

**REMEDIAL INVESTIGATION REPORT  
ORDER-ON-CONSENT: INDEX #B8-0400-92-03**

**FORMER GENERAL CIRCUITS FACILITY  
INACTIVE HAZARDOUS WASTE DISPOSAL SITE  
NYSDEC SITE CODE #828085  
95 MT. READ BLVD.  
ROCHESTER, NEW YORK**

Prepared for: Thomas Maguire  
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Rochester, New York

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

Project #: 1506R-97

Original Date: July 1999

Revised Date: December 2000

*Second Revision: February 2001*

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## **EXECUTIVE SUMMARY**

This report presents the findings of the remedial investigation (RI) that was conducted pursuant to New York State Department of Environmental Conservation (NYSDEC) Order on Consent Index #B8-0400-92-03. The ("Site") is located at 95 Mt. Read Boulevard, City of Rochester, County of Monroe, New York. The Site consists of approximately 3.5 acres of land improved primarily by a 120,000-square foot single-story building. The remaining land area not covered by the building is improved primarily with asphalt-paved driveways and parking lots. The Site is listed as a NYSDEC Inactive Hazardous Waste Disposal Site (NYSDEC Site Code #828085).

This RI report presents the background information and results of previous studies obtained to date, the scope and findings of investigations performed as part of the RI, the physical characteristics of the Site, the nature and extent of contamination, and a comparison of soil and groundwater analytical test results to state standards/guidance values and cleanup objectives.

### **Background**

The Site is located in an area of Rochester that is primarily zoned for industrial and commercial uses. Properties located north, south, east and west of the Site are zoned industrial or commercial. Some residential properties also exist east of the Site.

Since the date of the construction of the original portion of the Site building, the Site has reportedly been used as follows: printing facility (1920s to 1960s); a printed circuit board manufacturer (1960s to 1991). The current owner purchased the Site in 1991, and the owner has subdivided and leased the building to small light-industrial and commercial businesses.

Intrusive investigations conducted at the Site between 1990 and 1996 have identified soil and groundwater contamination at the Site. The contaminants of concern (COCs) identified include chlorinated volatile organic compounds (tetrachloroethene; trichloroethene; 1,2-dichloroethylene; etc.), total chromium and hexavalent chromium.

Volatile organic compounds (VOCs) were detected in the groundwater in a sump located in the basement of the Site building. Information obtained indicated that foundation drains for the basement are directed to this sump for collection and ultimate discharge of groundwater to the public sanitary sewer system. Groundwater elevation data for the Site indicated that the operation of this sump was influencing groundwater flow at the Site in proximity to the areas that contained the highest concentrations of VOCs, and that VOCs from beneath the building were collecting in this sump.

In 1992, the current owner installed a passive groundwater treatment system in the basement of the building. The treatment system is designed to treat VOC-contaminated groundwater that accumulates in the basement foundation drains and sump. Treated water is then discharged to a POTW.

In 1993, the test results for ambient air monitoring indicated that VOCs above permissible exposure limits (PELs) were not present in the air of the basement of the Site building. The basement was considered to represent the area of the Site building with the greatest potential of exposure to site occupants to VOCs.

In 1995, groundwater samples were collected from site wells for analysis at a laboratory. In addition to VOCs, part per million (ppm) concentrations of chromium were detected in some of the groundwater samples. Analysis of groundwater samples from chromium was initially conducted at the Site since the groundwater in overburden monitoring well MW-8 was yellow in color. Well MW-8 is in a hydraulically downgradient position from the former location of an etching operation that involved the use of chromic acid (i.e., in proximity to the former shipping room illustrated on Drawing RI-2 included in Appendix A).

In 1996, an interim remedial measure was conducted independently to address chromium-contaminated soils in an area of the building where the chromic acid operations were formerly located (i.e., beneath the former shipping room). As part of this remedial measure, the below-ground piping system that was associated with the chromic acid operations was also removed and disposed of off-site in accordance with applicable regulations. Approximately 20 cubic yards of chromium-contaminated soil was removed from beneath the concrete floor and was transported and disposed of off-site in accordance with applicable regulations. The analytical test results for subsequent confirmatory soil samples collected from the excavation indicated that total chromium concentrations ranging between 2,390 ppm and 21,400 ppm remained in the walls/floor of the excavation. Total chromium test results on Toxicity Characteristic Leaching Procedure (TCLP) extractions of two confirmatory soil samples were 98.2 ppm and 7.37 ppm, which indicated that soil left in-place would be considered a characteristic hazardous waste based on its chromium concentration.

## **RI Findings**

Fieldwork associated with this RI was conducted between April 1998 and October 2000. The fieldwork performed included the advancement of overburden test borings, the installation of one overburden/shallow bedrock well and five deep bedrock wells, the collection and analysis of soil samples, the collection and analysis of groundwater samples from new and existing Site wells, a basement sump evaluation, slug tests to evaluate hydraulic conductivity, and the collection of data for use in the development of groundwater potentiometric maps. The findings of the fieldwork, analytical test results, and other data obtained were then evaluated and are summarized below:

- Contaminants of concern that appear attributable to former operations at the Site include chlorinated VOCs and the metal chromium, including hexavalent chromium. Some Target Analyte List (TAL) metals at elevated concentrations were also detected primarily in a soil sample from beneath the building and in groundwater samples. A potential source for VOCs appears to be an area of former outdoor disturbance/storage located west of the original portion of the building. This area of disturbance/storage was observed in 1951 and 1961 historical aerial photographs. Potential sources of the chromium contamination appear to be the area of former outdoor disturbance/storage discussed above and/or former operations

and/or wastewater discharges involving chromic acid that were performed in proximity to the former shipping room located at the western end of the original portion of the building. Except for chromium, the source of TAL metals is unknown, but may be attributable to on-site sources, off-site sources, or could be naturally occurring.

- Chlorinated VOCs exceeding NYSDEC cleanup criteria were primarily detected in groundwater and not in soil at the Site. The highest concentration of total VOCs was detected in a groundwater sample collected from overburden well MW-9 (greater than 155,000 parts per billion [ppb] total VOCs). Groundwater samples from overburden wells MW-8, MW-10 and MW-12, deep bedrock well MW-17, and the sump also contained concentrations of total VOCs in excess of 1,000 ppb (i.e., between 2,140 ppb and 20,340 ppb). VOCs were also detected at concentrations above NYSDEC Technical and Operational Guidance series (TOGS) 1.1.1 drinking water standards in many of the wells around the perimeter of the Site, but at lower concentrations than detected in wells MW-8, MW-9, MW-10, MW-12, MW-17 and the sump.
- Chromium exceeding NYSDEC cleanup criteria was detected in soil and groundwater at the Site. The highest concentrations of chromium detected in soil is in proximity to the former shipping room located in the central portion of the building (i.e., near groundwater monitoring well MW-12). Chromium concentrations exceeding NYSDEC criteria were also detected on-site in one test boring north of the Site building. However, the analytical laboratory test results for soil samples collected on the adjoining Lightnin Aerators and Mixers property north of the Site indicated the concentrations of chromium are below NYSDEC criteria. As such, the extent of chromium in soils that exceeded NYSDEC criteria appears to be limited to the Site and primarily beneath the building. The chromium encountered in this area could be attributable to such things as migration through bedding around sewer piping, leaks in piping that was associated with the former chromic acid operations in the former shipping room, past spillage of chromic acids outside the building in this location, etc. The highest concentration of chromium detected in groundwater at the Site (i.e., 52,300 ppb) was in a sample collected from overburden groundwater monitoring well MW-8. The water sample from MW-8 was yellow in color, and the test results indicated that hexavalent chromium accounted for approximately 80% of the total chromium that was detected in this sample. Chromium concentrations above NYSDEC drinking water standards were also detected in wells MW-9, MW-12 and MW-21.
- Potential transport mechanisms of COCs appear to include possible Dense Non-Aqueous Phase Liquid (DNAPL) flow on or in bedrock (in proximity to wells MW-9 and MW-10), migration in groundwater in a dissolved phase, and diffusion through the saturated and unsaturated soil or bedrock. Information reviewed as part of this RI suggests that bedrock joint patterns noted in nearby Monroe County Pure Waters Combined Sewer Overflow Abatement program tunnels data trend 60° to 80° east of north, which may explain distribution patterns of VOCs away from potential sources areas at the Site.
- Contamination that appears attributable to off-site sources was also detected as part of this RI.

- The analytical test results of a groundwater sample from monitoring well MW-16 (deep bedrock well) indicated that chloropyridines and dichloropyridines were tentatively detected in this well. These two semi-volatile organic compounds (SVOCs) are chemical compounds that have been confirmed to have been released to the environment at the nearby Olin Chemicals NYSDEC-listed Inactive Hazardous Waste Disposal Site (NYSDEC Code #828018A), which is located approximately 1,500 feet west of the Site at 100 McKee Road. These two SVOCs are reportedly specific to Olin Chemicals and there are no known sources of these chemicals at the Site. As such, it appears that the contamination from the Olin Chemicals property is impacting the Site, and it is possible that other compounds detected along at least the western portion of the Site may also be attributable to off-site sources.
- Petroleum contamination was encountered in soil samples from test borings advanced on the Site near the southeast corner of the building. A used automobile sales business (i.e., named Rocky's) is located on the adjoining property (83 Mt. Read Boulevard) in proximity to the test borings where petroleum impact was detected. During field activities, evidence of sloppy housekeeping and outdoor container storage was observed on the adjoining property occupied by Rocky's along the shared fence between the Site and the adjoining property. Historical environmental information (e.g., 1988 Environmental Risk Assessment prepared by Environmental Strategies Corporation; 1988 Environmental Audit prepared by Blasland & Bouck Engineers, P.C.; 1990 Phase 2 Environmental Site Assessment Report prepared by Environmental Resources Management, etc.) pertaining to the Site does not suggest the past or present existence of an on-site source (e.g., underground or aboveground storage tank, etc.) of petroleum contamination on the Site. Based on the information presented above, it appears that the petroleum contamination encountered on this portion of the Site is attributable to the operations at Rocky's.
- Evaluation of groundwater flow conditions suggests the following:
  - Groundwater in the overburden at the Site appears to generally be flat or flow toward the southwest. In proximity to the basement, groundwater in the overburden appears to radially flow toward the sump.
  - The results of a basement sump evaluation, in which the sump was turned off and groundwater levels were measured in Site wells, was generally inconclusive in evaluating whether the operation of the sump was influencing groundwater levels at the wells. However, groundwater in the bedrock appears to generally flow toward the south and/or southeast as evidenced by seasonal fluctuations. In proximity to the basement and/or the western half of the Site, groundwater in the bedrock appears to radially flow toward the sump. This radial flow appears to create a groundwater divide near the center of the Site. Based on the data obtained as part of this RI, the basement sump appears to be influencing groundwater elevations in selected deep bedrock wells; however, the extent of vertical influence is unknown.

- Based on groundwater flow conditions observed for overburden wells, shallow bedrock wells and deep bedrock wells, the sump's observed influence on these wells, and the presence of site contaminants in groundwater from these wells, it is apparent that the overburden, shallow bedrock and deep bedrock intercepted by selected site wells are somewhat hydraulically connected.
- Evaluation of groundwater flow conditions in relation to wells where high levels of COCs are present indicate that the basement sump may not be adequately capturing contaminated groundwater at the Site.

## **RI Conclusions**

Based on the environmental studies performed as part of this RI, it appears that the extent of COCs attributable to the Site have generally been delineated. Chlorinated VOCs located in groundwater at the Site should be addressed in a Feasibility Study. Also, chromium and other TAL metals located in both soil and groundwater at the Site should be addressed in the Feasibility Study.

The COCs attributable to the Site are primarily located beneath the building. The highest concentrations of VOCs and/or chromium in groundwater were detected in four overburden wells, one deep bedrock well, and the basement sump that are located inside the building. Lower concentrations of COCs that exceeded NYSDEC drinking water criteria for groundwater were detected in some of the wells located around the perimeter of the Site. The area of chromium-contaminated media overlaps the area of VOC-contaminated media. Both types of contamination could be attributable to the same source (i.e., disturbed area/storage area that was observed west of the original building in 1951 and 1961 aerial photographs); however, it is also possible that the two types of contaminants may be attributable to different sources.

A review of cumulative groundwater data indicates that the concentration of total VOCs at the "hot spot" at well MW-9 has decreased approximately 38% between approximately 1990 and 1998 (i.e., from 252,278 ppb down to 155,969 ppb). Cumulative groundwater data indicates that concentrations of chromium at the "hot spot" at well MW-8 has shown no conclusive decrease between approximately 1995 and 1998.

The building and paved surfaces cover the majority of the Site and appear to be acting as a cap that inhibits infiltration of precipitation that would otherwise act to accelerate movement of COCs from the apparent source areas located beneath the building. The influence of the basement foundation drain system that is connected to the groundwater sump located in the basement of the building also appears to be inhibiting the migration of COCs away from the Site. Based on a review of the potentiometric groundwater maps and based on a review of cumulative groundwater test results for wells set along the perimeter of the Site (i.e., these results show steady or increasing concentrations of COCs), it appears likely that the foundation drain system and groundwater sump may not be achieving complete capture of the COCs in the groundwater at the Site.

VOCs that do not appear attributable to the Site have also been detected as part of the RI.

- The SVOCs chloropyridine and dichloropyridine, that appear attributable to the nearby Olin Chemicals Inactive Hazardous Waste Disposal site located approximately 1,500 feet west of the Site, were detected in deep bedrock well MW-16 located near the southwest corner of the Site building. Based on a review of the deep bedrock potentiometric contour maps for the Site and the Olin Chemicals waste site, and on the presence of these SVOCs in MW-16, it appears that groundwater in the deep bedrock may be flowing east/northeast on at least a seasonal basis.
- Petroleum-related impact, that appears attributable to the adjoining used automobile sales business (Rocky's), was detected in soil samples collected near the southeast corner of the Site building (e.g., test boring TB-20). Since the used automobile sales business is located on an adjoining property, the petroleum impact may have migrated onto the Site by multiple transport mechanisms (e.g., diffusion in soil or groundwater, groundwater flow, etc.)

## **RI Recommendations**

1. It is recommended that a Feasibility Study (FS) be completed that evaluates alternatives for addressing the COCs (i.e., VOCs and chromium) identified at the Site. The remedy that is selected for the site by the FS will also address other TAL metals detected at the Site.
2. Based on the industrial use of the property and on the generally industrial nature of nearby properties, it is recommended that a qualitative risk assessment be performed as part of the FS. The risk assessment for the Site would be used to evaluate potential routes of exposure, points of exposure, etc. Corrective action options that are protective of human health and the environment will be identified and evaluated as part of the FS.
3. Further investigative work in relation to chromium, other TAL metals, or chlorinated VOCs in soils or groundwater at the Site is not recommended at this time.
4. Further investigative work in relation to COCs that do not appear attributable to a Site source (i.e., chloropyridine and dichloropyridines attributable to Olin Chemical, and petroleum-related contamination attributable to Rocky's [used automobile sales]) is not recommended at this time. However, it is recommended that the apparent off-site potentially responsible parties be notified of the impacts encountered on the Site and that appropriate measures be implemented as deemed necessary by regulatory agencies (e.g., NYSDEC).



## **1.0 INTRODUCTION**

This report presents the investigative studies and findings of the RI that was performed in accordance with a May 30, 1997 Remedial Investigation/Feasibility Study (RI/FS) Work Plan; an October 1, 1999 Remedial Investigation/Feasibility Study Work Plan Addendum; and a May 2000 Remedial Investigation/Feasibility Study Work Plan Addendum No. 2 as amended by a letter dated July 26, 2000 from Day Environmental, Inc. (DAY) to the NYSDEC. Currently, the Site is listed by the NYSDEC as a Class 2 Inactive Hazardous Waste Disposal Site (NYSDEC Site Code #828085).

The subject property is located at 95 Mt. Read Blvd, City of Rochester, Monroe County, New York ("Site"). Drawing RI-1 included in Appendix A of this report illustrates the location of the Site. A Site Plan is included in Appendix A as Drawing RI-2.

### **1.1 Site Improvements**

The Site consists of approximately 3.5 acres of land improved with a 120,000-square foot single-story building. The remaining land area not covered by the building is improved primarily with asphalt-paved driveways and parking areas. Some landscaped area is located east of the building.

The Site is located in a predominantly industrial area of the City of Rochester; however, commercial and residential properties are present nearby. The Site is bounded to the north and west by industrial properties; to the south by Buffalo Road with industrial/commercial properties beyond; and to the east by Mt. Read Boulevard and a used automobile sales facility with a gasoline station and residential dwellings beyond.

### **1.2 Site History**

The original portion of the building was constructed in the 1920s, and the Site was reportedly operated as a printing facility until the early 1960s. Rochester Lithograph Corporation was a former owner/operator of the Site when it was operated as a printing business. It has been reported that Pluta Manufacturing acquired the Site around 1960 and began General Circuits, a printed circuit board manufacturer. Several building expansions were constructed in the 1960s and 1970s that increased the floor space of the building about four times the original size. General Circuits was then acquired in 1979 by Brand-Rex, a division of Akzona. In 1985, the name Brand-Rex was changed to BRIntec after a leveraged buyout. In June, 1990, General Circuits (a division of BRIntec) closed as a result of bankruptcy. The current owner purchased the Site in 1991, and the current owner has subdivided and leased the building to small light-industrial and commercial businesses.

### **1.3 Previous Environmental Studies and Remedial Measures**

In 1990, Environmental Resources Management, Inc. (ERM) conducted a Phase I Environmental Site Assessment of the Site. ERM also performed a Phase II Study consisting of test borings,

hand borings, soil/sediment sampling and analysis, installation of groundwater monitoring wells, groundwater sampling and analysis, and development of a cost estimate for building cleaning/equipment decommissioning. The ERM reports, or available portions thereof, were submitted to the NYSDEC as part of the March 25, 1998 Initial Submittal. ERM identified areas of environmental concern in its Phase I ESA and further evaluated whether concerns existed in these areas during its Phase II studies. Areas investigated by ERM included the Baker Line and copper-tin-lead plating area in the wet process room; the Entek room; the flammables storage area; the gold plate room; the tin immersion room; the Gyrex room; the wastewater treatment system in the basement; and the blanketing and screening department.

ERM data indicated that total concentrations of metals for some of the soil samples were "significant"; however, the data for leachable analysis indicated that the metals were not being leached from the soils. Based on the leaching test data, ERM concluded metals were not being released to the environment in "significant" concentrations.

Based on ERM's studies, VOCs including trichloroethene (TCE) and tetrachloroethene (also known as perchloroethene or PCE) were detected in groundwater beneath the building. The ERM Phase II Study concluded that the VOCs were attributable to historical use of chlorinated solvent degreasers at the Site. ERM's studies also indicated that VOC-impacted groundwater was flowing into the basement sump through foundation drains.

In 1991, the current owner had the building cleaned and the industrial equipment was decommissioned. The NYSDEC was involved during this work, and has records of the wastes and materials that were shipped off-site. After completion of the clean up, the equipment in the building was auctioned and removed from the Site. The current owner then began subdividing and leasing space in the building.

In 1992, the current owner installed a groundwater treatment system in the basement of the building. The treatment system is designed to treat groundwater that accumulates in the basement foundation drains and sump. The treatment system involves removal of VOCs from groundwater using activated carbon. A permit to discharge the effluent from the treatment system to the sanitary sewer system was obtained from the Monroe County Pure Waters (MCPW). Periodic sampling of the influent and effluent of the treatment system has been performed to monitor the effectiveness of the system, and to ensure compliance with permit conditions.

In 1993, ambient air monitoring was performed in the basement of the building to satisfy a request by the New York State Department of Health (NYSDOH). The air monitoring involved the collection and analytical laboratory testing of air samples for VOCs. The test results indicated that VOCs were not present in the air of the basement above PELs.

In 1995, the wells installed by ERM were sampled by the NYSDEC and Day Engineering, P.C, which is an affiliate of DAY. VOCs were confirmed to be present in the groundwater at the Site. Additionally, parts per million concentrations of chromium were detected in groundwater samples from some of the wells at the Site.

The source of chromium contamination at the Site was attributed to a former process that used chromic acid to etch copper circuit boards. The etching process was reportedly located in one area of the building that was formerly labeled as being a "shipping room" between the 1960s and the 1970s. A former General Circuits employee indicated that the use of chromic acid in this area resulted in deterioration of underground cast iron and polyvinyl chloride (PVC) piping that was initially used to transfer the chromic acid between etching machines. The deteriorated piping was replaced with glass-lined piping; however releases of chromic acid into the underlying subsurface soils appear to have occurred in this area..

At the request of the NYSDEC, a subsurface investigation was performed in 1995 to further delineate the extent of VOC and chromium impact at the Site.

- As part of this investigation, historical aerial photographs were reviewed. In the 1951 and 1961 aerial photographs, an approximate 10,000 to 20,000 square foot light-toned area devoid of vegetation was observed northwest of the original portion of the building. This area is in close proximity to the basement and the groundwater monitoring wells MW-8, MW-9, MW-10, MW-11 that were installed by ERM. In the 1951 aerial photographs, two smaller light-toned areas devoid of vegetation were observed south and west of the southwest corner of the original building. These areas of light-toned disturbance are illustrated on Drawing RI-2 included in Appendix A.
- Additional groundwater testing for VOCs confirmed the highest concentrations of VOCs remained beneath the building.
- The area where the glass-lined floor drains were located in the former "shipping room" (i.e., where the chromic acid was used) was evaluated as part of this investigation. The highest level of total chromium and hexavalent chromium that was detected in soil was in this area. The highest chromium concentrations in groundwater were detected in a sample collected from well MW-8, which appears to be "downgradient" from the former "shipping room".
- Groundwater elevations from monitoring wells and the sump in the basement were evaluated. Groundwater pumped from the sump is treated through the activated carbon treatment system. The groundwater elevations indicated that groundwater radially flows toward the sump. The extent and distribution of VOCs in the groundwater in proximity to the basement sump indicated that the sump is controlling groundwater movement in a localized area in the vicinity of the basement.

In 1996, a "source removal" was performed in the former "shipping room". Floor drains and piping suspected to be associated with the former etching process involving chromic acid, as well as a limited volume of soil, were removed from this area and disposed of in accordance with applicable regulations. Test results for confirmatory soil samples indicated that total chromium concentrations remaining in the excavation ranged between 2,390 ppm and 21,400 ppm, which exceed the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4046 recommended soil cleanup objective for total chromium of site background or 10 ppm [Note the 1995 NYSDEC proposed recommended soil cleanup objective for chromium is 50 ppm]. Also, the test results for two samples subjected to a TCLP extraction and tested for total chromium

indicated that the soil removed from the excavation was a characteristic hazardous waste based on chromium content.

#### 1.4 RI/FS Objectives

The objective of the RI/FS is to satisfy the following NYSDEC requirements:

- Further delineate the source of VOCs and chromium impact at the Site.
- Evaluate the potential for the presence of non-aqueous phase liquid (NAPL) at the Site.
- Sample the Site for other parameters besides VOCs and chromium to evaluate whether other COCs are present.
- Install additional wells to further evaluate groundwater flow conditions and groundwater quality at the Site.
- Conduct an RI that leads to an FS that evaluates remedial options for the Site, if warranted.

The RI study was conducted in general conformance with the scope of work outlined in the *"Remedial Investigation/Feasibility Study Work Plan, Order on Consent Index #B8-0400-92-03"* dated May 30, 1997 as formally amended by letters from DAY to the NYSDEC dated October 27, 1997; December 1, 1997; April 3, 1998 and August 13, 1998; an October 1, 1999 Remedial Investigation/Feasibility Study Work Plan Addendum; and a May 2000 Remedial Investigation/Feasibility Study Work Plan Addendum No. 2 as amended by a letter dated July 26, 2000 from DAY to the NYSDEC. Additionally, the Health and Safety measures during the RI fieldwork were performed in general conformance with the provisions specified in the May 30, 1997 Health and Safety Plan (HASP) included as part of the RI Work Plan. The RI Work Plan and its amendments were approved by the NYSDEC.

The assessments and evaluations outlined in this RI report are in general accordance with the requirements outlined in: the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 U.S.C. 9601 ET SEQ.], as amended; the National Contingency Plan ("NCP") of July 1, 1998 [40 CFR Part 300]; and the United States Environmental Protection Agency (USEPA) guidance document titled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" dated October, 1988.

## **2.0 FIELD STUDIES**

In order to further characterize the Site and meet the objectives of the RI, subsurface studies were performed. The studies performed included advancement of test borings, installation of groundwater monitoring wells, evaluation of groundwater flow conditions and hydraulic conductivities, soil and groundwater analytical laboratory testing, etc. These studies are further presented in this Section of the RI.

### **2.1 Overburden Test Borings**

Test borings were advanced through overburden soils inside and outside the building on the Site. A total of 45 test borings (designated as TB-1 through TB-42, TB-10A, TB-27A and MW-17A) were advanced as part of this RI study. The locations of these test borings are illustrated on Drawing RI-3 included in Appendix A.

Initially, a total of 23 test borings (TB-1 through TB-22 and TB-10A) were advanced on the Site at or in close proximity to node points determined by an approximately 70-foot grid. These test borings were advanced between April 13, 1998 and May 13, 1998. The NYSDEC approved test boring locations that deviated from the original locations designated in the May 30, 1997 RI/FS work plan. Such deviations were typically caused by physical constraints in the building and by tenant operations/equipment.

An additional 22 test borings (TB-23 through TB-42, TB-27A and MW-17A) were advanced on the Site between September 22, 1998 and September 29, 1998 and their locations were selected using the following criteria:

- Further delineate areas of VOC contamination identified during the initial 23 test borings (findings are discussed in subsequent sections of this RI report).
- Further delineate areas of chromium contamination in proximity to the former "shipping room".
- Evaluate whether contamination was present in the disturbed area observed in the 1951 and 1961 aerial photographs located in proximity to groundwater monitoring wells MW-8, MW-9, MW-10, MW-11, MW-12 and the basement.
- Evaluate whether contamination was present in the two smaller light-toned disturbed areas devoid of vegetation that were observed to be located south and west of the southwest corner of the original building in the 1951 aerial photographs.

The locations of these 22 additional test borings in relation to the initial test borings, the disturbed areas, and the former "shipping room" are illustrated on Drawing RI-3 included in Appendix A.

### 2.1.1 Test Boring Installation and Sampling Techniques

Vehicle-mounted Geoprobe Systems soil sampling equipment was used at test boring locations TB-1, TB-2, TB-5 to TB-16, TB-18 to TB-20, TB-24, TB-26 to TB-28, TB-10A, TB-27A, TB-30 to TB-35, TB-38, TB-40 to TB-42. A drill bit on this Geoprobe Systems equipment was used to advance the sampling equipment through the wood and concrete floor and asphalt-paved surfaces. An apparent petroleum-based mastic was observed on some of the wood flooring. Zebra Environmental Corporation (Zebra) provided the necessary labor and equipment to advance the test borings using the vehicle-mounted Geoprobe Systems equipment.

When test boring locations were not accessible to vehicle-mounted sampling equipment, hand-operated Geoprobe Systems soil sampling equipment was used. This equipment was used at test boring locations TB-3, TB-4, TB-17, TB-21 to TB-23, TB-25, TB-29, TB-36, TB-37, TB-39, and MW-17A. In these cases, a diamond-tipped floor-coring machine was used to remove the wood and/or concrete floor at the test boring locations so that the hand-operated Geoprobe Systems soil sampling equipment could be advanced into the underlying soils. DAY used its own equipment for test borings that were advanced by hand.

A Macro Core soil sampler or a Large Bore soil sampler was used to collect soil samples in four-foot and two-foot intervals, respectively. In general, soil samples were continuously collected throughout the soil column until equipment refusal was encountered (typically at the inferred top of bedrock) in an effort to observe and evaluate the entire column of overburden soils above bedrock. The samplers were fitted with a removable cutting shoe and disposable one-use clear acetate liners.

Recovered soil samples were observed in the field for evidence of suspect contamination (e.g., odors, staining, etc.). Portions of the recovered samples were placed in pre-cleaned laboratory containers and stored in a cooled atmosphere (i.e., cooler with ice) for possible laboratory analysis. Other portions of the recovered samples were placed in one-use laboratory containers for headspace analysis. The threaded lids on the headspace samples were secured on the jars and the samples were then agitated for approximately one minute. After at least five minutes following agitation, the ambient headspace in each jar was screened with a Photovac Microtip Model HL-2000 Photoionization detector (PID) equipped with a 10.6 eV lamp, and a Foxboro Company Century OVA Model 128GC flame ionization detector (FID).

A DAY representative recorded pertinent information for each test boring in a field book and on log sheets. Portions of the information were subsequently transcribed onto test boring logs, which are included in Appendix B. The test boring logs include information such as: peak PID/FID measurements, drill make, model and driller, soil lithologies, depths that water or wet soils were first encountered, etc.

Geoprobe Systems drilling equipment arrived on-site in clean condition. Drilling and sampling equipment that came into contact with overburden materials were

decontaminated on-site prior to each use. The decontamination procedures includedalconox (soap) and tap water wash, tap water rinse, and a final rinse in deionized water. Decontamination fluids were transferred to New York State Department of Transportation (NYSDOT)-approved 55-gallon drums. The drums were labeled and stored onsite inside the basement of the building. The boreholes were backfilled with soil cuttings and bentonite, and concrete was placed in the upper one foot of test borings at floor and paved surfaces.

### **2.1.2 Laboratory Analysis of Soil Samples**

As part of the RI, selected soil samples were labeled and delivered under chain-of-custody control to RECRA Environmental, Inc. (RECRA), Amherst, New York. RECRA is a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. During this project, RECRA was purchased by Severn-Trent Laboratories, Inc. (STL). As such, many of the samples were analyzed by STL, which is also a NYSDOH ELAP-certified analytical laboratory.

Table 1 included in Appendix C summarizes the soil samples that were analyzed. This table includes the sample designation, the sample collection date, the sample location, the depth interval where the sample was collected, and the analysis performed on the sample.

The soil analyses were performed in accordance with 1995 Analytical Services Protocol (ASP). As shown on Table 1, fifteen (15) soil samples were analyzed for target compound list (TCL) VOCs using ASP Method 95-1. Forty-six (46) soil samples were analyzed for total chromium using ASP Method CLP-M. Twenty-six (26) soil samples were analyzed for hexavalent chromium. Five (5) soil samples were analyzed for TAL metals using ASP Method CLP-M. One soil sample was analyzed for full TCL parameters using ASP Methods 95-1, 95-2, and 95-3. One soil sample was analyzed for full TAL parameters using ASP Method CLP-M.

Samples tested by the analytical laboratory were selected based on the following criteria:

- Samples tested for VOCs were selected based on their location in relation to known areas of VOC impact; field evidence suggesting the presence of VOCs in the sample (i.e., odors, staining, PID/FID readings above background for ambient air); and their location in areas suspected to be potential source areas of contaminants (e.g., areas observed to be disturbed and devoid of vegetation in historical aerial photographs, etc.). In most cases, the sample with the greatest field evidence of potential VOC content that was collected from a specific location was selected for laboratory analysis. Sometimes, more than one sample was selected for laboratory analysis from a location in order to evaluate the vertical distribution of potential VOC content.
- Samples tested for total chromium and hexavalent chromium were selected based on their location in relation to known areas of chromium impact; proximity to former sanitary sewer piping in a known area of chromium impact; areas where fill materials were observed; areas where field evidence suggested the presence of metals (i.e.,

odors, staining, etc); at soil sample locations at or near the top of presumed bedrock due to characteristics that chromium was detected in groundwater at the Site and that chromium has a specific gravity heavier than water; and in areas suspected to be potential sources of contaminants (e.g., areas observed to be disturbed and devoid of vegetation in historical aerial photographs, in proximity to former locations of industrial operations such as etching, etc.).

- Samples tested for TAL metals were selected in areas where fill materials were observed; areas where chromium and VOCs were previously identified; areas where field evidence suggested the presence of metals (i.e., odors, staining, etc); and in areas suspected to be potential source areas of contaminants (e.g., areas observed to be disturbed and devoid of vegetation in historical aerial photographs, in proximity to former locations of industrial operations, etc.).
- Also, one sample was tested for full TCL parameters (from well location MW-17) and one sample was tested for full TAL parameters (from test boring location MW-17A) in proximity to previously installed overburden wells where the highest concentrations of VOCs (i.e., at MW-9) and chromium (i.e., MW-8) in groundwater have been detected.

## **2.2 Monitoring Well Installation**

Six new wells were installed at the Site. Wells MW-17 through MW-21 were installed between October 27, 1998 and November 4, 1998. Well MW-22 was installed between August 28, 2000 and September 10, 2000. The locations of these wells are illustrated on Drawing RI-3 included in Appendix A. DAY retained the services of Nothnagle Drilling (Nothnagle) to provide the necessary equipment, labor and materials to drill the borings and install the wells.

These wells included one overburden/bedrock interface well (MW-18) and five deep bedrock wells (MW-17, MW-19, MW-20, MW-21 and MW-22). The shallow overburden/bedrock well MW-18 was installed in the upper five feet of fractured bedrock and the well screen extended through the overburden/bedrock interface. Four of the deep bedrock wells (MW-17, MW-19, MW-20 and MW-21) are open bedrock wells drilled 25 feet into bedrock. Deep bedrock well MW-22 is currently 80 feet deep and is an open bedrock well with a sampling interval between 50 feet and 80 feet below the ground surface.

### **2.2.1 Shallow Overburden/Bedrock Interface Well**

The overburden/bedrock interface well MW-18 was installed west of the building on the Site. Nothnagle used a truck-mounted drill-rig to advance 4-1/4-inch inner diameter (ID) hollow-stem augers (HSAs) at this well location.

When the top of bedrock was encountered at MW-18 at 13.6 feet below the ground surface (BGS), a temporary 8-inch ID steel casing was placed in the borehole from 0.0 feet to 13.4 feet BGS. Subsequently, the top 3.2 feet of bedrock was cored to a depth of 16.6 feet BGS using HQ coring equipment. Water was re-circulated in the borehole to



remove fines during the drilling. This drilling water was later containerized in NYSDOT-approved 55-gallon drums, labeled, and staged in the basement of the building. As approved by the MCPW, the waters were disposed of through the existing groundwater treatment system that is connected to the sump located in the basement.

A ten-foot length of schedule 40 2-inch outer diameter (OD) threaded 10-slot PVC screen with an end cap was placed in the boring at a depth interval of 6.6 to 16.6 feet below the existing ground surface. A section of 2-inch OD schedule 40 threaded PVC solid riser was then connected to the top of the screen and extended to near the surface of the well. A sand pack was placed around the remaining annulus at a depth interval of 5 and 16.6 feet below the existing ground surface. A bentonite seal was placed above the sand pack at a depth interval of 3 to 5 feet below the ground surface. Cement grout was then placed above the bentonite seal in order to set a curb box in the asphalt pavement. The top of the inner 2-inch OD PVC riser was fitted with a locking J-plug and pad lock.

A DAY representative recorded pertinent information for well MW-18 on a field log, and this information was later transcribed onto a well log, a copy of which is included in Appendix B. The recorded information included:

- Date, well identification, and project identification
- Name of individual developing the log
- Name of drilling contractor
- Drill make and model, auger size, core barrel, etc.
- Identification of alternative drilling methods used and justification thereof, when applicable
- Depths recorded in feet and fractions thereof (i.e., tenths of inches) referenced to ground surface
- Standard penetration test (American Society for Testing and Materials [ASTM] 1586) blow counts and N-values
- The length of the sample interval and the percentage recovered
- The depth of the first encountered water table along with the method of determination, referenced to ground surface
- Drilling and borehole characteristics
- Sequential stratigraphic boundaries
- PID/FID readings on ambient headspace air above selected samples
- Visual observations of suspected contamination (e.g., odors, staining, etc.)

### **2.2.2 Deep Bedrock Wells**

Five deep bedrock wells were installed at the Site. Well MW-17 was installed inside the central portion of the building between existing overburden wells MW-8 and MW-9. Wells MW-19, MW-20 and MW-21 are located outside the building on the west, northwest and northeast portions of the Site, respectively. Well MW-22 is a deeper bedrock well installed in the hallway approximately 25 feet south and eight feet west of overburden well MW-8. Nothnagle used a truck-mounted drill-rig to advance 6-1/4-inch ID HSAs at wells MW-19, MW-20 and MW-21. Due to access restrictions inside the

building, a portable drill-rig was used to install wells MW-17 and MW-22. Continuous two-inch OD split spoon samplers were used to collect soil samples ahead of the augers in general conformance with ASTM 186. These borings were sampled to auger refusal, which was encountered at depths ranging between 9.6 feet and 13.3 feet BGS. Portions of the split spoon samples were first placed into laboratory glass containers for possible laboratory analysis. Other portions of the split spoon samples were placed into pre-cleaned glass containers, and the ambient air headspace above the soil inside these sample containers was screened for total VOCs using a Photovac Microtip Model HL2000 PID equipped with a 10.6 eV lamp and also occasionally with a Fox Century Model OVA 128GC FID. The recovered split spoon samples were also visually examined for evidence of suspect contamination (e.g., staining, odors, etc.).

At well location MW-17, a temporary 6" ID steel casing was placed in the overburden and the first five feet of bedrock was then cored using HQ-sized coring equipment to a depth of approximately 18.3 feet BGS. This five-foot interval was then reamed using a 5-5/8" ID roller bit (between 13.3' and 18.3' BGS). The temporary 6" ID steel casing was removed and a permanent 4" ID steel casing was then grouted in-place from the ground surface to a depth of approximately 18.3 feet BGS. The cement grout, which contained 3% calcium chloride catalyst and 3% bentonite, was allowed to set for a minimum of twelve hours. Subsequently, the next twenty feet of bedrock was cored using NX coring equipment. The well was finished by installing a locking J-plug and pad lock on the top of the permanent 4" ID steel casing, and installing a flush-mounted curb box that was cemented in-place in the floor.

At well locations MW-19, MW-20 and MW-21, temporary 8" ID steel casings were placed in the overburden at each well. The first five feet of bedrock at each well location was then cored using HQ-sized coring equipment to depths ranging between approximately 16.8 feet and 18.0 feet BGS. These five-foot intervals in each well were then reamed using a 6-1/4" ID roller bit. The temporary 8" ID steel casing was removed and a permanent 6" ID steel casing was then grouted in-place in each well from the ground surface to depths ranging between approximately 16.8 feet and 18.0 feet BGS. The cement grout, which contained 3% calcium chloride catalyst and 3% bentonite, was allowed to set for a minimum of twelve hours. Subsequently, the next twenty feet of bedrock in each well was cored using NX coring equipment. The wells were finished by installing a locking J-plug and pad lock on the top of the permanent 6" ID steel casing, and installing a flush-mounted curb box that was cemented in-place in the asphalt pavement.

At well location MW-22, a temporary 6" ID steel casing was placed in the overburden and the bedrock was then cored using HQ-sized coring equipment to a depth of approximately 50.0 feet BGS. This interval of bedrock was then reamed using a 5-5/8" ID roller bit (between 9.6' and 50.0' BGS). The temporary 6" ID steel casing was removed and a permanent 4" ID steel casing was then grouted in-place from the ground surface to a depth of approximately 50.0 feet BGS. The cement grout, which contained 3% calcium chloride catalyst and 3% bentonite, was allowed to set for a minimum of twelve hours. Subsequently, the next thirty feet of bedrock was cored using HQ coring

equipment. The well was finished by installing a locking J-plug and pad lock on the top of the permanent 4" ID steel casing, and installing a flush-mounted curb box that was cemented in-place in the floor.

Water was re-circulated in the deep well boreholes to remove fines during the drilling. This drilling water, as well as drill cuttings, etc, were later containerized in NYSDOT-approved 55-gallon drums, labeled, and staged in the basement of the building. As approved by the Monroe County Pure Waters, the drilling waters were disposed of through the existing groundwater treatment system that is connected to the sump located in the basement.

A DAY representative recorded pertinent information for each well location on field logs, and this information was later transcribed onto well logs, copies of which are included in Appendix B. The recorded information included:

- Date, well identification, and project identification
- Name of individual developing the log
- Name of drilling contractor
- Drill make and model, auger size, core barrel, etc.
- Identification of alternative drilling methods used and justification thereof, when applicable
- Depths recorded in feet and fractions thereof (i.e., tenths of inches) referenced to ground surface
- Standard penetration test (ASTM 1586) blow counts and N-values
- The length of the sample interval and the percentage recovered
- The depth of the first encountered water table along with the method of determination, referenced to ground surface
- Drilling and borehole characteristics
- Sequential stratigraphic boundaries
- PID/FID readings on ambient headspace air above selected samples
- Visual observation of suspected contamination (e.g., odors, staining, etc.)

### **2.2.3 Well Development**

Prior to sampling, the new wells MW-17 through MW-21 were developed between December 2, 1998 and December 3, 1998. New deeper bedrock well MW-22 was developed on September 10, 2000, September 28 2000 and September 29, 2000. Well development was performed using a submersible pump or centrifugal pump and dedicated tubing. No fluids were added to the wells during development, and well development equipment was decontaminated prior to development of each well. The well development procedures were as follows:

- Obtain pre-development static water level readings using a Slope Indicator Co. electronic water level indicator (Model 51453)
- Calculate water to sediment volume in the well

- Obtain groundwater sample for field analysis using dedicated bailer and cord
- Set up development equipment
- Begin pumping
- Obtain initial water quality measurements (e., conductivity, temperature, pH, PID readings). Record water quantities and rates removed.
- Obtain water quality measurements on regular basis
- Stop development when water quality criteria are met
- Document development procedures, measurements, quantities, etc.

Development continued until the following criteria were achieved:

- A minimum of five well volumes were removed, or to dryness [Note: For deeper bedrock well MW-22, a volume of water greater than the total drill water lost plus five well casing volumes was removed during development].
- pH, conductivity, and temperature became relatively stable for three consecutive measurements

During development, the water removed from each well was observed for the presence of NAPL. NAPL was not observed on the development waters from the new wells (i.e., MW-17 through MW-22). Well development logs summarizing the information and data obtained for each well are included in Appendix D.

The water removed from each well during development was placed in NYSDOT-approved 55-gallon drums, labeled, and staged on-site in the basement of the building. As approved by the Monroe County Pure Waters, the development waters were discharged to the existing groundwater treatment system that is connected to the sump located in the basement.

## **2.3 Groundwater Sampling and Analysis**

### **2.3.1 Sampling Protocol**

Groundwater sampling efforts were conducted between December 21, 1998 and December 22, 1998. Wells that were sampled included MW-1, MW-3, MW-4, MW-6 through MW-14, MW-16 through MW-21. Well MW-15 was not sampled since it was determined to be dry. Well MW-2 no longer exists, and well MW-5 was previously determined to be damaged. Well MW-22 had not yet been installed. The groundwater in the basement sump was also sampled.

On December 21, 1998, the depth to static water in each well was measured with a Slope Indicator Co. electronic water level indicator (Model 51453). These measurements are summarized on Table 8 included in Appendix C and the groundwater elevations are summarized on Drawing RI-11 included in Appendix A. On December 21, 1998 and December 22, 1998, the 18 wells existing at that time were purged of a minimum of three well casing volumes of water or to dryness. A centrifugal pump with dedicated disposable tubing or a submersible pump with disposable dedicated tubing were used to purge (i.e., evacuate) water from the wells.

The purge water was placed in NYSDOT-approved 55-gallon drums, labeled, and staged on-site in the basement. As approved by the Monroe County Pure Waters, the purge waters were discharged to the existing groundwater treatment system that is connected to the sump located in the basement.

In general, the wells were allowed to recharge to a minimum of 90% of their initial static water levels prior to sampling. Each well and the basement sump were then sampled using new disposable dedicated bailers and cord. The NYSDEC also split samples at wells MW-8, MW-16, MW-17, MW-18 and MW-20. 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. Field measurements included pH, conductivity, and temperature. The well and sump sampling information and data are presented on monitoring well sampling logs included in Appendix D.

For deeper bedrock well MW-22, passive groundwater diffusion samplers developed by the United States Geological Survey (USGS) and available through EON Products, Inc. (EON) were used to collect groundwater samples at various depth intervals within the 30-foot portion of open-hole bedrock (i.e., between 50 feet and 80 feet below the ground surface) for subsequent analytical laboratory testing. As per the United States Department of the Air Force document titled "Final Technical Report for the Evaluation of Groundwater Diffusion Samplers" dated December 1999 and prepared by Parsons Engineering Science, Inc., the diffusion sampling technique used at this Site is an accepted method that produces comparable data to that of micro-purge and conventional purge sampling methods.

As concurred with the NYSDEC Region 8 representative, six diffusion samplers (designated as DS-1 through DS-6) were connected and placed in the well. Thirty pound fishing line that was doubled up was used to connect the diffusion sampler assembly. The centers of the samplers were measured to be at the following depths: DS-1 (53.40'); DS-2 (57.30'); DS-3 (60.85'); DS-4 (67.85'); DS-5 (72.05'); and DS-6 (77.35'). Each diffusion sampler is approximately 19 inches long. These sample intervals were selected based on their proximity in relation to fractures observed on the rock cores.

On October 6, 2000, the diffusion samplers were filled with deionized (DI) water provided by Columbia Analytical Services, Inc. (CAS), and then placed in well MW-22. The samplers were retrieved on October 25, 2000. EON diffusion sampler literature indicates this period of time allows for molecular diffusion to result in chemical equilibrium between the water in the diffusion samplers and the water in the well.

After retrieval, water from the diffusion samplers was decanted into the appropriate laboratory containers (designated as samples DS-1 through DS-6) and delivered under chain-of-custody control to CAS, which is a NYSDOH ELAP-certified analytical laboratory. A Passive Diffusion Sampler Log is included in Appendix D. Also, a blank sample of DI water (designated as Sample DI-1) was obtained at the same time the diffusion samplers were filled and was also delivered under chain-of-custody control to CAS.

### **2.3.2 NAPL Sampling**

On December 17, 1998, the depth to static water in each well was measured with a Slope Indicator Co. electronic water level indicator (Model 51453). Also, a Heron Instruments interface meter (Model H.01L) was used in each well to assess the presence of light non-aqueous phase liquids (LNAPL) and DNAPL. These measurements are summarized on Table 7 included in Appendix C and the groundwater elevations are summarized on Drawing RI-10 included in Appendix A. The oil/water interface meter indicated that 3.20 feet of DNAPL was suspected in the bottom of well MW-9. LNAPL and DNAPL were not detected in any of the other wells sampled.

On December 21, 1999, a submersible pump and dedicated tubing were used to obtain a sample (Sample 1506-N-MW9) prior to purging well MW-9. It was presumed that this sample could contain DNAPL from well MW-9. The tubing was placed within the midpoint of the presumed layer of DNAPL, the pump was slowly turned on and a sample was obtained from dedicated disposable discharge tubing on the pump.

### **2.3.3 Laboratory Analysis**

The groundwater samples (Samples 1506-W-MW1, 1506-W-MW3, 1506-W-MW4, 1506-W-MW6 through 1506-W-MW14, 1506-W-MW16 through 1506-W-MW21 and 1506-W-SUMP) and the pre-purge sample from well MW-9 (Sample 1506-N-MW9) were placed in pre-cleaned laboratory containers, labeled, and preserved as required (e.g., stored in cooler with ice, preserved with nitric acid, etc.).

The samples were delivered under chain-of-custody control to RECRA [Note, RECRA was later acquired by STL]. The groundwater analyses were performed by STL in accordance with the 1995 ASP. Table 2 included in Appendix C identifies the test parameters that were performed on each of DAY's groundwater samples from the wells. As shown, the post-purge groundwater samples from wells MW-9, MW-16 and MW-17 were analyzed for full TCL/TAL parameters and hexavalent chromium using Methods 92-1, 95-2, 95-3 and CLP-M. The post-purge samples from the remaining wells and the grab sample collected from the basement sump were analyzed for TCL VOCs using Method 95-1, for total chromium using Method CLP-M and for hexavalent chromium. The pre-purge sample collected from well MW-9 (Sample 1506-N-MW9) was analyzed for TCL VOCs using Method 95-1, total chromium using Method CLP-M, and hexavalent chromium.

CAS analyzed the diffusion samples (DS-1 through DS-6) from deep bedrock well MW-22 for TCL VOCs using USEPA Method 8260. Also, a blank sample of DI water that was obtained at the same time the diffusion samplers were filled was also tested by CAS for TCL VOCs using USEPA Method 8260.

## 2.4 Basement Sump Evaluation

Groundwater elevation data from previous studies suggested that the basement sump collects groundwater from beneath the Site and serves to draw-down groundwater elevations in proximity to the sump. In an effort to further evaluate the hydraulic impact of the sump on groundwater at the Site, the following efforts were performed in the field on February 19, 1999.

- A Slope Indicator Co. electronic water level indicator (Model 51453) was used to initially measure static groundwater levels in each well and the basement sump at the Site. At the time of the measuring of this sump, the sump pump was not observed to be actively removing water from the sump, and an estimated removal rate was not possible.
- Electrical connection to the sump pump was disconnected at 11:29 AM.
- Groundwater level measurements were then collected from the sump and wells MW-3, MW-9, MW-10, MW-14, and MW-17 at approximately three to five minute intervals for the first fifteen minutes after shut-down of the sump.
- Subsequently, groundwater level measurements were collected from the entire well field in approximately one-hour intervals.

Table 3 included in Appendix C illustrates the groundwater level measurement data collected during the February 19, 1999 basement sump test. At 4:58 PM, the water level in the sump was measured at 2.05 feet below the top of the metal grate located on the top of the sump. The sump had to be turned back on at 4:58 PM in order to mitigate potential overflowing since access to the basement was not permitted during non-business hours. Due to this constraint, it was decided to conduct a second sump evaluation test for a longer period of time.

A second pump test was performed over a longer period of time on April 5, 1999 and April 6, 1999. The following efforts were performed in the field during this second test.

- A Slope Indicator Co. electronic water level indicator (Model 51453) was used to initially measure static groundwater levels in each well and the basement sump at the Site. At the time of the measuring of the sump, the sump pump was not observed to be actively removing water from the sump, and an estimated removal rate was not possible.
- Electrical connection to the sump pump was disconnected at 8:38 AM on April 5, 1999.
- Based on the results of monitoring during the February 19, 1999 test, groundwater level measurements were then collected from the sump and entire well field in approximately four-hour to five-hour increments.
- Due to access limitations, the pump had to be turned back on at 5:06 PM on April 5, 1999.
- One round of water level measurements was collected from the entire well field and the basement sump on the morning of April 6, 1999.

Table 4 included in Appendix C illustrates the groundwater level measurement data collected during the second basement sump test performed on April 5, 1999 and April 6, 1999.

## **2.5 Groundwater Potentiometric Maps**

On January 8, 1999, the elevations of the top interior casing and rim of each newly constructed well (i.e., MW-17 through MW-21) were surveyed relative to an assumed elevation of 100.00 feet by a licensed land surveyor. The assumed datum of 100.00 feet corresponds to the assumed datum previously established at the Site.

On January 6, 1999 and April 5, 1999, a Slope Indicator Co. electronic water level indicator (Model 51453) was used to collect water level measurements from nineteen Site wells (MW-1, MW-3, MW-4, MW-6 through MW-21) and the basement sump. Well MW-2 could not be located, well MW-5 was previously damaged, and well MW-22 had not yet been installed; thus, water levels were not available from these well locations. The data collected was used to calculate approximate groundwater elevations. Table 5 (January 6, 1999 date) and Table 6 (April 5, 1999 data) included in Appendix C provide the data developed and the calculated groundwater elevations for each well location and the basement sump. The groundwater elevations for January 6, 1999 and April 5, 1999 are summarized on Drawings RI-8 and RI-9, respectively and are included in Appendix A.

Using the January 6, 1999 data, an overburden and/or shallow bedrock potentiometric map (Drawing RI-8A) and a deep bedrock potentiometric map (Drawing RI-8B) were prepared that approximate groundwater flow conditions on that date. Using the April 5, 1999 data, an overburden and/or shallow bedrock potentiometric map (Drawing RI-9A) and a deep bedrock potentiometric map (Drawing RI-9B) were also prepared. Copies of these drawings are included in Appendix A. The groundwater elevations measured in the basement sump were used on the overburden and/or shallow bedrock potentiometric maps and on the deep bedrock potentiometric maps. Based on the groundwater elevation data, the basement sump appears to be influencing groundwater elevations in selected deep bedrock wells; however, the extent of vertical influence is unknown. The following observations/findings support using the basement sump water elevations on the deep bedrock potentiometric maps: the hydraulic conductivities of overburden well MW-9 and nearby deep bedrock well MW-17 were similar (refer to Sections 2.7 and 3.3.1); the upper two packered zones in MW-17 (i.e., 18.3' to 28') showed evidence of hydraulic connection (refer to Sections 2.8 and 3.3.1); and analytical laboratory test results show total VOCs in MW-17 are consistent to a depth of approximately 38 feet below the ground surface (refer to Section 3.4.2).

## **2.6 Quality Assurance/Quality Control (QA/QC) and Reporting**

During the soil and groundwater sampling activities, efforts were made by DAY to adhere to the sample preservation and holding time requirements set forth in NYSDEC ASP. Subsequent analysis of samples was performed using the methods outlined in the May 30, 1997 RI/FS Work Plan and in Sections 2.1.2 and 2.3.3 of this report in accordance with USEPA SW-846, 3<sup>rd</sup> Edition, ASP Protocol.

In order to provide control over the collection, analysis, review, and interpretation of analytical data, the following procedures were included as part of the RI project.



- Samples were delivered under chain-of-custody control to RECRA (later known as STL) and CAS, which are NYSDOH ELAP-certified analytical laboratories.
- The analytical laboratories implemented their Quality Assurance Programs.
- Shipments containing samples for VOC analysis were generally accompanied by trip blanks that were analyzed for VOCs using ASP Method 95-1.
- One field blank (i.e., equipment rinsate) was collected for VOC analysis.
- One field blank (i.e., equipment rinsate) was collected for total chromium analysis and hexavalent chromium analysis.
- At least one matrix spike/matrix spike duplicate (MS/MSD) was analyzed for each 20 samples of each matrix (i.e., soil and groundwater) that were shipped within each seven day period.

Included in Appendix E is a copy of a Data Usability Summary Report (DUSR) dated July 14, 1999 that was prepared by Data Validation Services (DVS), North Creek, New York. The NYSDEC Division of Environmental Remediation Quality Assurance Group approved Ms. Judy Harry of DVS to perform the report. The DUSR concluded that the test results for samples collected between April 1998 and February 1999 were "usable with respect to project goals, with minor qualifications for some values as estimated" including the following results:

- Pesticide/polychlorinated biphenyl (PCB) results for a groundwater sample are estimated;
- hexavalent chromium test results for soil samples are estimated;
- the test results for other metals in groundwater samples and a soil sample are estimated; and
- lower concentrations of analyte detections are changed to non-detect since the analytes were possibly caused by contamination of the samples (e.g., analytes also detected in laboratory method blanks, etc.).

The analytical laboratory test results for this project as presented in this RI report have been revised to incorporate the conclusions and recommendations presented in the DUSR. The NYSDEC did not require a DUSR on analytical laboratory test results for samples collected after February 1999.

## **2.7 Hydraulic Conductivity Testing**

In-situ hydraulic conductivity testing was completed in seven wells at the Site on November 5, 1999 and November 8, 1999. The wells tested included overburden and/or shallow bedrock wells MW-4, MW-9 and MW-18, and deep bedrock wells MW-7, MW-16, MW-17, and MW-19. The locations of these wells are shown in Drawing RI-8, included in Appendix A. Overburden well MW-15 was not tested as proposed since measurable water was not detected using the electronic static water level. Well MW-18 was tested as a substitute for MW-15. Deep bedrock well MW-19 was added to the list of wells tested since it was agreed between DAY and the NYSDEC in the field that test results from this well would be useful for comparison to the test results for adjoining well MW-18.

The following protocol was used in performing the hydraulic conductivity tests at each well location:

1. The static water level within the monitoring well was measured.
2. A solid slug of known volume (e.g., length of PVC pipe filled with concrete and capped at each end) was then introduced ("slug in") and subsequently extracted ("slug out").
3. At T=0 (Time when "slug" was first introduced or removed from the well), a depth to water reading was obtained using an In-Situ TR 3100 Data Logger connected to a lap-top computer that was operating the Win-Situ program.
4. Depth to water measurements were recorded every three seconds for sixty minutes (T=0 to T=60)
5. The following data were input into the *Super Slug* hydraulic conductivity software program, unless static water level conditions were measured at lesser times:
  - Depth to water measurements for every three seconds during the first minute (T=0 to T=1).
  - Depth to water measurements for every 15 seconds for two minutes (T=1 to T=3).
  - Depth to water measurements for every 30 seconds for two minutes (T=3 to T=5).
  - Depth to water measurements for every 60 seconds for five minutes (T=5 to T=10).
  - Depth to water measurements for every 5 minutes thereafter (T=10 and longer).
  - The recovery of the water was measured until water levels returned to initial values or until one hour had passed.
6. Upon completion of the "slug in" (falling head) test, a "slug out" (rising head) test was conducted for at least ten minutes.
7. The data from each slug test was input into *Super Slug*, an aquifer slug test analysis software program, and was evaluated using the Bouwer and Rice graphical method. For the overburden and overburden/bedrock interface wells, the effective radius ( $r_e$ ) entered in the model was based on the following equation as recommended by the NYSDEC:  $r_e = [r^2(1-n) + nR^2]^{1/2}$ ; where  $r$  = radius of the well pipe;  $R$  = radius of the borehole; and  $n$  = porosity of the sand pack.

Additionally, the saturated thickness in the well or screen was used as the length of the sand pack/screened interval/open hole ( $L$ ) to be entered into the software program.

As deemed appropriate, the software program was run in a mode where late values and early values were sometimes not included in the best fit calculation.

The slug and water level indicator were decontaminated after each slug test following the protocol in the May 30, 1997 RI/FS Work Plan.

## 2.8 Groundwater Sampling Using Double Packer

VOCs have been detected at varying concentrations in deep bedrock wells at the Site. In order to evaluate the depth in bedrock at which VOCs are entering these deep bedrock wells, varying depth intervals of groundwater were sampled from two wells (MW-17 and MW-21). MW-17 was sampled on December 29 & 30, 1999 and well MW-21 was sampled on December 28 & 29, 1999. The locations of these wells are shown on Drawing RI-6 as well as other drawings included in Appendix A. A double packer was used to section-off the depth intervals in the two deep bedrock wells from which groundwater samples were desired.

The 20-foot open-hole bedrock of wells MW-17 and MW-21 were cored with an NX-size core barrel, which resulted in an approximate three-inch diameter hole. The bottom of well MW-17 was measured at approximately 37.5 feet BGS. The bottom of well MW-21 was measured at approximately 37.0 feet BGS. An NX-size inflatable double packer was used at wells MW-17 and MW-21.

The groundwater sampling using the packer system was performed on wells MW-21 and then well MW-17 as follows:

1. The initial packered zone was set at the bottom five feet of well MW-17 (i.e., approximately 33' to 37.5' BGS) and MW-21 (i.e., approximately 33' to 37' BGS). Based on equipment restrictions of the double packer system, a single packer was used to create this bottom zone.
2. Prior to insertion of the packer, the static water level in the well being tested, and nearby wells MW-8 and MW-9 during sampling at MW-17, were measured using an electric water level indicator. Subsequent to insertion and inflation of the packer system, the depth to water in the well being tested was monitored using an electric water level indicator and the test usually did not commence until the water level in the well had stabilized. On some occasions, the test commenced prior to reaching original static water levels conditions due to long recharge rates that were encountered in some packered zones. A NYSDEC representative agreed to this modification during the field work.
3. The water within the packered interval was purged using a half-inch foot valve connected to half-inch tubing.
4. While water was being purged, the static water level in the well being tested was measured every five minutes, and the static water level in nearby wells was measured every ten minutes.
5. Three volumes of water calculated for the packered interval (i.e., based upon the diameter of the borehole tested and the length of the packered section) were purged from the well, or until dryness (i.e., the level at which the foot valve can no longer operate), if less than three volumes. The water level within the packered zone was then allowed to recover to at least 80% of the initial static water level conditions that were measured. The water level recovery was monitored frequently using an electric water level indicator.
6. A groundwater sample was collected using a half-inch by two-foot long stainless steel bailer. The first bailer of water was used for field parameters (e.g., pH, temperature, conductivity, and turbidity). Water samples were placed in laboratory containers in accordance with

sampling protocol and laboratory analysis designated in Sections 2.3.1 and 2.3.3 of the May 30, 1997 RI/FS Work Plan.

7. The packer system was then deflated and a double packer system was set to sample the water from approximately 28' to 33' BGS in the wells.
8. Steps 2 through 6 for the packered depth interval were repeated.
9. The double packer system was then deflated and set to sample the water from approximately 23' to 28' BGS in the wells.
10. Steps 2 through 6 for the packered depth interval were repeated.
11. The double packer system was then deflated and one single packer was set to sample the water from approximately 18.3' to 23' BGS in well MW-17 and approximately 18' to 23' BGS in well MW-21

The dedicated equipment used during this work (e.g., electronic water level indicator, packer assembly, bailer, foot valve, etc.) was decontaminated after each test following the protocol in the May 30, 1997 RI/FS Work Plan.

The groundwater samples from each packered interval in wells MW-17 and MW-21 were delivered under chain of custody control to STL. STL analyzed these samples for VOCs using ASP Method 95-1. These samples are summarized on Table 2 (sample summary chart) included in Appendix C. As shown, the samples collected are designated as 1506-17(18.3-23'), 1506-17(23-28'), 1506-17(28-33'), 1506-17(33-37.5'), 1506-21(18-23'), 1506-21(23-28'), 1506-21(28-33'), and 1506-21(33-37').

## **2.9 Soil Sampling for Chromium Analysis on Adjoining Property**

Total chromium and hexavalent chromium concentrations of 222 ppm and 55 ppm, respectively, were detected in a soil sample from on-site test boring TB-30 that was advanced near the northern property boundary as part of the RI at the Site. The Site and adjoining property are shown on Drawing RI-1 included in Appendix A. The location of TB-30 and the other previously advanced test borings are shown on Drawing RI-OS1 included in Appendix A.

On November 8, 1999, two test borings (designated as TB-OS1 and TB-OS2) were advanced on the adjoining property north of the Site (i.e., Lightning Mixers and Aerators) in an effort to further define the nature and extent of chromium in soil near this portion of the Site. The approximate locations of TB-OS1 and TB-OS2 are shown on Drawing RI-OS1. Two surface soil samples (SS-OS1 and SS-OS2) were collected from a 0 to 2" interval at these two test boring locations. The samples were collected using disposable or pre-cleaned sampling equipment.

The two test borings were advanced using vehicle-mounted Geoprobe Systems soil sampling equipment. The Geoprobe Systems sampling procedures referenced in Section 2.1.2 of the May 30, 1997 RI/FS Work Plan were implemented at these two off-site test boring locations. Soil samples were collected in four-foot intervals unless equipment refusal was encountered at shallower depths (i.e., top of inferred bedrock).

A DAY representative evaluated the soil samples in the field for evidence of contamination and pertinent information is provided on test boring logs that are included in Appendix B.

A third test boring (TB-OS3) was planned but could not be advanced due to its proximity to buried utilities. As a substitute, two additional surface soil samples (designated as SS-OS3 and SS-OS4) were collected on the adjoining Lightnin property as agreed in the field by a NYSDEC representative. The approximate locations of SS-OS3 and SS-OS4 are shown on Drawing RI-OS1 included in Appendix A.

The surface soil samples and soil samples from each Geoprobe sample interval (e.g., 0-4', 4-8', 8-12', etc.) were delivered under chain-of-custody control to STL. STL analyzed these soil samples for total chromium using the same methods identified in the May 30, 1997 RI/FS Work Plan. These samples are summarized on Table 1 (sample summary chart) included in Appendix C.

### 3.0 REMEDIAL INVESTIGATION FINDINGS

This section of the report presents the findings of the studies performed as part of this RI and during previous studies. The types of soil and bedrock, as well as groundwater characteristics, are presented in this section of the report. Additionally, the results of field monitoring of soil and groundwater, and analytical testing of selected soil and groundwater samples are presented. The analytical test results are also compared to available NYSDEC standards/guidelines, or cleanup criteria.

#### 3.1 Environmental Monitoring Observations

A total of 45 test borings (designated as TB-1 through TB-42, TB-10A, TB-27A and MW-17A) were advanced through fill and overburden soils at the Site. Six new groundwater monitoring wells (designated as MW-17 through MW-22) were also advanced and installed at the Site. One new monitoring well (MW-18) is an overburden/shallow bedrock interface well. The other five wells are deep bedrock wells. Well MW-22 is a deeper bedrock well. Two test borings (designated as TB-OS1 and TB-OS2) and four surface soil samples (designated as SS-OS1 through SS-OS4) were completed on the adjoining property to the north (i.e., property occupied by Lightnin Mixers & Aerators).

The borings were advanced to equipment refusal. In most cases, equipment refusal appeared to represent the inferred top of bedrock. At some locations, where equipment refusal was encountered at shallower depths (i.e., test borings TB-5, TB-10, TB-27, TB-OS2, etc.), it appears other in-penetrable materials (i.e., concrete, boulders, cobbles, etc.) may have been encountered.

Test boring logs and well logs are included in Appendix B. Field observations and peak measured PID and FID readings on soil samples are presented on the test boring logs. Peak measured PID and FID readings on soil or bedrock samples are also summarized on Table 9 included in Appendix C and on Drawing RI-3.1 including in Appendix A.

- As shown on the logs, odors indicative of VOC, chromium, or unknown contamination were detected on soil samples from test borings TB-6, TB-8, TB-11, TB-14, TB-15, TB-17, TB-19, TB-20, TB-21, TB-23, TB-24, TB-26, TB-27A, TB-28, TB-29, TB-30, TB-32, TB-34, TB-35, TB-37, TB-38, TB-39, and TB-41.
- A review of the test boring logs and well logs indicated that evidence of possible soil discoloration or staining was apparent in soil samples from test borings TB-24, TB-26, TB-27A, TB-30, TB-32, TB-35, and TB-41.
- Peak measured PID readings ranging between 0.0 ppm and 10.0 ppm were detected in samples from test borings TB-1 through TB-5, TB-7 through TB-10, TB-10A, TB-13, TB-15 through TB-19, TB-21 through TB-27, TB-29 through TB-32, TB-34 through TB-42, TB-OS1 and TB-OS2, surface soil samples SS-OS1 through SS-OS4, and wells MW-19 through MW-21.

- Peak measured PID readings above 10.0 ppm were detected in samples from test borings TB-6, TB-11, TB-12, TB-14, TB-20, TB-27A, TB-28, TB-33 and MW-17A, and wells MW-17 and MW-22.
- Peak measured FID readings ranging between 0.0 ppm and 10.0 ppm were detected in samples from test borings TB-3, TB-4, TB-7, TB-9, TB-10, TB-13, TB-16 through TB-18, TB-21 through TB-26, TB-29 through TB-32, TB-35, and TB-39 through TB-42, and wells MW-20 and MW-21.
- Peak measured FID readings above 10.0 ppm were detected in samples from test borings TB-1, TB-2, TB-5, TB-6, TB-8, TB-10A, TB-11, TB-12, TB-14, TB-15, TB-19, TB-20, TB-27, TB-27A, TB-28, TB-33, TB-34, and TB-36 through TB-38.

## 3.2 Geology

General information regarding geology was researched and evaluated as part of this RI. Off-site and regional information were reviewed and evaluated as well as site-specific data generated as part of this RI and previous investigations on the Site. Site-specific data for the Site were used to develop cross-sections of subsurface geologic conditions over the Site. A map view of cross-section locations (A-A' and B-B') is shown on Drawing RI-3 included in Appendix A. The cross-sections A-A' and B-B' are illustrated on Drawing RI-12A and Drawing RI-12B included in Appendix A. Cross-section B-B' illustrates that the basement sump is set into bedrock at the Site.

### 3.2.1 Site-Specific Geology Information

A review of the test boring logs and well logs included in Appendix B indicated that fill material was observed near the surface (i.e., beneath concrete or asphalt surfaces) at 34 of the 45 test boring locations advanced over the Site inside and outside the building. The depth to the bottom of the fill ranged between 1.0 to 5.0 feet below the existing ground surface. The average thickness of fill at these locations was calculated to be approximately 2.7 feet. The fill material was observed to consist primarily of tan, brown, gray and black reworked soil. The fill at many of the test boring locations also contained lesser amounts of concrete, crushed stone, asphalt, cinders, brick, ceramic tile, coal, slag, ash, or glass.

Indigenous soil observed beneath the fill material or starting at the ground surface immediately beneath asphalt or concrete paved areas generally consisted of a mixture of red, brown, gray, tan and olive sands with lesser amounts of gravel, silts, clays and weathered dolomite rock. A layer of generally gray sand and gravel/weathered dolomite rock fragments was observed near the top of inferred bedrock in approximately two-thirds of the test boring and well locations.

Based on the studies performed as part of this RI and on previous studies performed at the Site, bedrock underlying the Site consists of gray crystalline Lockport Dolomite. Auger refusal during drilling of wells, and soil sample equipment refusal during drilling

of wells and advancement of test borings indicated that the inferred top of bedrock ranged between 7.9 feet and 17.0 feet below the existing ground surface. Equipment refusal at shallower depths of between 5.0 feet and 5.5 feet below the ground surface was encountered in test borings TB-10 and TB-27. Based on the deeper depths of test borings TB-10A and TB-27A in proximity to TB-10 and TB-27, these shallower depths to equipment refusal do not appear to represent the top of bedrock at these locations.

As part of this RI, bedrock was cored at well locations MW-17 through MW-22 (refer to Section 2.2.2). The dolomite observed at these locations was gray and contained a trace of vugs (i.e., small cavities ranging in size between 1/8" to 1" that were formed by dissolution of minerals). The dolomite was generally hard and contained some slight to moderately weathered fractures primarily along bedding planes. A few angled and vertical fractures were also observed in the top approximate one foot of rock cored from well MW-18. Some shale partings/seams were also observed in the bedrock that was cored from wells MW-20 and MW-21.

### **3.2.2 Off-Site/Regional Geology Information**

A review of the "Final Phase II Remedial Investigation Report" (Olin Report) dated October 1997 for Olin Chemicals Rochester Plant Site, located approximately 1,500 feet west of the Site, was conducted to collect data on regional geology. A review of the Olin Report indicated soils in the area are primarily associated with glacial depositions such as glacial till and possibly glacio-lacustrine depositions.

## **3.3 Hydrogeology**

General information regarding hydrogeology was researched and evaluated as part of this RI. Off-site and regional information were reviewed and evaluated as well as site-specific data generated as part of this RI and previous investigations on the Site.

### **3.3.1 Site-Specific Hydrogeology Information**

Potentiometric maps were developed using static water level measurements that were collected on January 6, 1999 and April 5, 1999. These maps include potentiometric contour lines that can be used to evaluate groundwater flow conditions for a given set of data. The static water level measurements, well and sump elevations, and calculated static water level elevations are presented on Table 5 (January 6, 1999 data) and Table 6 (April 5, 1999 data), which are included in Appendix C. Interpretation of this groundwater data is further discussed below.

#### January 6, 1999 Data

Drawing RI-8 presents the water elevations as calculated on January 6, 1999. Measurable water was not detected in well MW-15 using the static water level indicator. Some overburden and/or shallow bedrock wells are coupled with deep bedrock wells (e.g., MW-1/MW-6). At well couplings MW-1/MW-6, MW-18/MW-19, MW-9/MW-17,



and MW-3/MW-14, the elevation differences between the shallower wells with their nearby deeper wells were 2.0 feet or less. However, the elevation difference between shallow well MW-4 and deep well MW-7 was 10.5 feet, with the deep bedrock well having the lower groundwater elevation [Note, similar head elevation difference between wells MW-4 and MW-7 has been documented since their installation in 1990]. The water elevation measured in deep bedrock well MW-21 was also lower than expected.

Drawing RI-8A illustrates the water elevations calculated for overburden and/or shallow bedrock wells and the basement sump for January 6, 1999. As shown by the potentiometric contour lines on Drawing RI-8A, groundwater in the overburden/shallow bedrock within approximately fifty to seventy-five feet of the basement sump is shown to radially flow toward the sump, which had the lowest groundwater elevation. Beyond the influence of the sump, groundwater on the eastern side of the Site was generally flat and groundwater on the western side of the Site appeared to have a flow pattern toward the southwest.

Drawing RI-8B illustrates the water elevations calculated for deep bedrock wells for January 6, 1999 as well as the water elevation calculated for the basement sump. As shown by the potentiometric contour lines on Drawing RI-8B, groundwater in the deep bedrock on the western half of the Site was shown to radially flow toward the sump. The highest groundwater elevation was calculated for MW-20 located north of the northwest corner of the building. Groundwater on the eastern half of the Site appeared to flow toward the southeast (i.e., towards well MW-7, which had the lowest groundwater elevation on the Site).

Static water level measurements and calculated groundwater elevations collected from the wells on December 17, 1998 and December 21, 1998 are presented on Table 7 and Table 8, respectively. Measurable water was not detected in well MW-15 on December 17, 1998 or December 21, 1998. The groundwater elevations for the wells as measured on December 17, 1998 and December 21, 1998 are also presented on Drawing RI-10 and Drawing RI-11, respectively. The groundwater elevation data patterns for the December 17 and 21, 1998 data are similar to that shown using the January 6, 1999 groundwater elevation data; thus, potentiometric contour lines for these December 1998 data were not developed.

#### April 5, 1999 Data

Drawing RI-9 presents the water elevations as calculated on April 5, 1999. At well couplings MW-1/MW-6, MW-15/MW-16, MW-18/MW-19, MW-9/MW-17, and MW-3/MW-14, the elevation differences between the shallower wells with their nearby deeper wells were 1.91 feet or less. However, the elevation difference between shallow well MW-4 and deep well MW-7 was 10.53 feet, with the deep bedrock well having the lower groundwater elevation.

Drawing RI-9A illustrates the water elevations calculated for overburden and/or shallow bedrock wells and the basement sump for April 5, 1999. As shown by the potentiometric

contour lines on Drawing RI-9A, groundwater in the overburden/shallow bedrock was shown to radially flow toward the basement sump, which had the lowest groundwater elevation. Groundwater on the eastern side of the Site also flowed toward the sump, but at a lower gradient than observed at well locations closer to the sump.

Drawing RI-9B illustrates the water elevations calculated for deep bedrock wells and the basement sump for April 5, 1999. As shown by the potentiometric contour lines on Drawing RI-9B, groundwater in the deep bedrock on the western half of the Site was shown to radially flow toward the sump. Groundwater on the eastern half of the Site appeared to flow toward the southeast (i.e., towards well MW-7, which had the lowest groundwater elevation on the Site). This map appears to indicate that a groundwater divide trending north-south may have existed on the Site in proximity to bedrock well MW-17 on April 5, 1999.

#### Overburden Well MW-15 Static Water Level Measurements

The results of the static water level measurements on December 17 & 21, 1998 and January 6, 1999 indicated that overburden well MW-15 was dry (i.e., contained no measurable water). The results of the static water level measurements on February 1, 1999 and April 5, 1999 indicated that overburden well MW-15 contained measurable water. This indicated that the top of the groundwater table at this location on the Site fluctuates above and below the top of bedrock.

#### Deeper Bedrock Well MW-22 Static Water Level Measurements

A static water level measurement of 13.83 feet below the top of the inner 4-inch permanent casing was measured on October 6, 2000. A static water level measurement of 13.61 feet below the top of the inner 4-inch permanent casing was measured on October 25, 2000.

#### Basement Sump Evaluation

Table 3 included in Appendix C illustrates the groundwater level measurement data that was collected during the February 19, 1999 basement sump test. Table 4 included in Appendix C illustrates the groundwater level measurement data that was collected during the second basement sump test that was performed on April 5, 1999 and April 6, 1999. The water level data collected during the February 19, 1999 sump test and the April 5 & 6, 1999 sump test were evaluated and the following trends were noted:

- Subsequent to turning off the sump pump during the two tests, the water levels in the majority of the wells were measured to rise between 0.01 feet and 0.27 feet. Exceptions to this trend included water level readings from MW-1, MW-3, MW-8, MW-15 and MW-19, where water levels were observed to remain the same or decrease during one of the tests.

- Subsequent to turning the sump pump back on during the second test on April 6, 1999, the water levels in eighteen of the nineteen wells were measured to continue to rise between 0.02 feet and 0.29 feet. The water level in the remaining well was measured to fall 0.04 feet. It was expected that the water levels in the nineteen wells would have fallen, and not risen as measured in most of the wells. The measurements obtained could have been the result of natural fluctuations in the elevation of the groundwater table.

### Hydraulic Conductivity Testing

The slug-in and slug-out data from the seven wells tested (i.e., MW-4, MW-7, MW-9, MW-16, MW-17, MW-18, and MW-19) were input into the *Super Slug* aquifer slug test analysis software program and were evaluated using the Bouwer and Rice graphical method. Copies of the input data, and output data (including graphed data), are included in Appendix G. The original complete copy of the data, including the raw slug test data, is being stored at DAY's office in Rochester, New York and is available for review by regulatory agencies upon request. The hydraulic conductivities are summarized on Table 22 included in Appendix C, and the results of the slug-in tests are further discussed as follows:

- The hydraulic conductivities for overburden wells MW-9 and MW-4 were 0.96 feet/day ( $3.39 \times 10^{-4}$  cm/sec) and 0.24 feet/day ( $8.61 \times 10^{-5}$  cm/sec), respectively.
- The hydraulic conductivity for the overburden/bedrock well MW-18 was 23.0 feet/day ( $8.11 \times 10^{-3}$  cm/sec).
- The hydraulic conductivities for bedrock wells MW-7, MW-16, MW-17, and MW-19 were 0.75 feet/day ( $2.63 \times 10^{-4}$  cm/sec), 59.0 feet/day ( $2.08 \times 10^{-2}$  cm/sec), 0.42 feet/day ( $1.48 \times 10^{-4}$  cm/sec), and 4.61 feet/day ( $1.63 \times 10^{-3}$  cm/sec), respectively.
- The hydraulic conductivities for overburden wells MW-4 and MW-9 were similar to the hydraulic conductivities of bedrock wells MW-7 and MW-17 (i.e., hydraulic conductivities ranged between 0.24 feet/day and 0.96 feet/day). These wells are located on the central and eastern portions of the Site.
- Bedrock wells MW-16 and MW-19 and overburden/bedrock well MW-18 appeared to intercept bedrock that exhibited higher hydraulic conductivities than wells tested on other portions of the Site (i.e., hydraulic conductivities for these wells on the west side of the Site ranged between 4.61 feet/day to 59.0 feet/day, versus hydraulic conductivities for other wells that ranged between 0.24 feet/day and 0.96 feet/day). This comparison suggests heterogeneity of hydraulic conductivity in the bedrock at the Site or possibly that bedrock on the west side of the Site exhibits higher hydraulic conductivity characteristics than bedrock on the central and eastern portions of the Site.

### Observations During Groundwater Sampling Using Packer

Various zones in bedrock wells MW-17 and MW-21 were sampled using a packer system. During this work, an electronic static water level indicator was used to monitor the water levels within the packered zone, above the packered zone and at nearby wells MW-8 and MW-9 when the sampling was being conducted at MW-17). The water level data, times and dates of purging, amounts of water purged during purging for each packered zone are summarized on Groundwater Sampling Purging Logs included in Appendix D. The following observations are made based on review of the water level data:

Well MW-17: During purging of the 33 to 37.5 foot packered zone and the 28 to 33 foot packered zone in well MW-17, water levels measured inside the packered zone decreased dramatically with time in comparison to the water levels measured above these packered zones. During purging of the 23 to 28 foot packered zone, water levels measured inside the packered zone and above the packered zone simultaneously decreased over three feet. This data suggests that the 23 to 28 foot depth interval had some hydraulic connection to the overlying 18.3 to 23 foot depth interval and that the 28 to 37.5 foot depth interval had little or no hydraulic connection with the overlying 18.3 to 28 foot depth interval.

Well MW-21: During purging of the 33 to 37 foot packered zone and the 28 to 33 foot packered zone in well MW-21, water levels measured inside the packered zone decreased dramatically with time in comparison to the water levels measured above these packered zones. During purging of the 23 to 28 foot packered zone, water levels measured inside the packered zone continued to decrease dramatically with time in comparison to the water levels measured above this packered zone; however, the water levels above the packered zone were measured to drop approximately 0.3 feet below the original static water level of this well. This data suggests that the 23 to 28 foot depth interval may have a slight hydraulic connection to the overlying 18 to 23 foot depth interval, and that the 28 to 37 foot depth interval had little or no hydraulic connection with the overlying 18 to 28 foot depth interval.

In summary, based on the water level measurement observations taken within and above packered zones during groundwater purging, the top ten feet of open hole bedrock (i.e., approximately 18 to 28 feet below the existing ground surface) in wells MW-17 and MW-21 appeared to have slight to some hydraulic connection. The next two five foot packered zones (i.e., 28 to 33 feet and approximately 33 to 37 or 37.5 feet below the ground surface) in these wells appear to have little or no hydraulic connection to one another or to the overlying bedrock in the 18 to 28 foot depth interval.

### **3.3.2 Off-Site/Regional Hydrogeology Information**

A review of the "Final Phase II Remedial Investigation Report" (Olin Report) dated October 1997 for Olin Chemicals Rochester Plant Site, located approximately 1,500 feet

west of the Site, was conducted to collect data on regional hydrogeology. A review of the Olin Report indicated the following information of interest in relation to characterizing general subsurface conditions in the area of the Site:

- Information obtained in the Olin Report indicated that groundwater in the overburden at the Olin Site generally flows toward the south and west. However, information in the report including a Figure 3-4 of that report titled "November 1995 Overburden Groundwater Interpreted Piezometric Contours - Non-Pumping Condition" indicated that a groundwater divide may exist along the eastern side of the Olin property. As such, groundwater underlying the eastern portion of the Olin property may have the potential to also flow in an easterly direction.
- Information obtained in the Olin report indicated that groundwater in the overburden is hydraulically connected with groundwater in the shallow bedrock.
- Information obtained in the report indicated that groundwater in the study area in the bedrock generally flows toward the west and south; however, under non-pumping conditions, groundwater in the bedrock may also flow toward the east.
- Information obtained in the report indicated that a significant water bearing fracture zone appears evident between the Olin Chemicals property and the Dolomite Products quarry located approximately 3,500 feet southwest of the Olin Chemicals property. Olin Chemicals contaminants (e.g., chloropyridines, dichloropyridines, etc.) have been detected in the seep water coming from this fractured zone located in the east wall of the quarry. Information in the Olin report indicated that bedrock joint patterns noted in the nearby Monroe County Pure Waters Combined Sewer Overflow Abatement program tunnels data trend 60° to 80° east of north, which corresponds well with the fractures and bedding planes observed at the active seeps in the eastern wall of the quarry in relation to the Olin Chemicals property. Also, a review of the Olin report indicated that a vuggy zone in bedrock has been documented at well locations within the study area and its elevation is similar to that of the fractured seeps in the east wall of the quarry. [Note, the depths, groundwater elevations and flow conditions of the deep bedrock wells on the Site suggest that they are situated above this deeper bedrock water-bearing zone].

### **3.4 Analytical Test Results**

During this RI, soil and groundwater samples were collected from test borings and/or groundwater monitoring wells. The laboratory analytical test parameters varied depending upon Site location and criteria established in the RI/FS Work Plan and subsequent Work Plan addendums. The analytical laboratory test results are summarized on Table 10A, Table 10B, Tables 11 through 21, Table 23 and Table 24, which are included in Appendix C. The conclusions and recommendations of the DUSR were incorporated into the generation of these analytical laboratory data tables. The pertinent portions of the analytical laboratory reports (e.g., test results, chain-of-custody forms, etc.) are included in Appendix F. One complete copy of the analytical laboratory reports, including the QA/QC laboratory data, was submitted to the

NYSDEC Region 8 office in Avon, New York. The original complete laboratory reports are being stored at DAY's office in Rochester, New York and are available for review by regulatory agencies upon request. The test results are also further discussed in the following subsections.

### **3.4.1 Soil Samples**

#### VOCs in Soil

A total of 16 soil samples were analyzed for TCL VOCs. The analytical laboratory reports are included in Appendix F and the test results are summarized on Tables 10A and 10B included in Appendix C. The peak total VOC concentrations detected in soil samples from test boring and well locations are illustrated on Drawing RI-4 included in Appendix A. The concentrations of detected VOCs are also compared on the two tables to their available NYSDEC January 24, 1994 TAGM 4046 recommended soil cleanup objectives and USEPA Health Effects Assessment Summary Table (HEAST) values for oral exposure to soil as referenced in the May 1989 Resource Conservation and Recovery Act (RCRA) Facility Investigation Guidance (Publication #PB89-200299). The analytical test results and comparison to TAGM 4046 cleanup objectives and HEAST values are summarized as follows:

- Total VOC concentrations detected in soil samples ranged between 3 parts per billion (ppb) at test borings TB-6 and TB-8, and 50,866 ppb at TB-20.
- VOCs detected in two or more soil samples in order of frequency of detection included: PCE; TCE; MEK; total 1,2-DCE; trichlorofluoromethane; unknown silicone compounds; 1,2-DCA; carbon disulfide; 1,1-DCE; and acetone.
- The maximum total chlorinated VOC concentration detected in a soil sample was 3,342 ppb from the 12 to 14.5 foot interval of test boring TB-11.
- The concentrations of individual VOCs detected in the soil samples did not exceed their available HEAST values.
- With the exception of PCE (detected at 3,200 ppb) in sample 1506-S-12 from test boring TB-11 (12-14.5'), the concentrations of individual VOCs detected in the soil samples did not exceed their available NYSDEC TAGM 4046 recommended soil cleanup objectives.
- The total VOC concentration detected in the soil sample from TB-20 (50,866 ppb) exceeded the NYSDEC TAGM 4046 total VOC cleanup objective of  $\leq 10,000$  ppb.
- The VOCs detected at TB-20 consisted of compounds typically associated with petroleum products, unknown VOCs, and also the chlorinated VOC tetrachloroethene. The VOCs detected in the other fifteen soil samples typically consisted of chlorinated VOCs such as tetrachloroethene, trichloroethene, dichloroethenes, etc.

- From test boring TB-11, soil samples from three depth intervals were analyzed to evaluate the distribution of VOCs. Sample 1506-S-13 was collected from a 0-4 foot interval and contained 185 ppb total VOCs. Samples 1506-S-16 and 1506-S-17 were collected from an 8-12 foot interval and contained 55 ppb and 124 ppb total VOCs, respectively. Sample 1506-S-12 was collected from a 12-14.5 foot interval and contained 3,342 ppb total VOCs.
- The peak PID and FID readings measured on soil samples from the test borings and new wells are listed on Drawing 3.1 in Appendix A, Table 9 in Appendix C, and are also discussed in the text of Section 3.1. A conclusive correlation in PID or FID readings on soil samples with respect to the concentrations of VOCs detected in the soil samples by the analytical laboratory was not apparent for this Site. Examples are as follows:
  - In test boring TB-8, peak PID and FID readings of 1.0 ppm and 250 ppm were measured on soil from the same depth interval in which an analytical laboratory sample contained 8 ppb of total VOCs.
  - In test boring TB-14, peak PID and FID readings of 16.4 ppm and 21 ppm were measured on soil from the same depth interval in which an analytical laboratory sample contained 14 ppb of total VOCs.
  - In test boring MW-17A, a peak PID reading of 45.7 ppm was measured on soil from the same depth interval in which an analytical laboratory sample contained 26 ppb of total VOCs.
  - In test boring TB-6, peak PID and FID readings of 6.1 ppm and 530 ppm were measured on soil from the same depth interval in which an analytical laboratory sample contained only 3 ppb of total VOCs.

#### Chromium in On-Site Soil

A total of 42 soil samples from the Site were analyzed for total chromium. A total of 26 of these soil samples were also analyzed for hexavalent chromium. The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 11 included in Appendix C. The peak total chromium and hexavalent chromium concentrations detected in soil samples from test boring and well locations are illustrated on Drawing RI-5 included in Appendix A. The concentrations of detected chromium are also compared in Table 11 to its NYSDEC January 24, 1994 TAGM 4046 recommended soil cleanup objectives, 1995 "proposed" TAGM 4046 recommended soil cleanup objectives, TAGM 4046 background ranges, and USEPA HEAST values for oral exposure to soil as referenced in the May 1989 RCRA Facility Investigation Guidance (Publication #PB89-200299). The analytical test results and comparison to TAGM 4046 cleanup objectives, background ranges, and HEAST values are summarized as follows:

- Total chromium was detected in each of the soil samples at concentrations ranging between 2.9 ppm and 508 ppm.
- Hexavalent chromium was detected in 21 of the 26 soil samples tested at concentrations ranging between 0.48 ppm and 69.0 ppm.
- The concentration of total chromium detected in nine of the soil samples from six locations exceeded the 1995 "proposed" TAGM 4046 recommended soil cleanup objective of 50 ppm. The concentration of total chromium detected in ten of the soil samples from seven locations exceeded the upper background range listed in TAGM 4046.
- The concentration of hexavalent chromium detected in two soil samples from test boring TB-30 (i.e., 55.0 ppm) and test boring TB-31 (i.e., 69.0 ppm) exceeded the TAGM 4046 recommended soil cleanup objective of 50 ppm and the upper background range of 40 ppm listed in TAGM 4046.
- The concentrations of total chromium and hexavalent chromium detected in the soil samples do not exceed their HEAST values (80,000 ppm and 400 ppm, respectively) for oral exposure to soils.

#### Chromium in Off-Site Soil

A total of 10 soil samples were collected from test boring and surface soil locations on the adjoining Lightnin property north of the Site. These 10 soil samples were analyzed by STL for total chromium. The analytical laboratory report is included in Appendix F and the test results are summarized on Table 11 included in Appendix C. The peak total chromium concentrations detected in soil samples from test boring locations are illustrated on Drawing RI-OS1 included in Appendix A. The concentrations of detected chromium are also compared in Table 11 to its NYSDEC January 24, 1994 TAGM 4046 recommended soil cleanup objectives, 1995 "proposed" TAGM 4046 recommended soil cleanup objectives, TAGM 4046 background ranges, and USEPA HEAST values for oral exposure to soil as referenced in the May 1989 RCRA Facility Investigation Guidance (Publication #PB89-200299). The analytical test results and comparison to TAGM 4046 cleanup objectives, background ranges, and HEAST values are summarized as follows:

- Total chromium was detected in each of the soil samples at concentrations ranging between 4.6 ppm and 40.8 ppm.
- The concentrations of total chromium detected in the soil samples did not exceed the TAGM 4046 recommended soil cleanup objective of 50 ppm.



- The concentration of total chromium detected in Sample 1506-S-68 from surface soil location SS-OS4 (40.8 ppm) exceeded the upper background range listed in TAGM 4046 (40.0 ppm).
- The concentrations of total chromium detected in the soil samples do not exceed its HEAST value of 80,000 ppm for oral exposure to soils.

Note: These soil samples from the adjoining Lightnin property north of the Site were also supposed to be analyzed by STL for hexavalent chromium. STL indicated that the hexavalent chromium data were not usable. As a result, STL did not report the hexavalent chromium data. A NYSDEC representative agreed with DAY that based on the total chromium test results for these samples, it did not appear that re-sampling for hexavalent chromium analysis was warranted.

#### TAL Metals in Soil

A total of 6 soil samples from five test boring locations were analyzed for TAL metals. The chromium test results are discussed above. The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 12 included in Appendix C.

The concentrations of detected TAL metals are also compared on this table to their available NYSDEC January 24, 1994 TAGM 4046 recommended soil cleanup objectives and TAGM 4046 background ranges. The concentrations of cadmium and chromium are also compared to 1995 "proposed" TAGM 4046 recommended soil cleanup objectives. The comparison to TAGM 4046 cleanup objectives and background ranges are summarized as follows:

- In four of the samples (1506-S-06; 1506-S-15; 1506-S-19; and 1506-S-55), only the concentrations of the analyte calcium exceeded its NYSDEC TAGM 4046 recommended soil cleanup objective or upper limit of its background range. Sample 1506-S-06 from test boring TB-18 is considered to represent a background sample for the Site. Sample 1506-S-06 was collected from apparent indigenous soil from a depth of approximately 12-14.2 feet below the ground surface. Samples 1506-S-15; 1506-S-19; and 1506-S-55 also consisted of apparent indigenous soil. As such, the concentration of calcium detected in the samples may be attributable to naturally occurring metals in soils at the Site.
- In sample 1506-S-35 from test boring TB-30, the concentrations of the analytes cadmium, copper, magnesium, silver, and zinc exceeded their respective NYSDEC TAGM 4046 recommended soil cleanup objectives or upper limits of their background ranges. This sample consisted of fill material collected from a depth interval of 0-4 feet below the ground surface. The fill consisted of gray and black reworked soil, cinders, ash, asphalt, glass, brick, and organic material.

- In sample 1506-S-28 from test boring TB-27A, the concentrations of the analytes arsenic, barium, cadmium, calcium, chromium, copper, lead, silver, and zinc exceeded their respective NYSDEC TAGM 4046 recommended soil cleanup objectives or upper limits of their background ranges. This sample consisted of fill material collected from a depth interval of 1.5-3.0 feet below the floor of the building. The fill consisted of black reworked soil, wood and organic material that emanated a chemical odor. This test boring is located within the approximate limits of the area of outdoor disturbance/storage west of the original portion of the building as observed in 1951 and 1961 historical aerial photographs. This area of various elevated TAL metals is located in the same area that is impacted with elevated concentrations of the TAL metal chromium and chlorinated VOCs.

#### SVOCs in Soil

One soil sample (1506-S-58) from test boring MW-17A was analyzed for SVOCs. The analytical laboratory report is included in Appendix F and the test results are summarized on Table 13 included in Appendix C. As shown, two SVOCs (Bis(2-ethylhexyl)phthalate and Di-n-butylphthalate) and some tentatively identified compounds were detected in this soil sample at concentrations ranging between 75 ppb and 110 ppb. The tentatively identified compounds included 2-cyclohexen-1-one and an unknown ketone.

The concentrations of detected SVOCs are also compared in Table 13 to their available NYSDEC January 24, 1994 TAGM 4046 recommended soil cleanup objectives and USEPA HEAST values for oral exposure to soil as referenced in the May 1989 RCRA Facility Investigation Guidance (Publication #PB89-200299). As shown, the concentrations of SVOCs did not exceed their respective TAGM 4046 recommended soil cleanup objectives or HEAST values.

#### PCBs/Pesticides in Soil

One soil sample (1506-S-58) from the test boring MW-17A was analyzed for PCBs and pesticides. The analytical laboratory report is included in Appendix F and the test results are summarized on Table 14 included in Appendix C. As shown, PCBs and pesticides were not detected above laboratory detection limits in this sample.

### **3.4.2 Groundwater Samples**

Groundwater samples were collected from 18 wells and the basement sump in December 1998. The analytical test results are further discussed below.

#### VOCs in Groundwater

Subsequent to purging, groundwater samples were collected from 18 wells on the Site. A pre-purge sample (1506-N-MW9) was collected from well MW-9 since field monitoring with a Heron Instruments interface meter (Model H.01L) indicated the possible presence of DNAPL at this well location. A sample of groundwater was also collected from the

basement sump. The NYSDEC also collected grab samples from wells MW-8, MW17 and MW-18 for VOC analysis. These samples were analyzed for TCL VOCs.

The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 15 included in Appendix C. The peak total VOC concentrations detected in groundwater samples from well locations are illustrated on Drawing RI-6 included in Appendix A. The concentrations of detected VOCs are also compared in Table 15 to available NYSDEC June 1998 TOGS 1.1.1 groundwater standards and guidance values. The analytical test results and comparison to TOGS 1.1.1 groundwater standards and guidance values are summarized as follows:

- Total VOC concentrations detected in groundwater samples from the wells and the basement sump ranged between 8 ppb and 155,969 ppb. The groundwater sample collected from MW-9 after being purged contained the highest concentration of total VOCs detected (155,969 ppb). The groundwater samples from wells MW-8, MW-10, MW-12 and MW-17 and the basement sump contained VOC concentrations of 2,140 ppb, 20,340 ppb, 4,880 ppb, 9,070 ppb and 10,750 ppb, respectively. The concentrations of VOCs detected in the remaining wells ranged between non-detect (MW-19) and 209 ppb (MW-11).
- VOCs detected in two or more groundwater samples in order of frequency of detection included: 1,2-DCE (16 samples); TCE (14 samples); PCE (11 samples); VC (6 samples); 1,1-DCE (5 samples); 1,1-DCA (3 samples); carbon disulfide (2 samples); and toluene (2 samples). Unknown silanes were tentatively detected in six samples.
- The concentrations of at least one detected VOC in a groundwater sample from wells MW-3, MW-6, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-16, MW-17, MW-18, MW-20 and MW-21, and also in the sample collected from the basement sump, exceeded TOGS 1.1.1 groundwater standards or guidance values.
- The concentrations of detected VOCs in the groundwater samples from wells MW-1, MW-4, MW-7, MW-14 and MW-19 did not exceed TOGS 1.1.1 groundwater standards or guidance values.

#### VOCs in Groundwater Samples from Packered Zones

Groundwater was sampled from four packered zones in the open bedrock MW-17 and MW-21. Depth intervals sampled in MW-17 included 18.3 to 23', 23 to 28', 28 to 33' and 33 to 37.5' below the ground surface. Depth intervals sampled in MW-21 included 18 to 23', 23 to 28', 28 to 33' and 33 to 37' below the ground surface. These samples are listed on Table 2 included in Appendix C. The NYSDEC also collected grab samples from wells MW-17 and MW-21 for VOC analysis. These samples were analyzed for TCL VOCs.

The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 23 included in Appendix C. The concentrations of detected VOCs are also compared in Table 23 to available NYSDEC June 1998 TOGS 1.1.1 groundwater standards and guidance values. The analytical test results and comparison to TOGS 1.1.1 groundwater standards and guidance values are summarized as follows:

#### Well MW-17

- The total concentration of VOCs detected in Sample 1506-17(18.3-23) was 5,289 ppb, which was primarily comprised of PCE (2,300 ppb) and TCE (2,600 ppb) with a lesser amount of 1,2-DCE (360 ppb) and other constituents.
- The total concentration of VOCs detected in Sample 1506-17(23-28) was 5,562 ppb, which was primarily comprised of PCE (2,900 ppb) and TCE (2,100 ppb), with lesser amounts of 1,2-DCE (460 ppb), VC (2 ppb) and other constituents.
- The total concentration of VOCs detected in Sample 1506-17(28-33) was 4,713 ppb, which was primarily comprised of 1,2-DCE (3,100 ppb) with lesser amounts of PCE (610 ppb), TCE (940 ppb), VC (7 ppb), and other constituents.
- The total concentration of VOCs detected in Sample 1506-17(33-37.5') was 5,352 ppb, which was primarily comprised of 1,2-DCE (4,800 ppb), with lesser amounts of PCE (190 ppb), TCE (190 ppb), VC (120 ppb) and other constituents.

In summary, the total VOC concentrations detected in the four packered zones in well MW-17 ranged between 4,713 ppb and 5,562 ppb. The concentrations of biodegradation VOCs (i.e., 1,2-DCE and VC) increased with depth as the concentrations of parent VOCs (PCE and TCE) decreased with depth. A review of the test results suggests a significant change from parent products to daughter products occurs at a depth of approximately 28 feet below ground surface. Some other VOCs (e.g., acetone, toluene, xylene, etc.) were also detected, but at concentrations significantly lower than the concentrations of chlorinated VOCs. The concentrations of many of the specific VOCs detected in each sample exceeded their respective TOGS 1.1.1 groundwater standards or guidance values.

#### Well MW-21

- The total concentration of VOCs detected in Sample 1506-21(18-23) was 47 ppb, which was comprised of PCE (2 ppb), 1,2-DCE (21 ppb), VC (4 ppb), acetone (3 ppb), toluene (6 ppb), and xylenes (11 ppb).
- The total concentration of VOCs detected in Sample 1506-21(23-28) was 83 ppb, which was comprised of PCE (3 ppb), 1,2-DCE (28 ppb), VC (4 ppb), toluene (4 ppb), ethylbenzene (2 ppb), and xylenes (42 ppb).
- The total concentration of VOCs detected in Sample 1506-21(28-33) was 44 ppb, which was comprised of PCE (7 ppb), 1,2-DCE (11 ppb), toluene (4 ppb), ethylbenzene (1 ppb), and xylenes (21 ppb).
- The total concentration of VOCs detected in Sample 1506-21(33-37") was 13 ppb, which was solely comprised of 1,2-DCE.

In summary, the total VOC concentrations detected in the four packered zones in well MW-21 ranged between 13 ppb and 83 ppb, of which the total concentrations of chlorinated VOCs ranged between 13 ppb and 35 ppb. Some other VOCs (e.g., acetone, toluene, xylene, etc.) were also detected in these samples at concentrations ranging between 1 ppb and 42 ppb. The concentrations of VOCs detected in MW-21 generally were observed to decrease with depth (i.e., lowest total VOCs detected was in deepest interval). The concentrations of one or more detected VOCs in each groundwater sample from each zone in wells MW-17 and MW-21 exceeded TOGS 1.1.1 groundwater standards or guidance values.

#### VOCs in Samples from Well MW-22 Using Diffusion Samplers

Six passive groundwater diffusion samplers (designated DS-1 through DS-6) were used to collect groundwater samples at various depth intervals within the 30-foot portion of open-hole bedrock (i.e., between 50 feet and 80 feet below the ground surface) for subsequent analytical laboratory testing. The centers of the samplers were measured to be at the following depths: DS-1 (53.40'); DS-2 (57.30'); DS-3 (60.85'); DS-4 (67.85'); DS-5 (72.05'); and DS-6 (77.35').

CAS analyzed the groundwater samples from the passive diffusion samplers for TCL VOCs using USEPA Method 8260. These samples are listed on Table 2 included in Appendix C. The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 24 included in Appendix C. The concentrations of detected VOCs are also compared in Table 24 to available NYSDEC June 1998 TOGS 1.1.1 groundwater standards and guidance values. The analytical test results and comparison to TOGS 1.1.1 groundwater standards and guidance values are summarized as follows:

- VOCs were not detected above reported analytical laboratory detection limits in samples DS-1, DS-2 and DS-3.
- Chlorinated VOCs (e.g., PCE, TCE, 1,2-DCE, VC, etc.) were not detected in samples DS-1 through DS-6.
- The VOC toluene was detected in samples DS-4, DS-5 and DS-6 at concentrations of 6.0 ppb, 11.0 ppb and 6.8 ppb, respectively. These concentrations slightly exceed the NYSDEC TOGS 1.1.1 groundwater standard for toluene of 5.0 ppb
- The VOC xylene (m+p) was detected in samples DS-4, DS-5 and DS-6 at concentrations of 5.8 ppb, 7.9 ppb and 6.8 ppb, respectively. These concentrations slightly exceed the NYSDEC TOGS 1.1.1 groundwater standard for xylene (m+p) of 5.0 ppb
- The toluene and xylene (m+p) detected in samples DS-4, DS-5, and DS-6 do not appear attributable to historic or current use of the Site.

#### Chromium in Groundwater

Subsequent to purging, groundwater samples were collected from 18 wells on the Site. A groundwater sample was also collected from the basement sump. These samples were analyzed for total chromium and hexavalent chromium. The NYSDEC also collected

grab samples from wells MW-8, MW-16 and MW-20 for metals analysis (including chromium) and for hexavalent chromium (MW-8 only). The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 16 included in Appendix C. The peak total chromium and hexavalent chromium concentrations detected in groundwater samples from well locations are illustrated on Drawing RI-7 included in Appendix A. The concentrations of detected chromium are also compared on Table 16 to available NYSDEC June 1998 TOGS 1.1.1 groundwater standards. The analytical test results and comparison to TOGS 1.1.1 groundwater standards are summarized as follows:

- Total chromium was detected in groundwater samples from 16 of the 18 wells and the basement sump at concentrations ranging between 1.4 ppb and 52,300 ppb. Total chromium was not detected above reported laboratory detection limits in the groundwater samples from wells MW-3 and MW-14.
- Hexavalent chromium was detected in groundwater samples from MW-8, MW-9 and MW-12 at peak concentrations of 42,000 ppb, 283 ppb, and 587 ppb, respectively. Hexavalent chromium was not detected above laboratory detection limits in the groundwater samples from the remaining wells or from the basement sump.
- The concentrations of total chromium detected in wells MW-8, MW-9, MW-12, MW-21 and the basement sump exceeded the TOGS 1.1.1 groundwater standard for chromium of 50 ppb.
- The concentrations of hexavalent chromium detected in wells MW-8, MW-9 and MW-12 exceeded the TOGS 1.1.1 groundwater standard for hexavalent chromium of 50 ppb.
- The test results indicated that approximately 80% of the total chromium detected at well MW-8 is comprised of hexavalent chromium.

#### TAL Metals in Groundwater

Groundwater samples from wells MW-8, MW-9, MW-16, MW-17 and MW-20 were analyzed for TAL metals. The chromium test results are discussed above. The NYSDEC also collected grab samples from wells MW-8, MW-16 and MW-20 for total metals analysis. The analytical laboratory reports are included in Appendix F and the test results are summarized on Table 17 included in Appendix C.

The concentrations of detected TAL metals are also compared on this table to their available NYSDEC June 1998 TOGS 1.1.1 groundwater standards or guidance values and are summarized as follows:

- Concentrations of two or more analytes in a groundwater sample from each well exceeded NYSDEC TOGS 1.1.1 groundwater standards or guidance values. Analytes that exceeded TOGS 1.1.1 groundwater criteria in one or more of the groundwater samples included antimony, chromium, copper, iron, lead, magnesium, manganese,

selenium, sodium, and thallium. The concentrations of metals in specific samples that exceeded their respective NYSDEC TOGS 1.1.1 groundwater standards or guidance values are summarized as follows:

- Antimony was detected in the groundwater samples from wells MW-8, MW-9 and MW-16 at concentrations of 780 ppb, 19.8 ppb and 20.6 ppb, respectively.
  - Cadmium was detected in the groundwater samples from wells MW-9 and MW-16 at concentrations of 10 ppb each.
  - Chromium was detected in the groundwater samples from wells MW-8 and MW-9 at concentrations of 52,300 ppb and 1,110 ppb, respectively.
  - Copper was detected in the groundwater samples from wells MW-9 and MW-16 at concentrations of 273 ppb and 233 ppb, respectively.
  - Iron was detected in the groundwater samples from wells MW-8, MW-9, MW-16, MW-17 and MW-20 at concentrations ranging between 1,710 ppb (MW-8) and 18,200 ppb (MW-16).
  - Lead was detected in the groundwater samples from wells MW-9 and MW-17 at concentrations of 36.1 ppb and 80.9 ppb, respectively.
  - Magnesium was detected in the groundwater samples from wells MW-8, MW-9, MW-16, MW-17 and MW-20 at concentrations ranging between 48,900 ppb (MW-16) and 151,000 ppb (MW-8).
  - Manganese was detected in the groundwater sample from well MW-9 at a concentration of 643 ppb.
  - Nickel was detected in the groundwater sample from well MW-9 at a concentration of 309 ppb.
  - Selenium was detected in the groundwater sample from well MW-16 at a concentration of 18.5 ppb.
  - Sodium was detected in the groundwater samples from wells MW-8, MW-9, MW-16, MW-17 and MW-20 at concentrations ranging between 64,200 ppb (MW-8) and 510,000 ppb (MW-16).
  - Thallium was detected in the groundwater samples from wells MW-8, MW-9, MW-16 and MW-20 at concentrations of 111 ppb, 11.3 ppb, 28.4 ppb and 19.2 ppb, respectively.
- Concentrations of analytes that did not exceed available NYSDEC TOGS 1.1.1 groundwater criteria in the groundwater samples included arsenic, barium, beryllium, mercury, silver, zinc and cyanide.
  - The analytes aluminum, calcium, cobalt, potassium and vanadium were detected in groundwater samples; however, there are no available NYSDEC TOGS 1.1.1 groundwater criteria for these analytes.
  - The analytes mercury and cyanide were not detected in the groundwater samples above reported laboratory detected limits.

### SVOCs in Groundwater

Groundwater samples from wells MW-9, MW-16 and MW-17 were analyzed for SVOCs. The analytical laboratory report is included in Appendix F and the test results are summarized on Table 18 included in Appendix C. As shown, the SVOC Bis(2-ethylhexyl)phthalate was detected in the samples from wells MW-9 and MW-17 at concentrations of 3 ppb and 1 ppb, respectively. The SVOC Bis(2-chloroethyl)ether was detected in the sample from well MW-16 at a concentration of 20 ppb. The concentrations of detected SVOCs are also compared on Table 18 to their available NYSDEC June 1998 TOGS 1.1.1 groundwater standards or guidance values. As shown, the detected concentrations of Bis(2-ethylhexyl)phthalate did not exceed its respective TOGS 1.1.1 groundwater criteria; however, the detected concentration of Bis(2-chloroethyl)ether did exceed its respective TOGS 1.1.1 groundwater criteria.

Some tentatively identified compounds were also detected in the groundwater samples that were analyzed for SVOCs. The tentatively identified compounds are further discussed as follows:

- Unknown compounds and sulfur were tentatively identified in the sample from well MW-9 at concentrations of 20 ppb and 20 ppb, respectively.
- Unknown compounds; an oxygenated compound; 1,4-oxathiane; a chloropyridine isomer; a dichloropyridine isomer; and caprolactum were tentatively detected in the sample from MW-16 at concentrations of 33 ppb, 8 ppb, 37 ppb, 52 ppb, 10 ppb and 5 ppb, respectively.
- Unknown compounds and sulfur were tentatively detected in the sample from well MW-17 at concentrations of 17 ppb and 360 ppb, respectively.

There are no groundwater standards or guidance values listed in TOGS 1.1.1 for the tentatively identified compounds detected in these samples.

### PCBs/Pesticides in Groundwater

Groundwater samples from wells MW-9, MW-16 and MW-17 were analyzed for PCBs and pesticides. The analytical laboratory report is included in Appendix F and the test results are summarized on Table 19 included in Appendix C. As shown, PCBs and pesticides were not detected above laboratory detection limits in these samples.

#### **3.4.3 Evaluation of Cumulative VOC and Chromium Groundwater Data**

The analytical laboratory data for groundwater samples collected in December 1998 as part of this RI, and analytical data for groundwater samples previously generated between 1990 and 1996, for total and select VOCs, total chromium, and hexavalent chromium are summarized on Table 20 and Table 21, respectively and are included in Appendix C. A review of this cumulative groundwater data is further discussed as follows:



## VOCs

- The highest concentrations of VOCs detected in samples were collected from overburden well MW-9.
- VOC concentrations exceeding 1,000 ppb (1 ppm) were also detected in samples from wells MW-8, MW-10, MW-12, and MW-17 and in samples from the basement sump.
- Concentrations of VOCs detected in samples from overburden well MW-8 and MW-9 have decreased over time. The concentration of VOCs at the "hot spot" at well MW-9 has decreased approximately 38% between 1990 and 1998 (i.e., from 252,278 ppb down to 155,969 ppb).
- Concentrations of VOCs detected in samples from wells MW-10 and MW-11, and also in the sump have remained fairly constant between 1990 and 1998.
- Data from bedrock well MW-17 indicates that groundwater in bedrock in proximity to the "hot spot" is impacted by VOCs.
- Concentrations of VOCs in perimeter wells between 1990 and 1998 have been lower (i.e., less than 144 ppb) than the concentrations of VOCs detected in samples from wells inside the building.

## Chromium

- The highest concentrations of chromium detected in samples were collected from overburden well MW-8. In December, 1998, approximately 80% of this chromium appeared to be comprised of hexavalent chromium. The concentrations of chromium detected in samples from well MW-8 have remained similar between 1995 and 1998.
- Chromium concentrations greater than 200 ppb were also detected in samples from wells MW-9 and MW-12. The concentrations of chromium detected in samples from well MW-9 have varied between 1995 and 1998. The concentrations of chromium detected in samples from well MW-12 have decreased subsequent to implementation of the interim soil removal work in the potential chromium source area identified in proximity to this well.
- Between 1995 and 1998, concentrations of chromium in perimeter wells and the basement sump have been lower than the concentrations of chromium detected in samples from wells located inside the building. With the exception of the groundwater sample from MW-21 (i.e., 53.5 ppb), the concentrations of chromium detected in December, 1998 groundwater samples from perimeter wells do not exceed the NYSDEC groundwater standard of 50 ppb.

## **4.0 CONCLUSIONS**

The findings of the studies performed as part of this RI, as well as the findings of previous studies, were evaluated as part of this RI. The evaluation of this information was used to develop the conclusions presented in this RI report.

As part of this RI, samples were collected and analyzed for VOCs, chromium, hexavalent chromium, TAL metals, SVOCs, and PCBs/pesticides. Based on the work performed during this RI, chlorinated VOCs (e.g., PCE, TCE, etc.), chromium, hexavalent chromium, and some other TAL metals exceeded NYSDEC soil or groundwater criteria. Other constituents, including petroleum hydrocarbon VOCs and SVOCs were detected in some soil and groundwater samples from the Site; however, these constituents are not considered to represent COCs at the Site and do not appear to warrant further consideration as part of this RI/FS project. It also appears possible that some of the VOCs and SVOCs detected at the Site are attributable to off-site sources (refer to Section 4.4).

### **4.1 Nature and Extent of COCs**

COCs were detected in soil and groundwater samples at the Site. The COCs primarily consist of chlorinated VOCs, the metal chromium, and, to a lesser degree, some TAL metals. The COCs attributable to the Site are primarily located beneath the building. The highest concentrations of VOCs and/or chromium exceeding NYSDEC criteria were detected in four overburden wells, one deep bedrock well, and the basement sump that are located inside the building. Lower concentrations of COCs that exceeded NYSDEC drinking water criteria for groundwater were detected in some of the wells located around the perimeter of the Site. The area of chromium-contaminated media overlaps the area of VOC-contaminated media.

Based on the work performed as part of this RI, the vertical extent of COCs attributable to the Site in the vicinity of the presumed source areas appears to have been defined. The nature and extent of these COCs are further discussed below.

#### Chlorinated VOCs

Chlorinated VOCs in one soil sample exceeded NYSDEC cleanup criteria (e.g., PCE in sample 1506-S-12 from test boring TB-11 [12-14.5']), and this sample was collected beneath the building at or beneath the water table in proximity to the overburden/bedrock interface.

The highest concentration of total VOCs detected in a December 1998 groundwater sample was from overburden well MW-9 (greater than 155,000 ppb total VOCs). Groundwater samples from overburden wells MW-8, MW-10 and MW-12, deep bedrock well MW-17, and the basement sump also contained concentrations of total VOCs between 2,140 ppb and 20,340 ppb. VOCs were also detected at concentrations above NYSDEC drinking water standards in many of the wells around the perimeter of the Site, but at lower concentrations (i.e., less than 144 ppb) than detected in wells MW-8, MW-9, MW-10, MW-17 and the basement sump.

A review of cumulative groundwater data indicates that the concentration of VOCs at the "hot spot" at well MW-9 has decreased approximately 38% between 1990 and 1998 (i.e., from 252,278 ppb down to 155,969 ppb). This decrease in concentration is most likely attributable to the passive pump and treat system that has been operated by the current owner of this Site since 1992.

The analytical test results for groundwater samples collected from packered zones in bedrock well MW-17 in proximity to the presumed VOC source area suggests a distinct change from parent products (e.g., PCE and TCE) to daughter products (e.g., 1,2-DCE and VC) occurs in the bedrock at a depth of approximately 28 feet below ground surface. However, the total VOC concentrations detected in the samples from packered zones in well MW-17 do not significantly decrease with depth. The change in types of VOCs appears attributable to biodegradation of parent products.

Chlorinated VOCs were not detected by the analytical laboratory in six groundwater samples collected using diffusion samplers at different depths between 50 and 80 feet below the ground surface in deep bedrock well MW-22, which is located in proximity to the presumed VOC source area. This well is in close proximity to the overburden well (MW-9) and bedrock well (MW-17) where the highest concentrations of chlorinated VOCs have been detected. The analytical laboratory data collected from deep bedrock well MW-22 suggests the vertical extent of chlorinated VOCs is less than approximately 50 feet below the ground surface in proximity to the apparent chlorinated VOC source area on the Site.

### Chromium

Chromium concentrations that exceed NYSDEC cleanup criteria is located in both soil and groundwater at the Site.

- The highest concentration of chromium detected in a December 1998 groundwater sample from the Site (i.e., 52,300 ppb) was collected from overburden groundwater monitoring well MW-8 located beneath the building. When groundwater samples were collected in December, 1998, the water sample from MW-8 was yellow in color, and the test results indicated that hexavalent chromium accounted for approximately 80% of the total chromium that was detected in this sample. Chromium concentrations above the NYSDEC ambient groundwater standard of 50 ppb were detected in wells MW-8 (52,300 ppb), MW-9 (1,110 ppb), MW-12 (621 ppb) and MW-21 (53.5 ppb).
- Concentrations of chromium in soil (i.e., up to 21,400 ppm total chromium) remain in the area of the Site where an IRM soil removal had been previously conducted inside the "former shipping room". An etching process involving chromic acid had been located in this area (i.e., near groundwater monitoring well MW-12). Chromium concentrations exceeding NYSDEC criteria were also detected in various areas beneath the building and at two on-site test borings located north of the building (TB-13 and TB-30). Some of the test borings where chromium was detected at concentrations exceeding NYSDEC criteria were located in proximity to the known position of the former apparent discharge piping associated with the former chromic acid operations located in the former shipping room (refer to Drawing RI-3

in Appendix A) and possibly in a position down gradient from a Y-connection in this piping system inside the building. The extent of chromium detected in soil that exceeded NYSDEC criteria was delineated during this RI and appears limited to the Site.

- Cumulative groundwater data indicates that concentrations of chromium at the groundwater "hot spot" at well MW-8 has shown no conclusive decrease between 1995 and 1998. It appears likely that the chromium contamination from the former chromic acid operations in the former shipping room has migrated toward the basement sump and has accumulated in proximity to MW-8.

#### TAL Metals

Most of the analytes listed on the TAL list were detected at varying concentrations in soil and groundwater samples at the Site. Elevated concentrations of calcium and magnesium exceeding NYSDEC criteria were detected in many of the soil samples tested for TAL metals. Other TAL metals besides chromium (i.e., arsenic, barium, copper, lead, silver, and zinc) were detected at concentrations exceeding NYSDEC criteria in a sample from test boring TB-27A beneath the building. The TAL metals copper, silver, and zinc were also detected at concentrations exceeding NYSDEC criteria in a sample from test boring TB-30 beneath the building.

In general, iron, magnesium, sodium and thallium were detected above NYSDEC criteria in groundwater samples collected from across the Site (upgradient, downgradient, and beneath the building). Also, one or more of the TAL metals antimony, cadmium, copper, lead, manganese and selenium were detected in groundwater samples at concentrations exceeding NYSDEC criteria in wells MW-8, MW-9, MW-16 and MW-17.

Other than chromium, the TAL metals detected in soil/fill samples that exceeded NYSDEC criteria are generally not the same as the TAL metals detected in groundwater that exceeded NYSDEC criteria. Based on this comparison, it is concluded that the metals detected in soil/fill at the Site (except for chromium) at concentrations exceeding NYSDEC criteria do not appear to be impacting groundwater above NYSDEC groundwater criteria.

#### **4.2 Potential Sources of COCs**

COCs that appear attributable to former operations at the Site include chlorinated VOCs and the metal chromium (including hexavalent chromium), and, to a lesser degree, possibly some other TAL metals. A potential source for VOCs appears to be an area of former outdoor disturbance/storage located west of the original portion of the building that was observed in the 1951 and 1961 historical aerial photographs. Potential sources of the chromium contamination appear to be the area of former outdoor disturbance/storage discussed above and/or former operations and/or discharges involving chromic acid from an etching process that was performed in proximity to the former shipping room located at the western end of the original portion of the building. Piping in the etching process equipment was documented to have been replaced due to chemical deterioration. Additionally, chromium was also detected in one on-site test boring north of the Site building. The chromium encountered in this area could be attributable to such things as migration through bedding around sewer piping, leaks in piping that was associated

with the former chromic acid operations in the former shipping room, past spillage of chromic acids outside the building in this location, etc. Other areas of COCs attributable to the Site were not identified as part of this RI.

In addition to chromium, other TAL metals were also detected at elevated concentrations in soil/fill and groundwater samples. Except for chromium, the highest concentrations of TAL metals detected in soil/fill were in a near-surface sample from test boring TB-27A beneath the building floor. The source of these TAL metals may be the former outdoor disturbance/storage area located west of the original portion of the building that was observed in the 1951 and 1961 historical aerial photographs or the near-surface fill material.

With the exception of chromium, a definitive on-site source of TAL metals detected in groundwater could not be identified. Other potential sources of the TAL metals in the groundwater at the Site could include one or more of the following: naturally occurring in groundwater; attributable to suspended sediments (i.e., groundwater samples collected were slightly cloudy to cloudy in appearance); attributable to off-site sources, etc.

Except for chromium, a specific correlation or trend in the types of elevated TAL metals detected in soil/fill samples from the Site in relation to the types of elevated TAL metals detected in groundwater samples from the Site was not apparent. In any case, the TAL metals in soil and groundwater will be addressed concurrently with chromium during performance of the FS for this Site.

Based on the studies performed as part of this RI, the two small white-toned disturbed areas devoid of vegetation observed south and west of the southwestern corner of the original building in the 1951 aerial photographs do not appear to represent source areas of COCs.

#### **4.3 Fate and Transport of COCs**

##### Fate of Chlorinated VOCs

The chlorinated VOCs at the Site generally consist of PCE and TCE, and their breakdown products (i.e., 1,2-DCE, VC, etc.). PCE and TCE were used at the Site in the past for metal degreasing operations.

These chlorinated VOCs, and their breakdown compounds (e.g., VC) are persistent in the environment. As referenced in *Handbook of Environmental Degradation Rates*, Philip Howard, 1991, PCE has a half-life in soil between six months and 1 year. PCE has a half-life in groundwater between one and two years. TCE has a half-life in soil between six months and 1 year. TCE has a half-life in groundwater between 11 months and 4.5 years. VC has a half-life in soil between four weeks and six months. VC has a half-life in groundwater between 8 months and 8 years. The shorter half-lives of chlorinated VOCs in soil in relation to their longer half-lives in groundwater may partially explain why the concentrations of chlorinated VOCs detected in soil were lower than the concentrations of chlorinated VOCs detected in groundwater.

These chlorinated VOCs, and their breakdown compounds (e.g., VC), have specific gravity values greater than 1.0. As such, free product would be considered to be a DNAPL.

When released to the environment, these VOCs can adsorb to soil, occupy the pore space as a vapor phase in unsaturated soil, slightly dissolve in water, or sink as DNAPL below the groundwater table.

#### Fate of Chromium

The chromium appears to be present due to the past use of chromic acid at the Site. Trivalent chromium is the dominant naturally occurring form of chromium. Hexavalent chromium can be reduced to trivalent chromium, and under some circumstances, trivalent chromium can be oxidized to form hexavalent chromium. Under most conditions, hexavalent chromium is relatively soluble and trivalent chromium is rather insoluble.

#### Transport of COCs

The building and paved surfaces cover the majority of the Site and appear to be acting as a cap that inhibits infiltration of precipitation that would otherwise accelerate movement of COCs away from the potential source areas located beneath the building. The influence of the basement foundation drain system that is connected to the groundwater sump located in the basement of the building also appears to be inhibiting the migration of COCs away from the Site. However, based on a review of the potentiometric groundwater maps and on cumulative groundwater test results for wells set along the perimeter of the Site that show steady or increasing concentrations of COCs, it appears likely that the foundation drain system and groundwater sump may not be achieving complete capture of COCs in groundwater at the Site.

Potential transport mechanisms of COCs appear to include possible DNAPL flow on or in bedrock (e.g., in proximity to wells MW-9 and MW-10), migration in groundwater in a dissolved phase, and diffusion through the saturated and unsaturated soil or bedrock. Information reviewed as part of this RI suggests that bedrock joint patterns noted in the nearby Monroe County Pure Waters Combined Sewer Overflow Abatement program tunnels data trend 60° to 80° east of north, which may explain some of the distribution patterns of VOCs away from potential sources areas at the Site in more than one direction.

#### **4.4 Contaminants Attributable to Off-Site Sources**

Contamination that appeared attributable to off-site sources was detected during this RI and is further discussed below:

- Evidence of petroleum contamination was detected in soil samples collected from test boring TB-20 and confirmed through laboratory analysis of a soil sample from TB-20. This test boring is located on the Site near the southeast corner of the building. A used automobile sales business (Rocky's) is located on the adjoining property in proximity to test boring TB-20. During field activities, evidence of sloppy housekeeping and outdoor container storage was observed on the adjoining property occupied by Rocky's along the shared fence between the Site and this adjoining property.

Evidence of petroleum contamination, including analytical testing results for soil samples, was not encountered in test borings TB-38 and TB-40, which were advanced west and south of TB-20, respectively. Historical environmental information (e.g., 1988 Environmental Risk Assessment prepared by Environmental Strategies Corporation; 1988 Environmental Audit prepared by Blasland & Bouck Engineers, P.C.; 1990 Phase 2 Environmental Site Assessment Report prepared by Environmental Resources Management, etc.) pertaining to the Site does not suggest the past or present existence of an on-site source (e.g., underground or aboveground storage tank, etc.) of petroleum contamination on the Site. The petroleum impact may have migrated onto the Site by multiple transport mechanisms (e.g., diffusion in soil or groundwater, groundwater flow, etc.).

- The analytical test results of a groundwater sample from monitoring well MW-16 (deep bedrock well) indicated that chloropyridines and dichloropyridines were detected in this well. These two SVOCs are chemicals that have been confirmed to have been released to the environment at the nearby Olin Chemicals NYSDEC-listed Inactive Hazardous Waste Disposal Site, which is located approximately 1,500 feet west of the Site. These two SVOCs are specific to Olin Chemicals (i.e., there are no on-site sources of these chemicals). Based on a review of the deep bedrock potentiometric contour maps for the Site and on the presence of these SVOCs in MW-16, it appears that these SVOCs may be migrating onto the Site in a dissolved phase when groundwater in the deep bedrock flows east/northeast on at least a seasonal basis. Also, it is possible that other compounds detected in groundwater along at least the western portion of the Site may also be attributable to off-site sources.

#### **4.5 Hydrogeologic Conditions and Evaluation of Current Remedial System**

Evaluation of groundwater flow conditions suggests the following:

- Groundwater in the overburden at the Site appears to generally be flat or flow toward the southwest except in proximity to the basement where groundwater appeared to radially flow toward the sump.
- The results of a basement sump evaluation, in which the sump was turned off and groundwater levels were measured in Site wells, was inconclusive in showing whether the operation of the sump was influencing groundwater levels at the wells. However, groundwater in the bedrock appears to generally flow toward the south and/or southeast as evidenced by seasonal fluctuations except in proximity to the basement and/or western half of the Site where groundwater appeared to radially flow toward the sump. This radial flow appears to create a groundwater divide near the center of the Site. Based on the data obtained as part of this RI, the basement sump appears to be influencing groundwater elevations in selected deep bedrock wells; however, the extent of vertical influence is unknown.
- Evaluation of groundwater flow conditions in relation to wells where levels of COCs are present that exceed NYSDEC cleanup criteria indicate that the groundwater draw-down caused by operation of the sump may not be adequately capturing contaminated groundwater at the Site.

## 5.0 RECOMMENDATIONS

1. It is recommended that a FS be completed that evaluates alternatives for addressing the COCs (i.e., chlorinated VOCs and chromium) identified at the Site. The remedy that is selected for the site by the FS will also address other TAL metals that were detected at the Site.
2. Based on the industrial use of the property and on the generally industrial nature of nearby properties, it is recommended that a qualitative risk assessment be performed as part of the FS. The risk assessment for the Site would be used to evaluate potential routes of exposure, points of exposure, etc. Corrective action options that are protective of human health and the environment will be identified and evaluated as part of the FS.
3. Further investigative work in relation to chromium, other TAL metals, or chlorinated VOCs in soils or groundwater at the Site is not recommended at this time.
4. Further investigative work in relation to COCs that do not appear attributable to a Site source (i.e., chloropyridine and dichloropyridines attributable to Olin Chemical, and petroleum-related contamination attributable to Rocky's [used automobile sales]) is not recommended at this time. However, it is recommended that the apparent off-site potentially responsible parties be notified of the impacts encountered on the Site and that appropriate measures be implemented as deemed necessary by regulatory agencies (e.g., NYSDEC).



## REFERENCES

New York State Department of Environmental Conservation (NYSDEC) Division Technical and Administrative Guidance Memorandum: *Determination of Soil Cleanup Objectives and Cleanup Levels*; TAGM #4046; January 24, 1994.

New York State Department of Environmental Conservation (NYSDEC) Proposed Division Technical and Administrative Guidance Memorandum: *Determination of Soil Cleanup Objectives and Cleanup Levels*; TAGM 4046; 1995.

New York State Department of Environmental Conservation (NYSDEC) Division of water Technical and Operational Guidance Series (TOGS 1.1.1): *Ambient Water Quality Standards and Guidance Values*; June, 1998.

The Merck Index, Twelfth Edition; 1996

Handbook of Environmental Degradation Rates; Philip Howard, 1991

Chromium in Soil: Perspectives in Chemistry, Health, and Environmental Regulation; Special Issue Journal of Soil Contamination, Volume 6, Number 6; November, 1997

The Soil Chemistry of Hazardous Materials, prepared by James Dragun, Ph.D.; 1988

Subsurface Investigation Report prepared by Day Environmental, Inc.; January, 1996

Phase II Environmental Site Assessment report prepared by Environmental Resources Management, Inc. (ERM); November 26, 1990

Handbook from Seminar titled "*Remediation of NAPL Contaminated Sites*"; June, 1997

Final Phase II Remedial Investigation Report prepared by ABB Environmental Services, Inc. dated October, 1997 for the Olin Chemicals property on McKee Road, Rochester New York.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA") [42 U.S.C. 9601 ET SEQ.], as amended

The National Contingency Plan ("NCP") of July 1, 1998 [40 CFR Part 300]

The USEPA guidance document titled "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" dated October 1988

United States Department of the Air Force document titled "Final Technical Report for the Evaluation of Groundwater Diffusion Samplers" dated December 1999 and prepared by Parsons Engineering Science, Inc

## ACRONYM LIST

ASP	Analytical services Protocol
ASTM	American Society for Testing and Materials
BGS	Below the Ground Surface
CAS	Columbia Analytical Services, Inc.
CERCLA	Comprehensive Environmental response, Compensation, and Liability Act
COC	Contaminant of Concern
DAY	Day Environmental, Inc.
1,1-DCA	1,1-Dichloroethane
1,1-DCE	1,1-Dichloroethene
1,2-DCE	1,2-Dichloroethene, 1,2-Dichloroethylene
DI	Deionized
DNAPL	Dense Non-Aqueous Phase Liquid
DUSR	Data Usability Summary Report
DVS	Data Validation Services
ELAP	Environmental Laboratory Approval Program
ERM	Environmental Resources Management, Inc.
FID	Flame Ionization Detector
FS	Feasibility Study
HEAST	Health Effects Assessment Summary Table
ID	Inner Diameter
LNAPL	Light Non-Aqueous Phase Liquid
MCPW	Monroe County Pure Waters
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NAPL	Non-Aqueous Phase Liquid
NCP	National Contingency Plan
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OD	Outer Diameter
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene, Tetrachloroethylene, Perchloroethene, Perchloroethylene
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PPB	Parts Per Billion
PPM	Parts Per Million
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RECRA	RECRA Environmental, Inc.
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
STL	Severn-Trent Laboratories, Inc.
SVOC	Semi-Volatile Organic Compound
SWL	Static Water Level
TAGM	Technical and Administrative Guidance Memorandum
TAL	Target Analyte List
TCE	Trichloroethylene, Trichloroethene
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TOGS	Technical and Operational Guidance Series
VC	Vinyl Chloride
VOC	Volatile Organic Compound
USEPA	United States Environmental Protection Agency
ZEBRA	Zebra Environmental Corporation

## **APPENDIX A**

### **Drawings**



DRAWING PRODUCED FROM: ROCHESTER WEST, N.Y.  
 N4307.5-W7737.5/7.5  
 1971  
 PHOTOREVISED 1978

PROJECT NO.  
 1506R-97

RI-1

SHEET 1 OF 1

PROJECT TITLE  
 95 MT. READ BOULEVARD  
 ROCHESTER, NEW YORK

REMEDIAL INVESTIGATION

DRAWING TITLE  
 PROJECT LOCUS MAP

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

DATE  
 4/21/99

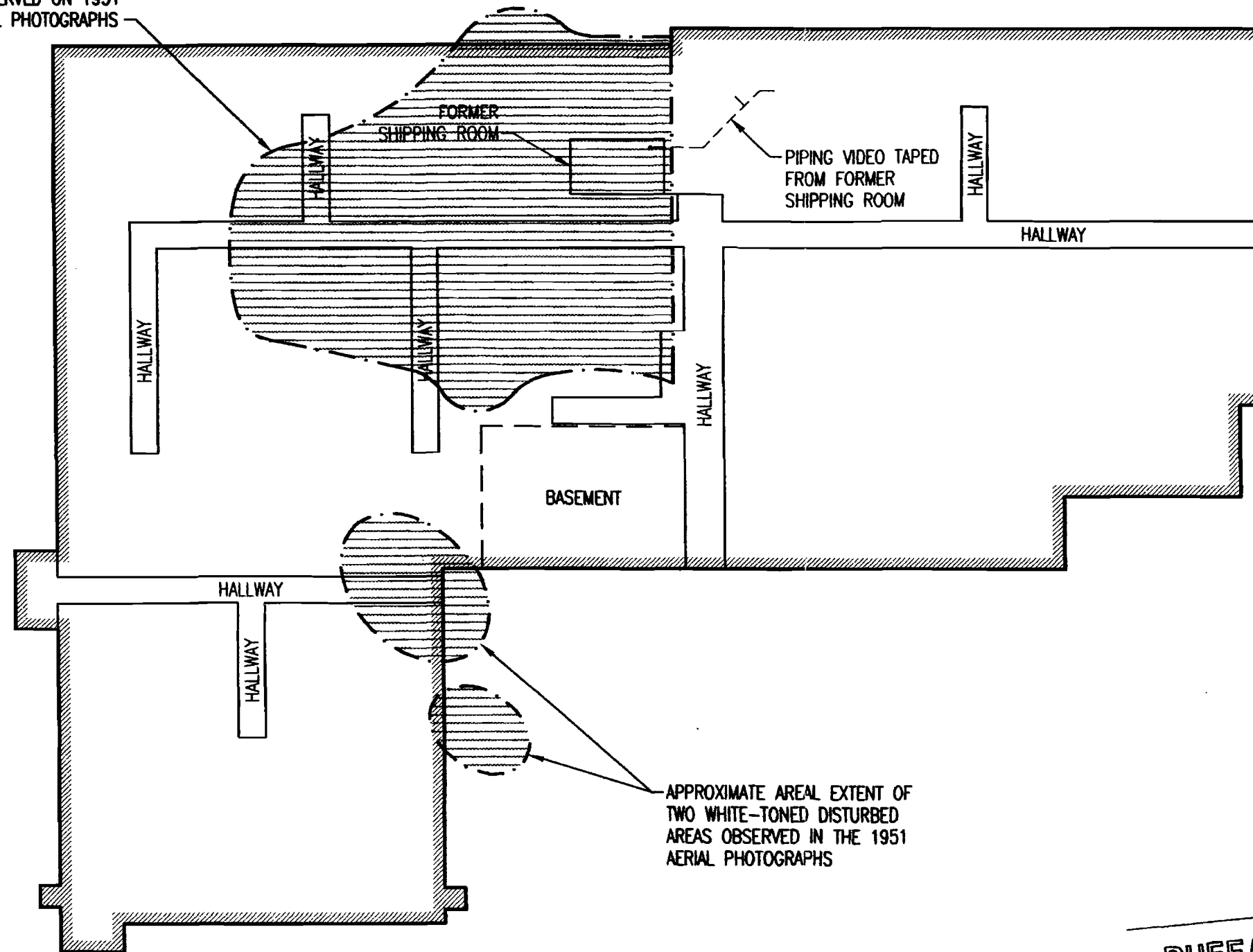
DRAWN BY

SCALE  
 1" = 2000'

IME PLOTTED: TUES NOV 21, 08:00:00 2000  
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NOTE:  
SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP,  
ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE  
SAMPLING LOCATIONS", AND DATED 11/20/90.

APPROXIMATE AREAL EXTENT OF  
DISTURBED AREA OBSERVED ON 1951  
AND 1961 AERIAL PHOTOGRAPHS



**SITE PLAN**  
SCALE: 1" = 50'

REVISED BY	DATE
RJM	11/20/00
FIELD VERIFIED BY	DATE
JAD	4/99
DRAWN BY	DATE DRAWN
RJM	4/21/99
SCALE	DATE ISSUED
1" = 50'	4/22/99

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

PROJECT TITLE  
**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**  
REMEDIAL INVESTIGATION  
DRAWING TITLE

PROJECT NO.  
**1506R-97**  
**RI-2**  
SHEET 1 OF 1

SITE PLAN

REF1: BORDER12  
REF2: REF2  
REF3: REF3

# NOTES

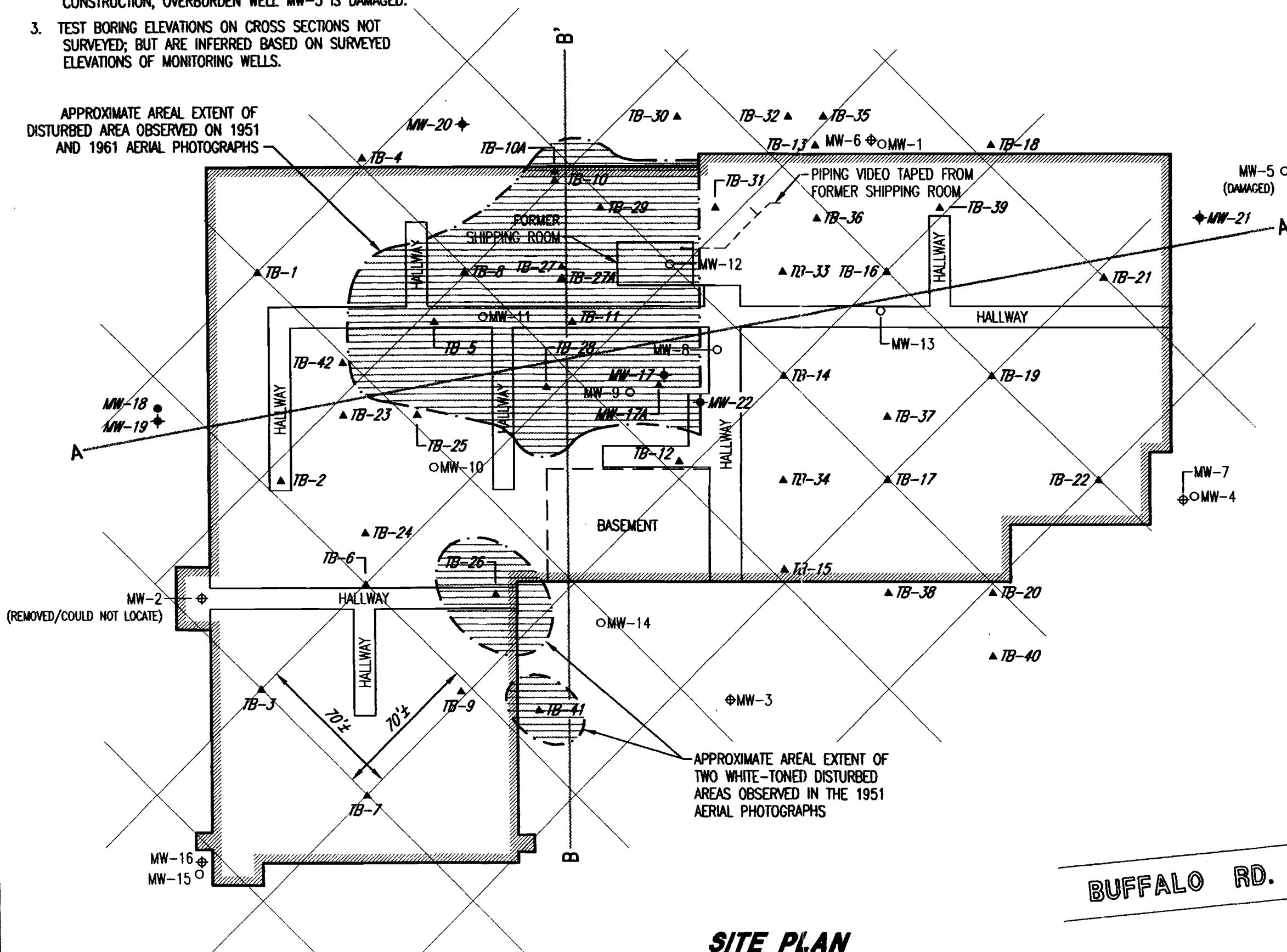
1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. TEST BORING ELEVATIONS ON CROSS SECTIONS NOT SURVEYED; BUT ARE INFERRED BASED ON SURVEYED ELEVATIONS OF MONITORING WELLS.

## LEGEND

- MW-18 NEW SHALLOW BEDROCK MONITORING WELL LOCATION
- ◆ MW-17 NEW DEEP BEDROCK MONITORING WELL LOCATION
- ▲ TB-1 TEST BORING LOCATION

- MW-1 EXISTING OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION
- ⊕ MW-3 EXISTING DEEP BEDROCK MONITORING WELL LOCATION

APPROXIMATE AREAL EXTENT OF DISTURBED AREA OBSERVED ON 1951 AND 1961 AERIAL PHOTOGRAPHS



## SITE PLAN

SCALE: 1" = 50'

REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
4/99

DRAWN BY  
RJM

DATE DRAWN  
4/21/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION

PROJECT NO.  
1506R-9

RI-3

SHEET 1 OF

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FILENAME: \MAGUIR\1506R-19R

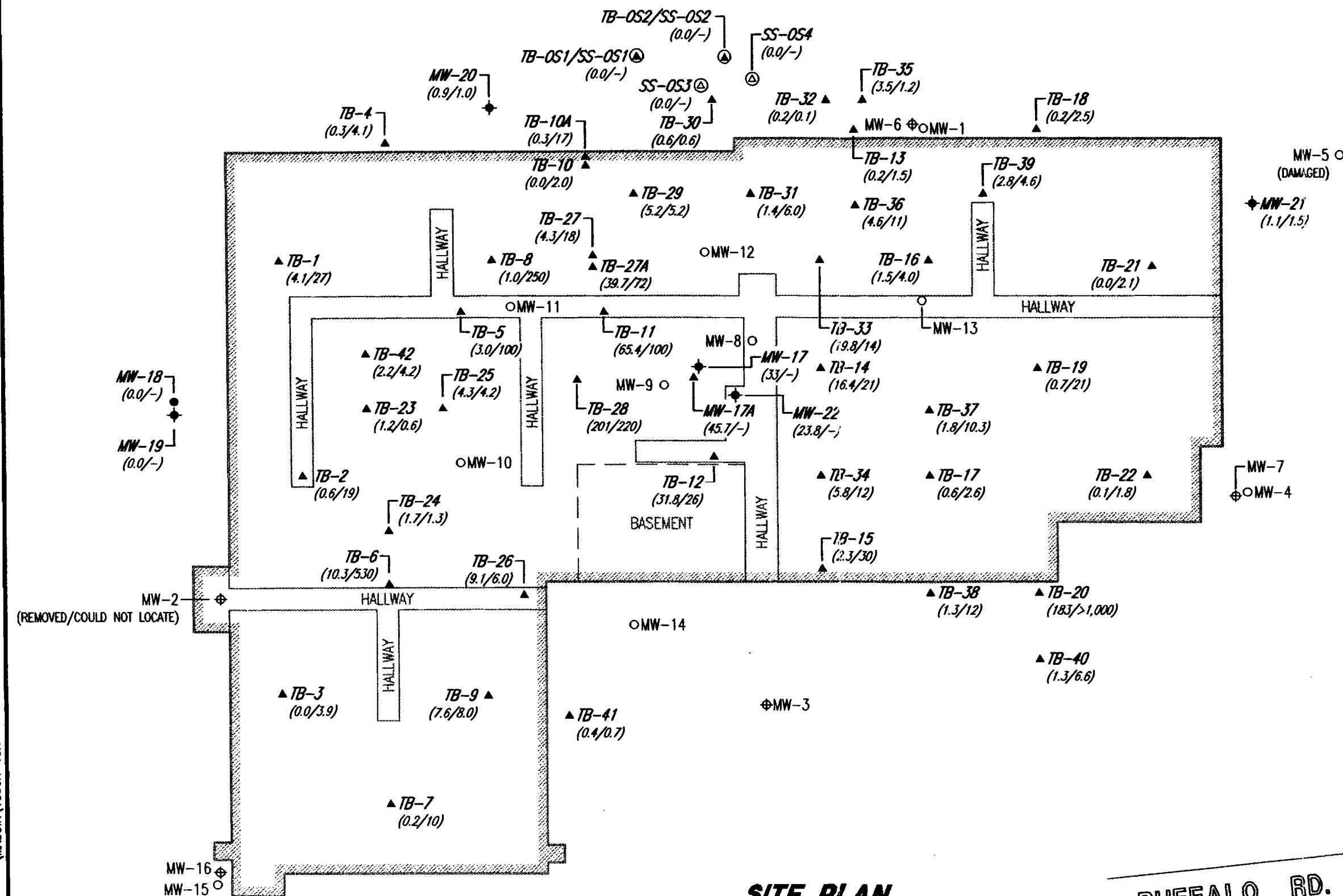
## NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.

## LEGEND

- MW-18 (0.0/-) NEW SHALLOW BEDROCK MONITORING WELL LOCATION WITH PEAK PHOTOIONIZATION DETECTOR (PID)/FLAME IONIZATION DETECTOR (FID) READINGS RECORDED IN PARTS PER MILLION (ppm)
- ◆ MW-17 (33/-) NEW DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK PHOTOIONIZATION DETECTOR (PID)/FLAME IONIZATION DETECTOR (FID) READINGS RECORDED IN PARTS PER MILLION (ppm)
- ⊙ TB-OS1/SS-OS1 (0.0/-) OFF-SITE TEST BORING/SURFACE SAMPLE LOCATION WITH PEAK PHOTOIONIZATION DETECTOR (PID)/FLAME IONIZATION DETECTOR (FID) READINGS RECORDED IN PARTS PER MILLION (ppm)

- ⊙ SS-OS3 (0.0/-) OFF-SITE SURFACE SAMPLE LOCATION WITH PEAK PHOTOIONIZATION DETECTOR (PID)/FLAME IONIZATION DETECTOR READINGS RECORDED IN PARTS PER MILLION (ppm)
- ▲ TB-1 (4.1/27) TEST BORING LOCATION WITH PEAK PHOTOIONIZATION DETECTOR (PID)/FLAME IONIZATION DETECTOR (FID) READINGS RECORDED IN PARTS PER MILLION (ppm)
- MW-1 EXISTING OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION
- ⊕ MW-3 EXISTING DEEP BEDROCK MONITORING WELL LOCATION



## SITE PLAN

SCALE: 1" = 50'

BUFFALO RD.

MT. READ BOULEVARD



REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
9/99

DRAWN BY  
RJM

DATE  
9/7/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION

PROJECT NO.  
1506R-9

RI-3.

SHEET 1 OF 1

REF: 1: BORDER12  
REF: 2: REF2  
REF: 3: REF3

TIME PLOTTED: TUES NOV 21, 08:00:00 2000  
FILENAME: \MAGUIR\1506R-9

## NOTES

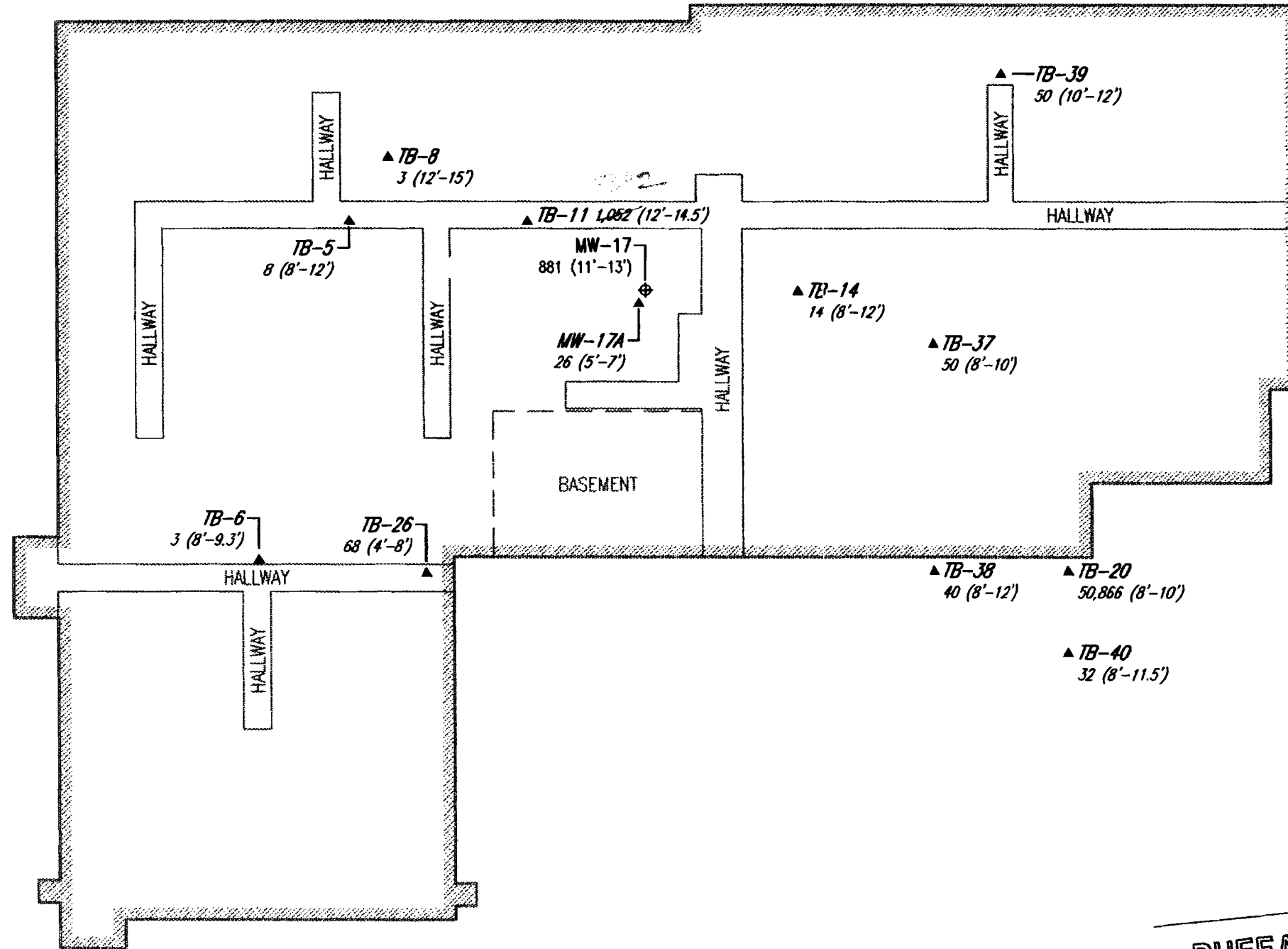
1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.

## LEGEND

- ⊕ MW-17  
881 (11'-13')
- ▲ TB-38  
40 (8'-12')

DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL VOC'S RECORDED IN PARTS PER BILLION (ppb) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS

TEST BORING LOCATION WITH PEAK TOTAL VOC'S RECORDED IN PARTS PER BILLION (ppb) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS



## SITE PLAN

SCALE: 1" = 50'

REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
4/99

DRAWN BY  
RJM

DATE DRAWN  
4/21/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION

PROJECT NO.  
1506R-9

RI-4

SHEET 1 OF



REF2: REF2  
REF3: REF3  
TIME PLOTTED: TUES NOV 21, 08:00:00 2000  
FILENAME: \MAGUIR\1506R-10

## NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.

## LEGEND

⊕ MW-17  
7.6/NA (5'-7')

DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL CHROMIUM/HEXAVALENT CHROMIUM CONCENTRATION RECORDED IN PARTS PER MILLION (ppm) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS

▲ TB-19  
6.4/1.5 (8'-12')

TEST BORING LOCATION WITH PEAK TOTAL CHROMIUM/HEXAVALENT CHROMIUM CONCENTRATION RECORDED IN PARTS PER MILLION (ppm) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS

NA

NOT ANALYZED

ND

NOT DETECTED ABOVE LABORATORY DETECTION LIMITS

REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY	DATE
JAD	4/99
DRAWN BY	DATE DRAWN
RJM	4/21/99
SCALE	DATE ISSUED
1" = 50'	7/19/99

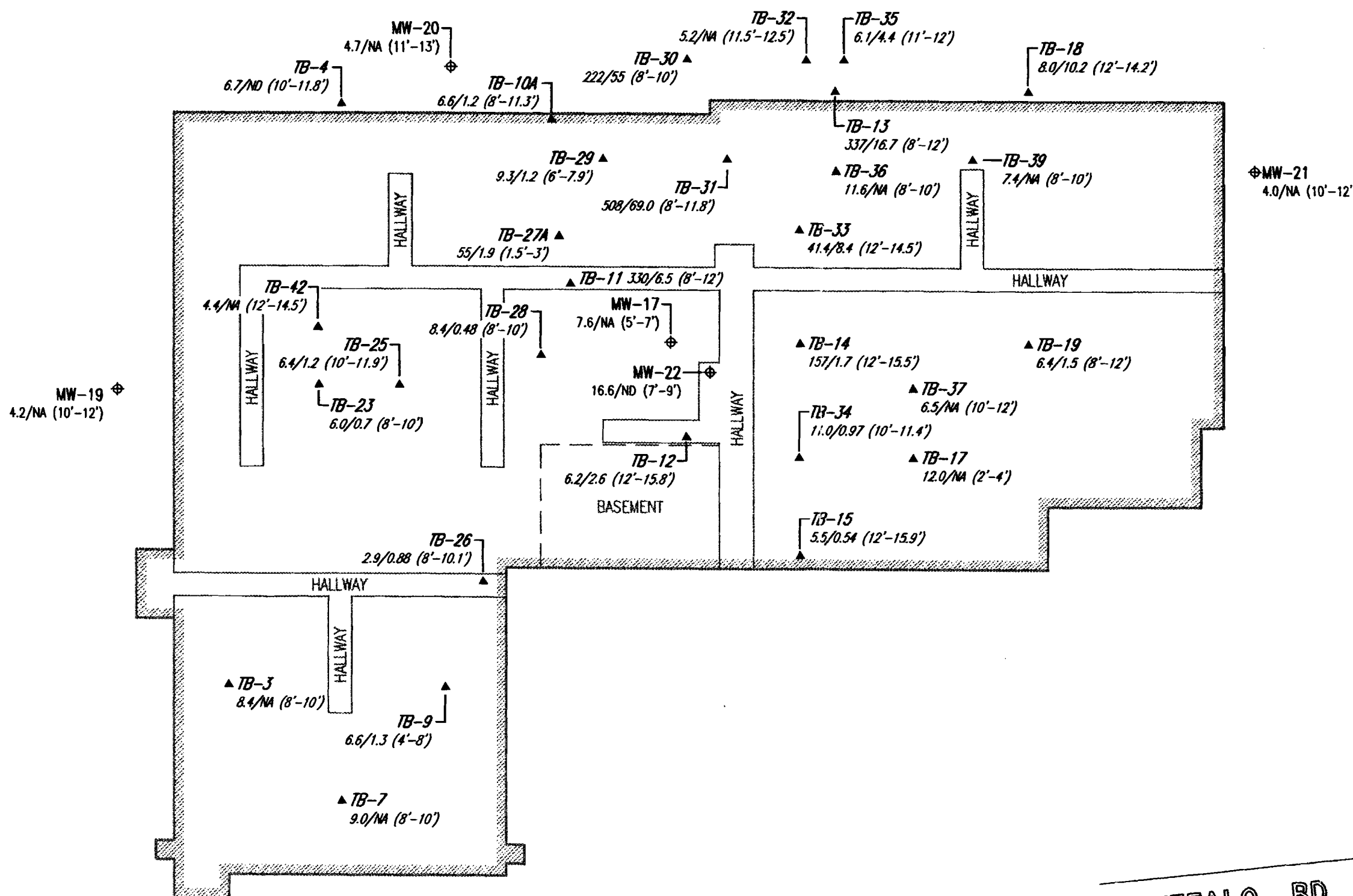
**DAY ENVIRONMENTAL, INC.**  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION  
DRAWING TITLE  
SITE PLAN WITH PEAK CHROMIUM  
DETECTED IN SOIL SAMPLES

PROJECT NO.  
1506R-97

RI-5

SHEET 1 OF 1



## SITE PLAN

SCALE: 1" = 50'

REF1: JORDER12  
REF2: REF2  
REF3: REF3

## NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.

## LEGEND

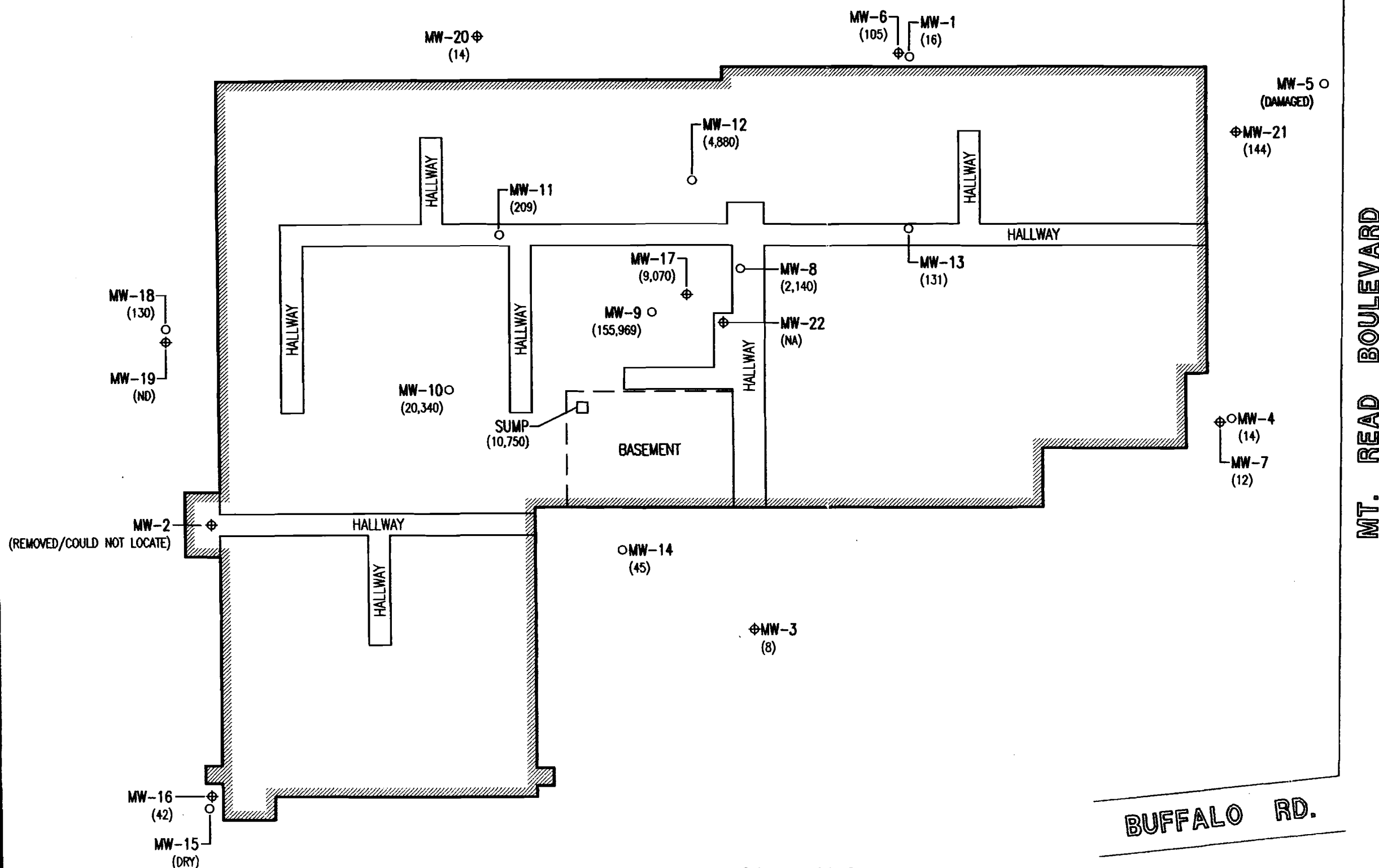
- MW-14 (47) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL VOC'S IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE
- ⊕ MW-17 (9,070) DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL VOC'S IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE

□ SUMP (10,750)

BASEMENT SUMP WITH TOTAL VOC'S IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE

(ND)

NOT DETECTED



## SITE PLAN

SCALE: 1" = 50'

TIME PLOTTED: TUES NOV 21, 08:00:00 2000  
FILENAME: \MAGUIR\1506R-11

REVISOR  
REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
4/99

DRAWN BY  
RJM

DATE DRAWN  
4/21/99

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

PROJECT TITLE  
**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION**

PROJECT NO.  
**1506R-11**

**RI-6**

SHEET 1 OF 1

# NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.

## LEGEND

- MW-1 (16.9/ND) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL CHROMIUM/HEXAVALENT CHROMIUM CONCENTRATIONS IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE
- ⊕ MW-17 (16.2/ND) DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL CHROMIUM/HEXAVALENT CHROMIUM IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE

□ SUMP (134/ND)

BASEMENT SUMP WITH TOTAL PEAK CHROMIUM/HEXAVALENT CHROMIUM IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE

ND

NOT DETECTED ABOVE LABORATORY DETECTION LIMITS

REVISOR BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
4/99

DRAWN BY  
RJM

DATE DRAWN  
4/22/99

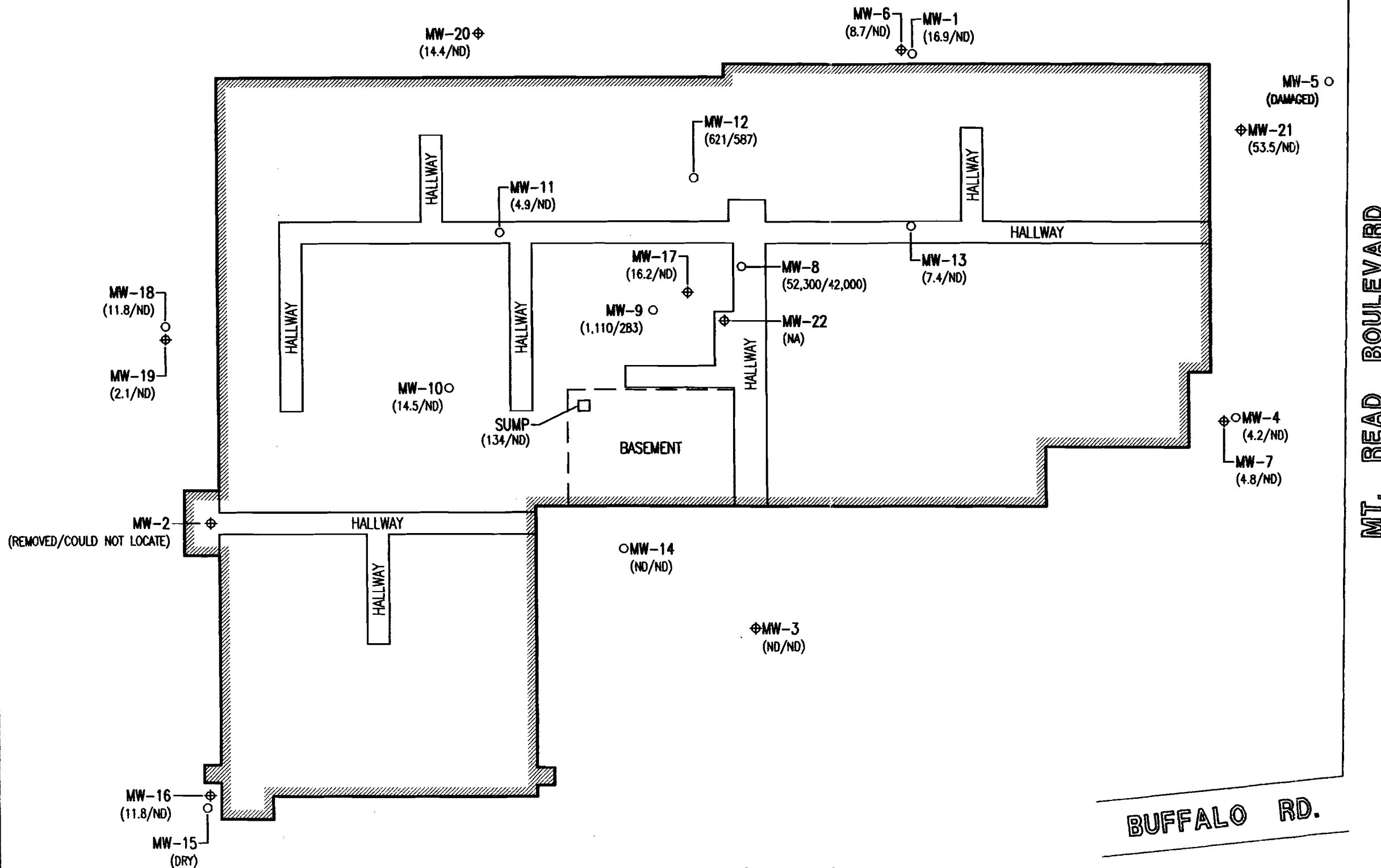
**DAY ENVIRONMENTAL, INC.**  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION

PROJECT NO.  
1506R-

RI-7

SHEET 1 0



## SITE PLAN

SCALE: 1" = 50'

REF: 1. BORDENTZ  
REF2: REF2  
REF3: REF3

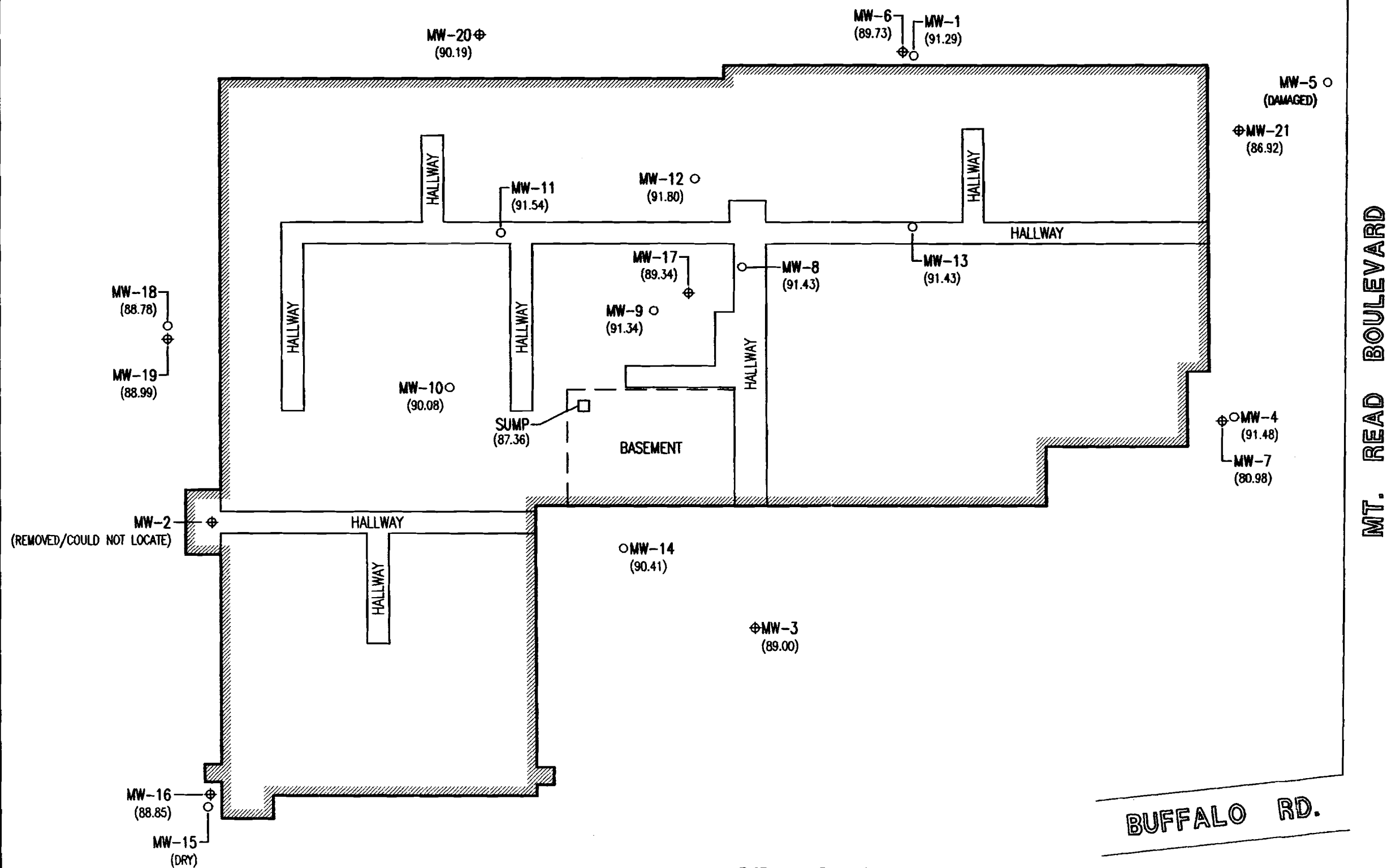
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ENAME: \MAGUIR\1506R-5

## NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.

## LEGEND

- MW-1 (91.29) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JANUARY 6, 1999
- ⊕ MW-3 (89.00) DEEP BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JANUARY 6, 1999



**SITE PLAN**  
SCALE: 1" = 50'

REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
1/6/99

DRAWN BY  
RJM

DATE DRAWN  
4/22/99

SCALE  
1" = 50'

DATE ISSUED  
4/22/99

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

PROJECT TITLE  
**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION**

DRAWING TITLE  
**GROUNDWATER ELEVATIONS FOR  
JANUARY 6, 1999**

PROJECT NO.  
**1506R-97**

**RI-8**

SHEET 1 OF 1

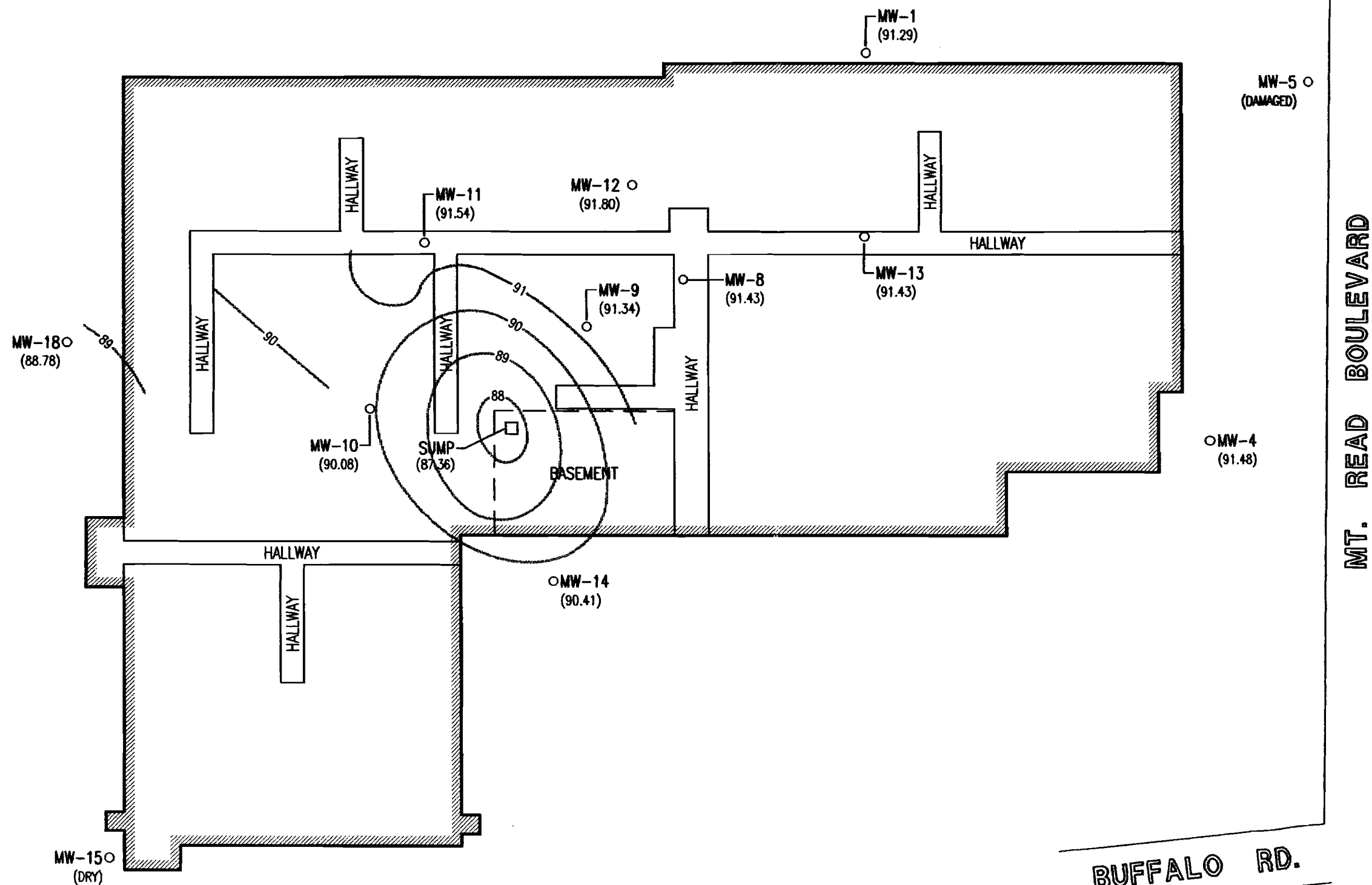
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REF: 2: REF  
REF: 3: REF  
TIME PLOTTED: TUES NOV 21, 08:00:00 2000  
FILENAME: \MAGUIR\1506R-5A

## NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.

## LEGEND

- MW-1 (91.29) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JANUARY 6, 1999
- 89— POTENTIOMETRIC CONTOUR LINE



## POTENTIOMETRIC CONTOUR MAP FOR JANUARY 6, 1999

SCALE: 1" = 50'

REVISED BY	DATE
RJM	11/20/00
FIELD VERIFIED BY	DATE
JAD	1/6/99
DRAWN BY	DATE DRAWN
RJM	4/22/99
SCALE	DATE ISSUED
1" = 50'	7/16/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION  
DRAWING TITLE  
OVERBURDEN AND/OR SHALLOW  
BEDROCK MONITORING WELLS (1/6/99)

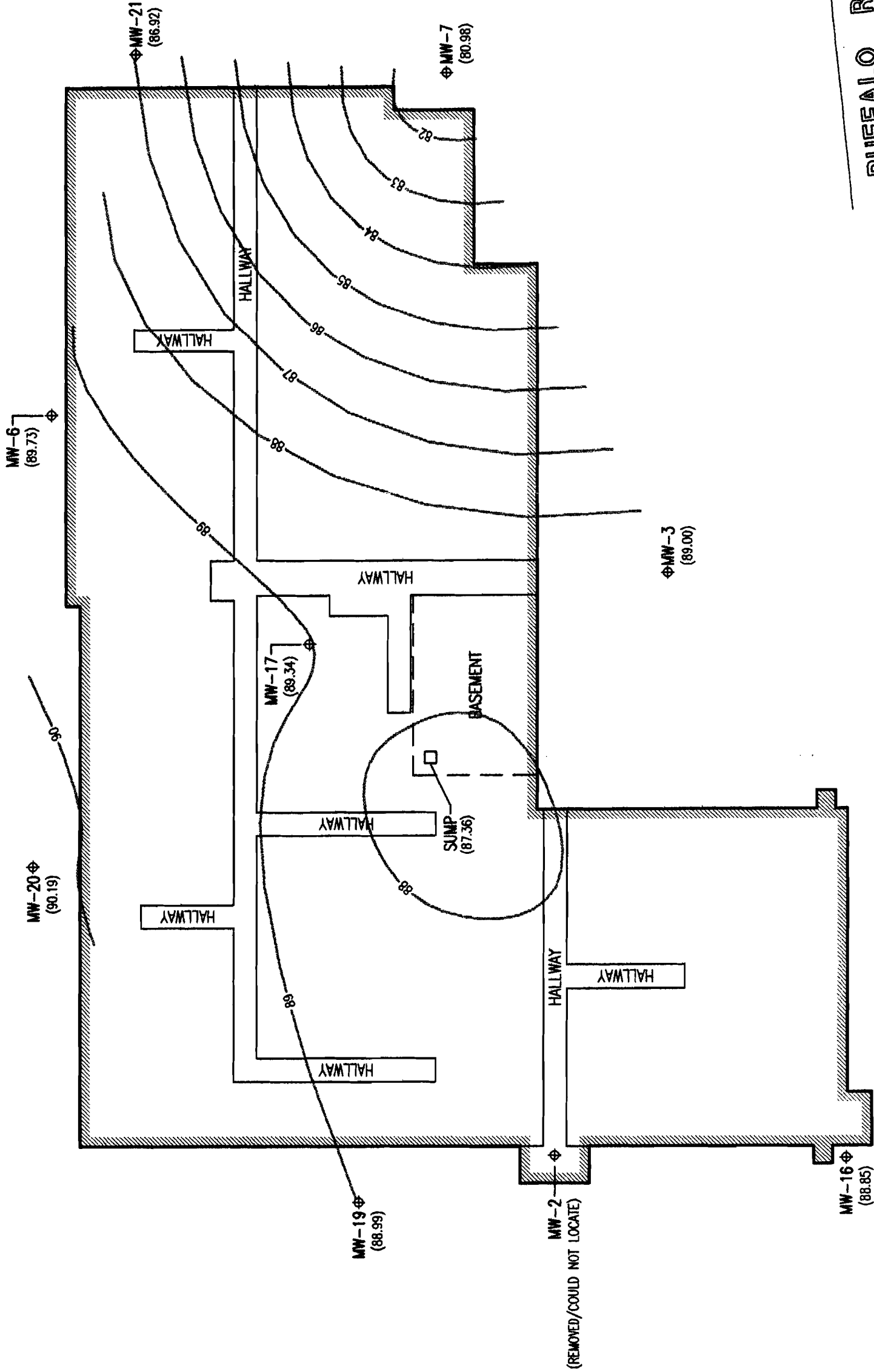
PROJECT NO.  
1506R-97  
RI-8A  
SHEET 1 OF 1

NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY ERM GROUP, ENTITLED "FIGURE 3-1: PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH, THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.
4. BASED ON GROUNDWATER ELEVATION DATA, THE BASEMENT SUMP APPEARS TO BE INFLUENCING GROUNDWATER ELEVATIONS IN SELECTED DEEP BEDROCK WELLS; HOWEVER, THE EXTENT OF VERTICAL INFLUENCE IS UNKNOWN.

LEGEND

- ΦMW-6 (89.73) DEEP BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION, (IN FEET), OBTAINED ON JANUARY 6, 1999
- 89— POTENTIOMETRIC CONTOUR LINE



POTENTIOMETRIC CONTOUR MAP FOR JANUARY 6, 1999

SCALE: 1" = 50'

REVISD BY	RJM	DATE	11/20/00
FIELD VERIFIED BY	JAD	DATE	1/6/99
DRAWN BY	RJM	DATE DRAWN	4/22/99
SCALE	1" = 50'	DATE ISSUED	7/16/99

DAY ENVIRONMENTAL, INC.  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION  
DRAWING TITLE DEEP BEDROCK  
MONITORING WELLS (1/6/99)

PROJECT NO.  
1506R-97

RI-8B

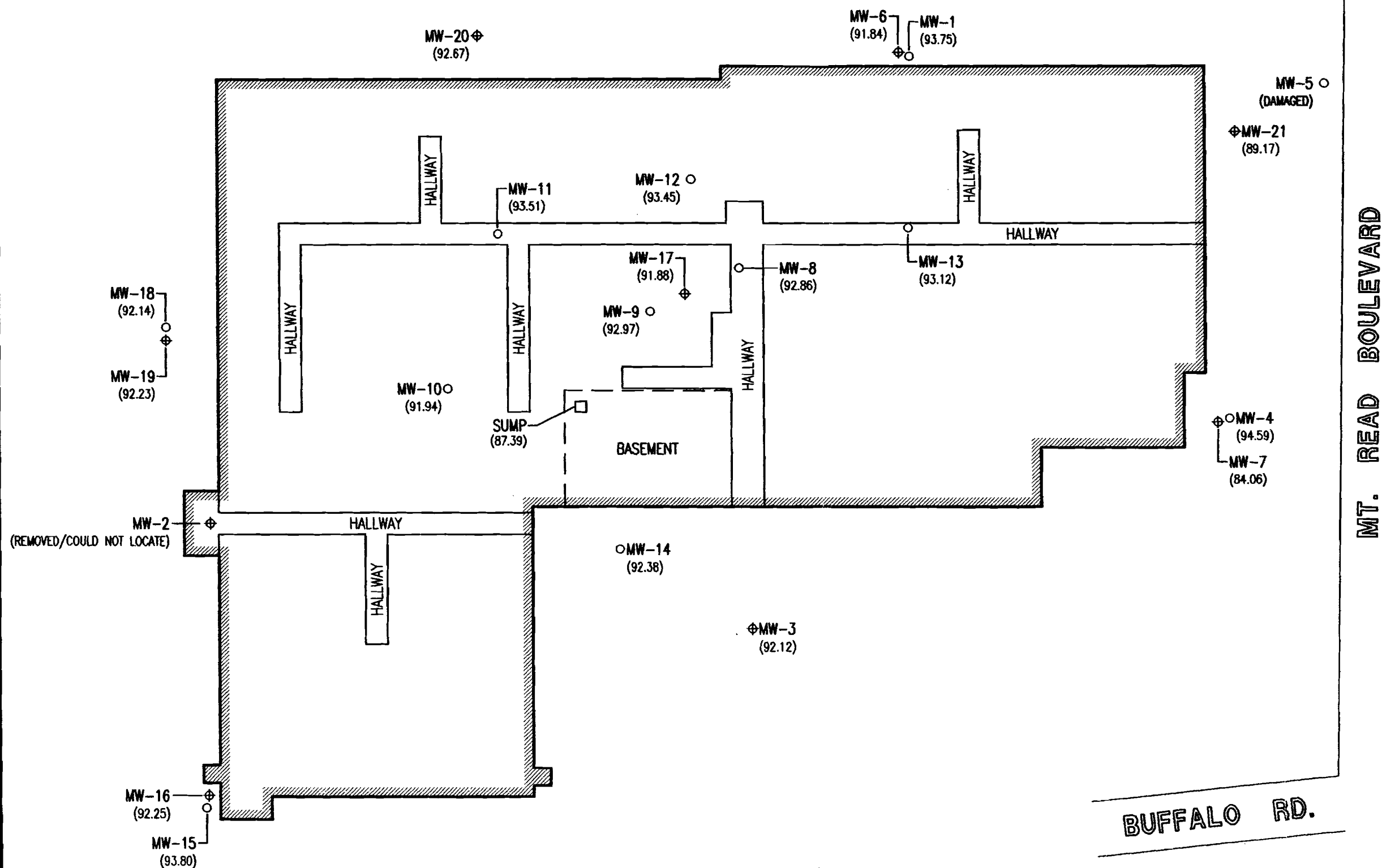
SHEET 1 OF 1

# NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.

# LEGEND

- MW-1 (93.75) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON APRIL 5, 1999
- ⊕ MW-3 (92.12) DEEP BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON APRIL 5, 1999



# SITE PLAN

SCALE: 1" = 50'

REVISED BY	DATE
RJM	11/20/00
FIELD VERIFIED BY	DATE
JAD	4/5/99
DRAWN BY	DATE DRAWN
RJM	4/22/99
SCALE	DATE ISSUED
1" = 50'	4/22/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION  
DRAWING TITLE GROUNDWATER ELEVATIONS FOR  
APRIL 5, 1999

PROJECT NO.  
1506R-97  
**RI-9**  
SHEET 1 OF 1

1. LOTTED: TUES NOV 21, 08:00:00 2000  
ME: \MAGUIR\1506R-SD

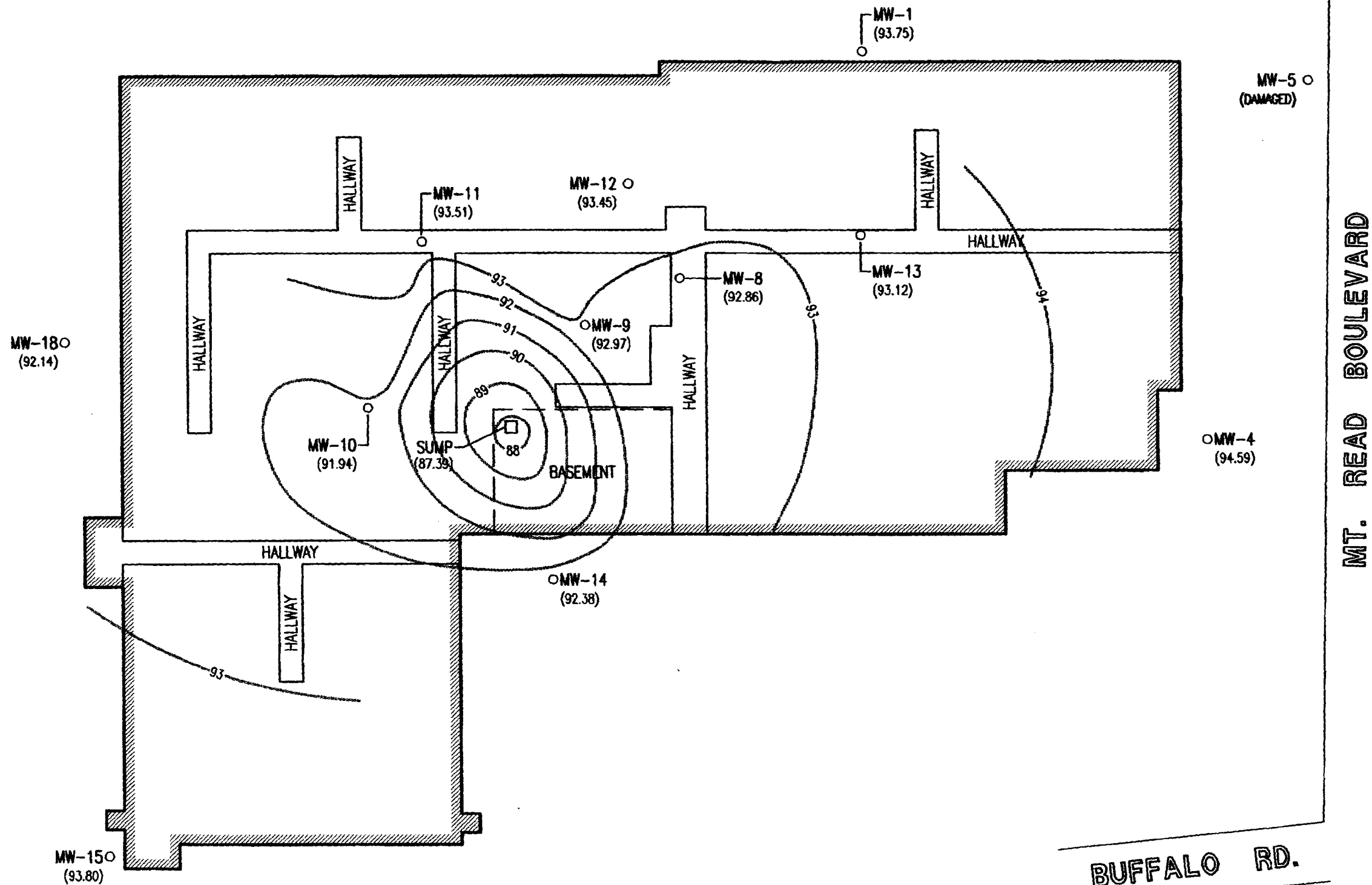
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## NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.

## LEGEND

- MW-1 (93.75) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON APRIL 5, 1999
- 89 — POTENTIOMETRIC CONTOUR LINE



## POTENTIOMETRIC CONTOUR MAP FOR APRIL 5, 1999

SCALE: 1" = 50'

REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY  
JAD

DATE  
4/5/99

DRAWN BY  
RJM

DATE DRAWN  
4/22/99

SCALE  
1" = 50'

DATE ISSUED  
7/16/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION

DRAWING TITLE  
OVERBURDEN AND/OR SHALLOW  
BEDROCK MONITORING WELLS (4/5/99)

PROJECT NO.  
1506R-97

RI-9A

SHEET 1 OF

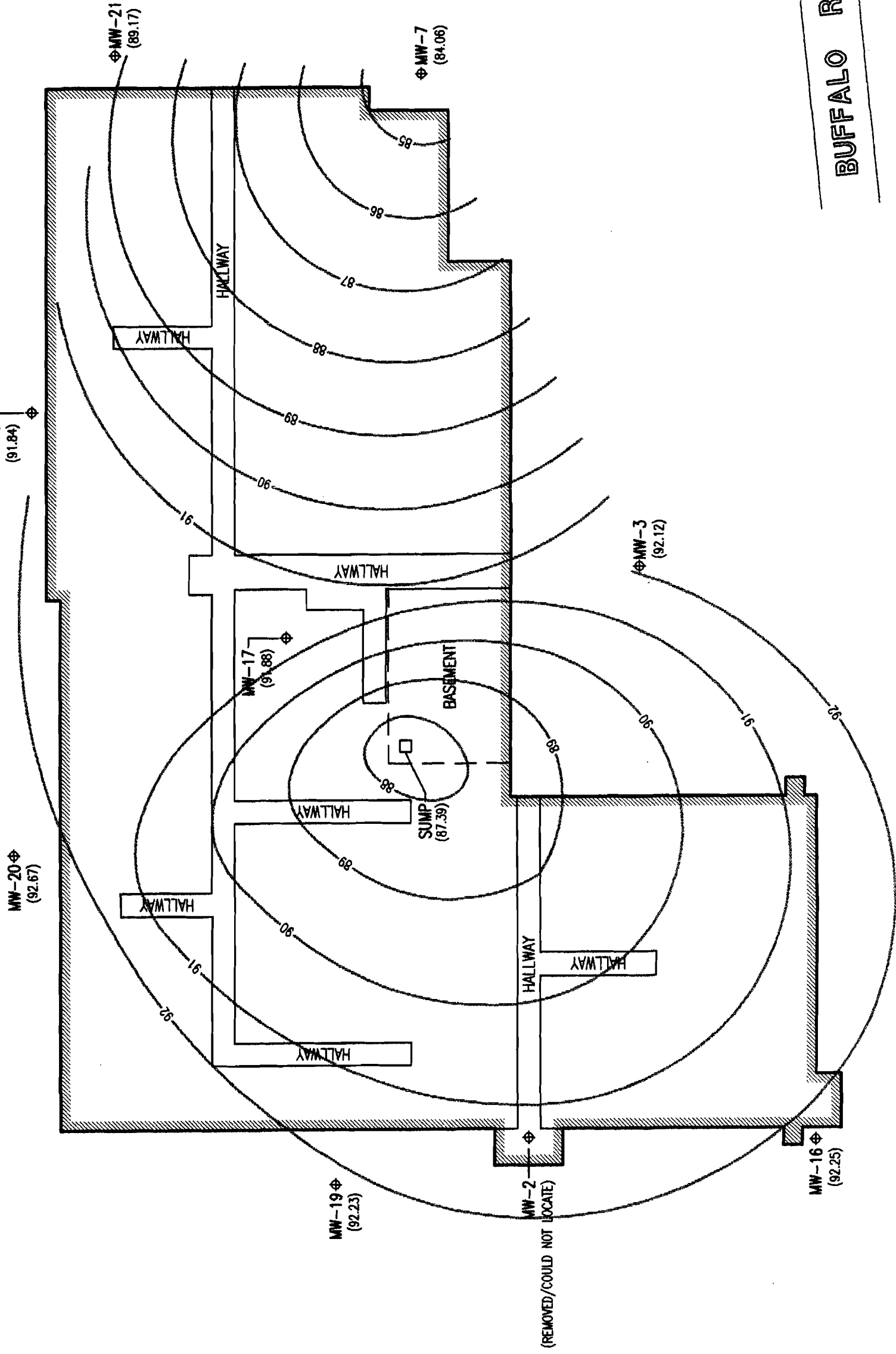


NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY ERM GROUP, ENTITLED "FIGURE 3-1; PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH, THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.
4. BASED ON GROUNDWATER ELEVATION DATA, THE BASEMENT SUMP APPEARS TO BE INFLUENCING GROUNDWATER ELEVATIONS IN SELECTED DEEP BEDROCK WELLS; HOWEVER, THE EXTENT OF VERTICAL INFLUENCE IS UNKNOWN.

LEGEND

- Φ MW-6 (91.84) DEEP BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION, (IN FEET), OBTAINED ON APRIL 5, 1999
- 89 — POTENTIOMETRIC CONTOUR LINE



POTENTIOMETRIC CONTOUR MAP FOR APRIL 5, 1999

SCALE: 1" = 50'

PROJECT TITLE 95 MT. READ BOULEVARD ROCHESTER, NEW YORK REMEDIAL INVESTIGATION DRAWING TITLE DEEP BEDROCK MONITORING WELLS (4/5/99)	PROJECT NO. 1506R-97 RI-9B SHEET 1 OF 1
DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK	SCALE 1" = 50' DATE ISSUED 7/16/99 DRAWN BY RJM DATE DRAWN 4/22/99 FIELD VERIFIED BY JAD DATE 4/5/99
REVISED BY RJM DATE 11/20/00	

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REF3: REF3

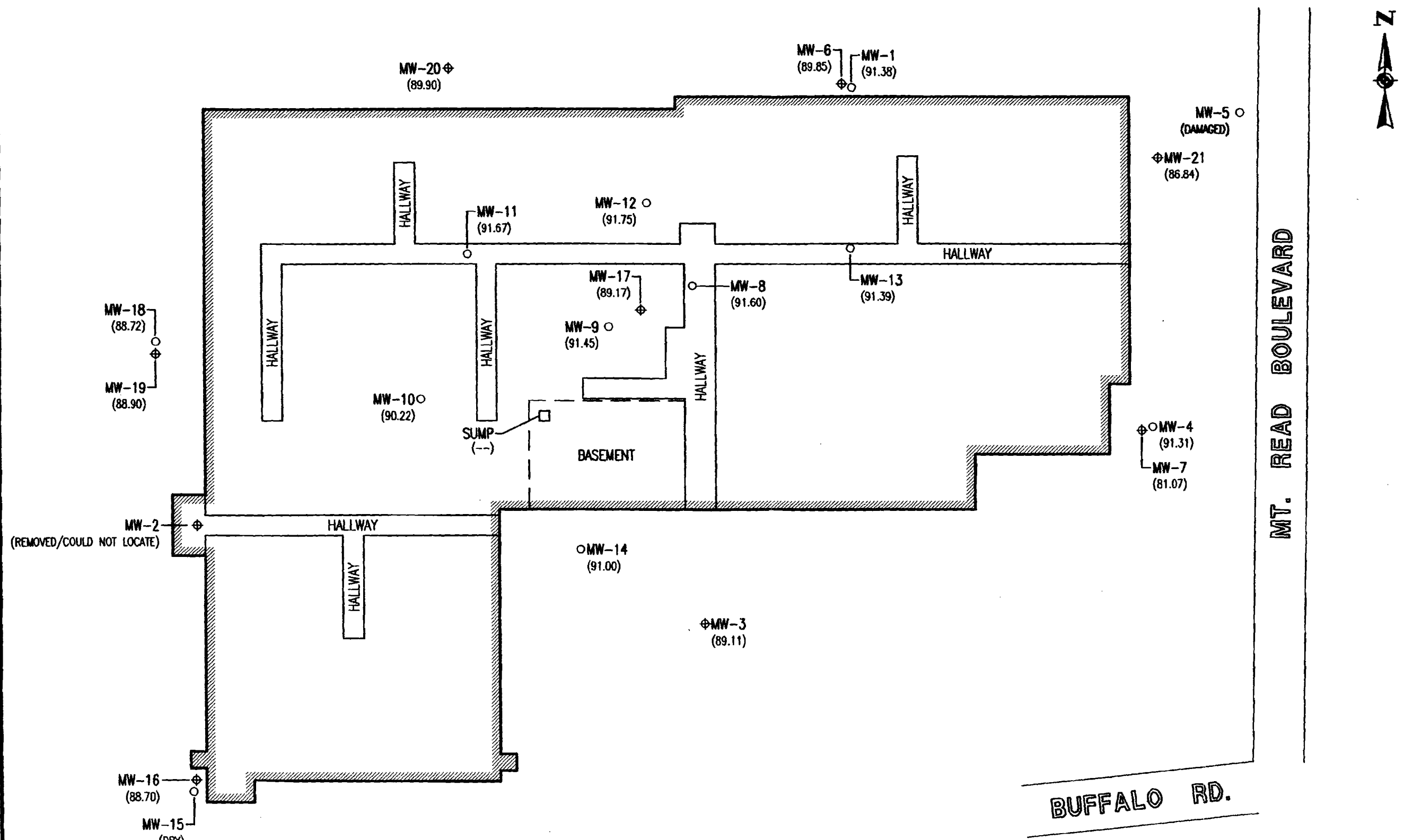
TIME PLOTTED: TUES NOV 21, 08:00:00 2000  
FILENAME: \MAGUR\1506R-23

NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.

LEGEND

- MW-1 (91.38) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON DECEMBER 17, 1998
- ⊕ MW-3 (89.11) DEEP BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON DECEMBER 17, 1998
- SUMP (--) BASEMENT SUMP (GROUNDWATER ELEVATION NOT OBTAINED)



**SITE PLAN**  
SCALE: 1" = 50'

REVISED BY  
RJM  
DATE  
11/20/00

FIELD VERIFIED BY JAD	DATE 12/17/98
DRAWN BY RJM	DATE DRAWN 10/19/99
SCALE 1" = 50'	DATE ISSUED 10/20/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION  
DRAWING TITLE GROUNDWATER ELEVATIONS FOR  
SCALED 17 1998

PROJECT NO.  
1506R-97  
**RI-10**  
SHEET 1 OF

TIME PLOTTED: TUES NOV 21, 08:00:00 2000  
FILENAME: \\MAGUIR\1506R-24

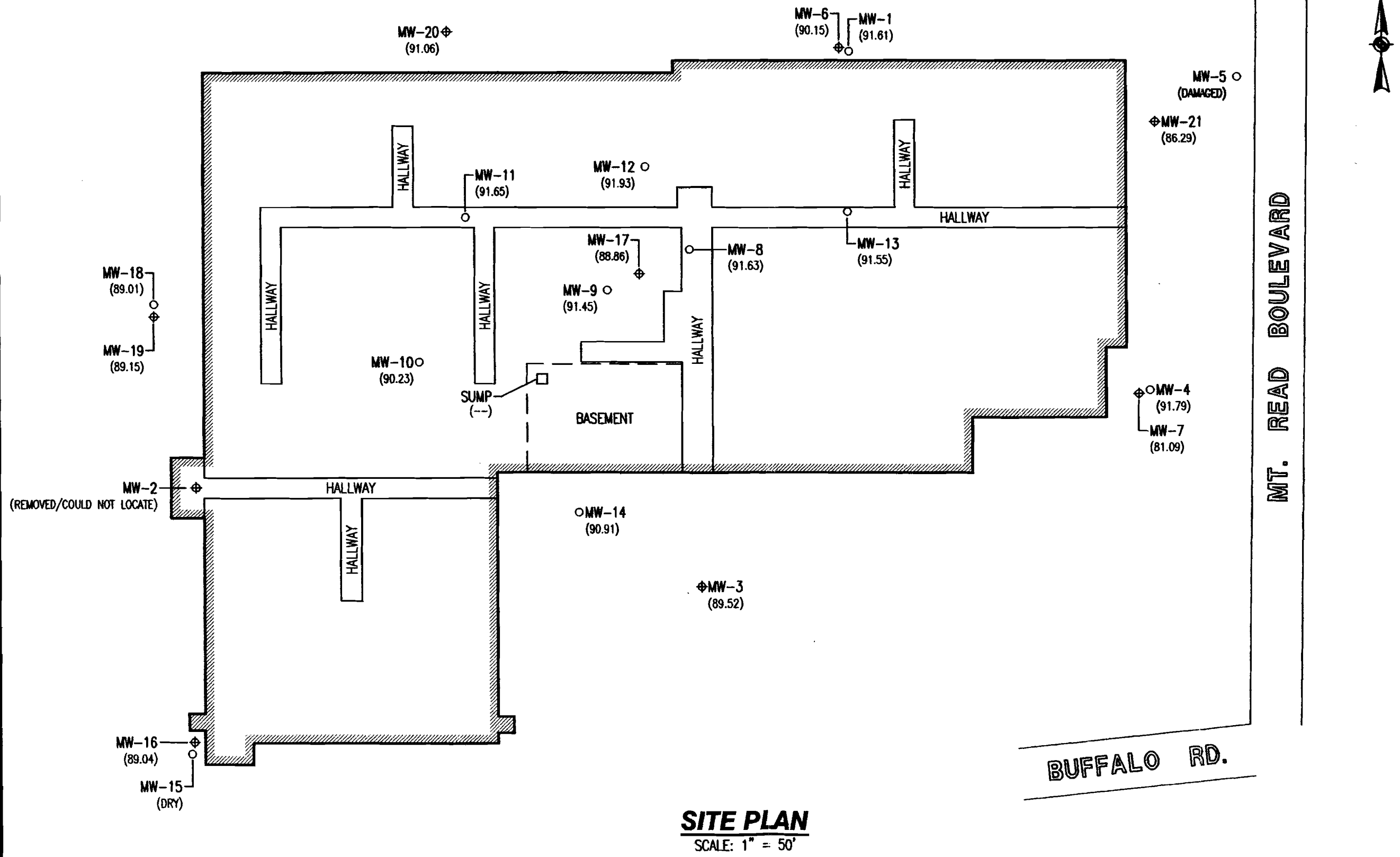
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REF: 2: REF 2  
REF: 3: REF 3

NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.
3. GROUNDWATER ELEVATIONS WILL VARY DUE TO SEASONAL FACTORS, PUMPING, ETC., AS SUCH THE POTENTIOMETRIC CONTOURS WILL ALSO VARY AND FLOW DIRECTION MAY BE DIFFERENT FROM THOSE SHOWN.

LEGEND

- MW-1 (91.61) OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON DECEMBER 21, 1998
- ⊕ MW-3 (89.52) DEEP BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON DECEMBER 21, 1998
- SUMP (--) BASEMENT SUMP (GROUNDWATER ELEVATION NOT OBTAINED)



**SITE PLAN**  
SCALE: 1" = 50'

REVISED BY  
RJM

DATE  
11/20/00

FIELD VERIFIED BY JAD	DATE 12/21/98
DRAWN BY RJM	DATE DRAWN 10/19/99
SCALE 1" = 50'	DATE ISSUED 10/20/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

DRAWING TITLE  
REMEDIAL INVESTIGATION  
GROUNDWATER ELEVATIONS FOR  
DECEMBER 21, 1998

PROJECT NO.  
1506R-97

RI-11

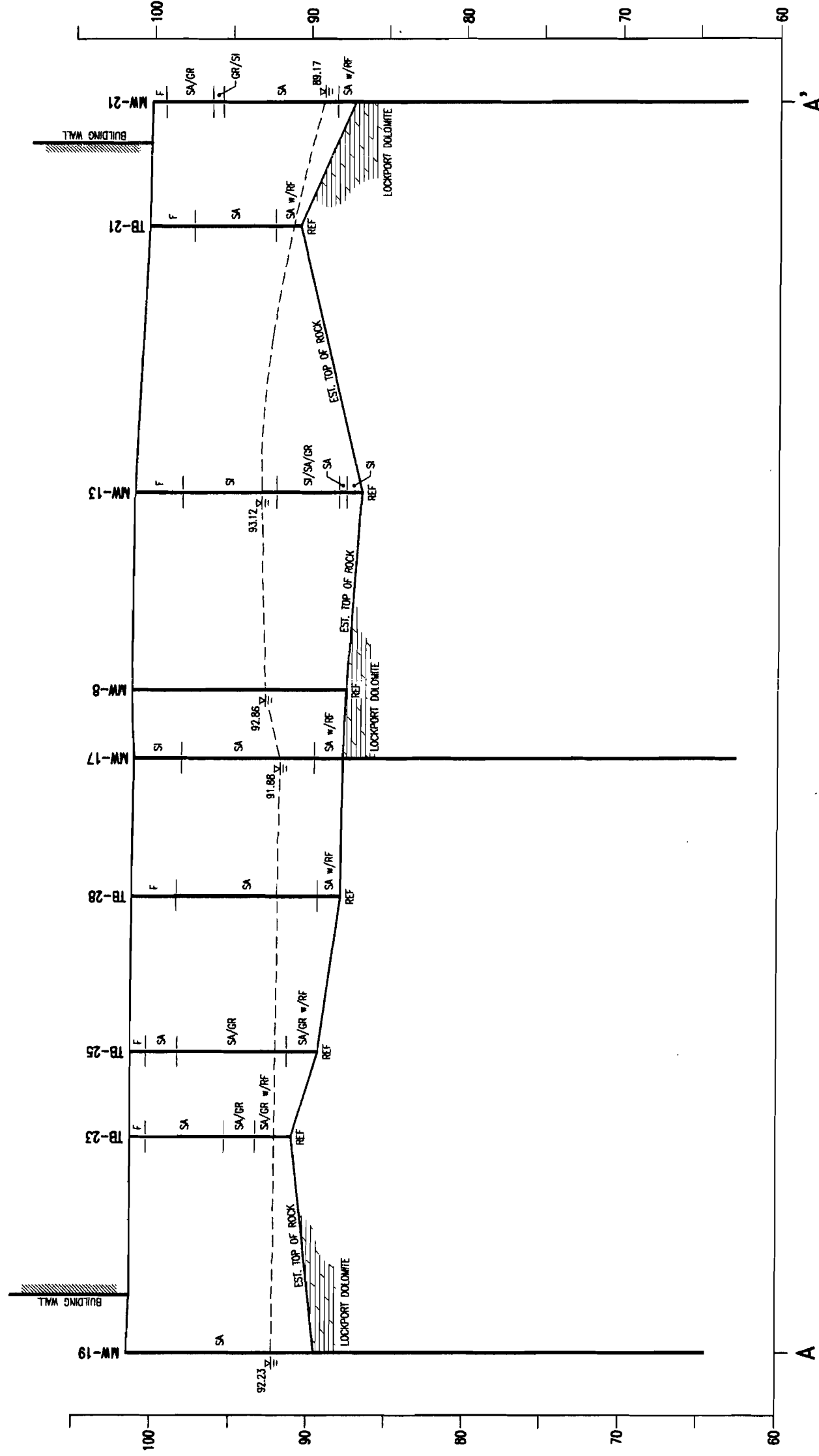
SHEET 1 OF 1

SCALE: HORIZ. 1" = 50'  
VERT. 1" = 8'

# **GEOLOGIC CROSS-SECTION A-A'**

**LEGEND**

F	FILL
GR	GRAVEL
REF	EQUIPMENT REFUSAL
RF	ROCK FRAGMENTS
SA	SAND
SI	SILT

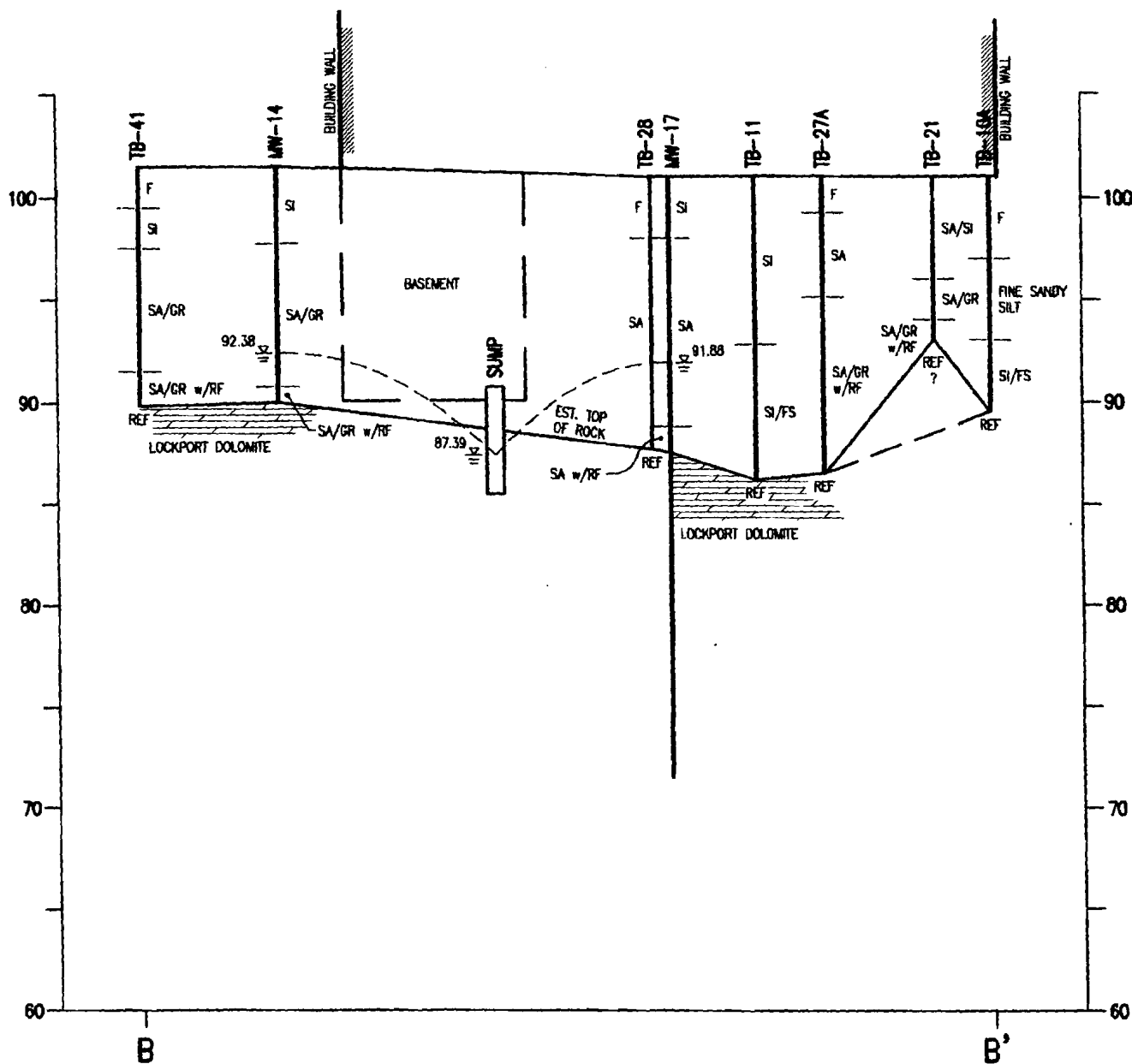


DATE	JAD	FIELD VERIFIED BY
6/99		
DATE DRAWN	RJM	SCALE
6/4/99		AS SHOWN
DATE ISSUED		7/16/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK  
REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
DRAWING TITLE GEOLOGIC CROSS-SECTION A-A'  
(4/5/99)

PROJECT NO.  
1506R-97  
RI-12A  
SHEET 1 OF 1



## GEOLOGIC CROSS-SECTION B-B'

SCALE: HORIZ. 1" = 50'  
 VERT. 1" = 8'

### LEGEND

F	FILL
FS	FINE SAND
GR	GRAVEL
REF	EQUIPMENT REFUSAL
RF	ROCK FRAGMENTS
SA	SAND
SI	SILT

### NOTE:

GROUNDWATER ELEVATIONS SHOWN ARE CALCULATED USING APRIL 5, 1999  
 STATIC WATER LEVEL MEASUREMENTS.

PROJECT NO.  
 1506R-97

RI-12B

SHEET 1 OF 1

PROJECT TITLE  
 95 MT. READ BOULEVARD  
 ROCHESTER, NEW YORK

REMEDIAL INVESTIGATION

DRAWING TITLE  
 GEOLOGIC CROSS-SECTION B-B'  
 (4/5/99)

**DAY ENVIRONMENTAL, INC.**

ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK

DATE  
 8/24/99

DRAWN BY  
 RJM

SCALE  
 AS SHOWN

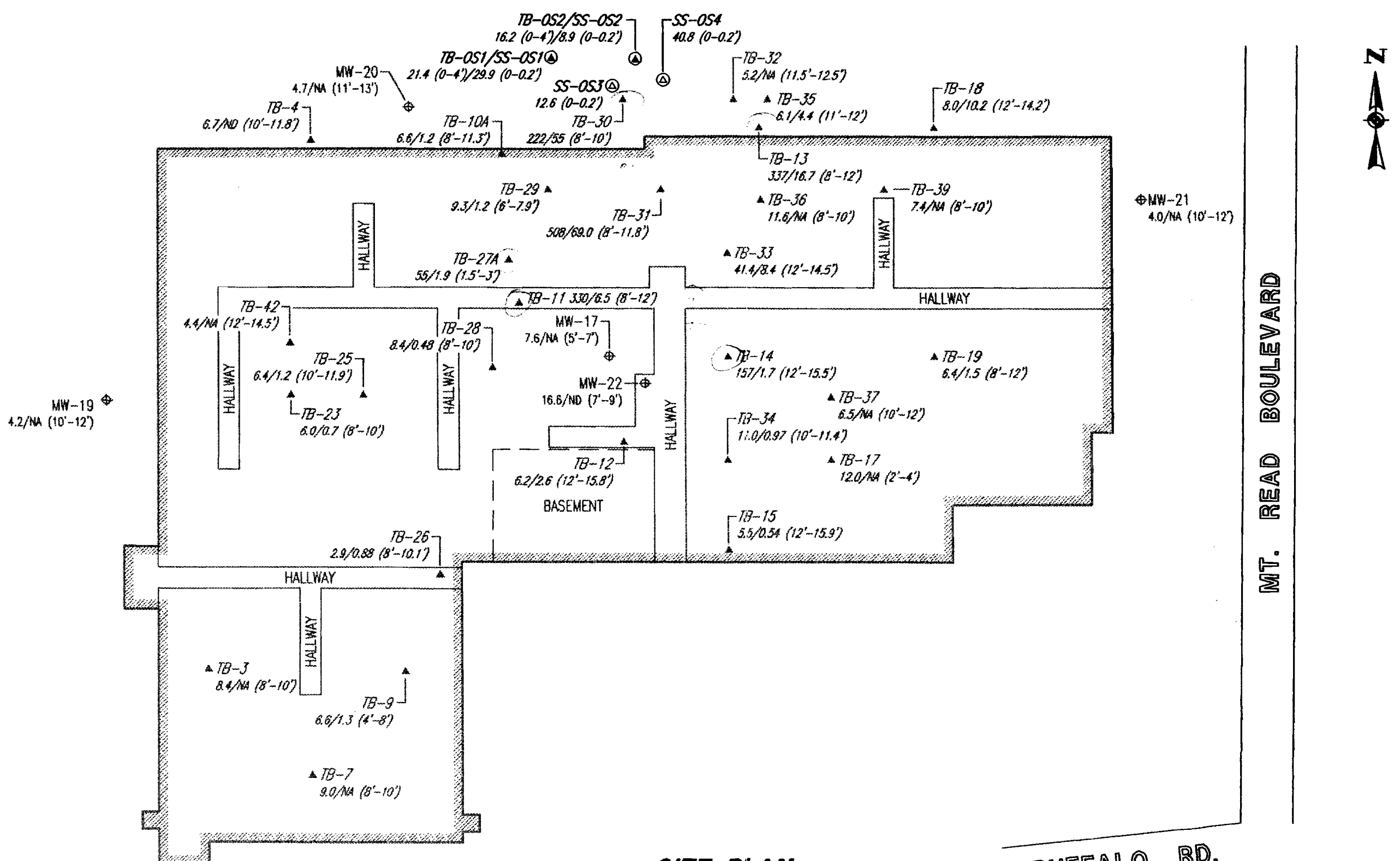
REF1: BUREAU  
REF2: REF2  
REF3: REF3  
ME PLOTTED: TUES NOV 21, 08:00:00 2000  
LENAME: \MAGUIR\1506R-1BR

NOTES

1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90.
2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED.

LEGEND

- |  |  |                           |   |
|--|--|---------------------------|---|
| ⊕ MW-17<br>7.6/NA (5'-7')                    | DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK CHROMIUM/HEXAVALENT CHROMIUM CONCENTRATION RECORDED IN PARTS PER MILLION (ppm) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS | ⊕ SS-OS3<br>12.6 (0-0.2') | OFF-SITE SURFACE SAMPLE LOCATION WITH PEAK TOTAL CHROMIUM CONCENTRATION RECORDED IN PARTS PER MILLION (ppm) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS |
| ▲ TB-19<br>6.4/1.5 (8'-12')                  | TEST BORING LOCATION WITH PEAK TOTAL CHROMIUM/HEXAVALENT CHROMIUM CONCENTRATION RECORDED IN PARTS PER MILLION (ppm) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS            | NA                        | NOT ANALYZED  |
| ⊕ TB-OS1/SS-OS1<br>21.4 (0-4')/29.9 (0-0.2') | OFF-SITE TEST BORING/SURFACE SAMPLE LOCATION WITH PEAK TOTAL CHROMIUM CONCENTRATION RECORDED IN PARTS PER MILLION (ppm) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS        | ND                        | NOT DETECTED ABOVE LABORATORY DETECTION LIMITS  |



**SITE PLAN**  
SCALE: 1" = 50'

REVISED BY RJM	DATE 11/20/00
FIELD VERIFIED BY JAD	DATE 9/99
DRAWN BY RJM	DATE DRAWN 9/2/99
SCALE 1" = 50'	DATE ISSUED 9/3/99

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

PROJECT TITLE  
95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

DRAWING TITLE  
REMEDIAL INVESTIGATION  
OFF-SITE LOCATIONS WITH PEAK  
CHROMIUM DETECTED IN SOIL SAMPLES

PROJECT NO.  
1506R-97

**RI-OS1**

SHEET 1 OF 1

## **APPENDIX B**

### **Test Boring Logs and Well Logs**

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-1  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/15/98 DATE FINISHED: 4/15/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 14.5'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 14.5'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Concrete floor.	
-2-				5	4.1	27	-2-	Concrete and Gravel. Dry.	
-3-							-3-		
-4-							-4-		
-5-	SS-2			60	0.7	4	-5-	Gray brown SILT and SAND, some Gravel and Rock fragments. Moist.	
-6-							-6-		
-7-							-7-	...Wet at 7.5'.	
-8-							-8-		
-9-	SS-3			70	0.8	10	-9-	Gray Silty fine to medium SAND, some gray Rock fragments. Wet.	
-10-							-10-		
-11-							-11-		
-12-							-12-	...Rock fragment content increases with depth.	
-13-	SS-4			40	0.7	13	-13-		
-14-							-14-		
-15-							-15-	Equipment refusal at 14.5'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable



DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-2  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/15/98 DATE FINISHED: 4/15/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 15.0'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 15.0'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Wood and Concrete floor.	
-1-	SS-1						-1-	Light brown, tan SILT and SAND, trace Gravel. Damp.	
-2-				50	0.4	2	-2-		
-3-							-3-		
-4-	SS-2						-4-	... Moist.	
-5-							-5-	Broken layered ROCK. Dry.	
-6-				60	0.6	19	-6-	Brown Silty SAND, some Gravel. Moist.	
-7-	SS-3						-7-		
-8-							-8-	...Gray brown. Wet.	
-9-							-9-		
-10-	SS-4			95	0.4	6	-10-	Gray SAND and ROCK fragments. Wet.	
-11-							-11-		
-12-							-12-		
-13-	SS-4						-13-		
-14-				75	0.2	2.5	-14-		
-15-							-15-		
		▼	▼					Equipment refusal at 15.0'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-3  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: NA  
TYPE OF DRILL RIG: Hand-operated Geoprobe  
SAMPLING METHOD: 1" large bore  
AUGERS: NA

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 5/13/98 DATE FINISHED: 5/13/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 11.2'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 11.2'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	95	0.0	0.1	-1-	Concrete floor.	
-2-							-2-	Dark brown Gravel, Sand, Asphalt, Cinders (FILL). Damp.	
-3-							-3-	Brown tan Silty SAND, some Gravel. Damp.	
-4-	SS-2			50	0.0	3.9	-4-	... Rock fragments. Moist.	
-5-							-5-		
-6-	SS-3			60	0.0	0.3	-6-		
-7-							-7-		
-8-	SS-4			60	0.0	2.2	-8-	... Grades to Gray color. Wet.	
-9-							-9-		
-10-	SS-5			70	0.0	2.8	-10-	... Weathered Rock.	
-11-							-11-		
-12-	SS-6			60	0.0	2.1	-12-	Equipment refusal at 11.2'.	
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-4 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>North of Building</u> DATE STARTED: <u>5/13/98</u> DATE FINISHED: <u>5/13/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>11.8'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>11.8'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>Sunny, light breeze, ~70°F</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	75	0.3	2.8	-1-	Asphalt pavement and concrete.	
-2-							-2-	Dark brown Silt, Sand, Brick, Gravel, Organics (FILL). Damp.	
-3-	SS-2			90	0.0	4.1	-3-	Red brown Silty SAND, some Gravel. Damp to moist.	
-4-							-4-		
-5-	SS-3			70	0.0	2.3	-5-		
-6-							-6-	Red brown SILT and SAND, some Gravel. Moist.	
-7-	SS-4			80	0.1	2.2	-7-		
-8-							-8-	Red brown Silty SAND, some Gravel. Moist to wet.	
-9-	SS-5			60	0.0	1.8	-9-	... Rock fragments.	
-10-							-10-		
-11-	SS-6			40	0.0	1.1	-11-	... Gray weathered Rock.	
-12-							-12-	Equipment refusal at 11.8'.	
-13-							-13-		
-14-							-14-		
-15-							-15-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-5  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/15/98 DATE FINISHED: 4/15/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 14.4'

TOP OF ROCK ELEVATION: NA

DEPTH DRILLED INTO ROCK: 0'

BOTTOM OF HOLE ELEVATION: NA

TOTAL DEPTH OF HOLE: 14.4'

WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-		NA	NA				-1-	Concrete floor.	Hit refusal three times at 2' BGS. Moved test boring into hallway.
-2-	SS-1			65	0.4	0.5	-2-	Tan light brown SILT, little fine Sand, trace Gravel. Damp.	
-3-							-3-		
-4-							-4-		
-5-	SS-2			75	3	10	-5-		
-6-							-6-		
-7-							-7-	Gary fine sandy SILT, some Gravel, little Rock fragments. Moist.	
-8-							-8-		
-9-	SS-3			50	1.5	100	-9-		
-10-							-10-	... Some Rock fragments. Moist to wet.	
-11-							-11-		
-12-							-12-	Gray Silty fine SAND. Wet.	
-13-	SS-4			50	0.9	20	-13-		
-14-							-14-	...Some Rock fragments.	
-15-							-15-	Equipment refusal at 14.4'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB- 6  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/13/98 DATE FINISHED: 4/13/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 9.3'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 9.3'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1			60	5.2	3.5	-1-	Brown and tan reworked Sand, Clay, and Gravel (FILL). Damp.	
-2-							-2-		
-3-							-3-		
-4-	SS-3			70	10.3	23	-4-	Red brown fine to medium SAND, some Gravel and Silt nodules. ... Color changes to tan olive.	Chemical odor.
-5-							-5-		
-6-							-6-	Tan olive fine to medium SAND, some Silt. Damp.	
-7-	SS-3			50	6.1	530	-7-	Gray fine to medium SAND, some Gravel and Rock fragments. Moist.	Chemical odor.
-8-							-8-		
-9-							-9-	... Wet at 8.5'.	Chemical odor.
-10-							-10-	Equipment refusal at 9.3'.	
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-7  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/14/98 DATE FINISHED: 4/14/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 10.0'

TOP OF ROCK ELEVATION: NA

DEPTH DRILLED INTO ROCK: 0'

BOTTOM OF HOLE ELEVATION: NA

TOTAL DEPTH OF HOLE: 10.0'

WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Ceramic tile and concrete floor.	
-1-	SS-1						-1-	Tan light brown SILT and SAND, some Gravel. Damp.	
-2-				35	0.0	0.5	-2-		
-3-							-3-		
-4-							-4-		
-5-	SS-2						-5-	Light brown Silty SAND, some Gravel. Moist.	
-6-				50	0.2	10	-6-		
-7-							-7-		
-8-							-8-		
-9-	SS-3						-9-	Gray Silty SAND, some Gravel and Rock fragments. Wet.	
-10-				50	0.0	6	-10-		
-11-							-11-	Equipment refusal at 10.0'.	
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-8  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/14/98 DATE FINISHED: 4/14/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 15.0'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 15.0'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1						-1-	Brown SILT, some fine Sand, trace Gravel. Damp to moist.	Possible Chemical odor.
-2-				70	0.3	0.2	-2-		
-3-							-3-		
-4-							-4-		
-5-	SS-2						-5-	... Little Sand, some Gravel in layers. Moist.	
-6-				90	0.5	5.5	-6-		
-7-							-7-		
-8-							-8-		
-9-	SS-3						-9-	Light brown SILT and fine SAND, some Gravel. Moist to wet.	
-10-				90	0.4	35	-10-		
-11-							-11-		
-12-							-12-		
-13-	SS-4						-13-	Gray brown SAND and GRAVEL, some Silt and Clay layers. Wet.	
-14-				50	1	250	-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-9</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Track-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>4/14/98</u> DATE FINISHED: <u>4/14/98</u> DAY REPRESENTATIVE: <u>Jeffrey A. Danzinger</u>					
THICKNESS OF OVERBURDEN: <u>9.5'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>9.5'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1			65	7.6	6	-1-	Brown fine Sandy SILT, some Gravel. Damp.	
-2-									
-3-									
-4-									
-5-	SS-2			60	3.7	5.5	-5-	Tan brown SILT and SAND, trace Gravel. Moist.	
-6-									
-7-									
-8-									
-9-	SS-3			35	4.6	8	-9-	... Wet.	
-10-							-10-	Gray SILT and SAND, some Gravel. Wet.	
-11-						-11-	Equipment refusal at 9.5'.		
-12-									
-13-									
-14-									
-15-									

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable



DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-10  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/15/98 DATE FINISHED: 4/15/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: NA  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 5.5'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Concrete floor.	
								Gravel.	
-2-				45	0.0	2	-2-	Dark brown reworked Silt and Sand, little Gravel, trace Ceramic (FILL). Damp.	
-3-							-3-	Brown tan SILT, little Gravel, trace fine Sand. Moist.	
-4-	SS-2						-4-	Red brown SILT and fine SAND, some Gravel. Moist.	
-5-				-	0.0	1	-5-		
-6-							-6-	Equipment refusal at 5.5'.	
-7-							-7-		
-8-							-8-		
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-10A  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/15/98 DATE FINISHED: 4/15/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 11.3'

TOP OF ROCK ELEVATION: NA

DEPTH DRILLED INTO ROCK: 0'

BOTTOM OF HOLE ELEVATION: NA

TOTAL DEPTH OF HOLE: 11.3'

WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Concrete floor.	
								Gravel and Styrofoam.	
-2-				30	0.1	1	-2-	Black brown reworked Silt, some Sand, Coal, Brick, and Slag (FILL). Damp to moist.	
-3-							-3-		
-4-	SS-2						-4-	Tan brown fine Sandy SILT, little Gravel. Moist.	
-5-				70	0.3	17	-5-		
-6-							-6-	Gray fine Sandy SILT, some Gravel. Moist.	
-7-							-7-		
-8-	SS-3						-8-	Gray SILT and fine SAND, some weathered Gravel and Rock fragments. Moist.	
-9-				80	0.0	4	-9-	... Wet.	
-10-							-10-	... Sand content increases.	
-11-							-11-		
-12-							-12-	Equipment refusal at 11.3'.	
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-11  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/15/98 DATE FINISHED: 4/15/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 14.5'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 14.5'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Concrete floor and Gravel.	Chemical odor.
								Light tan brown Sandy SILT, some Gravel. Damp.	
-2-				60	18.3	40	-2-	Dark brown black SILT, little Clay. Damp.	
-3-							-3-	...Brown.	
-4-	SS-2						-4-	Light brown gray fine Sandy SILT, trace Gravel. Moist.	
-5-							-5-		
-6-				90	7	4	-6-		
-7-							-7-	... Wet at 7.5'.	
-8-	SS-3						-8-	Gray SILT and fine SAND, little to some Gravel, trace Clay. Wet.	
-9-							-9-		
-10-				95	4.6	32	-10-		
-11-							-11-		
-12-	SS-4						-12-		
-13-				55	65.4	100	-13-		
-14-							-14-		
-15-							-15-	Equipment refusal at 14.5'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-12  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/13/98 DATE FINISHED: 4/13/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 15.8'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 15.8'  
TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1						-1-	Brown reworked Sand, Silt, and Gravel (FILL). Damp.	
-2-				30	4.9	3	-2-		
-3-							-3-		
-4-							-4-		
-5-	SS-2						-5-	Brown SAND, some Silt and Gravel. Moist.	
-6-				40	31.8	12	-6-		
-7-							-7-		
-8-							-8-		
-9-	SS-3						-9-	... Wet at 9.0'.	
-10-				50	19.8	26	-10-		
-11-							-11-		
-12-							-12-		
-13-	SS-4						-13-	Brown fine to medium SAND and GRAVEL, trace Silt. Wet.	
-14-				40	5.2	16	-14-		
-15-							-15-		
-16-							-16-		
								Equipment refusal at 15.8'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB- 13  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: North of Building  
DATE STARTED: 4/14/98 DATE FINISHED: 4/14/98  
DAY REPRESENTATIVE: Jeffrey A. Danzinger

THICKNESS OF OVERBURDEN: 12.7'

TOP OF ROCK ELEVATION: NA

DEPTH DRILLED INTO ROCK: 0'

BOTTOM OF HOLE ELEVATION: NA

TOTAL DEPTH OF HOLE: 12.7'

WEATHER: Mostly sunny, light wind, 60°F

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Asphalt pavement and Gravel.	
-2-				5	0.0	1.5	-2-	Gray Gravel and Sand (FILL). Damp.	
-3-							-3-		
-4-							-4-		
-5-	SS-2			55	0.2	1.1	-5-	Orange red brown medium SAND. Wet.	
-6-							-6-		
-7-							-7-		
-8-							-8-	...Trace Silt and Clay. Wet.	
-9-	SS-3			85	0.0	1.5	-9-		
-10-							-10-		
-11-							-11-	Gray orange brown, red SAND, some Gravel, little Clay and Silt. Wet.	
-12-				0	-	-	-12-	... Wet (no soil recovery).	
-13-	SS-4						-13-	Equipment refusal at 12.7'.	
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-14 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085			
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Track-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>4/14/98</u> DATE FINISHED: <u>4/14/98</u> DAY REPRESENTATIVE: <u>Jeffrey A. Danzinger</u>			
THICKNESS OF OVERBURDEN: <u>15.5'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>15.5'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>			

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Wood and Concrete floor.	
-1-	SS-1			50	0.2	1.4	-1-	Dark brown SILT, some Sand, trace Gravel. Damp.	Chemical odor.
-2-							-2-		
-3-							-3-		
-4-	SS-2			65	4.8	3	-4-	... Moist to wet.	
-5-							-5-		
-6-							-6-		
-7-						-7-	Olive brown Sandy SILT, little Clay, trace Gravel. Wet.		
-8-	SS-3			55	16.4	21	-8-	Gray SAND and GRAVEL, some Silt, little Clay. Wet.	
-9-							-9-		
-10-							-10-		
-11-						-11-			
-12-	SS-4			60	14.2	15	-12-	Gray SAND, some Gravel and Silt, little Rock fragments. Wet.	
-13-							-13-		
-14-							-14-		
-15-						-15-			
-16-		▼	▼				-16-	Equipment refusal at 15.5'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable	
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DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-15</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085			
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Track-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>4/13/98</u> DATE FINISHED: <u>4/13/98</u> DAY REPRESENTATIVE: <u>J Joseph Dorety</u>			
THICKNESS OF OVERBURDEN: <u>15.9'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>15.9'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>			

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1			60	1.5	5.5	-1-	Red, brown, tan, black reworked Sand, Silt, Gravel, Asphalt (FILL). Damp.	
-2-									
-3-									
-4-									
-5-	SS-2			80	2.3	24	-5-	Red brown fine to medium SAND, some Gravel, trace Silt. Damp.	
-6-									
-7-									
-8-									
-9-	SS-3			75	0.4	18	-9-	Gray SAND and GRAVEL, some Silt. Moist to wet.	
-10-									
-11-									
-12-									
-13-	SS-4			60	0.6	30	-13-	... Wet at 12.0'.	
-14-									
-15-									
-16-									
-16-							-16-	Equipment refusal at 15.9'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									
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DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-16</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Track-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>4/15/98</u> DATE FINISHED: <u>4/15/98</u> DAY REPRESENTATIVE: <u>Jeffrey A. Danzinger</u>					
THICKNESS OF OVERBURDEN: <u>15.2'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>15.2'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1			55	0.1	3	-1-	Tan brown SILT, little Clay and Gravel. Damp.	
-2-							-2-	... Black gray color.	
-3-							-3-	... Olive brown gray color. Damp.	
-4-							-4-	... Moist.	
-5-	SS-2			70	0.4	3	-5-		
-6-							-6-		
-7-							-7-	Gray fine SAND and SILT, little Gravel. Wet.	
-8-							-8-	... Orange brown gray color. Wet.	
-9-	SS-3			95	1.2	1	-9-		
-10-							-10-		
-11-							-11-		
-12-							-12-	... Brown color. Wet.	
-13-	SS-4			75	1.5	4	-13-	Gray Silty fine to medium SAND, some Gravel. Wet.	
-14-							-14-		
-15-							-15-	Gray SAND and fractured ROCK. Wet.	
		▼	▼						

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-17 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>5/12/98</u> DATE FINISHED: <u>5/12/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>11.1'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>11.1'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	60	0.1	2.1	-1-	Concrete floor.	Chemical odor.
-2-	SS-2			90	0.2	2.6	-2-	Brown reworked Sand, Silt, Gravel, Cinders, Asphalt (FILL). Damp.  ... 4" seam of asphalt-like material.	
-3-							-3-		
-4-							-4-		
-5-	SS-3			75	0.6	1.9	-5-	Red brown Silty SAND and GRAVEL. Damp to moist.	
-6-						-6-			
-7-	SS-4			30	-	-	-7-		
-8-							-8-		
-9-	SS-5			85	0.0	1.2	-9-		
-10-							-10-		
-11-	SS-6			70	0.1	1.3	-11-	Equipment refusal at 11.1'.	
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-18</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Track-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>North of Building</u> DATE STARTED: <u>4/14/98</u> DATE FINISHED: <u>4/14/98</u> DAY REPRESENTATIVE: <u>Jeffrey A. Danzinger</u>					
THICKNESS OF OVERBURDEN: <u>14.2'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>14.2'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER : <u>Partly cloudy, light wind 55-60 °F</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	60	0.0	0.3	-1-	Asphalt pavement and Gravel.	
-2-							-2-	Black gray reworked Gravel, Sand, and Silt (FILL). Damp.	
-3-							-3-	Brown, red, tan, and gray fine Sandy SILT, trace Gravel. Moist.	
-4-							-4-	Tan light brown SILT and fine to medium SAND, some Gravel. Moist.	
-5-	SS-2			-5-					
-6-				-6-	... Wet at 6.5'.				
-7-				-7-					
-8-				-8-	Tan brown Silty fine SAND, little Gravel. Wet.				
-9-	SS-3			-9-					
-10-				-10-					
-11-				-11-					
-12-				-12-	Gray brown SAND and GRAVEL, some Rock fragments, Clay, and Silt. Wet.				
-13-	SS-4			-13-					
-14-				-14-					
-15-				-15-		Equipment refusal at 14.2'.			

MISCELLANEOUS NOTES: PPM = parts per million  
 NA = Not Applicable

PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-19  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Track-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 4/13/98 DATE FINISHED: 4/13/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 15.5'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 15.5'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Wood and Concrete floor.	
-1-	SS-1			80	0.6	0.2	-1-	Tan brown black reworked Sand, Silt, Gravel, Cinders, Slag, and Ash (FILL). Damp.	Possible chemical odor.
-2-							-2-		
-3-							-3-		
-4-							-4-		
-5-	SS-2			100	0.4	3.0	-5-	Red Brown fine to medium SAND, some Silt and Gravel. Damp.	Possible chemical odor.
-6-							-6-		
-7-							-7-		
-8-							-8-		
-9-	SS-3			65	0.7	5.6	-9-	Tan SAND and GRAVEL, trace to some Silt. Damp to moist.	
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-	SS-4			90	0.7	21	-13-	... Rock fragments at 9.5'. ... Brown gray color. Moist to wet. ... Wet at 12.3'. ... Gray in color. ... Gray weathered Rock.	
-14-							-14-		
-15-							-15-		
-16-							-16-		
		▼	▼					Equipment refusal at 15.5'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-20 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085			
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Track-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>South of Building</u> DATE STARTED: <u>4/13/98</u> DATE FINISHED: <u>4/13/98</u> DAY REPRESENTATIVE: <u>J Joseph Dorety</u>			
THICKNESS OF OVERBURDEN: <u>17.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>17.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>-</u>			

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-		NA	NA				-1-	Asphalt pavement.	
-2-	SS-1			60	0.6	1.4	-2-	Gray black brown Sand, Silt, Asphalt, Gravel, Cinders, Ash Brick, and Slag (FILL). Damp.	
-3-							-3-		
-4-							-4-		
-5-							-5-	Red brown fine to medium SAND, some Gravel, trace Silt. Damp.	
-6-	SS-2			80	183	>1,000	-6-		
-7-							-7-	... Gray color. Moist.	Petroleum-like odor.
-8-							-8-		
-9-							-9-	... Wet between 8.5' and 10.0'.	Sheen on water, petroleum-like odor.
-10-	SS-3			90	126	>1,000	-10-		
-11-							-11-	... Rock fragments. Moist.	
-12-							-12-		
-13-							-13-		
-14-	SS-4			95	38.9	31	-14-		
-15-							-15-		
-16-							-16-		
-16-	SS-5			25	23.1	300	-16-		
-17-							-17-	Gray fine SAND and GRAVEL, some Silt. Wet.	Sheen on water, petroleum-like odor.
							-17-	Equipment refusal at 17.0'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									
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DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-21</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>5/13/98</u> DATE FINISHED: <u>5/13/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>9.3'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>9.3'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	90	0.0	0.0	-1-	Concrete floor.	Possible chemical odor.
-2-							-2-	Tan brown black reworked Sand, Silt, Gravel, Brick, Cinders, Slag, and Ash (FILL). Damp.	
-3-	SS-2			85	0.0	0.0	-3-	Tan Silty SAND, some Gravel. Damp to moist.	
-4-							-4-		
-5-	SS-3			90	0.0	0.0	-5-	... Wet a 5.8'.	
-6-							-6-		
-7-	SS-4			50	0.0	0.2	-7-	...Some Rock fragments.	
-8-							-8-		
-9-	SS-5			20	0.0	2.1	-9-	... Gray with some weathered Rock.	
-10-							-10-	Equipment refusal at 9.3'.	
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-22 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>5/12/98</u> DATE FINISHED: <u>5/12/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>10.2'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>10.2'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	80	0.1	1.6	-1-	Concrete.	
-2-							-2-	Gray black brown reworked Sand, Gravel, Silt, Rock, Cinders, Ash, and Brick (FILL). Damp.	
-3-						-3-			
-4-	SS-2			95	0.0	1.8	-4-	Tan brown Silty SAND, some Gravel. Damp to moist.	
-5-						-5-			
-6-						-6-			
-7-	SS-3			60	0.1	3	-7-	... Wet at 5.3'.	
-8-						-8-			
-9-						-9-			
-10-	SS-4			65	0.1	0.8	-10-	... With Rock fragments.	
-11-						-11-			
-12-						-12-			
-13-	SS-5			70	0.1	0.5	-13-	Gray SAND, GRAVEL, and ROCK fragments. Wet.	
-14-						-14-			
-15-						-15-			
-16-	SS-6			0	-	-	-16-	Equipment refusal at 10.2'.	
-17-						-17-			
-18-						-18-			
-19-							-19-		
-20-							-20-		
-21-							-21-		
-22-							-22-		
-23-							-23-		
-24-							-24-		
-25-							-25-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-23 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/28/98</u> DATE FINISHED: <u>9/28/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>10.2'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>10.2'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	90	-	-	-1-	Concrete floor.	Possible chemical odor.
							-1-	Gray Gravel, Sand and Silt (FILL). Damp.	
								Tan fine to medium SAND, some Silt and Gravel. Damp to moist.	
-2-	SS-2			75	-	-	-2-		
-3-	SS-3			80	1.0	0.6	-3-		
-4-	SS-4			70	0.8	0.1	-4-		
-5-							-5-		
-6-	SS-5			75	0.7	0.0	-6-	Gray brown fine to medium SAND and GRAVEL, trace to some Silt. Moist to wet.	
-7-							-7-	... Wet at 7.5'.	
-8-	SS-6			80	1.2	0.2	-8-	... Rock fragments.	
-9-							-9-	... Moist to wet.	
-10-	SS-7			0	-	-	-10-		
-11-							-11-	Equipment refusal at 10.2'.	
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-24 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/24/98</u> DATE FINISHED: <u>9/24/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>10.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>10.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	80	1.7	0.2	-1-	Clay tile and Concrete Floor.	Some yellowish discoloration at 5.5'.  Chemical odor.
-2-							-2-	Brown Gravel, Sand, Silt, Concrete (FILL). Damp.	
-3-							-3-	Tan reworked Sand, Silt, Gravel (FILL). Damp to moist	
-4-	SS-2			75	1.5	0.6	-4-	Tan brown SILT and SAND, some Gravel. Damp to moist.	
-5-							-5-		
-6-							-6-	Gray fine to medium SAND, some Gravel, trace Silt. Moist to wet.	
-7-					-7-				
-8-	SS-3			50	0.9	1.3	-8-	... Wet at 8.5'.	
-9-							-9-	Gray fine to medium SAND and GRAVEL, trace Silt. Wet.	
-10-							-10-	Equipment refusal at 10.0'.	
-11-					-11-				
-12-					-12-				
-13-					-13-				
-14-					-14-				
-15-					-15-				

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-25 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085			
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/29/98</u> DATE FINISHED: <u>9/29/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>			
THICKNESS OF OVERBURDEN: <u>11.9'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>11.9'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>			

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	90	1.6	0.1	-1-	Clay tile and Concrete Floor.	
								Gray, brown, tan reworked Silt, Sand, Gravel (FILL). Damp.	
								Red brown SAND, some Silt and Gravel. Damp.	
-2-							-2-		
-3-	SS-2			80	1.5	0.8	-3-		
-4-							-4-	Tan brown fine to medium SAND and GRAVEL, some Silt. Damp to moist.	
-5-	SS-3			50	1.5	0.8	-5-	... Moist to wet at 5.5'.	
-6-							-6-		
-7-	SS-4			50	4.3	4.2	-7-	... Wet at 7.0'.	
-8-							-8-		
-9-	SS-5			65	0.9	0.3	-9-	... Gray, trace Silt and Rock fragments. Moist to wet.	
-10-							-10-	... Some large Rock fragments. Moist to wet.	
-11-	SS-6			70	1.6	0.8	-11-		
-12-							-12-	Equipment refusal at 11.9'.	
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

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DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-26</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/23/98</u> DATE FINISHED: <u>9/23/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>10.1'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>10.1'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Clay tile and Concrete Floor.	
-1-							-1-	Gray Sand and Gravel, trace Silt (FILL). Damp.	
-2-	SS-1			85	9.1	6.0	-2-	Red yellow Sandy SILT, some Gravel. Damp.	
-3-							-3-	Tan brown Silty SAND, some Gravel. Damp.	
-4-							-4-		
-5-	SS-2			75	2.6	3.9	-5-		
-6-							-6-	Gray fine to medium SAND and GRAVEL, some Silt. Damp to moist.	Chemical odor.
-7-							-7-		
-8-							-8-	... Wet at 8.0'.	
-9-	SS-3			80	3.9	4.8	-9-	... Dark gray seam with Rock fragments.	Yellow orange discoloration.
-10-							-10-		
-11-							-11-	Equipment refusal at 10.1'.	
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-27  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: ATV-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 9/22/98 DATE FINISHED: 9/22/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: NA  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 5.0'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Clay tile and Concrete Floor.	
-2-				90	4.3	18	-2-	Tan gray Sand and Gravel (FILL). Damp.	
-3-							-3-	Black Clay, fine to medium Sand, Gravel, Wood, Organics (FILL). Damp to moist.	
-4-	SS-2			95	1.9	10	-4-	Tan brown fine to medium SAND, some Silt and Gravel. Damp.	
-5-							-5-	Equipment refusal at 5.0'.	
-6-							-6-		
-7-							-7-		
-8-							-8-		
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-27A</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside building, 3' south of TB-27</u> DATE STARTED: <u>9/22/98</u> DATE FINISHED: <u>9/22/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>14.5'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>14.5'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1			55	-	-	-1-	Tan gray Sand and Gravel (FILL). Damp.	Chemical odor.
-2-							-2-	Black Clay, fine to medium Sand, Gravel, Wood, Organics (FILL). Damp to moist.	
-3-							-3-	Tan brown fine to medium SAND, some Silt and Gravel. Damp.	
-4-	SS-2			100	0.4	18	-4-	... Some Clay, Roots and seam of Rock Fragments.	
-5-							-5-		
-6-							-6-	Yellow orange fine to medium SAND, some Gravel, little Silt. Moist to wet.	
-7-							-7-	Gray tan fine to medium SAND and GRAVEL, some Silt and Rock fragments. Moist.	Chemical odor.
-8-	SS-3			100	4.1	32	-8-	... Gray brown. Wet.	
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-	SS-4			100	39.7	72	-12-	Gray brown SAND, some Gravel and Rock fragments, trace Silt. Wet.	Possible chemical odor.
-13-							-13-	... Moist.	
-14-							-14-		
-15-							-15-	Equipment refusal at 14.5'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090							FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-28</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085				
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>							SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/22/98</u> DATE FINISHED: <u>9/22/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>				
THICKNESS OF OVERBURDEN: <u>13.1'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>13.1'</u>							TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER : <u>NA</u>				
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS		
-1-	SS-1	NA	NA	75	0.0	1.4	-1-	Concrete floor.	Possible chemical odor.		
-2-								-2-		Brown tan Silt, Sand, Gravel, trace Clay (FILL). Damp.	
-3-								-3-		Red brown Silty SAND, some Gravel. Damp.	
-4-	SS-2			90	7.1	12	-4-				
-5-								-5-		... Moist.	
-6-								-6-		... Gray. Moist to wet.	
-7-						-7-					
-8-	SS-3			50	27.1	72	-8-				
-9-								-9-			
-10-								-10-		... Some Rock fragments. Wet.	
-11-						-11-					
-12-	SS-4			25	201	220	-12-				
-13-							-13-				
-14-							-14-	Equipment refusal at 13.1'.			
-15-							-15-				

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-29</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/29/98</u> DATE FINISHED: <u>9/29/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>7.9'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>7.9'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	80	5.2	1.4	-1-	Ceramic tile and concrete floor.	Possible chemical odor.
-2-							-2-	Tan SAND and SILT, some Gravel, trace Clay. Moist	
-3-	SS-2			75	1.3	0.7	-3-		
-4-							-4-		
-5-	SS-3			75	1.4	3.6	-5-	Tan Silty SAND and GRAVEL. Moist	
-6-							-6-	... Wet at 5.8'.	
-7-	SS-4			65	4.9	5.2	-7-	Gray fine SAND and GRAVEL, trace Silt and Rock fragments. Wet.	
-8-							-8-	Equipment refusal at 7.9'.	
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									

<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-30</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085						
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>North of Building in Driveway</u> DATE STARTED: <u>9/24/98</u> DATE FINISHED: <u>9/24/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>						
THICKNESS OF OVERBURDEN: <u>10.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>10.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>Cloudy, Breezy, ~55°F</u>						
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS	
-1-	SS-1	NA	NA	85	0.0	0.0	-1-	Asphalt pavement.	Possible yellow discoloration and chemical odor.	
-2-								-2-		Gray black Gravel, Sand, Cinders, Ash, Asphalt (FILL). Damp.
-3-								-3-		Black Silt, fine Sand, Ash, Glass, Organics, and Brick (FILL). Damp to moist.
-4-								-4-		Brown Silty SAND, some Gravel. Damp to moist.
-5-	SS-2			90	0.2	0.0	-5-	Red brown fine to medium SAND and GRAVEL, trace to some Silt. Moist to wet.		
-6-								-6-		... Wet at 6.5'.
-7-								-7-		
-8-								-8-		... Moist. Some Rock fragments.
-9-	SS-3			70	0.6	0.6	-9-			
-10-							-10-	Equipment refusal at 10.0'.		
-11-							-11-			
-12-							-12-			
-13-							-13-			
-14-							-14-			
-15-							-15-			

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-31</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/23/98</u> DATE FINISHED: <u>9/23/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>14.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>14.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Wood floor over concrete floor.	
-2-							-2-	Gray Gravel, Sand, Silt, Cinders (FILL). Damp.	
-3-							-3-	Brown tan Sandy SILT, some Gravel. Damp.	
-4-	SS-2			50	0.8	0.3	-4-	Brown Silty SAND, some Gravel. Damp to moist.	
-5-							-5-		
-6-							-6-		
-7-							-7-		
-8-	SS-3			70	1.2	5.0	-8-	... Wet at 8.5'.	
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-	SS-4			80	1.4	6.0	-12-	Gray brown fine SAND and GRAVEL, trace Silt. ... Moist at 12.8'.	
-13-							-13-		
-14-							-14-		
-15-							-15-	Equipment refusal at 14.0'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-32 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085						
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>North of Building in Driveway</u> DATE STARTED: <u>9/24/98</u> DATE FINISHED: <u>9/24/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>						
THICKNESS OF OVERBURDEN: <u>12.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>12.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>Cloudy, Breezy, ~55°F</u>						
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS	
-1-	SS-1	NA	NA				-1-	Asphalt pavement.	Possible petroleum-like odor.	
-2-				80	0.0	0.0	-2-	Black brown Sand, Silt, Gravel, Cinders, Ash, Slag, Glass (FILL). Damp to moist.		
-3-							-3-	Tan fine to medium SAND, some Gravel, trace Silt. Damp to moist.		
-4-	SS-2						-4-	... 3" seam of black SAND. Moist.		
-5-				75	0.2	0.1	-5-	... 3" seam of brown coarse SAND, some Gravel. Moist to Wet.		
-6-							-6-	... Brown fine SAND, some Gravel, trace Silt. Wet.		
-7-						-7-				
-8-	SS-3						-8-			Possible yellow discoloration at 9.0' to 9.5'.
-9-				70	0.0	0.1	-9-			
-10-							-10-	... Increase in Gravel content.		
-11-						-11-				
-12-	SS-4			50	0.0	0.1	-12-	Gray fine SAND and GRAVEL, trace Silt and Rock fragments. Moist to wet.		
-13-						-13-	Equipment refusal at 12.0'.			
-14-						-14-				
-15-						-15-				

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-33  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: ATV-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 9/23/98 DATE FINISHED: 9/23/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 14.5'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 14.5'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1						-1-	Gray black Gravel, Sand, Cinders, Silt (FILL). Damp.	
-2-				80	0.4	0.7	-2-	Brown tan Silt, Sand, Gravel, and Roots (FILL). Damp.	
-3-							-3-		
-4-							-4-	Tan Sandy SILT, some Gravel. Damp to moist.	
-5-	SS-2						-5-		
-6-				75	1.2	1.1	-6-	Tan fine to medium SAND, some Gravel and Silt. Moist.	
-7-							-7-	... Wet at 7.5'.	
-8-							-8-		
-9-	SS-3						-9-		
-10-				80	19.8	14	-10-		
-11-							-11-	Brown fine to medium SAND and GRAVEL, trace to some Silt. Wet.	
-12-							-12-		
-13-	SS-4						-13-	Gray brown fine SAND, some Gravel, trace Silt. Moist.	
-14-				50	6	8.6	-14-		
-15-							-15-	Equipment refusal at 14.5'.	
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-34</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085						
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/22/98</u> DATE FINISHED: <u>9/22/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>						
THICKNESS OF OVERBURDEN: <u>11.4'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>11.4'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>						
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS	
-1-	SS-1	NA	NA		75	0.1	-1-	Concrete floor.	Possible petroleum-like odor.	
-2-								-2-		Tan brown Sand, Gravel, Silt, and Concrete (FILL). Damp.
-3-								-3-		Brown Sand, Silt, Gravel and Rock fragments (FILL). Damp.
-4-				-4-	Black Cinders, Slag, Sand, Silt and Asphalt (FILL).					
-5-	SS-2				90-	0.9	-5-	Red brown Silty fine to medium SAND, some Gravel, trace Clay. Damp to moist.		
-6-								-6-		
-7-								-7-		... Wet at 7.8'.
-8-	SS-3				70	1.8	3.2	-8-		Possible chemical odor.
-9-	SS-4				75	5.7	2.4	-9-		
-10-							-10-			
-11-	SS-5				75	5.8	12	-11-		
-12-							-12-	Equipment refusal at 11.4'.		
-13-							-13-			
-14-							-14-			
-15-							-15-			

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-35</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>North of Building in Driveway</u> DATE STARTED: <u>9/24/98</u> DATE FINISHED: <u>9/24/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>12.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>12.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>Cloudy, Breezy, ~55°F</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	85	0.5	0.5	-1-	Asphalt pavement.	Possible yellow discoloration and chemical odor.
-2-							-2-	Gray Gravel, Sand, Asphalt, Silt (FILL). Damp.	
-3-							-3-	Tan orange SILT, some Sand, trace Gravel. Moist.	
-4-	SS-2			80	3.5	1.2	-4-	Tan fine to medium SAND, some Gravel and Silt. Moist.	
-5-							-5-	... 1" seam of black SAND and GRAVEL.	
-6-							-6-	... Wet at 5.0'.	
-7-						-7-			
-8-	SS-3			50	2.0	0.6	-8-	Red gray fine SAND and GRAVEL, trace Silt. Moist to wet.	
-9-							-9-	... Some Rock fragments. Moist to wet.	
-10-							-10-		
-11-	SS-4			75	2.4	1.2	-11-		
-12-							-12-	Equipment refusal at 12.0'.	
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-36</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/24/98</u> DATE FINISHED: <u>9/24/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>10.2'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>10.2'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER : <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	55	3.0	0.3	-1-	Wood floor over concrete floor.	
							-1-	Black Slag, Cinders, Gravel, Sand, and Ash (FILL). Damp.	
								Brown Silty SAND, some Gravel, trace Clay. Damp to moist.	
-2-							-2-		
	SS-2			60	4.6	0.1	-3-		
-3-							-4-		
							-4-		
-4-							-5-		
	SS-3			60	3.2	1.2	-5-		
-5-							-6-		
							-6-		
-6-							-7-		
	SS-4			40	1.9	3.6	-7-	Brown fine to medium SAND and GRAVEL, some Silt. Moist.	
-7-							-8-	... Wet at 7.5'.	
							-8-	... Some Rock fragments. Wet.	
-8-							-9-		
	SS-5			70	3.9	11	-9-		
-9-							-10-	... Moist to wet.	
							-10-		
-10-	SS-6			0	-	-	-11-	Equipment refusal at 10.2'.	
							-11-		
-11-							-12-		
							-12-		
-12-							-13-		
							-13-		
-13-							-14-		
							-14-		
-14-							-15-		
							-15-		
-15-									

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-37</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/28/98</u> DATE FINISHED: <u>9/28/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>12.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>12.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	50	1.3	0.3	-1-	Concrete floor.	Possible chemical odor.
							-1-	Black Slag, Cinders, Ash, Gravel, Sand, Silt (FILL). Damp.	
								Brown Silt, Sand, Grave and Brick (FILL). Damp.	
-2-							-2-		
	SS-2			70	1.6	1.3	-3-	Brown tan Silty SAND, some Gravel. Damp.	
-3-							-4-		
							-4-		
-4-							-5-		
	SS-3			60	1.3	0.0	-5-	Brown fine to medium SAND and SILT, some Gravel. Damp to moist.	
-5-							-6-		
							-6-		
-6-							-7-		
	SS-4			75	1.6	2.8	-7-		
-7-							-8-		
							-8-	Brown fine SAND and GRAVEL, trace to some Silt. Moist to wet.	
-8-							-9-		
	SS-5			35	1.8	0.1	-9-		
-9-							-10-	... Wet at 10.0'.	
							-10-	... Some Rock fragments.	
-10-							-11-		
	SS-6			85	1.8	10.3	-11-		
-11-							-12-		
							-12-	Equipment refusal at 12.0'.	
-12-							-13-		
-13-							-14-		
-14-							-15-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-38 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Southeast parking lot.</u> DATE STARTED: <u>9/23/98</u> DATE FINISHED: <u>9/23/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>14.5'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>14.5'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER : <u>Sunny, light breeze ~50°F</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	90	1.3	11	-1-	Asphalt pavement.	Possible chemical odor.
-2-							-2-	Brown black Gravel, Sand, Cinders, and Ash (FILL). Damp to moist.	
-3-							-3-	Red brown SILT, some fine Sand and Gravel. Moist.	
-4-							-4-	Brown Silty fine to medium SAND, some Gravel. Moist.	
-5-	SS-2			70	0.4	2.0	-5-		
-6-							-6-	Brown Silty fine to medium SAND and GRAVEL.	
-7-							-7-	... Wet at 7.0'.	
-8-							-8-		
-9-	SS-3			70	0.7	4.6	-9-	... Red gray.	
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-	SS-4			50	0.9	12	-13-	... Moist	
-14-							-14-	... Some Rock fragments.	
-15-							-15-	Equipment refusal at 14.5'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-39</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>Hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>9/28/98</u> DATE FINISHED: <u>9/28/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>11.8'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>11.8'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA	85	1.5	0.7	-1-	Ceramic tile and concrete floor.	Possible chemical odor.
-2-							-2-	<del>Black Slag, Cinders, Gravel, Sand, and Ash (FILL). Damp.</del> Brown Silt, Sand, Gravel, and Clay (FILL). Moist.	
-3-	SS-2			70	0.6	0.0	-3-	Black Sand, Cinders, Gravel (FILL). Damp to moist.	
-4-							-4-	Brown Sandy SILT, some Gravel. Moist.	
-5-	SS-3			75	1.4	0.0	-5-		
-6-							-6-		
-7-	SS-4			75	1.8	4.6	-7-	Brown SILT and SAND, some Gravel. Moist to wet. ... Wet at 7.3'.	
-8-							-8-		
-9-	SS-5			85	1.3	0.2	-9-		
-10-							-10-	Brown fine SAND and GRAVEL, trace to some Silt. Wet to moist.	
-11-	SS-6			80	2.8	3.6	-11-		
-12-							-12-	Equipment refusal at 11.8'.	
-13-							-13-		
-14-							-14-		
-15-							-15-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected NA = Not Applicable									



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-40</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085			
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>East side of south parking lot.</u> DATE STARTED: <u>9/23/98</u> DATE FINISHED: <u>9/23/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>			
THICKNESS OF OVERBURDEN: <u>17.5'</u>				TOP OF ROCK ELEVATION: <u>NA</u>		DEPTH DRILLED INTO ROCK: <u>0'</u>	
BOTTOM OF HOLE ELEVATION: <u>NA</u>				TOTAL DEPTH OF HOLE: <u>17.5'</u>		WEATHER: <u>Sunny, light breeze -50°F</u>	

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVER	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Asphalt pavement.	
-1-	SS-1			65	0.7	1.8	-1-	Gray brown Sand, Gravel, Silt and Cinders (FILL). Damp.	
-2-							-2-		
-3-							-3-		
-4-	SS-2			90	0.6	1.6	-4-	Brown tan Silty SAND, some Gravel. Moist.	
-5-							-5-		
-6-							-6-		
-7-	SS-3			75	0.8	2.4	-7-	Brown tan SILT and SAND, some Gravel.  ... Wet.	
-8-							-8-		
-9-							-9-		
-10-	SS-4			80	0.8	1.6	-10-	Tan fine SAND and GRAVEL, trace Silt. Moist.	
-11-							-11-		
-12-							-12-		
-13-	SS-5			40	1.3	6.6	-13-	... Brown.	
-14-							-14-		
-15-							-15-		
-16-							-16-	... Some Rock fragments.	
-17-						-17-			
								Equipment refusal at 17.5'.	

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>TB-41</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085								
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>West side of South parking lot</u> DATE STARTED: <u>9/24/98</u> DATE FINISHED: <u>9/24/98</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>								
THICKNESS OF OVERBURDEN: <u>11.5'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>11.5'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>partly sunny, breezy, ~50°F</u>								
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS			
-1-	SS-1	NA	NA	85	0.3	0.0	-1-	Asphalt pavement.	Possible petroleum-like odor.			
-2-								-2-		Black Gravel, Sand and Silt (FILL). Damp.		
-3-								-3-		Brown Sand, Silt, some Gravel (FILL). Damp.		
-4-								-4-		Red brown SILT, some Sand and Gravel. Damp to moist.		
-5-	SS-2			90	0.2	0.6	-5-	Tan brown fine to medium SAND and GRAVEL, some Silt. Moist to wet.				
-6-										-6-		
-7-										-7-	... Wet at 7.5'.	
-8-										-8-		
-9-	SS-3			90	0.4	0.7	-9-	Red gray fine SAND and GRAVEL, trace Silt. Moist.		Possible yellow discoloration		
-10-											-10-	
-11-											-11-	... Some Rock fragments.
-12-											-12-	Equipment refusal at 11.5'.
-13-				-13-								
-14-				-14-								
-15-							-15-					

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-42  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: ATV-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Inside Building  
DATE STARTED: 9/23/98 DATE FINISHED: 9/23/98  
DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 14.5'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 14.5'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: NA

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-	SS-1			90	0.8	1.7	-1-	Gray Gravel, Sand, Silt and Concrete (FILL). Damp.	
-2-							-2-	... Seam of brick.	
-3-							-3-	Tan Silt, Sand, Gravel and Roots (FILL). Damp.	
-4-	SS-2			75	2.2	4.2	-4-	Red brown SILT and SAND, some Gravel. Damp.	
-5-							-5-	Brown Silty SAND, some Gravel. Damp.	
-6-							-6-	Brown Silty SAND and GRAVEL. Damp to moist.	
-7-	SS-3			70	0.7	3.6	-7-		
-8-							-8-	Gray fine to medium SAND, some Silt and Gravel. Moist.	
-9-							-9-		
-10-	SS-4			60	0.8	3.0	-10-	Gray red fine SAND and GRAVEL, some Rock fragments, trace Silt. Wet.	
-11-							-11-		
-12-							-12-	... Damp to moist.	
-13-							-13-		
-14-							-14-		
-15-							-15-	Equipment refusal at 14.5'.	

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: <u>1506R-97</u> BORING NO.: <u>MW-17A</u> PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085			
CONTRACTOR: <u>NA</u> TYPE OF DRILL RIG: <u>hand-operated Geoprobe</u> SAMPLING METHOD: <u>1" large bore</u> AUGERS: <u>NA</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Inside Building</u> DATE STARTED: <u>2/19/99</u> DATE FINISHED: <u>2/19/99</u> DAY REPRESENTATIVE: <u>J. Kirk Hampton</u>			
THICKNESS OF OVERBURDEN: <u>NA</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>7.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>NA</u>			

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-		NA	NA				-1-	Not sampled	
-2-							-2-		
-3-							-3-		
-4-							-4-		
-5-	SS-1						-5-	Yellow brown SAND, little Gravel.	
-6-			-	45.7	NC	-6-			
-7-							-7-	Test boring terminated at 7.0'	
-8-							-8-		
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090				FILE NO.: 1506R-97      BORING NO.: TB-OS1 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085					
CONTRACTOR: <u>ZEBRA Environmental</u> TYPE OF DRILL RIG: <u>Vehicle-Mounted Geoprobe</u> SAMPLING METHOD: <u>1" macro core</u> AUGERS: <u>Direct Push</u>				SURFACE ELEV.: <u>NA</u> DATUM: <u>NA</u> LOCATION: <u>Adjacent Lightnin property at 135 Mt. Read Blvd.</u> DATE STARTED: <u>11/8/99</u> DATE FINISHED: <u>11/8/99</u> DAY REPRESENTATIVE: <u>J. Joseph Dorety</u>					
THICKNESS OF OVERBURDEN: <u>13.0'</u> DEPTH DRILLED INTO ROCK: <u>0'</u> TOTAL DEPTH OF HOLE: <u>13.0'</u>				TOP OF ROCK ELEVATION: <u>NA</u> BOTTOM OF HOLE ELEVATION: <u>NA</u> WEATHER: <u>Cloudy, light breeze, 40°F</u>					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Brown reworked Silty Sand, Gravel, Roots (FILL). Damp.	
-2-				85	0.0	--	-2-	Brown reworked Sand, Silt, Gravel, trace Clay (FILL). Damp.	
-3-							-3-		
-4-	SS-2						-4-	Gray brown Sandy SILT, Some Gravel, trace Clay. Damp.	
-5-				90	0.0	--	-5-		
-6-							-6-		
-7-						-7-			
-8-	SS-3						-8-	... Moist to wet.	
-9-				75	0.0	--	-9-		
-10-							-10-	... Grades to red gray color.	
-11-						-11-			
-12-	SS-4						-12-	... Wet at 12.0'.	
-13-				20	0.0	--	-13-	Equipment refusal at 13.0'.	
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
 NA = Not Applicable

DAY ENVIRONMENTAL, INC.  
2144 BRIGHTON-HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623  
(716) 292-1090

FILE NO.: 1506R-97 BORING NO.: TB-OS2  
PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY  
95 MT. READ BLVD, ROCHESTER, NEW YORK  
NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental  
TYPE OF DRILL RIG: Vehicle-Mounted Geoprobe  
SAMPLING METHOD: 1" macro core  
AUGERS: Direct Push

SURFACE ELEV.: NA DATUM: NA  
LOCATION: Adjacent Lightnin property at 135 Mt. Read Blvd.  
DATE STARTED: 11/8/99 DATE FINISHED: 11/8/99  
DAY REPRESENTATIVE: J. Joseph Dorety

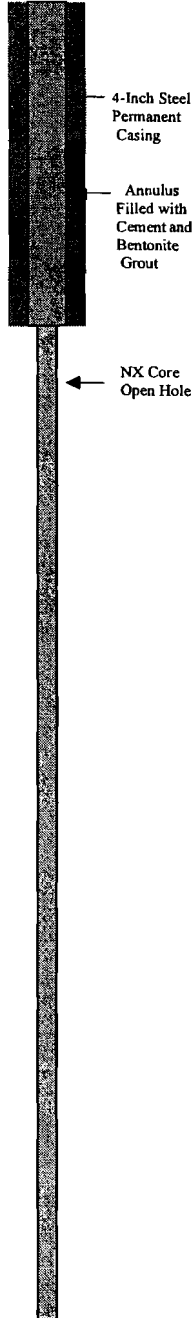
THICKNESS OF OVERBURDEN: 7.0'  
DEPTH DRILLED INTO ROCK: 0'  
TOTAL DEPTH OF HOLE: 7.0'

TOP OF ROCK ELEVATION: NA  
BOTTOM OF HOLE ELEVATION: NA  
WEATHER: Cloudy, light breeze, 40°F


DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA				-1-	Brown Sand, Silt, Gravel, Roots (TOPSOIL). Damp.	
-2-				60	0.0	-	-2-	Brown SAND and SILT, some Gravel, trace Clay.	
-3-							-3-		
-4-							-4-		
-5-	SS-2			40	0.0	--	-5-		
-6-							-6-	Brown Silty SAND, some Gravel, trace Clay. Moist to wet.	
-7-							-7-	Equipment refusal at 7.0'.	
-8-							-8-		
-9-							-9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-							-15-		

MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected  
NA = Not Applicable

<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090					FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-17</u>  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK					
CONTRACTOR: Nothnagle Drilling TYPE OF DRILL RIG: Dietrich D-25 SAMPLING METHOD: 2-inch split spoons CASING: Permanent 4" Steel casing to 18.3', open hole to 38.3'. SIZE AND TYPE OF BIT: 4-1/4" HSA, 5-5/8" Roller Bit, HQ/NX Core					SURFACE ELEV.: 100.98'      DATUM: 100.00' LOCATION: Inside Building DATE STARTED: 11/4/98      DATE FINISHED: 11/4/98 DAY REPRESENTATIVE: Dennis Peck					
THICKNESS OF OVERBURDEN: 13.3' DEPTH DRILLED INTO ROCK: 25.0' TOTAL DEPTH OF HOLE: 38.3'					TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-1-		-	-					-1-	8" Concrete Floor underlain by coarse Gravel.	Flush Mount Steel Curb Box  6-inch Steel Temporary Casing  Annulus Filled with Cement and Bentonite Grout           4-Inch Steel Permanent Casing
		-	-							
		8								
	SS-1	10	25	30	-	0.3	-		Dark brown SILT.	
-2-		15						-2-		
		19								
-3-		8						-3-		
	SS-2	12	32	40	-	11.1	-		Yellow brown very fine SAND and SILT. Moist.	
-4-		20						-4-		
		20								
-5-		18						-5-		
	SS-3	38	102	40	-	17.3	-		Yellow brown very fine SAND, little Gravel.	
-6-		64						-6-		
		100/3"								
-7-		38						-7-		
	SS-4	42	90	40	-	6.3	-			
-8-		48						-8-		
		40							Gray fine SAND, trace Gravel. Moist	
-9-		5						-9-		
	SS-5	8	21	10	-	2.4	-			
-10-		13						-10-		
		20								
-11-		12						-11-		
	SS-6	15	35	75	-	33.0	-		Light brown fine to medium SAND. Wet.	
-12-		20						-12-		
		21							... Some Rock fragments at 12.5'.	
-13-	SS-7	22	-	25	-	7.3	-	-13-		
									Auger refusal at 13.3'.	
-14-								-14-	Install 6" temporary casing to 13.3'.	
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface										
WELL NO. MW-17					SHEET 1 OF 3					

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: 1506R-97      WELL NO.: MW-17  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK		
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION	
-15-	C-1 HQ	-	-	86.7	46.7	0.0	-	-15-	Light gray massive Dolomite, hard. (LOCKPORT FORMATION)		
-16-								-16-			
-17-								-17-			
-18-								-18-			
-19-	C-2 NX					0.5	-	-19-			
-20-						0.3	-	-20-			
-21-						0.2	-	-21-			
-22-						0.3	-	-22-			
-23-		-	-	98.3	91.7			-23-			
-24-						0.4	-	-24-			
-25-						0.3	-	-25-			
-26-						0.4	-	-26-			
-27-								-27-			
-28-								-28-			
-29-								-29-			... 1/4" vug at 29'.
-30-								-30-			
-31-								-31-			
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface											
WELL NO. MW-17									SHEET 2 OF 3		



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-17</u> NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK	
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-32-	C-3 NX	-	-	96.7	77.5	-	-	-32-	... 1" vug at 35.3'.	 NX Core Open Hole
-33-								-33-		
-34-								-34-		
-35-								-35-		
-36-								-36-		
-37-								-37-		
-38-								-38-		
-39-								-39-	Bottom of Well at 38.3'.	Bottom of Well
-40-	-40-									
-41-	-41-									
-42-	-42-									
-43-	-43-									
-44-	-44-									
-45-	-45-									
-46-	-46-									
-47-	-47-									
-48-	-48-									

MISCELLANEOUS NOTES:

PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected

HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-17
SHEET 3 OF 3

<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090					FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-18</u>  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK					
CONTRACTOR: Nothnagle Drilling TYPE OF DRILL RIG: CME 75 SAMPLING METHOD: 2-inch split spoons CASING: Temporary 8" casing in overburden. SIZE AND TYPE OF BIT: 4-1/4" HSA, HQ Core					SURFACE ELEV.: 101.35'      DATUM: 100.00' LOCATION: West of Building DATE STARTED: 11/3/98      DATE FINISHED: 11/4/98 DAY REPRESENTATIVE: Dennis Peck					
THICKNESS OF OVERBURDEN: 13.4' DEPTH DRILLED INTO ROCK: 3.2' TOTAL DEPTH OF HOLE: 16.6'					TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:					
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-1-								-1-	Asphalt pavement underlain by Gravel. Dry.  No samples collected. See MW-19 well log. Use 4-1/4" augers to advance boring to refusal.	
-2-								-2-		
-3-								-3-		
-4-								-4-		
-5-								-5-		
-6-								-6-		
-7-								-7-		
-8-								-8-		
-9-								-9-		
-10-								-10-		
-11-								-11-		
-12-								-12-		
-13-								-13-		
-14-								-14-	Auger refusal at 13.6'. Begin HQ core.	HQ Core
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface										
WELL NO. MW-18					SHEET 1 OF 2					

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: 1506R-97      WELL NO.: MW-18 NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK	
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-15-	C-1	-	-	100	69	0.0	-	-15-	Light gray massive Dolomite, hard. Upper one foot has vertical to horizontal fractures. Slightly weathered at partings. (LOCKPORT FORMATION).	
-16-								-16-		
-17-								-17-	Bottom of well at 16.6'.	
-18-								-18-	Temporary 8" steel casing installed to 13.6'.	
-19-								-19-		
-20-								-20-		
-21-								-21-		
-22-								-22-		
-23-								-23-		
-24-								-24-		
-25-								-25-		
-26-								-26-		
-27-								-27-		
-28-								-28-		
-29-								-29-		
-30-								-30-		
-31-								-31-		

MISCELLANEOUS NOTES:

PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected

HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

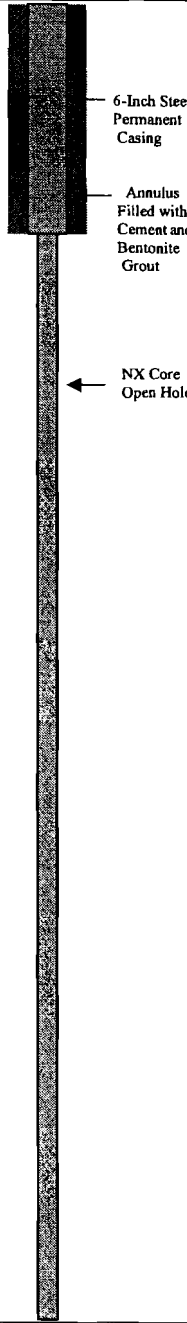
WELL NO. MW-18


SHEET 2 OF 2

<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090					FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-19</u>  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK								
CONTRACTOR: Nothnagle Drilling TYPE OF DRILL RIG: CME 75 SAMPLING METHOD: 2-inch split spoons CASING: Permanent 6" Steel casing to 17', open hole to 37'. SIZE AND TYPE OF BIT: 6-1/4" HSA, 7-7/8" Roller Bit, HQ/NX Core					SURFACE ELEV.: 101.38'      DATUM: 100.00' LOCATION: West of Building DATE STARTED: 11/2/98      DATE FINISHED: 11/3/98 DAY REPRESENTATIVE: Dennis Peck								
THICKNESS OF OVERBURDEN: 12.0' DEPTH DRILLED INTO ROCK: 25.0' TOTAL DEPTH OF HOLE: 37.0'					TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:								
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION			
-1-	SS-1	-	14	40	-	0.0	-	-1-	6" Asphalt pavement.	Flush Mount Steel Curb Box  8-inch Steel Temporary Casing  Annulus Filled with Cement and Bentonite Grout  6-Inch Steel Permanent Casing			
		4							-1-		Light brown fine SAND, trace fine Gravel. Dry.		
		10											
-2-	16		-2-										
	SS-2	5	19	60	-	0.0	-	-2-					
		6									-3-		
-3-		13									-3-		
	SS-3	20	23	50	-	0.0	-	-4-					
-4-		3										-4-	
		10										-5-	
-5-	SS-4	13	41	60	-	0.0	-	-5-					
		15											-6-
-6-		6											-6-
	SS-5	29	38	75	-	0.0	-	-7-					
-7-		12								-7-			
		18								-8-			
-8-	SS-6	13	52	30	-	0.0	-	-8-					
		20											
-9-		18							-9-				
	SS-7	18	52	30	-	0.0	-	-10-					
-10-		41											
		30									-11-		
-11-	SS-8	22	52	30	-	0.0	-	-11-					
		100/2"											
-12-												-12-	
-13-								-13-				Auger refusal at 11.8'. Install 8" temporary casing to 12.0'.	
-14-								-14-					

MISCELLANEOUS NOTES:  
 PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
  
 HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-19
SHEET 1 OF 3

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: 1506R-97      WELL NO.: MW-19  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK	
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-15-	C-1 HQ	-	-	70	30	-	-	-15-	Light gray massive Dolomite, hard. (LOCKPORT FORMATION)  ... Vugs at 19.3'.	
-16-								-16-		
-17-								-17-		
-18-								-18-		
-19-								-19-		
-20-								-20-		
-21-								-21-		
-22-								-22-		
-23-	C-2 NX	-	-	100	84	0.0	-	-23-		
-24-								-24-		
-25-								-25-		
-26-								-26-		
-27-								-27-		
-28-								-28-		
-29-								-29-		
-30-								-30-		
-31-								-31-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface										
WELL NO. MW-19      SHEET 2 OF 3										

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-19</u> NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK	
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-32-								-32-		 NX Core Open Hole  Bottom of Well
-33-	C-3	-	-	98	86	0.0	-	-33-		
-34-	NX							-34-	... 2.5-inch vugs.	
-35-								-35-		
-36-								-36-	Muddy at core breaks	
-37-								-37-	Bottom of Well at 37.0'.	
-38-								-38-		
-39-								-39-	Temporary 8" steel casing installed to 12.0'. Core block encountered at 13'.	
-40-								-40-	Rock reamed to 17' with 7-7/8" roller bit. Permanent 6" steel casing set to 17'.	
-41-								-41-	Open NX core to 37'.	
-42-								-42-		
-43-								-43-		
-44-								-44-		
-45-								-45-		
-46-								-46-		
-47-								-47-		
-48-								-48-		

MISCELLANEOUS NOTES:  
PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-19      SHEET 3 OF 3


<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090								FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-20</u>  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK			
CONTRACTOR: Nothnagle Drilling TYPE OF DRILL RIG: CME 75 SAMPLING METHOD: 2-inch split spoons CASING: Permanent 6" Steel casing to 18', open hole to 38'. SIZE AND TYPE OF BIT: 6-1/4" HSA, 7-7/8" Roller Bit, HQ/NX Core								SURFACE ELEV.: 99.85'      DATUM: 100.00' LOCATION: North of Building DATE STARTED: 10/27/98      DATE FINISHED: 10/28/98 DAY REPRESENTATIVE: Dennis Peck			
THICKNESS OF OVERBURDEN: 13.0' DEPTH DRILLED INTO ROCK: 25.0' TOTAL DEPTH OF HOLE: 38.0'								TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:			
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION	
-1-	-	-	-	-	-	-	-	-1-	Asphalt pavement underlain by Gravel. Dry.	<p>Flush Mount Steel Curb Box</p> <p>8-inch Steel Temporary Casing</p> <p>Annulus Filled with Cement and Bentonite Grout</p> <p>6-Inch Steel Permanent Casing</p>	
-2-	SS-1	5	6	10	-	0.7	1.0	-2-	Brown SILT and fine SAND.		
-3-		3						-3-			
-4-		3						-4-			
-5-	SS-2	3	5	30	-	0.3	0.5	-5-	... Moist.		
-6-		2						-6-			
-7-		3						-7-			
-8-	SS-3	5	26	50	-	0.6	0.5	-8-	Brown fine SAND, trace Gravel. Moist.		
-9-		11						-9-			
-10-		15						-10-			
-11-		26						-11-			
-12-	SS-4	5	27	60	-	0.5	0.5	-12-	... Little Gravel.		
-13-		9						-13-			
-14-		18						-14-			
-15-		22						-15-			
-16-	SS-5	2	35	75	-	0.5	0.5	-16-	... Moist.		
-17-		14						-17-			
-18-		21						-18-			
-19-		28						-19-			
-20-	SS-6	14	-	-	-	0.5	0.3	-20-	... Gray, some angular Rock fragments. Wet.		
-21-		18						-21-			
-22-		100/2"						-22-			
-23-								-23-			
-24-						0.3	0.0	-24-	Auger refusal at 13.0'. Install 8" temporary casing to 13.0'. Void from 13.5' to 14.0'.		

**MISCELLANEOUS NOTES:**  
 PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
  
 HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-20
SHEET 1 OF 3

DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: 1506R-97      WELL NO.: MW-20  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK	
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-15-	C-1 HQ	-	-	90	85	0.9	-	-15-	Light gray massive Dolomite, hard. (LOCKPORT FORMATION) ... Some dark gray shale partings, slightly weathered.	<p>6-Inch Steel Permanent Casing</p> <p>Annulus Filled with Cement and Bentonite Grout</p> <p>NX Core Open Hole</p>
-16-						0.4		-16-		
-17-						0.3		-17-		
-18-	C-2 NX	-	-	100	88	0.3	-	-18-	Some slightly weather shale partings between 18.0' and 29.0'.	
-19-						0.0		-19-		
-20-						0.0		-20-		
-21-						0.0		-21-		
-22-						0.0		-22-		
-23-						0.0		-23-		
-24-						0.0		-24-		
-25-						0.0		-25-		
-26-						0.0		-26-		
-27-						0.0		-27-		
-28-						0.3		-28-	Highly fractured, slightly weathered between 29.4' and 30.0'.  ... Some small vugs.	
-29-						0.2		-29-		
-30-						0.4		-30-		
-31-								-31-		
MISCELLANEOUS NOTES: PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface										
WELL NO. MW-20      SHEET 2 OF 3										



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090									FILE NO.: 1506R-97      WELL NO.: MW-20 NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK	
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-32-	C-3 NX	-	-	100	75	0.3	-	-32-	... 1/2-inch shale seam at 34.5'.  ... Shale seams at 37.7' and 38.0'.  Bottom of Well at 38.0'.  Temporary 8" steel casing installed to 13.0'. Rock reamed to 18' with 7-7/8" roller bit. Permanent 6" steel casing set to 18'. Open NX core to 38'.	 <p>NX Core Open Hole</p> <p>Bottom of Well</p>
-33-						-33-				
-34-						-34-				
-35-						-35-				
-36-						-36-				
-37-						-37-				
-38-	-38-									
-39-	-39-									
-40-	-40-									
-41-	-41-									
-42-	-42-									
-43-	-43-									
-44-	-44-									
-45-	-45-									
-46-	-46-									
-47-	-47-									
-48-	-48-									

MISCELLANEOUS NOTES:

PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected

HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-20      SHEET 3 OF 3

<b>DAY ENVIRONMENTAL, INC.</b> 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090								FILE NO.: <u>1506R-97</u> WELL NO.: <u>MW-21</u>  NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK		
CONTRACTOR: Nothnagle Drilling TYPE OF DRILL RIG: CME 75 SAMPLING METHOD: 2-inch split spoons CASING: Permanent 6" Steel casing to 18', open hole to 38'. SIZE AND TYPE OF BIT: 6-1/4" HSA, 7-7/8" Roller Bit, HQ/NX Core								SURFACE ELEV.: 99.75'      DATUM: 100.00' LOCATION: East of Building DATE STARTED: 10/28/98      DATE FINISHED: 10/30/98 DAY REPRESENTATIVE: Dennis Peck		
THICKNESS OF OVERBURDEN: 13.0' DEPTH DRILLED INTO ROCK: 25.0' TOTAL DEPTH OF HOLE: 38.0'								TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:		
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-1-	SS-1	-	6	25	-	0.0	0.0	-1-	Asphalt pavement underlain by Gravel. Dry.	Flush Mount Steel Curb Box  8-inch Steel Temporary Casing  Annulus Filled with Cement and Bentonite Grout            6-Inch Steel Permanent Casing
		3						-1-	Yellow brown SILT, some Gravel.	
		3							Dark brown fine SAND and GRAVEL. Dry.	
-2-		3						-2-		
	SS-2	3	11	40	-	0.0	0.0	-3-		
-3-		5						-3-		
		6						-4-	Yellow brown medium SAND.	
-4-		7						-4-	Yellow SILT and GRAVEL, trace Clay.	
	SS-3	6	20	90	-	0.0	0.4	-5-	Tan fine SAND, little Gravel. Moist to wet.	
-5-		9						-6-		
		11						-6-		
-6-		15						-7-		
	SS-4	7	35	80	-	0.0	0.5	-7-		
-7-		20						-8-	Gray medium SAND. Wet.	
		15						-9-	... Little Gravel.	
-8-		10						-10-		
	SS-5	3	22	80	-	0.0	1.0	-10-		
-9-		11						-11-		
		11						-11-		
-10-		12						-12-	Gray SAND and ROCK (dolomite) fragments.	
	SS-6	8	30	80	-	0.0	1.5	-12-		
-11-		13						-13-	Auger refusal at 13.0'.	
		17						-13-		
-12-		30						-14-	Void at 13.0' to 13.5'.	
	SS-7	15	-	10	-	0.0	1.5			
-13-		100/1"								
						0.8	-			
-14-										

**MISCELLANEOUS NOTES:**

PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected

HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-21

SHEET 1 OF 3



DAY ENVIRONMENTAL, INC. 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD ROCHESTER, NEW YORK 14623 (716) 292-1090								FILE NO.: 1506R-97      WELL NO.: MW-21 NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK		
DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEPTH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-32-								-32-		
-33-	C-3	-	-	100	82	0.0	-	-33-		<div style="position: relative; height: 100%;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black;"></div> <div style="position: absolute; top: 25%; left: 10px;">← NX Core Open Hole</div> <div style="position: absolute; bottom: 0; left: 10px;">Bottom of Well</div> </div>
-34-	NX							-34-		
-35-								-35-		
-36-								-36-		
-37-								-37-		
-38-								-38-	... Slightly weathered Shale seams.	
-39-								-39-	Bottom of Well at 38.0'.	
-40-								-40-	Temporary 8" steel casing installed to 13.0'.	
-41-								-41-	Rock reamed to 18' with 7-7/8" roller bit.	
-42-								-42-	Permanent 6" steel casing set to 18'.	
-43-								-43-	Open NX core to 38'.	
-44-								-44-		
-45-								-45-		
-46-								-46-		
-47-								-47-		
-48-								-48-		

MISCELLANEOUS NOTES:  
PPM = parts per million    PID = Photoionization detector    FID = Flame Ionization Detector    NC = Not Collected  
HSA = hollow stem auger    RQD = rock quality determination    BGS = below ground surface

WELL NO. MW-21
SHEET 3 OF 3

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

**BORING NUMBER: MW-22**

**Project:** 95 Mt. Read Boulevard, Rochester, NY  
**DAY Representative:** J. Danzinger/D.Noll  
**Drilling Contractor:** Nothnagle Drilling  
**Drilling Rig:** Dietrich D-25  
**Sampling Method:** 2-inch Split Spoons, HQ Core  
**Completion Method:** Open Hole

**Project No:** 1506R-97  
**Boring Location:** Inside building  
**Ground Surface Elevation:** 101.02' **Datum:** 100.00'  
**Start Date:** 8/28/00 **Completion Date:** 9/10/00  
**Borehole Diameter:** 4 inch **Borehole Depth:** 80 feet  
**Water Level:** 13.82 feet TOC (10/6/00)

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	Recovery (Feet)	Pieces > 0.33 Feet	N-Value or RQD %	PID Reading (ppm)	Observed Fractures	Well Installation Log	Sample Description
1			0-1							3" Wood Floor 5" Concrete Floor underlain by black Sand and Slag (FILL).
2			1-2							1'-2" - no sample.
3	8 11	SS-1	2-3	0.8		19	4.9			Light tan/brown SILT, little Clay, Firm, moist.
4	33 172.5"	SS-2	3-5	1.7		—	2.3			Olive brown SILT, some fine Sand, trace rounded Gravel. Moist, split spoon sample refusal at 3.9'. Auger through hard rock to 5.0'.
5										Olive brown SILT, some fine Sand, trace gray Gravel. Very moist.
6	19 33 24 26	SS-3	5-7	1.5		57	8.9			... Little Gravel (weathered). Very moist to wet.
7										Light brown SILT, little Sand, Some gray Dolomite Rock fragments.
8	46 47 74 129	SS-4	7-9	2.0		121	23.8			auger refusal at 9.6', ream with 5 7/8" roller bit to 10.0'.
9	200-5"	SS-5	9-9.5	0.5		—	7.5			Gray DOLOMITE, hard, trace vug.
10			9.5-10							... Little mineralized vugs, horizontal fractures.
11										
12		C-1	10-13.9	0.2		0	—			
13										
14										
15		C-2	13.9-16	0.83	0.67	31.9	—			
16										
17										... slight to moderately weathered fractures - primarily horizontal along bedding planes - no apparent vugs.
18		C-3	16-20	4.17	4.0	100	0.3			
19										
20										

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

**BORING NUMBER: MW-22**

**Project:** 95 Mt. Read Boulevard, Rochester, NY

**DAY Representative:** J. Danzinger/D.Noll

**Drilling Contractor:** Nothnagle Drilling

**Drilling Rig:** Dietrich D-25

**Sampling Method:** 2-inch Split Spoons, HQ Core

**Completion Method:** Open Hole

**Project No:** 1506R-97

**Boring Location:** Inside building

**Ground Surface Elevation:** 101.02' **Datum:** 100.00'

**Start Date:** 8/28/00

**Completion Date:** 9/10/00

**Borehole Diameter:** 4 inch

**Borehole Depth:** 80 feet

**Water Level:** 13.82 feet TOC (10/6/00)

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	Recovery (Feet)	Pieces > 0.33 Feet	N-Value or RQD %	PID Reading (ppm)	Observed Fractures	Well Installation Log	Sample Description
21		C-4	20-21	0.83	0.67	83	3.0			... One mechanical fracture.
22										... DOLOMITE, two visible vugs for entire run - fractures are near horizontal along bedding planes.
23		C-5	21-25	3.95	3.38	84.5	19.5			
24										
25										... horizontal and 5 degree angle fractures.
26										
27		C-6	25-29.8	4.92	4.5	93.8	0.2			
28										
29										... Two mineralized vugs.
30										
31										... horizontal and 5 degree angle fractures.
32		C-7	29.8-35	4.94	2.0	38.5	0.8			... One mineralized vug.
33										
34										
35										
36										... horizontal fractures, no vugs.
37		C-8	35-40	5.08	4.67	93.4	1.3			
38										
39										
40										

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

**BORING NUMBER: MW-22**

**Project:** 95 Mt. Read Boulevard, Rochester, NY  
**DAY Representative:** J. Danzinger/D.Noll  
**Drilling Contractor:** Nothnagle Drilling  
**Drilling Rig:** Dietrich D-25  
**Sampling Method:** 2-inch Split Spoons, HQ Core  
**Completion Method:** Open Hole

**Project No:** 1506R-97  
**Boring Location:** Inside building  
**Ground Surface Elevation:** 101.02' **Datum:** 100.00'  
**Start Date:** 8/28/00 **Completion Date:** 9/10/00  
**Borehole Diameter:** 4 inch **Borehole Depth:** 80 feet  
**Water Level:** 13.82 feet TOC (10/6/00)

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	Recovery (Feet)	Pieces > 0.33 Feet	N-Value or RQD %	PID Reading (ppm)	Observed Fractures	Well Installation Log	Sample Description
41										... DOLOMITE, horizontal to 5 degree angle fractures, one vertical "hairline" fracture, no vugs.
42		C-9	40-45	4.75	4.13	82.6	0.1			
43										
44										
45										
46		C-10	45-46.6	2.08	1.88	117	0.1			... horizontal fractures and one vertical "hairline" fracture.
47		C-11	46.6-48.2	0.71	0.42	26.3	0.1			... horizontal fractures.
48										... horizontal fractures.
49		C-12	48.2-50	1.96	1.31	72.8	0.3			
50										End of inner casing.
51										... horizontal to 30 degree angle fractures.
52		C-13	50-55	4.79	3.65	73.0	0.0			
53										... One mineralized vug.
54										Diffusion sample DS-1 @ 53.40'
55										... horizontal to 5 degree angle fractures.
56										
57		C-14	55-60	5.0	4.92	98.4	0.7			Diffusion sample DS-2 @ 57.30'
58										
59										
60										

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

BORING NUMBER: MW-22

Project: 95 Mt. Read Boulevard, Rochester, NY

DAY Representative: J. Danzinger/D.Noll

Drilling Contractor: Nothnagle Drilling

Drilling Rig: Dietrich D-25

Sampling Method: 2-inch Split Spoons, HQ Core

Completion Method: Open Hole

Project No: 1506R-97

Boring Location: Inside building

Ground Surface Elevation: 101.02'

Start Date: 8/28/00

Borehole Diameter: 4 inch

Water Level: 13.82 feet TOC (10/6/00)

Datum: 100.00'

Completion Date: 9/10/00

Borehole Depth: 80 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	Recovery (Feet)	Pieces > 0.33 Feet	N-Value or RQD %	PID Reading (ppm)	Observed Fractures	Well Installation Log	Sample Description
61										Diffusion sample DS-3 @ 60.85'
62		C-15	60-65	5.0	4.67	93.4				... horizontal fractures, two near vertical fractures.
63										
64										
65										... horizontal fractures.
66										
67		C-16	65-70	5.0	4.73	94.6	0.0			Diffusion sample DS-5 @ 67.85'
68										
69										
70										... horizontal fractures.
71										
72		C-17	70-75	5.0	4.71	94.2	0.0			Diffusion sample DS-5 @ 72.05'
73										
74										
75										... horizontal fractures.
76										
77		C-18	75-80	5.0	4.27	85.4	0.0			Diffusion sample DS-6 @ 77.35'
78										
79										
80										



## **APPENDIX C**

### **Tables**

TABLE 1

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**DAY ENVIRONMENTAL, INC.  
SOIL SAMPLE LOG**

SAMPLE	DATE	LOCATION	DEPTH	LABORATORY ANALYSES
1506-S-01	4/13/98	TB-12	12-15.8'	Total CR, Hex CR
1506-S-02	4/13/98	TB-15	12-15.9'	Total CR, Hex CR
1506-S-03	4/13/98	TB-19	8-12'	Total CR, Hex CR
1506-S-04	4/14/98	TB-14	12-15.5'	Total CR, Hex CR
1506-S-05	4/14/98	TB-13	8-12'	Total CR, Hex CR
1506-S-06	4/14/98	TB-18	12-14.2'	TAL Metals, Hex CR
1506-S-07	4/14/98	TB-9	4-8'	Total CR, Hex CR
1506-S-08	4/13/98	TB-20	8-10'	TCL VOCs
1506-S-09	4/13/98	TB-6	8-9.3'	TCL VOCs
1506-S-10	4/14/98	TB-8	12-15'	TCL VOCs
1506-S-11	4/14/98	TB-14	8-12'	TCL VOCs
1506-S-12	4/15/98	TB-11	12-14.5'	TCL VOCs
1506-S-13	4/15/98	TB-11	0-4'	Total CR, Hex CR, TCL VOCs
1506-S-14	4/15/98	TB-5	8-12'	TCL VOCs
1506-S-15	4/15/98	TB-10A	8-11.3'	TAL Metals, Hex CR
1506-S-16	4/15/98	TB-11	8-12'	Total CR, Hex CR, TCL VOCs
1506-S-17	4/15/98	TB-11	8-12'	Total CR, Hex CR, TCL VOCs*
1506-T-18	4/15/98	Trip Blank	Trip Blank	TCL VOCs*
1506-S-19	4/15/98	TB-10A	8-11.3'	TAL Metals*
1506-S-20	5/12/98	TB-17	2-4'	Total CR
1506-S-21	5/13/98	TB-4	10-11.8'	Total CR, Hex CR
1506-S-22	5/15/98	TB-4	10-11.8'	Total CR, Hex CR*
1506-S-23	5/12/98	TB-17	8-10'	Total CR
1506-S-24	5/13/98	TB-3	8-10'	Total CR
1506-S-25	4/14/98	TB-7	8-10'	Total CR
1506-S-26	9/22/98	TB-28	8-10'	Total CR, Hex CR
1506-S-27	9/22/98	TB-34	10-11.4'	Total CR, Hex CR
1506-S-28	9/22/98	TB-27A	1.5-3.0'	TAL Metals, Hex CR
1506-S-29	9/23/98	TB-26	8-10.1'	Total CR, Hex CR
1506-S-30	9/23/98	TB-42	12-14.5'	Total CR
1506-S-31	9/23/98	TB-31	8-11.8'	Total CR, Hex CR
1506-S-32	9/23/98	TB-31	4-8'	Total CR
1506-S-33	9/23/98	TB-31	11.8-14'	Total CR*
1506-S-34	9/23/98	TB-33	12-14.5'	Total CR, Hex CR
1506-S-35	9/24/98	TB-30	0-4'	TAL Metals*
1506-S-36	9/24/98	TB-30	8-10'	Total CR, Hex CR
1506-S-37	9/24/98	TB-32	11.5-12'	Total CR, Hex CR
1506-S-38	9/24/98	TB-35	11-12'	Total CR, Hex CR*
1506-S-39	9/24/98	Equip. Rinsate	Equip. Rinsate	Total CR, Hex CR*
1506-S-40	9/28/98	TB-37	10-12'	Total CR
1506-S-41	9/28/98	TB-39	8-10'	Total CR
1506-S-42	9/24/98	TB-36	8-10'	Total CR
1506-S-43	9/29/98	TB-29	6-7.9'	Total CR, Hex CR
1506-S-44	9/29/98	TB-25	10-11.9'	Total CR, Hex CR
1506-S-45	9/28/98	TB-23	8-10'	Total CR, Hex CR
1506-S-46	9/23/98	TB-26	4-8'	TCL VOCs*
1506-S-47	9/23/98	TB-38	8-12'	TCL VOCs
1506-S-48	9/23/98	TB-40	8-11.5'	TCL VOCs
1506-S-49	9/28/98	TB-37	8-10'	TCL VOCs
1506-S-50	9/28/98	TB-39	10-12'	TCL VOCs
1506-S-51	9/29/98	Equip. Rinsate	Equip. Rinsate	TCL VOCs*
1506-S-52	10/27/98	MW-20	11-13'	Total CR
1506-S-53	10/28/98	MW-21	10-12'	Total CR
1506-S-54	11/2/98	MW-19	10-12'	Total CR
1506-S-55	11/4/98	MW-17	5-7'	Full TAL*
1506-S-56	11/5/98	MW-17	11-13'	TCL VOCs
1506-T-57	10/27/98	Trip Blank	Trip Blank	TCL VOCs*
1506-S-58	2/19/99	MW-17A	5-7'	Full TCL*

\* Quality Assurance/Quality Control Sample

TABLE 1 (Cont.)

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

DAY ENVIRONMENTAL, INC.  
SOIL SAMPLE LOG

SAMPLE	DATE	LOCATION	DEPTH	LABORATORY ANALYSES
1506-S-59	11/8/99	TB-OS1	0-4'	Total CR
1506-S-60	11/8/99	TB- OS1	4-8'	Total CR
1506-S-61	11/8/99	TB- OS1	8-12'	Total CR
1506-S-62	11/8/99	TB- OS1	12-13'	Total CR*
1506-S-63	11/8/99	TB- OS2	0-4'	Total CR
1506-S-64	11/8/99	TB- OS2	4-7'	Total CR
1506-S-65	11/8/99	SS-OS1	0-2"	Total CR
1506-S-66	11/8/99	SS-OS2	0-2"	Total CR
1506-S-67	11/8/99	SS-OS3	0-2"	Total CR
1506-S-68	11/8/99	SS-OS4	0-2"	Total CR
1506-S-69	11/8/99	Equip. Rinsate	Equip. Rinsate	Total CR*
1506-S-70	8/28/00	MW-22	7-9'	Total CR, Hex CR

\* Quality Assurance/Quality Control Sample

TABLE 2

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**DAY ENVIRONMENTAL, INC.  
GROUNDWATER SAMPLE LOG**

SAMPLE	DATE	LOCATION	LABORATORY ANALYSES
1506-W-MW1	12/22/98	MW-1	TCL VOCs, Total CR, Hex CR
1506-W-MW3	12/22/98	MW-3	TCL VOCs, Total CR, Hex CR
1506-W-MW4	12/22/98	MW-4	TCL VOCs, Total CR, Hex CR
1506-W-MW6	12/22/98	MW-6	TCL VOCs, Total CR, Hex CR
1506-W-MW7	12/22/98	MW-7	TCL VOCs, Total CR, Hex CR
1506-W-MW8	12/22/98	MW-8	TCL VOCs, Total CR, Hex CR*
1506-W-MW9	12/22/98	MW-9	Full TCL/TAL, Hex CR
1506-W-MW10	12/22/98	MW-10	TCL VOCs, Total CR, Hex CR
1506-W-MW11	12/22/98	MW-11	TCL VOCs, Total CR, Hex CR
1506-W-MW12	12/22/98	MW-12	TCL VOCs, Total CR, Hex CR
1506-W-MW13	12/22/98	MW-13	TCL VOCs, Total CR, Hex CR
1506-W-MW14	12/22/98	MW-14	TCL VOCs, Total CR, Hex CR
1506-W-MW16	12/22/98	MW-16	Full TCL/TAL, Hex CR
1506-W-MW17	12/22/98	MW-17	Full TCL/TAL, Hex CR*
1506-W-MW18	12/22/98	MW-18	TCL VOCs, Total CR, Hex CR
1506-W-MW19	12/22/98	MW-19	TCL VOCs, Total CR, Hex CR
1506-W-MW20	12/22/98	MW-20	TCL VOCs, Total CR, Hex CR
1506-W-MW21	12/22/98	MW-21	TCL VOCs, Total CR, Hex CR
1506-W-TRIP	12/14/98	Trip Blank	TCL VOCs*
1506-W-SUMP	12/22/98	SUMP	TCL VOCs, Total CR, Hex CR
1506-N-MW9	12/21/98	MW-9	TCL VOCs, Total CR, Hex CR
1506-17 (33-37.5')	12/29/99	MW-17	TCL VOCs
1506-17 (28-33')	12/30/99	MW-17	TCL VOCs
1506-17 (23-28')	12/30/99	MW-17	TCL VOCs
1506-17 (18.3-23')	12/30/99	MW-17	TCL VOCs
1506-21 (33-37')	12/28/99	MW-21	TCL VOCs
1506-21 (28-33')	12/28/99	MW-21	TCL VOCs
1506-21 (23-28')	12/28/99	MW-21	TCL VOCs
1506-21 (18-23')	12/29/99	MW-21	TCL VOCs
1506-ER	12/30/99	Equip. Rinsate	TCL VOCs*
1506-W2-TRIP	12/30/99	Trip Blank	TCL VOCs*
DI-1	10/6/00	DI Water Blank	TCL VOCs*
DS-1 (53.40')	10/25/00**	MW-22	TCL VOCs
DS-2 (57.30')	10/25/00**	MW-22	TCL VOCs
DS-3 (60.85')	10/25/00**	MW-22	TCL VOCs
DS-4 (67.85')	10/25/00**	MW-22	TCL VOCs
DS-5 (72.05')	10/25/00**	MW-22	TCL VOCs
DS-6 (77.35')	10/25/00**	MW-22	TCL VOCs
Trip-1	10/00	Trip Blank	TCL VOCs*

\* Quality Assurance/Quality Control sample

\*\* Passive diffusion sampler installed on 10/6/00 and retrieved on 10/25/00

TABLE 3

**SUMP TEST SWL DATA**  
**95 Mt. Read Blvd., Rochester, New York**

**Date of Test: 2/19/99**

SUMP		MW-1		MW-3		MW-4		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL
11:06	3.40	10:38	6.16	10:15	10.75	10:45	6.57	10:35	7.92	10:44	17.04	10:59	7.86	11:03	7.97	10:55	9.34	10:52	7.45
SUMP TURNED OFF AT 11:29 ON 2-19-99																			
11:32	3.48			11:36	10.93									11:32	7.98	11:34	9.32		
11:37	3.45			11:41	10.93									11:35	7.96	11:38	9.27		
11:42	3.40			11:45	10.93									11:39	7.98	11:41	9.29		
12:32	3.21	12:46	6.15	12:35	10.95	12:49	6.54	12:45	7.90	12:49	16.91	12:57	7.91	12:59	7.98	12:55	9.32	12:54	7.44
14:00	2.81	14:15	6.12	14:02	10.91	14:19	6.53	14:14	7.86	14:19	16.89	14:30	7.86	14:32	7.97	14:26	9.29	14:25	7.42
16:58	2.05	16:52	6.15	16:42	10.85	16:56	6.52	16:51	7.88	16:55	16.92	16:33	7.86	16:36	7.95	16:28	9.28	16:26	7.42
Δ SWL	+1.35		+0.01		-0.10		+0.05		+0.04		+0.12		0.00		+0.02		+0.06		+0.03

MW-12		MW-13		MW-14		MW-15		MW-16		MW-17		MW-18		MW-19		MW-20		MW-21	
TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL
10:50	7.51	10:48	7.43	10:17	9.54	10:23	10.66	10:21	12.55	11:01	9.74	10:29	9.92	10:27	9.72	10:32	7.93	10:41	10.63
SUMP TURNED OFF AT 11:29 ON 2-19-99																			
				11:34	9.53					11:32	9.66								
				11:39	9.55					11:36	9.46								
				11:44	9.54					11:40	9.70								
12:52	7.50	12:51	7.41	12:36	9.52	12:38	10.67	12:38	12.53	12:58	9.76	12:41	9.92	12:40	9.77	12:43	7.93	12:48	10.63
14:23	7.48	14:26	7.40	14:04	9.50	14:06	10.68	14:07	12.50	14:31	9.60	14:09	9.90	14:09	9.65	14:12	7.86	14:16	10.58
16:23	7.48	16:30	7.41	16:38	9.47	16:43	10.65	16:44	12.48	16:35	9.47	16:47	9.90	16:46	9.74	16:49	7.81	16:54	10.58
Δ SWL	+0.03		+0.02		+0.07		+0.01		+0.07		+0.27		+0.02		-0.02		+0.12		+0.05

SWL = Static water level.

SWL readings collected using a Slope Indicator Co. electronic water level indicator (Model 51453).

TABLE 4

**SUMP TEST SWL DATA**  
**95 Mt. Read Blvd., Rochester, New York**

**Date of Test: 4/5/99 – 4/6/99**

SUMP		MW-1		MW-3		MW-4		MW-6		MW-7		MW-8		MW-9		MW-10		MW-11	
TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL
4/5/99																			
8:37	3.35	8:13	5.34	8:21	9.87	8:19	5.70	8:12	7.21	8:18	16.01	8:24	7.75	8:33	7.58	8:30	8.63	8:29	6.87
SUMP TURNED OFF AT 8:38 ON 4-5-99																			
12:21	2.19	12:03	5.34	12:08	9.68	12:07	5.64	12:02	7.16	12:06	16.00	12:10	7.68	12:18	7.60	12:16	8.62	12:15	6.92
17:05	1.70	16:50	5.34	16:55	9.70	16:54	5.62	16:48	7.19	16:53	15.97	16:57	7.65	17:02	7.51	16:32	8.55	17:00	6.86
Δ SWL																			
	+1.65		0.00		+0.17		+0.08		+0.03		+0.04		+0.10		+0.07		+0.08		+0.01
SUMP TURNED ON AT 17:06 ON 4-5-99																			
4/6/99																			
9:14	3.51	8:46	5.30	8:55	9.60	8:53	5.66	8:45	6.90	8:52	15.90	8:56	7.63	9:09	7.41	9:05	8.41	9:04	6.80
Δ SWL																			
	-1.81		+0.04		+0.10		-0.04		+0.29		+0.07		+0.02		+0.10		+0.14		+0.06

MW-12		MW-13		MW-14		MW-15		MW-16		MW-17		MW-18		MW-19		MW-20		MW-21	
TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL
4/5/99																			
8:27	7.30	8:26	7.10	7:50	8.93	7:52	9.65	7:52	11.40	8:35	8.77	7:56	8.83	8:06	8.62	8:08	6.73	8:15	10.02
SUMP TURNED OFF AT 8:38 ON 4-5-99																			
12:14	7.09	12:12	7.11	11:50	8.93	11:52	9.64	11:53	11.28	12:19	8.70	11:57	8.80	11:54	8.60	11:59	6.65	12:04	10.00
16:27	7.01	16:58	7.01	16:35	8.90	16:39	9.65	16:40	11.30	17:03	8.66	16:43	8.77	16:42	8.58	16:46	6.58	16:51	10.01
Δ SWL																			
	+0.29		+0.09		+0.03		0.00		+0.10		+0.11		+0.06		+0.04		+0.15		+0.01
SUMP TURNED ON AT 17:06 ON 4-5-99																			
4/6/99																			
9:02	6.91	9:00	6.82	8:29	8.86	8:33	9.63	8:35	11.23	9:10	8.58	8:38	8.67	8:39	8.51	8:42	6.49	8:48	9.91
Δ SWL																			
	+0.10		+0.09		+0.04		+0.02		+0.07		+0.08		+0.10		+0.07		+0.09		+0.10

SWL = Static water level.

SWL readings collected using a Slope Indicator Co. electronic water level indicator (Model 51453).

**TABLE 5****Static Water Level Measurements (1/6/99)**

**95 Mt. Read Blvd.  
Rochester, New York**

<b>Well ID</b>	<b>Top of Inner Casing (feet)*</b>	<b>Static Water Level (feet)</b>	<b>Thickness of DNAPL (feet)*</b>	<b>Groundwater Elevation</b>
MW-1	99.09	7.80	--	91.29
MW-3	101.99	12.99	--	89.00
MW-4	100.29	8.81	--	91.48
MW-6	99.05	9.32	--	89.73
MW-7	100.07	19.09	--	80.98
MW-8	100.61	9.18	--	91.43
MW-9	100.55	9.21	0.0	91.34
MW-10	100.57	10.49	--	90.08
MW-11	100.38	8.84	--	91.54
MW-12	100.75	8.95	--	91.80
MW-13	100.22	8.79	--	91.43
MW-14	101.31	10.90	--	90.41
MW-15	103.45	DRY	--	--
MW-16	103.65	14.80	--	88.85
MW-17	100.65	11.31	--	89.34
MW-18	100.97	12.19	--	88.78
MW-19	100.85	11.86	--	88.99
MW-20	99.40	9.21	--	90.19
MW-21	99.19	12.27	--	86.92
Basement Sump**	90.74	3.38**	--	87.36

-- Measurement not collected.

\* The wells were monitored for LNAPL and DNAPL on 12/17/98 (refer to Section 2.3.2 of the RI report). Based on that NAPL monitoring, only MW-9 was suspected to contain DNAPL, and was the only well monitored for DNAPL on 1/6/99 using a Heron Instruments interface meter (Model H.01L).

\*\* Static water level measured on 1/7/99 since access to basement sump could not be gained on 1/6/99.

**TABLE 6****Static Water Level Measurements (4/5/99)**

**95 Mt. Read Blvd.  
Rochester, New York**

<b>Well ID</b>	<b>Top of Inner Casing (feet)</b>	<b>Static Water Level (feet)</b>	<b>Depth to DNAPL (feet)</b>	<b>Groundwater Elevation</b>
MW-1	99.09	5.34	--	93.75
MW-3	101.99	9.87	--	92.12
MW-4	100.29	5.70	--	94.59
MW-6	99.05	7.21	--	91.84
MW-7	100.07	16.01	--	84.06
MW-8	100.61	7.75	--	92.86
MW-9	100.55	7.58	--	92.97
MW-10	100.57	8.63	--	91.94
MW-11	100.38	6.87	--	93.51
MW-12	100.75	7.30	--	93.45
MW-13	100.22	7.10	--	93.12
MW-14	101.31	8.93	--	92.38
MW-15	103.45	9.65	--	93.80
MW-16	103.65	11.40	--	92.25
MW-17	100.65	8.77	--	91.88
MW-18	100.97	8.83	--	92.14
MW-19	100.85	8.62	--	92.23
MW-20	99.40	6.73	--	92.67
MW-21	99.19	10.02	--	89.17
Basement Sump	90.74	3.35	--	87.39

-- Measurement not collected.



**TABLE 7**

**Non-Aqueous Phase Liquid (NAPL) Monitoring  
And Static Water Level Measurements (12/17/98)**

**95 Mt. Read Blvd.  
Rochester, New York**

<b>Well ID</b>	<b>Depth to LNAPL (feet)<sup>1</sup></b>	<b>Static Water Level (feet)</b>	<b>Depth to DNAPL (feet)<sup>1</sup></b>	<b>Depth of Well (feet)*</b>	<b>NAPL thickness (feet)</b>	<b>Top of Inner casing (feet)</b>	<b>Groundwater Elevation</b>
MW-1	ND	7.71	ND	11.61		99.09	91.38
MW-3	ND	12.88	ND	50.22		101.99	89.11
MW-4	ND	8.98	ND	16.09		100.29	91.31
MW-6	ND	9.20	ND	44.75		99.05	89.85
MW-7	ND	19.00	ND	54.44		100.07	81.07
MW-8	ND	9.01	ND	13.39		100.61	91.60
MW-9	ND	9.10	9.65	12.85	3.20 (DNAPL)	100.55	91.45
MW-10	ND	10.35	ND	14.41		100.57	90.22
MW-11	ND	8.71	ND	13.44		100.38	91.67
MW-12	ND	9.00	ND	13.87		100.75	91.75
MW-13	ND	8.83	ND	13.48		100.22	91.39
MW-14	ND	10.31	ND	15.63		101.31	91.00
MW-15	--	--	--	--	--	103.45	--
MW-16	ND	14.95	ND	34.70		103.65	88.70
MW-17	ND	11.53	ND	37.39		100.65	89.12
MW-18	ND	12.25	ND	15.92		100.97	88.72
MW-19	ND	11.95	ND	36.35		100.85	88.90
MW-20	ND	9.50	ND	37.49		99.40	89.90
MW-21	ND	12.35	ND	36.54		99.19	86.84

1            Monitoring for NAPL was conducted using a Heron Instruments interface meter (Model H.01L)

DNAPL      Dense Non-Aqueous Phase Liquid.

LNAPL      Light Non-Aqueous Phase Liquid.

\*            The depth of each well was measured on 12/21/98.

ND           Not detected.

--           Well was dry, data could not be measured/calculated.

**TABLE 8****Static Water Level Measurements (12/21/98)**

**95 Mt. Read Blvd.  
Rochester, New York**

<b>Well ID</b>	<b>Top of Inner Casing (feet)</b>	<b>Static Water Level (feet)</b>	<b>Depth to DNAPL (feet)</b>	<b>Groundwater Elevation</b>
MW-1	99.09	7.48	--	91.61
MW-3	101.99	12.47	--	89.52
MW-4	100.29	8.50	--	91.79
MW-6	99.05	8.89	--	90.15
MW-7	100.07	18.95	--	81.09
MW-8	100.61	8.98	--	91.63
MW-9	100.55	9.10	--	91.45
MW-10	100.57	10.34	--	90.23
MW-11	100.38	8.73	--	91.65
MW-12	100.75	8.82	--	91.93
MW-13	100.22	8.67	--	91.55
MW-14	101.31	10.40	--	90.91
MW-15	103.45	DRY	--	--
MW-16	103.65	14.61	--	89.04
MW-17	100.65	11.76	--	88.86
MW-18	100.97	11.96	--	89.01
MW-19	100.85	11.70	--	89.15
MW-20	99.40	8.34	--	91.06
MW-21	99.19	12.29	--	86.29
Basement Sump	90.74	--	--	--

-- Measurement not collected.

TABLE 9

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**PEAK PID/FID READINGS ON HEADSPACE  
AIR ABOVE SOIL OR BEDROCK SAMPLES**

LOCATION	PEAK PID READING (PPM) WITH DEPTH INTERVAL		PEAK FID READING (PPM) WITH DEPTH INTERVAL		LOCATION	PEAK PID READING (PPM) WITH DEPTH INTERVAL		PEAK FID READING (PPM) WITH DEPTH INTERVAL	
TB-1	4.1	0-4'	27	0-4'	TB-25	4.3	6-8'	4.2	6-8'
TB-2	0.6	4-8'	19	4-8'	TB-26	9.1	0-4'	6.0	0-4'
TB-3	0.0	0-11.2'	3.9	2-4'	TB-27	4.3	0-4'	18	0-4'
TB-4	0.3	0-2'	4.1	2-4'	TB-27A	39.7	12-14.5'	72	12-14.5'
TB-5	3.0	4-8'	100	8-12'	TB-28	201	12-13.1'	220	12-13.1'
TB-6	10.3	4-8'	530	8-9.3'	TB-29	5.2	0-2'	5.2	6-7.9'
TB-7	0.2	4-8'	10	4-8'	TB-30	0.6	8-10'	0.6	8-10'
TB-8	1.0	12-15'	250	12-15'	TB-31	1.4	8-12'	6.0	8-12'
TB-9	7.6	0-4'	8.0	8-9.5'	TB-32	0.2	4-8'	0.1	4-12'
TB-10	0.0	0-5.5'	2.0	0-4'	TB-33	19.8	8-12'	14	8-12'
TB-10A	0.3	4-8'	17	4-8'	TB-34	5.8	10-11.4'	12	10-11.4'
TB-11	65.4	12-14.5'	100	12-14.5'	TB-35	3.5	4-8'	1.2	4-8'
TB-12	31.8	4-8'	26	8-12'	TB-36	4.6	2-4'	11	8-10'
TB-13	0.2	4-8'	1.5	8-12'	TB-37	1.8	8-12'	10.3	10-12'
TB-14	16.4	8-12'	21	8-12'	TB-38	1.3	0-4'	12	12-14.5'
TB-15	2.3	4-8'	30	12-15.9'	TB-39	2.8	10-11.8'	4.6	6-8'
TB-16	1.5	12-15.2'	4.0	12-15.2'	TB-40	1.3	15-17.5'	6.6	15-17.5'
TB-17	0.6	4-6'	2.6	2-4'	TB-41	0.4	8-11.5'	0.7	8-11.5'
TB-18	0.2	8-12'	2.5	4-8'	TB-42	2.2	4-8'	4.2	4-8'
TB-19	0.7	8-15.5'	21	12-15.5'	MW-17A	45.7	5-7'	NC	-
TB-20	183	4-8'	>1,000	4-12'	MW-17	33	11-13'	NC	-
TB-21	0.0	0-9.3'	2.1	8-9.3'	MW-18	0.0	15'	NC	-
TB-22	0.1	0-10'	1.8	2-4'	MW-19	0.0	0-37.0'	NC	-
TB-23	1.2	8-10'	0.6	3-4'	MW-20	0.9	15'	1.0	1-3'
TB-24	1.7	0-4'	1.3	8-10'	MW-21	1.1	17'	1.5	10-13'
TB-OS1	0.0	0-13'	NC	-	SS-OS2	0.0	0-2"	NC	-
TB-OS2	0.0	0-7'	NC	-	SS-OS3	0.0	0-2"	NC	-
SS-OS1	0.0	0-2"	NC	-	SS-OS4	0.0	0-2"	NC	-
MW-22	23.8	7-9'	NC	-					

PPM = Parts per million  
NC = Not Collected

TABLE 10A

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)

SOIL SAMPLES

DETECTED VOLATILE COMPOUNDS	SAMPLE AND LOCATION										NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	USEPA HEAST VALUE (PPB)
	1506-S-08 TB-20(8-10')	1506-S-09 TB-6(8-9.3')	1506-S-10 TB-8(12-15')	1506-S-11 TB-14(8-12')	1506-S-12 TB-11(12-14.5')	1506-S-13 TB-11(0-4')	1505-S-14 TB-5(8-12')	1506-S-16 TB-11(8-12')	1506-S-17 TB-11(8-12')			
Acetone	ND	ND	ND	ND	5 J	31	ND	ND	ND	200	8,000,000	
Carbon Disulfide	ND	3 J	ND	ND	ND	ND	ND	ND	2 J	2,700	8,000,000	
2-Butanone (MEK)	ND	ND	ND	ND	ND	6 J	ND	ND	ND	300	4,000,000	
1,1-Dichloroethane	ND	ND	ND	ND	2 J	ND	2 J	ND	5 J	200	8,000,000	
1,1-Dichloroethene	ND	ND	3 J	ND	ND	ND	6 J	ND	ND	400	12,000	
Total 1,2-Dichloroethene	ND	ND	ND	11	15 J	140	ND	3 J	12 J	300	2,000,000	
Trichloroethene	ND	ND	ND	3 J	120 J	6 J	ND	12	21 J	700	64,000	
Tetrachloroethene	ND	ND	ND	ND	3,200 D	2 J	ND	40	84 J	1,400	14,000	
Ethylbenzene	18 J	ND	ND	ND	ND	ND	ND	ND	ND	5,500	8,000,000	
Total Xylenes	18 J	ND	ND	ND	ND	ND	ND	ND	ND	1,200	200,000,000	
TENTATIVELY IDENTIFIED COMPOUNDS												
Total Unknowns	28,300 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Total Alkyl Benzenes	13,500 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Total Trimethylbenzenes	3,100 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Total Diethylbenzenes	2,100 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
1,4-Diethylbenzene	170 JN	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Unknown Cyclic Hydrocarbon	1,800 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Total Methylmethyl- ethylbenzenes	1,050 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Total Ethyldimethylbenzenes	130 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Total Methylpropylbenzenes	510 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
Decahydronaphthalene	170 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	
TOTAL VOCs	50,866	3	3	14	3,342	185	8	55	124	≤ 10,000	NA	

J = Indicates an estimate value.

D = Identifies compounds identified in an analysis at a secondary dilution factor.

N = Indicates presumptive evidence of tentatively identified compounds.

ND = Not detected above reported laboratory detection limit value.

NA = Not available.

TABLE 10B

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)**

**SOIL SAMPLES**

DETECTED VOLATILE COMPOUNDS	SAMPLE AND LOCATION								NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE	USEPA HEAST VALUE
	1506-S-46 TB-26(4-8')	1506-S-47 TB-38(8-12')	1506-S-48 TB-40(8-11.5')	1506-S-49 TB-37(8-10')	1506-S-50 TB-39(10-12')	1506-S-58 MW- 17A(5-7')	1506-S-56 MW-17(11-13')			
Acetone	ND	ND	ND	ND	ND	ND	ND	200	8,000,000	
Carbon Disulfide	2 J	ND	ND	ND	ND	ND	ND	2,700	8,000,000	
2-Butanone (MEK)	3 JR	3 JR	3 JR	3 JR	2 JR	ND	ND	300	4,000,000	
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	200	8,000,000	
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	400	12,000	
Total 1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	300	2,000,000	
Trichloroethene	14 J	ND	ND	ND	ND	9 J	120 DJ	700	64,000	
Tetrachloroethene	ND	ND	ND	ND	12	ND	720 DJ	1,400	14,000	
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	5,500	8,000,000	
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	1,200	200,000,000	
Methylene chloride	ND	ND	ND	ND	ND	ND	1 J	100	93,000	
TENTATIVELY IDENTIFIED COMPOUNDS										
Unknown Silicone Compounds	31 JR	22 JR	23 JR	28 JR	27 JR	ND	ND	NA	NA	
Trichlorofluoromethane	18 JN	14 JN	6 JN	19 JN	9 JN	ND	ND	NA	NA	
TOTAL VOCS	68	39	32	50	50	9	841	≤ 10,000	NA	

J = Indicates an estimate value.

D = Identifies compounds identified in an analysis at a secondary dilution factor.

N = Indicates presumptive evidence of tentatively identified compounds.

ND = Not detected above reported laboratory detection limit value.

NA = Not analyzed for this specific constituent or Not available.

R = 2-Butanone (MEK), Toluene, and an unknown silicone compound were detected in a field equipment rinsate sample (Sample 1506-S-57).

TABLE 12

TABLE 11

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

CHROMIUM TEST RESULTS  
IN PARTS PER MILLION (PPM)

## SOIL SAMPLES

SAMPLE NUMBER	LOCATION AND DEPTH	TOTAL CHROMIUM (PPM)	HEXAVALENT CHROMIUM (PPM)
1506-S-01	TB-12 (12-15.8')	6.2	2.6 J
1506-S-02	TB-15 (12-15.9')	5.5	0.54 J
1506-S-03	TB-19 (8-12')	6.4	1.5 J
1506-S-04	TB-14 (12-15.5')	157 *	1.7 J
1506-S-05	TB-13 (8-12')	337 *	16.7 J
1506-S-06	TB-18 (12-14.2')	8.0 *	10.2 J
1506-S-07	TB-9 (4-8')	6.6 *	1.3 J
1506-S-13	TB-11 (0-4')	14.5 *	ND
1506-S-15	TB-10A (8-11.3')	5.4 *	1.2 J
1506-S-16	TB-11 (8-12')	330 *	6.5 J
1506-S-17	TB-11 (8-12')	300 *	2.5 J
1506-S-19	TB-10A (8-11.3')	6.6 *	NA
1506-S-20	TB-17 (2-4')	12.0 EN*J	NA
1506-S-21	TB-4 (10-11.8')	6.7	ND
1506-S-22	TB-4 (10-11.8')	5.4	ND
1506-S-23	TB-17 (8-10')	5.0 EN*J	NA
1506-S-24	TB-3 (8-10')	8.4 EN*J	NA
1506-S-25	TB-7 (8-10')	9.0 EN*J	NA
1506-S-26	TB-28 (8-10')	8.4 EN*J	0.48 J
1506-S-27	TB-34 (10-11.4')	11.0 EN*J	0.97 J
1506-S-28	TB-27A (1.5-3.0')	55.0 EN*J	1.9 J
1506-S-29	TB-26 (8-10.1')	2.9 EN*J	0.88 J
1506-S-30	TB-42 (12-14.5')	4.4 EN*J	NA
1506-S-31	TB-31 (8-11.8')	508 EN*J	69.0 J
1506-S-32	TB-31 (4-8')	408 EN*J	NA
1506-S-33	TB-31 (11.8-14')	371 EN*J	NA
1506-S-34	TB-33 (12-14.5')	41.4 EN*J	8.4 J
1506-S-35	TB-30 (0-4')	23.6 EN*J	NA
1506-S-36	TB-30 (8-10')	222 EN*J	54.0 J
1506-S-37	TB-32 (11.5-12.5')	5.2 EN*J	ND
1506-S-38	TB-35 (11-12')	6.1 EN*J	4.4 J
1506-S-40	TB-37 (10-12')	6.5 EN*J	NA
1506-S-41	TB-39 (8-10')	7.4 EN*J	NA
1506-S-42	TB-36 (8-10')	11.6	NA
1506-S-43	TB-29 (6-7.9')	9.3	1.2 J
1506-S-44	TB-25 (10-11.9')	6.4	1.2 J
1506-S-45	TB-23 (8-10')	6.0	0.7 J
1505-S-52	MW-20 (11-13')	4.7	NA
1506-S-53	MW-21 (10-12')	4.0	NA
1506-S-54	MW-19 (10-12')	4.2	NA
1506-S-55	MW-17 (5-7')	7.6	NA
NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPM)		10 or SB (50) <sup>1</sup>	(50) <sup>1</sup>
NYSDEC TAGM 4046 TYPICAL BACKGROUND RANGES (PPM)		1.5 - 40	NA
USEPA HEAST VALUE (PPM)		80,000	400

- E = Indicates a value estimated or not reported due to the presence of interference  
N = Indicates spike sample recovery is not within the control limits  
J = Estimated value as recommended in the Data Usability Summary Report  
ND = Not detected above reported laboratory detection limit value  
NA = Not analyzed for this specific constituent  
\* = Indicates duplicate analysis was not within the control limits  
SB = Site background  
1 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for chromium of 50 ppm.

TABLE 11 (Continued)

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

CHROMIUM TEST RESULTS  
IN PARTS PER MILLION (PPM)

## SOIL SAMPLES

SAMPLE NUMBER	LOCATION AND DEPTH	TOTAL CHROMIUM (PPM)	HEXAVALENT CHROMIUM (PPM)
1506-S-59	TB-OS1 (0-4')	21.4	NA
1506-S-60	TB-OS1 (4-8')	6.0	NA
1506-S-61	TB-OS1 (8-12')	4.6	NA
1506-S-62	TB-OS1 (12-13')	6.9	NA
1506-S-63	TB-OS2 (0-4')	16.2	NA
1506-S-64	TB-S2 (4-7')	8.4	NA
1506-S-65	SS-OS1 (0-2")	29.9	NA
1506-S-66	SS-OS2 (0-2")	8.9	NA
1506-S-67	SS-OS3 (0-2")	12.6	NA
1506-S-68	SS-OS4 (0-2")	40.8	NA
1506-S-70	MW-22 (7-9')	16.6	ND
NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPM)		10 or SB (50) <sup>1</sup>	(50) <sup>1</sup>
NYSDEC TAGM 4046 TYPICAL BACKGROUND RANGES (PPM)		1.5 - 40	NA
USEPA HEAST VALUE (PPM)		80,000	400

- E = Indicates a value estimated or not reported due to the presence of interference  
N = Indicates spike sample recovery is not within the control limits  
J = Estimated value as recommended in the Data Usability Summary Report  
ND = Not detected above reported laboratory detection limit value  
NA = Not analyzed for this specific constituent  
\* = Indicates duplicate analysis was not within the control limits  
SB = Site background  
1 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for chromium of 50 ppm.

TABLE 12

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**TARGET ANALYTE LIST (TAL) METAL TEST RESULTS  
IN PARTS PER MILLION (PPM)**

**SOIL SAMPLES**

DETECTED ANALYTES	SAMPLE AND LOCATION												NYSDEC TAGM 4046 TYPICAL BACKGROUND RANGES (PPM)	NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPM)
	1506-S-06 TB-18(12-14.2')		1506-S-15 TB-10A(8-11.3')		1506-S-19 TB-10A(8-11.3')		1506-S-28 TB-27A(1.5-3')		1506-S-35 TB-30(0-4')		1506-S-55 MW-17(5-7')			
Aluminum	3,210		3,600		3,420		22,900	*	4,990	*	4,510	*	33,000	SB
Antimony	ND		ND		ND		1.9	BNJ	ND	N	ND	NJ	NA	SB
Arsenic	1.2	B	1.3	B	1.8	B	14.0		5.2		2.4		3-12	7.5 or SB
Barium	28.1	BEJ	38.8	BEJ	35.8	BE	2,650		57.4		71.3		15-600	300 or SB
Beryllium	ND		ND		ND		1.6	NJ	1.1	N	0.34	B	0-1.75	0.16 or SB
Cadmium	ND	N	ND	N	ND	N	9.9	NJ	6.2	N	0.15	B	0.1-1	1 or SB (10) <sup>1</sup>
Calcium	49,700		42,100		39,400		56,100	*J	82.2	B*	51,600		130-35,000	SB
Chromium	8.0	*	5.4	*	6.6	*	55.0	EN*J	23.6	EN*	7.6		1.5-40	10 or SB (50) <sup>2</sup>
Cobalt	2.8	B	3.3	B	3.3	B	10.6	BN	3.6	BN	4.3	B	2.5-60	30 or SB
Copper	8.2		8.8		8.0		1,310	N*J	122	N*	12.3	EJ	1-50	25 or SB
Iron	6,940		8,260		7,080		15,000	N*	9,550		10,900		2,000-550,000	2,000 or SB
Lead	4.0	*J	4.4	*J	2.9	*	565	N*J	86.5	N*	4.6		200-500	SB
Magnesium	17,800		9,990		9,940		10,100		44,400		10,500	*	100-5,000	SB
Manganese	271		385		329		2,120		238		353	NJ	50-5,000	SB
Mercury	ND		ND		ND		ND		ND		ND	N	0.001-0.2	0.1
Nickel	4.7	B	6.1	B	6.3	B	19.3	NJ	14.0	N	8.5		0.5-25	13 or SB
Potassium	840	B	805	B	758	B	1,980	E	1,730	E	830	BE	8,500-43,000	SB
Selenium	ND		ND		ND		ND		ND		ND		0.1-3.9	2 or SB
Silver	ND		ND		ND		0.71	BNJ	0.86	BN	ND		NA	SB
Sodium	1,430		914	B	984	B	1,540		851	B	272	B	6,000-8,000	SB
Thallium	ND		ND		ND		2.0	B	ND		ND		NA	SB
Vanadium	8.0	B	9.7	B	7.8	B	25.8		11.0	B	14.3		1-300	150 or SB
Zinc	16.5	EJ	23.3	EJ	19.3	E	2,770	NJ	61.7	N	27.8		9-50	20 or SB
Molybdenum	0.55		ND		ND		23.1		0.86	B	NA		NA	NA

- \* = Indicates duplicate analysis is not within the control limits.  
E = Indicates a value estimated or not reported due to the presence of interference.  
B = Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.  
N = Indicates spike sample recovery is not within the control limits.  
J = Estimated value as recommended in the Data Usability Summary Report.  
ND = Not detected above reported laboratory detection limit value.  
NA = Not available.  
1 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for cadmium of 10 ppm  
2 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for chromium of 50 ppm.



TABLE 13

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

SEMI-VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)

## SOIL SAMPLE

DETECTED SVOCs	SAMPLE DESIGNATION AND LOCATION		NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB)	USEPA HEAST VALUE (PPB)
	1506-S-58 From MW-17A (5-7')			
Identified SVOCs				
Bis(2-ethylhexyl)phthalate	100	J	50,000	50,000
Di-n-Butylphthalate	77	J	8,100	8,000,000
Tentatively Identified Compounds				
2-Cyclohexen-1-one	75	JN	NA	NA
Unknown Ketone	110	J	NA	NA

J = Indicates an estimate value.

N = Indicates presumptive evidence of tentatively identified compounds.

NA = Not available.

TABLE 14

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

POLYCHLORINATED BIPHENYLS/PESTICIDES TEST RESULTS  
IN PARTS PER BILLION (PPB)

## SOIL SAMPLES

CONSTITUENTS	SAMPLE DESIGNATION AND LOCATION	NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVES (PPB)	USEPA HEAST VALUE (PPB)
	1506-S-58 From MW-17A (5-7')		
Pesticides	ND	NR	NR
Polychlorinated Biphenyls (PCBs)	ND	NR	NR

ND = Not detected above reported laboratory detection limit value.

NR = Not Required.

TABLE 15

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)

## DECEMBER 1998 GROUNDWATER SAMPLES

SAMPLE NUMBER	LOCATION	DETECTED VOLATILE COMPOUNDS														
		TOTAL VOCs	PCE		TCE		1,2-DCE		1,2-DCA		VC		1,1-DCE		1,1-DCA	
1506-W-MW1	MW-1	16	ND	BJ	ND		ND		ND		ND		ND		ND	
1506-W-MW3	MW-3	8	ND	BJ	ND		8	J	ND		ND		ND		ND	
1506-W-MW4	MW-4	14	ND	BJ	ND		ND		ND		ND		ND		ND	
1506-W-MW6	MW-6	105	ND		ND		100		3	J	2	J	ND		ND	
1506-W-MW7	MW-7	12	ND		ND		ND		ND		ND		ND		ND	
1506-W-MW8	MW-8	2,140	1,600		540		ND		ND		ND		ND		ND	
B21608	MW-8	1,886	1,300	E	460	-	6	J	ND		ND		ND		ND	
			1,400	DJ	480	DJ	ND	-								
1506-W-MW9	MW-9	155,969	19,000	E	9,800	E	2,000	E	ND	-	ND	-	17	J	23	J
			95,000	BDJ	59,000	DJ	1,400	DJ	ND	DJ	ND	DJ	ND	DJ	ND	DJ
1506-W-MW10	MW-10	20,340	ND	-	17,000	E	2,100	-	ND	-	260	J	120	J	ND	-
			ND	DJ	18,000	DJ	2,000	DJ	ND	DJ	230	DJ	110	DJ	ND	DJ
1506-W-MW11	MW-11	209	120	B	37		22		ND		ND		10		10	
1506-W-MW12	MW-12	4,880	6,700	BE	550	-	ND	-	ND	-	ND	-	ND	-	ND	-
			4,500	BDJ	380	DJ	ND	DJ	ND	DJ	ND	DJ	ND	DJ	ND	DJ
1506-W-MW13	MW-13	131	10	B	30		71		ND		ND		ND		ND	
1506-W-MW14	MW-14	45	ND	BJ	ND		ND		ND		ND		ND		ND	
1506-W-MW16	MW-16	42	ND	BJ	11		5	J	ND		ND		ND		ND	
1506-W-MW17	MW-17	9,070	5,800	B	3,000		270	J	ND		ND		ND		ND	
B21617	MW-17	5,930	3,700		2,000		230	J	ND		ND		ND		ND	
1506-W-MW18	MW-18	129	ND	BJ	14		81		ND		24		8	J	2	J
B21618	MW-18	130	5		13		72		ND		30		10	J	ND	
1506-W-MW19	MW-19	ND	ND	BJ	ND		ND		ND		ND		ND		ND	
1506-W-MW20	MW-20	14	ND		ND		14		ND		ND		ND		ND	
1506-W-MW21	MW-21	144	ND		ND		140		ND		4	J	ND		ND	
1506-W-SUMP	SUMP	10,750	2,400	B	4,900		3,200		ND		110	J	140	J	ND	
1506-N-MW-9 (pre-purge)	MW-9	119,000	66,000	B	51,000		2,000	J	ND		ND		ND		ND	
NYSDEC TOGS 1.1.1 GROUNDWATER STANDARD/GUIDANCE VALUE (PPB)		NA	5		5		5		0.6		2		5		5	

- B = This flag is used when the analyte is found in the associated blank as well as in the sample.  
 E = This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.  
 J = Indicates an estimate value.  
 D = Identifies compounds identified in an analysis at a secondary dilution factor.  
 N = Indicates presumptive evidence of tentatively identified compounds.  
 ND = Not detected above reported laboratory detection limit value.  
 NA = Not available.

TABLE 15 (Continued)

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)**

**DECEMBER 1998 GROUNDWATER SAMPLES**

SAMPLE NUMBER	WELL LOCATION	DETECTED VOLATILE COMPOUNDS													
		Methylene Chloride	Acetone	Carbon Disulfide	Chloroform	Benzene	4-Methyl-2- pentanone	Toluene	Ethylbenzene	Xylenes	1,2-Dichloro propane	Unknown	Unknown Silanes		
1506-W-MW1	MW-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	J	
1506-W-MW3	MW-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW4	MW-4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	J	
1506-W-MW6	MW-6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW7	MW-7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	J		
1506-W-MW8	MW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
B21608	MW-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW9	MW-9	5 J	53 J	12 J	5 J	3 J	4 J	370 EJ	7 J	70 J	ND	ND	ND		
1506-W-MW10	MW-10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW11	MW-11	ND	ND	ND	ND	ND	ND	1 J	ND	ND	2 J	ND	7	J	
1506-W-MW12	MW-12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW13	MW-13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	J	
1506-W-MW14	MW-14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45	J	
1506-W-MW16	MW-16	ND	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND	25	J	
1506-W-MW17	MW-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
B21617	MW-17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW18	MW-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
B21618	MW-18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW19	MW-19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW20	MW-20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-MW21	MW-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-W-SUMP	SUMP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1506-N-MW-9	MW-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
<b>NYSDEC TOGS 1.11 GROUNDWATER STANDARD/GUIDANCE VALUE (PPB)</b>		5	50	NA	7	1	NA	5	5	5	1	NA	NA		

- B = This flag is used when the analyte is found in the associated blank as well as in the sample.  
 E = This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.  
 J = Indicates an estimate value.  
 D = Identifies compounds identified in an analysis at a secondary dilution factor.  
 N = Indicates presumptive evidence of tentatively identified compounds.  
 ND = Not detected above reported laboratory detection limit value.  
 NA = Not available.

TABLE 16

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**CHROMIUM TEST RESULTS  
IN PARTS PER BILLION (PPB)**

**DECEMBER 1998 GROUNDWATER SAMPLES**

SAMPLE NUMBER	LOCATION	TOTAL CHROMIUM (PPB)		HEXAVALENT CHROMIUM (PPB)	
1506-W-MW1	MW-1	16.9		ND	
1506-W-MW3	MW-3	ND		ND	
1506-W-MW4	MW-4	4.2	B	ND	
1506-W-MW6	MW-6	8.7	B	ND	
1506-W-MW7	MW-7	4.8	B	ND	
1506-W-MW8	MW-8	49,100		32,300	
B21608	MW-8	52,300		42,000	
1506-W-MW9	MW-9	1,110		283	
1506-W-MW10	MW-10	14.5		ND	
1506-W-MW11	MW-11	4.9	B	ND	
1506-W-MW12	MW-12	621		587	
1506-W-MW13	MW-13	7.4	B	ND	
1506-W-MW14	MW-14	ND		ND	
1506-W-MW16	MW-16	11.8		ND	
B21616	MW-16	1.4	B	NA	
1506-W-MW17	MW-17	16.2		ND	
1506-W-MW18	MW-18	11.8		ND	
1506-W-MW19	MW-19	2.1	B	ND	
1506-W-MW20	MW-20	4.2	B	ND	
B21620	MW-20	14.4		NA	
1506-W-MW21	MW-21	53.5		ND	
1506-W-SUMP	SUMP	134		ND	
1506-N-MW-9	MW-9	955		394	
<b>NYSDEC TOGS 1.1.1 GROUNDWATER STANDARD/GUIDANCE VALUES (PPB)</b>		<b>50</b>		<b>50</b>	

ND = Not detected above reported laboratory detection limit value

NA = Not available

B = Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.

TABLE 17

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**TARGET ANALYTE LIST (TAL) METAL TEST RESULTS  
IN PARTS PER BILLION (PPB)**

**DECEMBER 1998 GROUNDWATER SAMPLES**

DETECTED ANALYTES	SAMPLE AND LOCATION												NYSDEC TOGS 1.1.1 GROUNDWATER STANDARDS/GUIDANCE VALUES (PPB)
	1506-W-MW9 from MW-9		1506-W-MW16 from MW-16		1506-W-MW17 from MW-17		B21616 From MW-16		B21620 From MW-20		B21608 From MW-8		
Aluminum	9270	EN*J	456	EN*J	4,090	EN*J	167	B	3,260		721		NA
Antimony	19.8	B	20.6	B	ND		ND		ND		780		3
Arsenic	ND		ND		ND		ND	N	ND	N	24.7	N	25
Barium	104	B	147	B	173	B	102	B	121	B	26.9	B	1,000
Beryllium	ND		1.2	B	ND		2.8	B	2	B	0.35	B	3
Cadmium	10		10		4.4	B	3.6	B	2.2	B	ND		5
Calcium	239,000	EJ	191,000	EJ	194,000	EJ	188,000		169,000		373,000		NA
Chromium	1,110		11.8		16.2		1.4	B	14.4		52,300		50
Cobalt	17.2	B	19.9	B	2	B	ND		ND		4.3	B	NA
Copper	273		233		14.8	B	ND		28		10.1	B	200
Iron	14,400		13,400		7,340		18,200		11,200		1,710		300
Lead	36.1	*J	24.4	*J	80.9	*J	ND		9		ND		25
Magnesium	108,000	EN*J	55,000	EN*J	65,200	EN*J	48,900		86,200		151,000		35,000
Manganese	643	EJ	230	EJ	145	EJ	270		186		123		300
Mercury	ND		ND		ND		ND		ND		ND		0.7
Nickel	309		30.9	B	12	B	2.5	B	9	B	16.3	B	100
Potassium	10,200	*J	25,800	*J	8,900	*J	5,260		7,700		10,500		NA
Selenium	ND	N	18.5	NJ	ND	N	ND	WN	ND	WN	1.6	BWN	10
Silver	ND		2.8	B	ND		2.3	B	3.1	B	3.7	B	50
Sodium	117,000	EN*J	418,000	EN*J	93,600	EN*J	510,000		108,000		64,200		20,000
Thallium	11.3		ND		ND		28.4		19.2		111		0.5
Vanadium	51.4		25.3	B	8.1	B	ND	N	8.6	BN	ND	N	NA
Zinc	117		218		64.6		30.1		37.2		9.3	B	2,000
Cyanide	ND		ND		ND		NA		NA		NA		200

- \* = Indicates duplicate analysis is not within the control limits.
- E = Indicates a value estimated or not reported due to the presence of interference.
- B = Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- N = Indicates spike sample recovery is not within the control limits.
- J = Estimated value as recommended in the Data Usability Summary Report.
- W = Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- ND = Not detected above reported laboratory detection limit value.
- NA = Not available.

TABLE 18

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

SEMI-VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)

DECEMBER 1998 GROUNDWATER SAMPLES

DETECTED SVOCs	SAMPLE DESIGNATION AND LOCATION						NYSDEC TOGS 1.1.1 GROUNDWATER STANDARD/GUIDANCE VALUE (PPB)
	1506-W-MW9 From MW-9		1506-W-MW16 From MW-16		1506-W-MW17 From MW-17		
Identified SVOCs							
Bis(2-ethylhexyl)phthalate	3	J	ND		1	J	5
Bis(2-chloroethyl)ether	ND		20		ND		1
Tentatively Identified Compounds							
Total Unknowns	20	J	33	BJ	17	J	NA
Sulfur	20	JN	ND		360	JN	NA
Oxygenated compound	ND		8	J	ND		NA
1,4-Oxathiane	ND		37	JN	ND		NA
Chloropyridine isomer	ND		52	JN	ND		NA
Dichloropyridine isomer	ND		10	J	ND		NA
Caprolactum	ND		5	JN	ND		NA

B = This flag is used when the analyte is found in the associated blank as well as in the sample.  
 J = Indicates an estimate value.  
 N = Indicates presumptive evidence of tentatively identified compounds.  
 ND = Not detected above reported laboratory detection limit value.  
 NA = Not available.

TABLE 19

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

POLYCHLORINATED BIPHENYLS/PESTICIDES TEST RESULTS  
IN PARTS PER BILLION (PPB)

DECEMBER 1998 GROUNDWATER SAMPLES

CONSTITUENTS	SAMPLE DESIGNATION AND LOCATION			NYSDEC TOGS 1.1.1 GROUNDWATER STANDARD/GUIDANCE VALUE (PPB)
	1506-W-MW9 From MW-9	1506-W-MW16 From MW-16	1506-W-MW17 From MW-17	
Pesticides	ND	ND	ND	NR
Polychlorinated Biphenyls (PCBs)	ND	ND	ND	NR

ND = Not detected above reported laboratory detection limit value.

NR = Not Required.



TABLE 20

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

CUMMULATIVE VOC TEST RESULTS  
TOTAL AND SELECT VOLATILE ORGANIC COMPOUNDS  
IN PARTS PER BILLION (PPB)

GROUNDWATER SAMPLES

LOCATION	DATE SAMPLED	DETECTED VOLATILE COMPOUNDS								
		TOTAL VOCs	PCE	TCE	1,2-DCE	1,2-DCA	VC	1,1-DCE	1,1-DCA	Acetone
MW-1	8/90	19	--	--	--	--	--	--	--	19
MW-1	11/90	0	--	--	--	--	--	--	--	--
MW-1	10/95	0	--	--	--	--	--	--	--	--
MW-1	12/98	16	--	--	--	--	--	--	--	--
MW-2	11/90	0	--	--	--	--	--	--	--	--
MW-3	11/90	0	--	--	--	--	--	--	--	--
MW-3	2/95	8	--	1.6	6.4	--	--	--	--	--
MW-3	10/95	4	--	--	4	--	--	--	--	--
MW-3	12/98	8	--	--	8	--	--	--	--	--
MW-4	8/90	38	--	--	--	--	--	--	--	38
MW-4	11/90	0	--	--	--	--	--	--	--	--
MW-4	10/95	0	--	--	--	--	--	--	--	--
MW-4	12/98	14	--	--	--	--	--	--	--	--
MW-5	8/90	24	--	--	--	--	--	--	--	24
MW-5	11/90	0	--	--	--	--	--	--	--	--
MW-6	11/90	48	--	5	37	6	--	--	--	--
MW-6	2/95	67	--	--	35	--	--	--	--	21
MW-6	10/95	130	--	4	113	5	4	--	--	4
MW-6	12/98	105	--	--	100	3	2	--	--	--
MW-7	11/90	0	--	--	--	--	--	--	--	--
MW-7	10/95	8	--	--	--	--	--	--	--	8
MW-7	12/98	12	--	--	--	--	--	--	--	--
MW-8	11/90	5,334	3,400	1,900	19	--	--	--	--	--
MW-8	2/95	3,200	2,100	1,100	--	--	--	--	--	--
MW-8	10/95	2,237	1,500	710	16	--	--	--	--	--
MW-8	12/98	2,140	1,600	540	--	--	--	--	--	--

-- = Not detected above reported laboratory detection limit value, or detected in method blank or trip blank.

TABLE 20 (Continued)

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

CUMMULATIVE VOC TEST RESULTS  
TOTAL AND SELECT VOLATILE ORGANIC COMPOUNDS  
IN PARTS PER BILLION (PPB)

## GROUNDWATER SAMPLES

LOCATION	DATE SAMPLED	DETECTED VOLATILE COMPOUNDS								
		TOTAL VOCs	PCE	TCE	1,2-DCE	1,2-DCA	VC	1,1-DCE	1,1-DCA	Acetone
MW-9	11/90	252,278	110,000	130,000	8,900	--	--	29	54	2,600
MW-9	2/95	183,000	73,000	110,000	--	--	--	--	--	--
MW-9	10/95	192,900	95,000	87,000	1,900	--	--	--	--	6,400
MW-9	12/98	155,969	95,000	59,000	2,000	--	--	17	23	53
MW-9 (pre-purge)	12/98	119,000	66,000	51,000	2,000	--	--	--	--	--
MW-10	11/90	21,448	10	19,000	2,400	--	--	18	9	--
MW-10	2/95	18,200	--	17,000	1,200	--	--	--	--	--
MW-10	10/95	19,100	--	18,000	1,100	--	--	--	--	--
MW-10	12/98	20,340	--	18,000	2,000	--	230	110	--	--
MW-11	10/95	192	58	67	19	1	--	23	19	--
MW-11	12/98	209	120	37	22	--	--	10	10	--
MW-12	10/95	3,810	3,400	170	--	--	--	--	--	210
MW-12	12/98	5,050	4,500	550	--	--	--	--	--	--
MW-13	10/95	183	33	65	81	--	--	--	2	--
MW-13	12/98	131	10	30	71	--	--	--	--	--
MW-14	10/95	3	--	1	2	--	--	--	--	--
MW-14	12/98	45	--	--	--	--	--	--	--	--
MW-16	10/95	68	22	15	4	--	--	25	2	--
MW-16	12/98	42	--	11	5	--	--	--	--	--
MW-17	12/98	9,070	5,800	3,000	270	--	--	--	--	--
MW-18	12/98	130	5	13	72	--	30	10	--	--
MW-19	12/98	--	--	--	--	--	--	--	--	--
MW-20	12/98	14	--	--	14	--	--	--	--	--
MW-21	12/98	144	--	--	140	--	4	--	--	--
SUMP	10/90	9,650	410	2,200	5,800	--	540	560	14	--
SUMP	11/90	10,905	770	3,000	5,700	--	720	680	--	--
SUMP	10/95	13,730	1,800	6,500	4,420	--	220	--	340	390
SUMP	12/98	10,750	2,400	4,900	3,200	--	110	140	--	--

-- = Not detected above reported laboratory detection limit value, or detected in method blank or trip blank.

TABLE 21

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

CUMULATIVE CHROMIUM TEST RESULTS  
IN PARTS PER BILLION (PPB)

GROUNDWATER SAMPLES

LOCATION	DATE SAMPLED	TOTAL CHROMIUM (PPB)	HEXAVALENT CHROMIUM (PPB)
MW-1	4/95	--	--
MW-1	10/95	10.6	--
MW-1	12/98	16.9	--
MW-3	10/95	2.7	--
MW-3	12/98	--	--
MW-4	4/95	--	--
MW-4	10/95	3.4	--
MW-4	12/98	4.2	--
MW-6	10/95	--	--
MW-6	12/98	8.7	--
MW-7	4/95	--	--
MW-7	10/95	--	--
MW-7	12/98	4.8	--
MW-8	2/95	35,000	NA
MW-8	4/95	44,400	57,700
MW-8	10/95	17,600	23,400
MW-8	9/96	60,100	57,500
MW-8	12/98	49,100	32,300
MW-8	12/98	52,300	42,000
MW-9	4/95	2,080	2,810
MW-9	10/95	38	--
MW-9	9/96	93.1	--
MW-9	12/98	1,110	283
MW-9 (pre-purge)	12/98	955	394
MW-10	9/96	--	--
MW-10	10/95	3.8	--
MW-10	12/98	14.5	--
MW-11	10/95	--	--
MW-11	9/96	--	--
MW-11	12/98	4.9	--
MW-12	10/95	223	41.9
MW-12	9/96	4,210	4,400
MW-12	12/98	621	587
MW-13	10/95	5	--
MW-13	9/96	--	--
MW-13	12/98	7.4	--
MW-14	10/95	--	--
MW-14	12/98	--	--
MW-16	10/95	--	--
MW-16	12/98	11.8	--
MW-16	12/98	1.4	NA
MW-17	12/98	16.2	--
MW-18	12/98	11.8	--
MW-19	12/98	2.1	--
MW-20	12/98	4.2	--
MW--20	12/98	14.4	NA
MW-21	12/98	53.5	--
SUMP	10/95	4.5	--
SUMP	12/98	134	--

-- = Not detected above reported laboratory detection limit value  
NA = Not available

**TABLE 22**

**HYDRAULIC CONDUCTIVITY TEST RESULTS**

**FORMER GENERAL CIRCUITS**

**INACTIVE HAZARDOUS WASTE DISPOSAL SITE #828085**

**95 MT. READ BOULEVARD**

**ROCHESTER, NEW YORK**

WELL	TYPE	HYDRAULIC CONDUCTIVITY SLUG IN	HYDRAULIC CONDUCTIVITY SLUG OUT
MW-4	OVERBURDEN	0.24 ft/day ( $8.61 \times 10^{-5}$ cm/sec)	0.49 ft/day ( $1.75 \times 10^{-4}$ cm/sec)
MW-7	BEDROCK	0.75 ft/day ( $2.63 \times 10^{-4}$ cm/sec)	0.75 ft/day ( $2.64 \times 10^{-4}$ cm/sec)
MW-9	OVERBURDEN	0.96 ft/day ( $3.39 \times 10^{-4}$ cm/sec)	1.75 ft/day ( $6.17 \times 10^{-4}$ cm/sec)
MW-17	BEDROCK	0.42 ft/day ( $1.48 \times 10^{-4}$ cm/sec)	2.07 ft/day ( $7.31 \times 10^{-4}$ cm/sec)
MW-18	OVERBURDEN/BEDROCK	23.00 ft/day ( $8.11 \times 10^{-3}$ cm/sec)	53.08 ft/day ( $1.87 \times 10^{-2}$ cm/sec)
MW-19	BEDROCK	4.61 ft/day ( $1.63 \times 10^{-3}$ cm/sec)	4.63 ft/day ( $1.64 \times 10^{-3}$ cm/sec)
MW-16	BEDROCK	59.00 ft/day ( $2.08 \times 10^{-2}$ cm/sec)	81.11 ft/day ( $2.86 \times 10^{-2}$ cm/sec)

TABLE 23

95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK

VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)

DECEMBER 1999 GROUNDWATER SAMPLES  
FROM PACKERED ZONES (MW-17 & MW-21)

SAMPLE NUMBER	LOCATION	DETECTED VOLATILE COMPOUNDS																						
		TOTAL VOCs	PCE		TCE		1,2-DCE		VC		1,1-DCE		1,1-DCA		Acetone		4-Methyl-2-pentanone		Toluene		Ethylbenzene		Xylenes	
1506-17 (18.3-23')	MW-17	5,289	2,300	D	2,600		360		ND		ND		ND		ND		29	J		ND		ND		
1506-17 (23-28')	MW-17	5,562	2,900	D	2,100	D	460		2	J	18		5	J	3	J	ND		57		2	J		15
1506-17 (28-33')	MW-17	4,713	610	D	940	D	3,100	D	7	J	22		4	J	ND		ND		24		ND		6	J
1506-17 (33-37.5')	MW-17	5,352	190	D	190		4,800	D	120		34		7	J	3	J	3	J	1	J	1	J	3	J
1506-21 (18-23')	MW-21	47	2	J	ND		21		4	J	ND		ND		3	J	ND		6	J	ND		11	
1506-21 (23-28')	MW-21	83	3	J	ND		28		4	J	ND		ND		ND		ND		4	J	2	J	42	
1506-21 (28-33')	MW-21	44	7	J	ND		11		ND		ND		ND		ND		ND		4	J	1	J	21	
1506-21 (33-37')	MW-21	13	ND		ND		13		ND		ND		ND		ND		ND		ND		ND		ND	
NYSDEC TOGS 1.1.1 GROUNDWATER STANDARD/GUIDANCE VALUE (PPB)		NA	5		5		5		2		5		5		50		NA		5		5		5	

J = Indicates an estimate value.  
D = Identifies compounds identified in an analysis at a secondary dilution factor.  
ND = Not detected above reported laboratory detection limit value.  
NA = Not available.

TABLE 24

**95 MT. READ BOULEVARD  
ROCHESTER, NEW YORK**

**TOTAL AND SELECTED VOLATILE ORGANIC COMPOUND TEST RESULTS  
IN PARTS PER BILLION (PPB)**

**OCTOBER 2000 GROUNDWATER SAMPLES  
FROM PASSIVE DIFFUSION SAMPLERS PLACED IN WELL MW-22**

SAMPLE NUMBER	LOCATION	DETECTED VOLATILE COMPOUNDS						
		TOTAL VOCs	PCE	TCE	1,2-DCE	VC	Toluene	Xylenes
DS-1	MW-22 (53.40')	0.0	ND	ND	ND	ND	ND	ND
DS-2	MW-22 (57.30')	0.0	ND	ND	ND	ND	ND	ND
DS-3	MW-22 (60.85')	0.0	ND	ND	ND	ND	ND	ND
DS-4	MW-22 (57.40')	11.8	ND	ND	ND	ND	6.0	5.8
DS-5	MW-22 (72.05')	18.9	ND	ND	ND	ND	11.0	7.9
DS-6	MW-22 (77.35')	13.6	ND	ND	ND	ND	6.8	6.8
NYSDEC TOGS 1.1.1 GROUNDWATER STANDARD/GUIDANCE VALUE (PPB)		NA	5	5	5	2	5	5

ND = Not detected above reported laboratory detection limit value.

NA = Not available.

## **APPENDIX D**

### **Well Development Logs, Well Sampling Logs, and Groundwater Packer Sampling Purge Logs**

**WELL DEVELOPMENT DATA**  
**MW- 17**

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York

JOB#: 1506R-97

DATE/ TIME	12/2/98 9:37	9:52	10:10	10:29	10:53	11:41	11:54	12:22
EVACUATION METHOD	Centrifugal Pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	38.3	-	-	-	-	-	-	-
STATIC WATER LEVEL (SWL) FT	11.27	-	-	15.58	-	-	-	14.38
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	5	10	15	20	25	30	35	40
TEMPERATURE (°F)	60.7	65.5	66.7	67.1	67.7	69.2	67.9	69.3
pH	8.34	7.83	7.80	7.38	7.44	7.30	7.39	7.05
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Mostly clear	Cloudy "gray"	Cloudy	Slightly cloudy	Slightly cloudy	Mostly clear	Mostly clear	Mostly clear

LEGEND: NC = Not Collected  
ND = Not Detected

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



## WELL DEVELOPMENT DATA

MW- 17 cont.

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York

JOB#: 1506R-97

DATE/ TIME	12/2/98 12:40	13:05	13:25	13:56	14:00			
EVACUATION METHOD	Centrifugal pump	"	"	"	"			
PID/FID (PPM)	-	-	-	-	-			
DEPTH OF WELL (FT)	38.3	-	-	-	-			
STATIC WATER LEVEL (SWL) FT		-	-		-			
VOLUME EVACUATED (GAL)	5	5	5	5	2			
TOTAL VOLUME EVACUATED (GAL)	45	50	55	60	62			
TEMPERATURE (°F)	69.0	69.4	70.1	69.2	69.5			
pH	7.16	7.02	7.07	7.04	6.94			
Eh	-	-	-	-	-			
CONDUCTIVITY (ms/cm)	0.88	0.89	0.89	0.89	0.89			
TURBIDITY (NTU)	-	-	-	-	-			
VISUAL OBSERVATION	Cloudy	Slightly cloudy	Slightly cloudy	Clear	Clear			

LEGEND: NC = Not Collected  
ND = Not Detected

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2144 Brighton-Henrietta Town Line Road  
Rochester, New York 14623

**WELL DEVELOPMENT DATA**  
**MW- 18**

SITE LOCATION: 95 Mt. Read Blvd. , Rochester , New York

JOB#: 1506R-97

DATE/ TIME	12/2/98 14:50	14:58	15:01	15:04				
EVACUATION METHOD	Centrifugal pump	"	"	"				
PID/FID (PPM)	NC	-	-	-				
DEPTH OF WELL (FT)	16.6	-	-	-				
STATIC WATER LEVEL (SWL) FT	11.85	-	-	-				
VOLUME EVACUATED (GAL)	1	1	1	1				
TOTAL VOLUME EVACUATED (GAL)	1	2	3	4				
TEMPERATURE (°F)	67.8	66.9	66.5	65.5				
pH	6.80	6.86	6.88	6.89				
Eh	NC	-	-	-				
CONDUCTIVITY (ms/cm)	0.88	0.88	0.88	0.88				
TURBIDITY (NTU)	NC	-	-	-				
VISUAL OBSERVATION	Cloudy	Mostly clear	Clear	Clear				

LEGEND: NC = Not Collected  
ND = Not Detected

Day Environmental, Inc.  
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Rochester, New York 14623

**WELL DEVELOPMENT DATA**  
**MW- 19**

SITE LOCATION: 95 Mt. Read Blvd. , Rochester , New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 9:01	9:05	9:09	9:12	9:15	9:18	9:21	9:24
EVACUATION METHOD	Submersible pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	37.0	"	"	"	"	"	"	"
STATIC WATER LEVEL (SWL) FT	11.62	-	-	-	-	-	-	-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	5	10	15	20	25	30	35	40
TEMPERATURE (°F)	52.0	52.9	52.8	52.9	53.1	52.9	54	54
pH	7.01	7.04	7.16	7.16	7.15	7.18	6.91	6.97
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Mostly clear	Mostly clear

LEGEND: NC = Not Collected  
ND = Not Detected

Day Environmental, Inc.  
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Rochester, New York 14623

## WELL DEVELOPMENT DATA

MW- 19 cont.

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 9:29	9:41	9:45	9:50	9:53	9:57	10:00	10:05
EVACUATION METHOD	Submersible pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	37.0	-	-	-	-	-	-	-
STATIC WATER LEVEL (SWL) FT	-	-	-	-	-	-	-	-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	45	50	55	60	65	70	75	80
TEMPERATURE (°F)	55.1	55.7	56.0	56.3	56.6	56.9	57.0	57.5
pH	6.97	7.07	6.97	7.37	7.05	6.99	6.98	6.93
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	0.87	0.87	0.87	0.88	0.87	0.87	0.88	0.87
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Mostly clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA**  
**MW- 20**

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 11:05	11:08	11:10	11:13	11:16	11:19	11:21	11:23
EVACUATION METHOD	Submersible pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	38.0	"	"	"	"	"	"	"
STATIC WATER LEVEL (SWL) FT	9.42	-	-	-	-	-	-	-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	5	10	15	20	25	30	35	40
TEMPERATURE (°F)	58.3	59.5	60.5	60.6	58.9	58.4	57.6	57.2
pH	12.25	11.85	11.07	10.08	9.07	9.09	8.64	8.76
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	1.05	1.02	0.99	0.98	0.98	0.98	0.98	0.98
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA**  
**MW- 20 cont.**

SITE LOCATION: 95 Mt. Read Blvd. , Rochester , New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 11:26	11:28	11:30	11:34	11:36	11:39	11:42	11:44
EVACUATION METHOD	Submersible pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	38.0	-	-	-	-	-	-	-
STATIC WATER LEVEL (SWL) FT	-	-	-	-	-	-	-	-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	45	50	55	60	65	70	75	80
TEMPERATURE (°F)	57.0	56.9	56.5	56.3	56.3	56.2	56.1	55.9
pH	8.53	8.39	8.01	7.66	7.50	7.51	7.48	7.41
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	1.01	1.05	1.06	1.06	1.06	1.06	1.06	1.06
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Slightly cloudy	Slightly cloudy	Slightly cloudy

LEGEND: NC = Not Collected  
ND = Not Detected

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2144 Brighton-Henrietta Town Line Road  
Rochester, New York 14623

**WELL DEVELOPMENT DATA**  
**MW- 20 cont**

SITE LOCATION: 95 Mt. Read Blvd. , Rochester , New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 11:46	11:48	11:50	11:52	11:55			
EVACUATION METHOD	Submersible pump	"	"	"	"			
PID/FID (PPM)	NC	-	-	-	-			
DEPTH OF WELL (FT)	38.0	-	-	-	-			
STATIC WATER LEVEL (SWL) FT	-	-	-	-	-			
VOLUME EVACUATED (GAL)	5	5	5	5	5			
TOTAL VOLUME EVACUATED (GAL)	85	90	95	100	105			
TEMPERATURE (°F)	55.8	55.8	55.9	55.7	55.8			
pH	7.35	7.27	7.40	7.21	7.26			
Eh	-	-	-	-	-			
CONDUCTIVITY (ms/cm)	1.06	1.06	1.06	1.06	1.06			
TURBIDITY (NTU)	-	-	-	-	-			
VISUAL OBSERVATION	Slightly cloudy	Slightly cloudy	Slightly cloudy	Slightly cloudy	Slightly cloudy			

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA**  
**MW- 21**

SITE LOCATION: 95 Mt. Read Blvd. , Rochester , New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 12:40	12:43	12:47	12:50	13:05	13:12	13:27	13:34
EVACUATION METHOD	Submersible pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	38.0	-	-	-	-	-	-	-
STATIC WATER LEVEL (SWL) FT	12.28	-	-	-	-	-	-	-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	5	10	15	20	25	30	35	40
TEMPERATURE (°F)	58.5	57.3	57.4	58.1 (Dry)	57.9	58.7 (Dry)	60.8	60.0 (Dry)
pH	10.68	11.57	11.45	8.94	8.06	7.91	7.66	7.74
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	1.31	1.06	1.07	1.06	1.07	1.06	1.03	0.99
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Cloudy	Cloudy	Cloudy	Cloudy	Mostly clear	Mostly clear	Clear	Clear

LEGEND: NC = Not Collected  
ND = Not Detected

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



**WELL DEVELOPMENT DATA**  
**MW- 21 cont.**

SITE LOCATION: 95 Mt. Read Blvd. , Rochester , New York

JOB#: 1506R-97

DATE/ TIME	12/3/98 13:54	14:01	14:20	14:24	14:49	14:54	15:12	15:17
EVACUATION METHOD	Submersible pump	"	"	"	"	"	"	"
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	38.0	-	-	-	-	-	-	-
STATIC WATER LEVEL (SWL) FT	-	-	-	-	-	-	-	-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	45	50	55	60 (Dry)	65	70 (Dry)	75	80
TEMPERATURE (°F)	61.3	59.5	57.5	57.5	57.2	57.4	57.4	57.5
pH	7.71	7.82	7.75	7.57	7.60	7.48	7.42	7.46
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.01
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Clear	Mostly clear	Clear	Clear	Clear	Clear	Clear	Clear

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/28/00 1220	1225	1235	1243	1248	1255	1305	1311
EVACUATION METHOD	Grundfos Pump							
PID (PPM)	2.1							
DEPTH OF WELL (FT)	79.76							
STATIC WATER LEVEL (SWL) FT	14.27							
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	5	10	15	20	25	30	35	40
TEMPERATURE (°C)	17.4	17.6	17.6	17.5	17.8	18.1	17.8	17.9
pH	6.87	7.05	7.06	7.49	7.47	7.38	7.45	7.35
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	2.26	2.01	1.86	0.92	0.909	1.03	0.96	1.36
TURBIDITY (NTU)	14	7	50	378	586	619	978	734
VISUAL OBSERVATION	Slightly cloudy gray sulfur odor	Slightly cloudy gray sulfur odor	Cloudy gray sulfur odor	Very cloudy gray sulfur odor	Very cloudy gray sulfur odor	Very cloudy gray sulfur odor	Very cloudy gray sulfur odor	Very cloudy gray sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

JD3663/1506R-97

**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/28/00 1320	1330	1334	1339	1345	1435	1446	1457
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT		56.61						
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	45	50	55	60	65	70	75	80
TEMPERATURE (°C)	18.2	18.1	17.9	17.9	18.1	17.9	18.2	18.1
pH	7.39	7.34	7.32	7.30	7.43	7.40	7.21	7.12
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	1.43	1.37	1.92	2.66	2.81	3.57	4.06	4.41
TURBIDITY (NTU)	353	575	681	462	355	115	16	9
VISUAL OBSERVATION	Cloudy gray sulfur odor	Cloudy gray sulfur odor	Cloudy gray sulfur odor	Cloudy gray sulfur odor	Cloudy gray sulfur odor	Slightly cloudy gray sulfur odor	Slightly cloudy gray sulfur odor	Slightly cloudy gray sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

## WELL DEVELOPMENT DATA (Cont.)

MW- 22

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/28/00 1502	1506	1509	1515	1520	1545	1555	1605
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	85	90	95	100	105	110	115	120
TEMPERATURE (°C)	18.1	18.2	17.9	17.9	18.3	18.3	18.4	18.5
pH	7.08	7.09	7.12	7.16	7.30	7.19	7.14	7.10
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	4.35	4.33	2.89	3.75	4.12	4.17	4.16	4.17
TURBIDITY (NTU)	45	52	44	46	11	54	52	28
VISUAL OBSERVATION	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

JD3663/1506R-97

## WELL DEVELOPMENT DATA (Cont.)

MW- 22

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/28/00 1615	1625	1634	1645	1653	1700	1705	1725
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	125	130	135	140	145	150	155	160
TEMPERATURE (°C)	18.2	18.2	18.4	18.6	18.4	18.2	18.7	18.4
pH	7.14	7.12	7.07	7.07	7.07	7.09	7.13	7.12
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	4.15	4.13	4.13	4.14	4.11	4.09	4.09	4.05
TURBIDITY (NTU)	10	48	50	3	53	51	47	4
VISUAL OBSERVATION	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/28/00 1735	1745	1755	1803	1808	1813	9/29/00 0655	0700
EVACUATION METHOD	Grundfos Pump						Grundfos Pump	
PID (PPM)							1.2	
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT							14.03	
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	165	170	175	180	185	190	195	200
TEMPERATURE (°C)	18.6	18.9	18.8	18.4	18.4	18.5	17.0	17.2
pH	7.07	7.06	7.05	7.06	7.06	7.09	6.97	7.08
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	4.03	4.02	4.00	3.98	3.96	3.95	3.94	4.05
TURBIDITY (NTU)	3	50	49	52	36	7	9	54
VISUAL OBSERVATION	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/29/00 0705	0715	0722	0734	0740	0750	0800	0808
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	205	210	215	220	225	230	235	240
TEMPERATURE (°C)	17.6	18.0	17.8	18.0	18.0	18.2	18.0	18.0
pH	7.07	7.21	7.25	7.22	7.27	7.19	7.20	7.18
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	3.85	3.14	3.27	3.46	3.48	3.51	3.49	3.56
TURBIDITY (NTU)	56	27	13	55	16	55	12	29
VISUAL OBSERVATION	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor	Clear to light gray sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

Day Environmental, Inc.  
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Rochester, New York 14623

**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/29/00 0815	0823	0830	0836	0842	0850	0855	0900
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	245	250	255	260	265	270	275	280
TEMPERATURE (°C)	18.2	18.4	18.0	18.1	18.0	18.2	18.1	18.3
pH	7.14	7.17	7.13	7.12	7.11	7.16	7.15	7.22
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	3.66	3.41	3.49	3.53	3.63	3.09	3.13	3.32
TURBIDITY (NTU)	49	55	50	55	18	20	44	58
VISUAL OBSERVATION	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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



**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/29/00 0906	0912	0917	0924	0935	0942	0950	1000
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	285	290	295	300	305	310	315	320
TEMPERATURE (°C)	18.2	18.3	18.1	18.3	18.2	18.2	18.0	18.2
pH	7.23	7.24	7.22	7.23	7.19	7.18	7.15	7.15
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	3.53	3.56	3.56	3.54	3.54	3.51	3.47	3.46
TURBIDITY (NTU)	24	56	23	21	15	32	7	14
VISUAL OBSERVATION	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/29/00 1016	1021	1030	1038	1047	1055	1102	1109
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	325	330	335	340	345	350	355	360
TEMPERATURE (°C)	18.3	18.4	18.3	18.3	18.5	18.6	18.7	18.7
pH	7.14	7.19	7.20	7.13	7.11	7.10	7.10	7.12
Eh	-	-	-	-	-	-	-	-
CONDUCTIVITY (ms/cm)	3.47	3.41	3.45	3.42	3.41	3.42	3.41	3.40
TURBIDITY (NTU)	4	61	61	13	24	6	56	26
VISUAL OBSERVATION	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA (Cont.)**  
**MW- 22**

SITE LOCATION: 95 Mt. Read Boulevard, Rochester, New York

JOB#: 1506R-97

DATE/ TIME	9/29/00 1125	1133	1140	1148	1158			
EVACUATION METHOD	Grundfos Pump							
PID (PPM)								
DEPTH OF WELL (FT)								
STATIC WATER LEVEL (SWL) FT								
VOLUME EVACUATED (GAL)	5	5	5	5	5			
TOTAL VOLUME EVACUATED (GAL)	365	367	375	380	385			
TEMPERATURE (°C)	18.5	18.3	18.2	18.4	18.3			
pH	7.11	7.10	7.11	7.13	7.14			
Eh	-	-	-	-	-			
CONDUCTIVITY (ms/cm)	3.38	3.37	3.36	3.34	3.34			
TURBIDITY (NTU)	11	23	4	14	8			
VISUAL OBSERVATION	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor	Clear sulfur odor			

LEGEND: NC = Not Collected  
ND = Not Detected

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

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-1

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB/DMP

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 11.61 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 7.48 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 4.13 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .67

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.1667)

0.1632023

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

CALCULATED PURGE VOLUME [GAL]: 2.02 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 1.0 (dry)

PURGE METHOD: Bailer PURGE START: 12:35 END: 12:36

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW1	12/22/98 13:37	1' Bailer	VOAs, Total Cr, Hex Cr	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.02	9.5	7.83	0.5	-	Cloudy	0.1 ppm (12/21/98) 0.5 ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-3

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 50.22 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 12.47 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 37.75 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 24.64

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT)

CALCULATIONS

" (0.3333)

0.6528

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

CALCULATED PURGE VOLUME [GAL]: 73.92 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 75.00

PURGE METHOD: Submersible Pump PURGE START: 13:15 END: 14:15

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW3	12/22/98 13:18	1' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
11.50	10.7	7.25	1.6	-	Slightly Cloudy	0.0ppm (12/21/98) 0.2ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-4

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 16.09 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 8.50 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 7.59 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 1.24

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 3.72 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 4.5

PURGE METHOD: Centrifugal Pump PURGE START: 13:35 END: 13:38

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW4	12/22/98 14:12	1' Bailer	VOAs, Total Cr, Hex Cr	Clear

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.15	9.4	7.39	0.6	-	Clear	0.1ppm (12/21/98) 0.8ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-6

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE : 12/21/98  
SAMPLE COLLECTOR(S): JAD/JKH/JSB  
WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 44.75 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 8.89 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 35.86 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 23.41

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT)

CALCULATIONS

(0.3333)

0.6528

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

CALCULATED PURGE VOLUME [GAL]: 70.23 (3 TIMES CASING VOLUME)  
ACTUAL VOLUME PURGED [GAL]: 38 (Dry)  
PURGE METHOD: Submersible Pump PURGE START: 12:10 END: 13:00

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW6	12/22/98 13:47	1' Bailer	VOAs, Total Cr, Hex Cr	Clear

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
9.34	11.8	7.27	1.0	-	Clear	0.0ppm (12/21/98) 0.4ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-7

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 54.44 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 18.95 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 35.49 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 23.17

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

1" (0.3333)

0.6528

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

CALCULATED PURGE VOLUME [GAL]: 69.51 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 54.0 (Dry)

PURGE METHOD: Submersible Pump PURGE START: 13:25 END: 13:57

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW7	12/22/98 14:25	1' Bailer	VOAs, Total Cr, Hex Cr.	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
18.03	11.0	7.38	1.3	-	Slightly cloudy	0.1ppm (12/21/98) 0.0ppm (12/22/98)



DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-8

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/21/98  
SAMPLE COLLECTOR(S): JAD/JKH/JSB  
WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 13.39 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 8.98 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 4.41 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .72

CALCULATIONS:

CASING DIA. (FT) 2" WELL CONSTANT (GAL/FT) 0.1632

CALCULATIONS:

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

CALCULATED PURGE VOLUME [GAL]: 2.16 (3 TIMES CASING VOLUME)  
ACTUAL VOLUME PURGED [GAL]: 1.5 (Dry)  
PURGE METHOD: Bailer PURGE START: 14:50 END: 15:00

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW8	12/22/98 11:30	3' Bailer	VOAs, Total Cr, Hex Cr	Yellow

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
9.13	18.4	7.46	2.5	-	Yellow	110ppm (12/21/98) 17.4ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-9

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 12.85 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 9.10 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 3.75 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 0.61

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 1.84 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.5

PURGE METHOD: Submersible Pump PURGE START: 16:30 END: 17:00

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1509-W-MW9	12/22/98 13:00	1' Bailer	Full TCL/TAL; Hex Cr	Cloudy
1509-N-MW9	12/21/98 13:00	Pump	VOAs, Total Cr, Hex Cr	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY MS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
9.19	19.9	7.12	1.7	-	Cloudy	2,401ppm (12/21/98) 880ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-10

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 14.41 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 10.34 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 4.07 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .66

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

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

CALCULATED PURGE VOLUME [GAL]: 1.98 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.0

PURGE METHOD: Bailer PURGE START: 15:20 END: 15:35

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW10	12/22/98 15:10	3' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
10.53	16.6	7.55	3.6	-	Slightly cloudy	984ppm (12/21/98) 55ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-11

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 13.44 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 8.73 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 4.71 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .77

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

(0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 2.31 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.5

PURGE METHOD: Bailer PURGE START: 15:40 END: 15:50

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW11	12/22/98 13:55	3' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.83	16.0	7.13	1.4	-	Slightly cloudy	9.2ppm (12/21/98) 0.9ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-12

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/21/98  
SAMPLE COLLECTOR(S): JAD/JKH/JSB  
WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 13.87 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 8.82 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 5.05 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .82

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 2.46 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.0 (Dry)

PURGE METHOD: 3' Bailer PURGE START: 15:23 END: 15:29

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW12	12/22/98 15:40	3' Bailer	VOAs, Total Cr, Hex Cr	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.83	15.6	7.24	1.1	-	Cloudy	149ppm (12/21/98) 12.3ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-13

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE : 12/21/98  
SAMPLE COLLECTOR(S): JAD/JKH/JSB  
WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 13.48 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 8.67 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 4.81 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .78

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 2.34 (3 TIMES CASING VOLUME)  
ACTUAL VOLUME PURGED [GAL]: 1.75 (dry)  
PURGE METHOD: 3' Bailer PURGE START: 15:36 END: 15:42

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW13	12/22/98 16:11	3' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
9.03	14.9	6.95	1.1	-	Slightly Cloudy	4.8ppm (12/21/98) 1.8ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-14

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 15.63 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 10.40 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 5.23 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: .85

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT)

CALCULATIONS

" (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 2.55 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 4.0

PURGE METHOD: 3' Bailer PURGE START: 14:20 END: 14:40

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW14	12/22/98 08:55	3' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
11.31	-	-	-	-	Slightly cloudy	1.5ppm (12/21/98) 0.3ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-15

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/21/98  
SAMPLE COLLECTOR(S): JAD/JKH/JSB  
WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

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

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT)

CALCULATIONS

' (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: \_\_\_\_\_ (3 TIMES CASING VOLUME)  
ACTUAL VOLUME PURGED [GAL]: \_\_\_\_\_  
PURGE METHOD: \_\_\_\_\_ PURGE START: \_\_\_\_\_ END: \_\_\_\_\_

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
-	-	-	-	-

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
-	-	-	-	-	-	1.0ppm (12/21/98)



DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-16

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE : 12/21/98  
SAMPLE COLLECTOR(S): JAD/JKH/JSB  
WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 34.70 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 14.61 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 20.09 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 7.63

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.3333) 0.6528 (0-15' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT  
3" (0.250) 0.380 (15-35' BGS)

CALCULATED PURGE VOLUME [GAL]: 22.89 (3 TIMES CASING VOLUME)  
ACTUAL VOLUME PURGED [GAL]: 25  
PURGE METHOD: Submersible Pump PURGE START: 11:15 END: 11:40

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW16	12/22/98 10:05	Bailer	Full TCL/TAL, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
14.75	9.5	7.77	3.7	-	Slightly cloudy	2.4ppm (12/21/98) 0.3ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-17

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.39 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 11.76 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 25.63 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 10.51

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.3333) 0.6528 (0-18.3' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

3" (0.250) 0.380 (18.3-38.3' BGS)

CALCULATED PURGE VOLUME [GAL]: 31.53 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 17.5 (Dry)

PURGE METHOD: Submersible Pump PURGE START: 16:31 END: 16:40

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW17	12/22/98 11:15	3' Bailer	Full TCL/TAL, Hex Cr (MS/MSD)	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
11.24	17.9	7.68	1.6	-	Cloudy	80ppm (12/21/98) 93.6ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-18

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE : 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 15.92 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 11.96 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 3.96 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 0.65

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

" (0.1667)

0.1632

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

CALCULATED PURGE VOLUME [GAL]: 1.95 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.5

PURGE METHOD: Centrifugal Pump PURGE START: 11:05 END: 11:08

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW18	12/22/98 10:30	1' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
12.06	12.8	7.26	1.7	-	Slightly Cloudy	1.1ppm (12/21/98) 0.0ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-19

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 36.35 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 11.70 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 24.65 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 15.13

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

6" (0.5000) 1.4688 (0-17' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

3" (0.250) 0.380 (17-37' BGS)

CALCULATED PURGE VOLUME [GAL]: 45.39 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 46.00

PURGE METHOD: Submersible Pump PURGE START: 11:00 END: 11:15

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW19	12/22/98 10:31	1' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
11.81	12.2	7.43	2.0	-	Slightly Cloudy	0.7ppm (12/21/98) 0.0ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-20

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE : 12/21/98

SAMPLE COLLECTOR(S): JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.49 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 8.34 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 29.15 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 22.28

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

6" (0.5000) 1.4688 (0-18' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

3" (0.250) 0.380 (18-38' BGS)

CALCULATED PURGE VOLUME [GAL]: 66.84 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 67

PURGE METHOD: Submersible Pump PURGE START: 11:55 END: 12:20

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW20	12/22/98 10:50	1' Bailer	VOAs, Total Cr, Hex Cr	Slightly Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
9.29	10.7	8.24	1.2	-	Slightly Cloudy	0.5ppm (12/21/98) 0.0ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

WELL MW-21

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE : 12/21/98

SAMPLE COLLECTOR(S) : JAD/JKH/JSB

WEATHER CONDITIONS: 12/21/98-Overcast. Some rain, 40-45°F; 12/22/98 -  
Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 36.54 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 12.29 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 24.25 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 15.42

CALCULATIONS:

CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS

6" (0.5000) 1.4688 (0-18' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

3" (0.250) 0.380 (18-38' BGS)

CALCULATED PURGE VOLUME [GAL]: 46.26 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 18 (dry)

PURGE METHOD: Submersible Pump PURGE START: 13:15 END: 13:20

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-MW21	12/22/98 14:00	1' Bailer	VOAs, Total Cr, Hex Cr	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
12.49	10.6	7.72	1.0	-	Cloudy	0.2ppm (12/22/98)

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

SUMP

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE : 12/22/98

SAMPLE COLLECTOR(S): JAD/JSB

WEATHER CONDITIONS: 12/22/98 - Mostly cloudy, some snow, windy, 10-30°F

SECTION 2 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-W-Sump	12/22/98 16:25	1' Bailer	VOAs, Total Cr, Hex Cr	Cloudy

SECTION 3 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
-	14.3	7.64	2.1	-	Cloudy	-

**DAY ENVIRONMENTAL, INC.**  
**GROUNDWATER PACKER SAMPLING PURGE LOG**

**Well #:MW-17**

Date	Time Interval	Sample Interval (feet)	Cumulative Amount Purged (gallons)	WL Inside Packer (feet)	WL Above Packer (feet)	WL at MW-8 (feet)	WL at MW-9 (feet)
12/29/99	930-1240	pre-purge	0	11.09	11.09	8.78	8.74
12/29/99	1310	pre-purge	0	10.20*	10.70*	--	--
12/29/99	1317-1340	33-37.5	2.1	29.80	10.78	8.62	8.70
12/29/99	1422-1426	33-37.5	4.5	30.10	10.87	8.62	8.72
12/29/99	1447-1449	post-purge	4.5	20.1	10.87	8.62	8.70
12/29/99	1507	post-purge	4.5	17.75	10.86	--	--
12/29/99	1522	post-purge	4.5	16.90	--	--	--
12/29/99	1540	post-purge	4.5	15.65	10.82	--	--
12/29/99	1555	post-purge	4.5	15.40	--	--	--
12/29/99	1620	post-purge	4.5	14.75	10.81	--	--
12/30/99	646-702	pre-purge	0	10.55*	10.94*	8.61	8.72
12/30/99	758	pre-purge	0	--	10.38*	--	--
12/30/99	805-806	28-33	1.4	13.10	10.25	--	--
12/30/99	813-816	28-33	2.6	14.00	10.92	8.65	8.74
12/30/99	820	28-33	4.0	12.00	10.42	--	--
12/30/99	832-833	28-33	6.0	14.23	10.62	--	--
12/30/99	910	post-purge	6.0	10.95	10.79	--	--
12/30/99	936	pre-purge	0	10.60*	10.63*	--	--
12/30/99	943	23-28	1.0	10.95	11.42	--	--
12/30/99	945	23-28	2.75	12.80	12.58	8.70	8.78
12/30/99	958	23-28	4.0	13.10	13.28	--	--
12/30/99	1003-1005	23-28	6.0	14.02	14.21	8.70	8.78
12/30/99	1023	post-purge	6.0	12.00	13.15	--	--
12/30/99	1040	post-purge	6.0	11.50	12.45	--	--
12/30/99	1050	post-purge	6.0	11.80	12.20	--	--
12/30/99	1140	pre-purge	0	--	10.95*		
12/30/99	1148	18.3-23	--	--	16.97	--	--
12/30/99	1153-1156	18.3-23	--	--	17.40	8.71	8.80
12/30/99	1200	18.3-23	8.0	--	17.99	--	--
12/30/99	1205-1206	18.3-23	9.8	--	17.95	8.71	8.81
12/30/99	1230	post-purge	9.8	--	12.84	--	--
12/30/99	1241	post-purge	9.8	--	12.30	--	--
12/30/99	1251	post-purge	9.8	--	11.75	--	--

WL = Water level measured from top of inner casing.

-- = not recorded.

\* = Pre-purge water level measurement after setting packer in well.



**DAY ENVIRONMENTAL, INC.**  
**GROUNDWATER PACKER SAMPLING PURGE LOG**

**Well #:MW-21**

<b>Date</b>	<b>Time Interval</b>	<b>Sample Interval (feet)</b>	<b>Cumulative Amount Purged (gallons)</b>	<b>WL Inside Packer (feet)</b>	<b>WL Above Packer (feet)</b>
12/28/99	847	pre-purge	0	12.03	12.03
12/28/99	1015	pre-purge	0	11.69*	11.72*
12/28/99	1030	33-37	1.8	34.1	11.75
12/28/99	1037	33-37	2.2	34.65	11.80
12/28/99	1050	33-37	3.5	34.97	11.84
12/28/99	1102	33-37	4.0	35.02	11.87
12/28/99	1117	post-purge	4.0	32.76	11.90
12/28/99	1133	post-purge	4.0	20.95	11.90
12/28/99	1148	post-purge	4.0	18.47	11.92
12/28/99	1203	post-purge	4.0	17.03	11.92
12/28/99	1218	post-purge	4.0	16.51	11.94
12/28/99	1233	post-purge	4.0	16.02	11.93
12/28/99	1304	pre-purge	0	12.62	12.62
12/28/99	1343	pre-purge	0	11.43*	11.83*
12/28/99	1352	28-33	1.5	21.30	11.85
12/28/99	1401	28-33	3.0	22.80	11.90
12/28/99	1413	28-33	6.0	28.54	11.96
12/28/99	1426	post-purge	6.0	12.90	12.03
12/28/99	1435	post-purge	6.0	12.65	12.05
12/28/99	1446	pre-purge	0	12.65	12.07
12/28/99	1515	pre-purge	0	11.50*	12.35*
12/28/99	1522	23-28	1.5	23.13	12.34
12/28/99	1529	23-28	2.5	24.80	12.34
12/28/99	1533	23-28	3.25	22.90	12.35
12/28/99	1550	post-purge	3.25	12.32	12.36
12/29/99	801	pre-purge	0	--	12.12
12/29/99	806	pre-purge	0	--	11.60*
12/29/99	910	18-23	20	--	19.25
12/29/99	940	post-purge	20	--	15.44
12/29/99	953	post-purge	20	--	15.04
12/29/99	1016	post-purge	20	--	14.15
12/29/99	1035	post-purge	20	--	13.59

WL = Water level measured from top of inner casing.

\* = Pre-purge water level measurement after setting packer in well.

-- = not recorded.

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #:MW-17

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE : 12/29/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Partly cloudy, ~25°F, 0-5 MPH wind.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.5 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 11.09' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 33' to 37.5' (4.5' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  
CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS  
4" (0.3333) 0.6528 (0 - 18.3' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT  
3" (0.250) 0.380 (18.3 - 38.3' BGS)  
CALCULATED PURGE VOLUME [GAL]: 5.13 (3 TIMES CASING VOLUME OF INTERVAL  
BEING SAMPLED)  
ACTUAL VOLUME PURGED [GAL]: 4.5 (air in purge tubing)  
PURGE METHOD: foot valve and tubing PURGE START: 1311 END: 1422

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-17 (33-37.5')	1630/ 12-29-99	1/2" ID 2' long steel bailer	ASP 95-1 (VOCs)	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID READING
14.75	17.9	6.99	256	600	Cloudy	--

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #:MW-17

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE : 12/30/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Cloudy, ~30°F, 0-5 MPH wind.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.5 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 10.94' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 28' to 33' (5' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)	CALCULATIONS
4" (0.3333)	0.6528 (0 - 18.3' BGS)	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250)	0.380 (18.3 - 38.3' BGS)	

  
CALCULATED PURGE VOLUME [GAL]: 5.7 (3 TIMES CASING VOLUME OF INTERVAL BEING SAMPLED)  
ACTUAL VOLUME PURGED [GAL]: 6.0  
PURGE METHOD: foot valve and tubing PURGE START: 759 END: 829

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN (S)	SAMPLE APPEARANCE
1506-17(28-33')	920/ 12-30-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY $\mu$ S/cm	TURBIDITY (NTU)	VISUAL	PID READING
10.95	19.0	6.65	1029	500	Cloudy	--

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #: MW-17

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/30/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Cloudy, ~30°F, 0-5 MPH wind.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.5 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 10.60' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 23' to 28' (5' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)	CALCULATIONS
4" (0.3333)	0.6528 (0 - 18.3' BGS)	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250)	0.380 (18.3 - 38.3' BGS)	

  
CALCULATED PURGE VOLUME [GAL]: 5.7 (3 TIMES CASING VOLUME OF INTERVAL BEING SAMPLED)  
ACTUAL VOLUME PURGED [GAL]: 6.0  
PURGE METHOD: foot valve and tubing PURGE START: 938 END: 1005

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-17(23-28')	1100/ 12-30-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy, sulfur odor.

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY $\mu$ S/cm	TURBIDITY (NTU)	VISUAL	PID READING
11.80	19.1	7.88	988	>1,100	Cloudy	--

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #:MW-17

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE : 12/30/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Cloudy, ~30°F, 0-5 MPH wind.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.5 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 10.60' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 18.3' to 23' (4.7' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  
CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS  
4" (0.3333) 0.6528 (0 - 18.3' BGS) VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT  
3" (0.250) 0.380 (18.3 - 38.3' BGS)  
CALCULATED PURGE VOLUME [GAL]: 9.62 (1 TIMES PERMANENT 6" CASING  
VOLUME AND 3 TIMES 5' OPEN ROCK  
VOLUME OF INTERVAL BEING SAMPLED,  
LESS VOLUME OF PACKER EQUIPMENT)  
ACTUAL VOLUME PURGED [GAL]: 9.8  
PURGE METHOD: foot valve and tubing PURGE START: 1142 END: 1205

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN (S)	SAMPLE APPEARANCE
1506-17(18.3-23')	1256/ 12-30-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID READING
11.75	18.9	6.88	1045	120	Cloudy	--

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #: MW-21

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/28/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Mostly cloudy, 10-15°F.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.0 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 12.03' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 33' to 37' (4' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)	CALCULATIONS
6" (0.5000)	1.4688 (0 - 18' BGS)	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250)	0.380 (18 - 38' BGS)	

  
CALCULATED PURGE VOLUME [GAL]: 4.56 (3 TIMES CASING VOLUME OF INTERVAL BEING SAMPLED)  
ACTUAL VOLUME PURGED [GAL]: 4.0 (dry)  
PURGE METHOD: foot valve and tubing PURGE START: 1025 END: 1055

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME/ DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-21(33-37')	1255/ 12-28-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Black/gray, sulfur odor.

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID READING
16.02	11.6	7.13	26.2	850	dark gray	--

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #: MW-21

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/28/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Mostly cloudy, 10-15°F.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.0 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 12.62' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 28' to 33' (5' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)	CALCULATIONS
6" (0.5000)	1.4688 (0 - 18' BGS)	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250)	0.380 (18 - 38' BGS)	

  
CALCULATED PURGE VOLUME [GAL]: 5.7 (3 TIMES CASING VOLUME OF INTERVAL  
BEING SAMPLED)  
ACTUAL VOLUME PURGED [GAL]: 6.0  
PURGE METHOD: foot valve and tubing PURGE START: 1347 END: 1413

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-21 (28-33')	1445/ 12-28-99	1/2" ID 2' long steel bailer	ASP 95-1 (VOCs)	Cloudy gray, sulfur odor.

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID READING
12.65	11.2	7.3	613	170	Cloudy gray	--

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Well #:MW-21

SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97  
PROJECT NAME: RI/FS DATE: 12/28/99  
SAMPLE COLLECTOR(S): JAD  
WEATHER CONDITIONS: Mostly cloudy, 10-15°F.

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.0 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 12.65' (MEASURED FROM T.O.C.)  
PACKERED INTERVAL BEING SAMPLED [FT]: 23 to 28' (5' column)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:  
T.O.C. = Top of inner casing.  
CALCULATIONS:  

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)	CALCULATIONS
6" (0.5000)	1.4688 (0 - 18' BGS)	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250)	0.380 (18 - 38' BGS)	

  
CALCULATED PURGE VOLUME [GAL]: 5.7 (3 TIMES CASING VOLUME OF INTERVAL BEING SAMPLED)  
ACTUAL VOLUME PURGED [GAL]: 3.25 (dry)  
PURGE METHOD: foot valve and tubing PURGE START: 1517 END: 1532

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN (S)	SAMPLE APPEARANCE
1506-21 (23-28')	1604/ 12-28-99	1/2" ID 2' long steel bailer	ASP 95-1 (VOCs)	Light gray cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY $\mu$ S/cm	TURBIDITY (NTU)	VISUAL	PID READING
12.32	12.7	6.87	790	200	Light gray cloudy	--

DAY ENVIRONMENTAL, INC.



## MONITORING WELL SAMPLING LOG

Well #:MW-21

## SECTION 1

SITE LOCATION: 95 Mt. Read Blvd, Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE: 12/29/99

SAMPLE COLLECTOR(S): JAD

WEATHER CONDITIONS: Partly cloudy, 15-20°F.

## SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 37.0 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 12.12' (MEASURED FROM T.O.C.)

PACKERED INTERVAL BEING SAMPLED [FT]: 18' to 23' (5' column)

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

T.O.C. = Top of inner casing.

CALCULATIONS:

CASING DIA. (FT)

WELL CONSTANT (GAL/FT)

CALCULATIONS

6" (0.5000)

1.4688 (0 - 18' BGS)

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

3" (0.250)

0.380 (18 - 38' BGS)

CALCULATED PURGE VOLUME [GAL]: 14.34 (1 TIMES PERMANENT 6" CASING  
VOLUME AND 3 TIMES 5' OPEN ROCK  
VOLUME OF INTERVAL BEING SAMPLED  
LESS VOLUME OF PACKER EQUIPMENT)

ACTUAL VOLUME PURGED [GAL]: 20

PURGE METHOD: foot valve and tubing PURGE START: 807 END: 910

## SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
1506-21(18-23')	1045/ 12-29-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy gray

## SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID READING
14.15	12.3	6.77	633	110	Cloudy light gray/brown	--

DAY ENVIRONMENTAL, INC.

PASSIVE DIFFUSION SAMPLER LOG  
MONITORING WELL MW-22

SECTION 1 - SITE INFORMATION

SITE LOCATION: 95 Mt. Read Blvd., Rochester, New York JOB #: 1506R-97

PROJECT NAME: RI/FS DATE : 10/06/00

SAMPLE COLLECTOR(S): JAD

WEATHER CONDITIONS: 10/06/00-Drizzle/mist, 50-55°F; 10/25/00 - Overcast, mist, 60°F+

SECTION 2 - WELL INFORMATION

DEPTH OF WELL [FT]: 79.75 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 13.82 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 66.03 (DEPTH OF WELL - SWL)

10/06/00 - Diffusion samplers installed

10/25/00 - Diffusion samplers retrieved

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCANS)	SAMPLE APPEARANCE
DS-1 (53.40')	10/25/00 09:28	Passive Diffusion sampler	TCL VOCs	Clear
DS-2 (57.30')	10/25/00 09:32	Passive Diffusion sampler	TCL VOCs	Clear
DS-3 (60.85')	10/25/00 09:37	Passive Diffusion sampler	TCL VOCs	Clear
DS-4 (67.85')	10/25/00 09:42	Passive Diffusion sampler	TCL VOCs	Clear
DS-5 (72.05')	10/25/00 09:46	Passive Diffusion sampler	TCL VOCs	Clear
DS-6 (77.35')	10/25/00 09:52	Passive Diffusion sampler	TCL VOCs	Clear

## **APPENDIX E**

### **Data Usability Summary Report (DUSR)**

# Data Validation Services

Cobble Creek Road P. O. Box 208

North Creek, N. Y. 12853

Phone 518-251-4429

June 26, 1999; Revised July 14, 1999

Jeff Danzinger  
Day Environmental  
2144 Brighton-Henrietta Townline Rd.  
Rochester, NY 14623

RE: Data Usability Summary Report for Former General Circuits Site Data Packages  
STL/RECRA SDG Nos. A98-1237, A98-1261/1289, A98-1770, A98-4049/4067/4076/4146,  
A98-4147/4177, A98-5082, A98-6169/6186, A98-6184, and A99-0954

Dear Mr. Danzinger:

Review has been completed for the data packages generated Severn Trent Laboratories (also as Recra Laboratories), pertaining to samples collected at the Former General Circuits site. Samples collected between April 1998 and February 1999 were processed for various parameters including full TCL/TAL, as well as combinations of TCL volatiles, fourteen metals (soils), full TAL (aqueous), and total chromium/ hexavalent chromium analytes. Matrix spikes/duplicates, and an equipment blank were also processed. Methodologies utilized are those of the 1995 NYSDEC ASP/USEPA SW846.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and some review of associated raw QC data. Full validation has not been performed; however, the reported sample and QC data have been reviewed for application of validation qualifiers with guidance from the USEPA National Functional Guidelines and the USEPA Region II SOPs HW-2 and HW-6. Those qualifications which impact significantly on the usability of the sample results are cited within this report. All conclusions are based upon assumption of accurate reported values on the QC summary forms, and compliance in sample processing. The following items were reviewed:

- \* Laboratory Narrative Discussion
- \* Custody Documentation
- \* Holding Times
- \* Surrogate and Internal Standard Recoveries
- \* Matrix Spike Recoveries/Duplicate Correlations
- \* Field Duplicate Correlations
- \* Preparation/Calibration Blanks
- \* Control Spike/Laboratory Control Samples
- \* Instrumental Tunes
- \* Calibration Standards
- \* Instrument IDLs
- \* Method Compliance

Those items listed above which show deficiency are discussed within the text of this narrative. All other items undergoing this DUSR review were determined to be acceptable.

Attached to this narrative are copies of laboratory case narratives and resubmission communications, which should be reviewed in conjunction with this report. The following text discusses quality issues of concern.

**In summary**, DUSR review indicates that sample results were generated from acceptable processing, and are usable with respect to project goals, with minor qualifications for some values as estimated.

1. The pesticide/PCB results for 1506-W-MW-17 are of borderline usability due to matrix effect, with a possible low bias of an order of magnitude.
2. The metals QC results for aqueous and one soil sample showed potential matrix effect, causing numerous element values to be qualified as estimated.
3. The NYSDEC ASP holding time for hexavalent chromium in soil was not met, and results for this analyte in the soil samples is therefore qualified as estimated, with a possible low bias. Additionally, significant variance was observed in lab duplicate correlation of hexavalent chromium in soils.
4. Several analyte detections are edited to nondetection due to possible contamination.

## **General**

Although required by the ASP deliverables, all internal custody forms, and the laboratory NYSDEC Sample Preparation and Analysis Summary Forms associated with some of the earlier data packages are not provided. Some of the cover pages for the metals data package sections, and organic MDL/IDL study summaries were also not provided. Review was performed without the summary forms by inspection of raw data. The internal custodies should be requested of the laboratory if documentation of all sample tracking is of concern for this project.

The chain-of-custody associated with samples in SDG A98-4049/4067/4076/4146 showed no receipt signature for samples collected 9/24/98. No relinquish signature was present on the custody form for the release of samples in SDG A98-5082 from the laboratory to the subcontracted laboratory.

Some of the samples were collected and held prior to shipment to the laboratory. For those cases, evaluation of technical holding times has been made from sample collection. No delays from collection to shipment were observed for those samples requiring the hexavalent chromium analysis.

Although the custody requests full TCL/TAL analyses for 1506-S-55, only metals analyses were conducted.

## **SOIL SAMPLES**

### **Volatile Analyses**

Analyte values which show the laboratory qualifier "E" should be derived from the dilution ("DL") analysis of the sample. These edited values should then be qualified as estimated ("J"), possibly biased low due to use of a previously opened sample vial. Unless noted elsewhere within this text, all other analyte values can be derived without qualification from the original analysis of the sample.

The following samples exhibited elevated surrogate standard recoveries. Therefore, **detected** values for the samples should be considered estimated ("J"):

- 1506-S-08     -use only the initial analysis, not the ("-DL")
- 1506-S-12     -all detected values except tetrachloroethene are estimated; tetrachloroethene value is derived unqualified from the dilution analysis.
- 1506-S-17     -all detected values estimated

Although the samples 1506-S-46 and 1506-S-47 were analysed within the required holding time from receipt, the technical holding time from collection was exceeded by four days. Therefore the volatile results for these samples should be considered estimated ("J"), possibly biased low.

Accuracy and precision evaluations were performed on sample 1506-S-3, 1506-S-17, 1506-S-46, and 1506-S-58 and results were acceptable, with the exception of the trichloroethene recoveries in 1506-S-58 (210% and 183%). Results for trichloroethene in the sample are already considered estimated due to value below CRDL.

Due to copresence in associated blanks, the detections of methylene chloride and toluene in samples 1506-S-46, 1506-S-47, 1506-S-48, 1506-S-49, and 1506-S-50 should be considered contamination, and results edited to nondetection at the CRDL. Low level methylene chloride detections in all project samples are suspect.

The detection of tetrachloroethene in 1506-S-58 may also be contamination (per associated blank level), and the result should be edited to nondetection ("U") at the originally reported value.

Calibration standard responses which were slightly out of validation guidelines were reviewed for impact on the reported results. No effect was noted, with the exception that the bromomethane value for 1506-S-56, and the result for tetrachloroethene in 1506-N-MW-9, should be considered estimated ("J") due to low standard responses (both 39%D).

Those TICs showing the "B" flag should be disregarded as sample components due to copresence in the associated blank.

### **Semivolatile Analyses**

Although the sample 1506-S-58 was analysed within the required holding time from receipt, the technical holding time from collection was exceeded by three days. Therefore the semivolatile results for this sample should be considered estimated ("J"), possibly biased low.

Accuracy and precision evaluations were performed on sample 1506-S-58, and produced results within recommended ranges, or slightly outside, not affecting sample reported results.

Blanks showed no analyte concentrations. However, detected phthalate levels in the samples are at concentrations typical of contamination. Calibration standard responses were acceptable.

Those TICs showing the "B" and/or "A" flags should be disregarded as sample components due to copresence in the associated blank.

## Pesticide/PCB Analyses

Although the sample 1506-S-58 was analysed within the required holding time from receipt, the technical holding time from collection was exceeded by one day. Therefore the semivolatile results for this sample should be considered estimated ("J"), possibly biased low.

Accuracy and precision evaluations were performed on sample 1506-S58, and produced results within recommended ranges, or slightly outside, not affecting sample reported results.

Due to copresence in the associated blank, the detection of endrin in 1506-S-58 is considered contamination, and the result should be edited to nondetection at the CRDL ("3.6 U").

Slightly elevated GPC recoveries do not affect the sample reported (nondetection) results.

## Metals/CN Analyses

Accuracy and precision evaluations were performed for the fourteen metals on samples 1506-T-19, 1506-S-35, and 1506-S-55 and results were within recommended ranges, with the following exceptions. Associated sample values should be considered estimated ("J"):

1. 1506-T-19 showed cadmium (49% recovery) and lead (elevated duplicate correlation  $>+2 \times \text{CRDL}$ ). Affects 1506-S-06, 1506-S-15, and 1506-T-19.
2. 1506-S-35 showed numerous recovery outliers. Most values would have been better if calculated against the laboratory duplicate: antimony, beryllium, cadmium, chromium, copper, lead, nickel, silver, and zinc. Affects chromium in all samples in SDG A98-4049/4067/4076/4146, and the other elemental results for 1506-S-28 and 1506-S-35.
3. 1506-S-55 showed antimony (64%) and manganese (290%). Affects 1506-S-55.

Accuracy and precision for chromium-only were performed on 1506-S-3, 1506-S-17, 1506-S-22, 1506-S-33, and 1506-S-38. All values were within validation guidelines.

ICP Serial dilution evaluations were performed at correct frequency, and all showed acceptable responses except those listed below. Associated sample values are considered estimated ("J"):

1. Barium and zinc in 1506-T-19 Affects 1506-S-06, 1506-S-15, and 1506-T-19.
2. Copper in 1506-S-55. Affects 1506-S-55

The variance in reported values for the elements from actual concentrations are not expected to be extreme.

Due to poor recovery of lead in the low concentration standard (CRI), associated sample lead results for 1506-S-06, 1506-S-15, and 1506-T-19 should be considered estimated ("J").

Mercury calibration standards should have included on at the CRDL of 0.2 ug/L.

## Hexavalent Chromium

Although section 2.6.2 of the project Work Plan shows that the 1995 NYSDEC ASP holding time (24 hour from VTSR for hexavalent chromium in soils) should be met for this project, the laboratory used that of the 1996 USEPA method 3060A (attached) for the soil sample processing. Therefore soil samples were analysed between eight and thirty days from collection. Based upon the USEPA discussion regarding the stability of the analyte (section 6.4), the outlying analysis data are not rejected, but the results for this analyte in the soil samples should be considered estimated ("J" and "UJ"), possibly biased low, due to the extended holding time.

The following corrections to sample reported results should be made (apparent transcription errors):

1. Edit the hexavalent chromium result for 1506-S-29 to " 0.88 mg/kg". This removes the "U" flag, and reduces the value by a factor of 10.
2. Remove the "U" from the results for 1506-S-31 and 1506-S-34, therefore showing detection at the originally reported values.

Accuracy and precision evaluations were performed on 1506-S-17, 1506-S-22, 1506-S-38, and 1506-S-43. All values were within validation guidelines, except the duplicate correlation for 1506-S-38, which showed great variance (detection at 4.4 mg/kg, and nondetection at 0.4 mg/kg). Values for this analyte in the samples 1506-S-26 through 1506-S-29, 1506-S-31, 1506-S-34, and 1506-S-36 through 1506-S-38 should be considered additionally estimated ("J" and "UJ").

It should be noted that the accuracy (matrix spike) evaluations were not of great use for this analysis because they were performed at concentrations exceeding fifteen hundred times the reported detection limit, and well above the project sample concentrations.

## AQUEOUS SAMPLES

### VOA Analyses

Analyte values which show the laboratory qualifier "E" should be derived from the dilution ("DL") analysis of the sample. These edited values should then be qualified as estimated ("J"), possibly biased low due to use of a previously opened sample vial. Unless noted elsewhere within this text, all other analyte values can be derived without qualification from the original analysis of the sample.

The following samples exhibited elevated surrogate standard recoveries. Therefore, **detected** values for the samples should be considered estimated ("J"):

- 1506-W-MW-9 -all detected values except trichloroethene, tetrachloroethene, and toluene (these three values to be derived from dilution unqualified)
- 1506-W-MW-12 -all detected values except trichloroethene and tetrachloroethene; derived these two values unqualified from the dilution analysis.

Although the sample 1506-S-51 (equipment blank) was analysed within the required holding time from receipt, the technical holding time from collection was exceeded by four days. Therefore the volatile results for this sample should be considered estimated ("J"), possibly biased low.



Due to copresence at low levels in the associated blank, all detected tetrachloroethene values in the samples in SDG A9806169/6186 below 10 ug/L should be considered contamination, and results edited to "10 U".

Accuracy and precision evaluations were performed on samples 1506-W-MW-17 and 1506-W-MW-8, and results were acceptable.

Calibration standard responses which were slightly out of validation guidelines were reviewed for impact on the reported results. No effect was noted.

Those TICs showing the "B" flag should be disregarded as sample components due to copresence in the associated blank.

### **BNA Analyses**

Accuracy and precision evaluations were performed on sample 1506-W-MW-17, and produced results within recommended ranges, or slightly outside, not affecting sample reported results.

Blanks showed no analyte concentrations. However, detected phthalate levels in the samples are at concentrations typical of contamination. Calibration standard responses were acceptable.

Those TICs showing the "B" and/or "A" flags should be disregarded as sample components due to copresence in the associated blank.

The first two TICs reported for sample 1506-W-MW-9 are volatile target analytes, and should be disregarded from the BNA evaluation. The one ID'd as tetrachloroethene is also in the associated blank, and should have been flagged as "B".

### **Pesticide/PCB Analysis**

Sample 1506-W-MW-17 produced little or no recovery of the surrogate standards ( $\leq 10\%$ ). Matrix spikes were performed on the sample, with surrogate recoveries between 10% and 14%. Based upon the response of the matrix spikes, results for the analytes which are not matrix spike compounds in the sample are to be qualified as estimated ("J"), with a possible low bias of about a factor of ten. Results for the following (matrix spike) compounds in the sample are to be edited to the associated elevated detection limit, and qualified as estimated ("J"):

g-BHC, heptachlor, and aldrin to 0.5 ug/L ("0.5 UJ")  
dieldrin, endrin, and 4,4'-DDT to 1.0 ug/L ("1.0 UJ")

Accuracy and precision evaluations were performed on sample 1506-W-MW-17, and produced low recoveries for aldrin, 4,4'-DDT and heptachlor (all between 22% and 41%). These sample results are already estimated due to surrogate recovery.

## Metals/CN Analyses

Accuracy and precision evaluations were performed for the full TAL metals on samples 1506-W-MW-17, and results were within recommended ranges, with the following exceptions, for which aqueous sample values should be considered estimated ("J"): aluminum, magnesium, potassium, lead, and sodium for 1506-W-MW-09, 1506-W-MW-16, and 1506-W-MW-17; selenium for 1506-W-MW-16 (a detected value).

The selenium results for 1506-W-MW-09 and 1506-W-MW-17 (nondetected results) should be rejected ("R") due to lack of recovery of the spike.

Accuracy and precision for chromium-only were performed on 1506-W-MW-8. Values were within validation guidelines.

ICP Serial dilution evaluations were performed on 1506-N-MW-9 (chromium only), and 1506-W-MW-17 (full TAL). The following analytes showed outlying correlations, and results for these in the aqueous samples 1506-W-MW-16, 1506-W-MW-17, and 1506-W-MW-09 should be considered estimated (three of them also showed outlying accuracy and precision): aluminum, calcium, magnesium, manganese, and sodium.

Mercury calibration standards should have included on at the CRDL of 0.2 ug/L.

Metals digestion logs should show sample pHs.

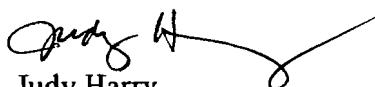
## Hexavalent Chromium

Accuracy and precision determinations were performed on 1506-W-MW-8 and 1506-N-MW-9. Results were acceptable.

Holding times were met for aqueous sample processing.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

  
Judy Harry

5.6 Lead Chromate:  $\text{PbCrO}_4$ , analytical reagent grade. The insoluble matrix spike is prepared by adding 10-20 mg of  $\text{PbCrO}_4$  to a separate sample aliquot. Store under dry conditions at 20-25°C in a tightly sealed container.

5.7 Digestion solution: Dissolve  $20.0 \pm 0.05$  g NaOH and  $30.0 \pm 0.05$  g  $\text{Na}_2\text{CO}_3$  in reagent water in a one-liter volumetric flask and dilute to the mark. Store the solution in a tightly capped polyethylene bottle at 20-25°C and prepare fresh monthly. The pH of the digestion solution must be checked before using. The pH must be 11.5 or greater, if not, discard.

5.8 Potassium dichromate,  $\text{K}_2\text{Cr}_2\text{O}_7$ , spiking solution (1000 mg/L Cr(VI)): Dissolve 2.829 g of dried (105°C)  $\text{K}_2\text{Cr}_2\text{O}_7$  in reagent water in a one-liter volumetric flask and dilute to the mark. Alternatively, a 1000 mg/L Cr(VI) certified primary standard solution can be used (Fisher AAS standard or equivalent). Store at 20-25°C in a tightly sealed container for use up to six months.

5.8.1 Matrix spiking solution (100 mg/L Cr(VI)): Add 10.0 mL of the 1000 mg Cr(VI)/L made from  $\text{K}_2\text{Cr}_2\text{O}_7$  spiking solution (Section 5.8) to a 100 mL volumetric flask and dilute to volume with reagent water. Mix well.

5.9 Reagent Water - Reagent water will be free of interferences. Refer to Chapter One for a definition of reagent water.

## 6.0 SAMPLE COLLECTION, PRESERVATION, AND HANDLING

6.1 Samples must have been collected using a sampling plan that addresses the considerations discussed in Chapter Nine of this manual.

6.2 Samples should be collected using devices and placed in containers that do not contain stainless steel (e.g., plastic or glass).

6.3 Samples should be stored field-moist at  $4 \pm 2^\circ\text{C}$  until analysis.

6.4 Hexavalent chromium has been shown to be quantitatively stable in field-moist soil samples for 30 days from sample collection. In addition, Cr(VI) has also been shown to be stable in the alkaline digestate for up to 168 hours after extraction from soil.

6.5 Hexavalent chromium solutions or waste material that are generated should be disposed of properly. One approach is to treat all Cr(VI) waste materials with ascorbic acid or other reducing agent to reduce the Cr(VI) to Cr(III). For additional information on health and safety issues relating to chromium, the user is referred to References 10.7 and 10.10.

## 7.0 PROCEDURE

7.1 Adjust the temperature setting of each heating device used in the alkaline digestion by preparing and monitoring a temperature blank [a 250 mL vessel filled with 50 mLs digestion solution (Section 5.7)]. Maintain a digestion solution temperature of 90-95°C as measured with a NIST traceable thermometer or equivalent.

7.2 Place  $2.5 \pm 0.10$  g of the field-moist sample into a clean and labeled 250 mL digestion vessel. The sample should have been mixed thoroughly before the aliquot is removed.

000002

### CASE NARRATIVE

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-01  
1506-S-02  
1506-S-03

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.

### METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

No quality control was digested or analyzed due to a laboratory oversight.

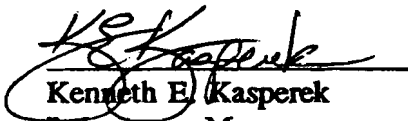
### HEXAVALENT CHROMIUM DATA

The relative percent difference between recoveries of the Matrix Spike Blank and Matrix Spike Blank Duplicate was outside of quality control limits; individual spike recoveries were compliant.



000003

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Manager  
5/11/98  
Date

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000002

CASE NARRATIVE

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-04  
1506-S-05  
1506-S-06  
1506-S-07  
1506-S-08  
1506-S-09  
1506-S-10  
1506-S-11  
1506-S-12  
1506-S-13  
1506-S-14  
1506-S-15  
1506-S-16  
1506-S-17  
1506-S-17 MATRIX DUPLICATE  
1506-S-17 MATRIX SPIKE  
1506-S-17 MATRIX SPIKE DUPLICATE  
1506-T-19  
1506-T-19 MATRIX DUPLICATE  
1506-T-19 MATRIX SPIKE

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.



The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

#### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Sample 1506-S-08 yielded a recovery for surrogate p-Bromofluorobenzene which was outside of quality control limits. Due to severe matrix this sample was not reanalyzed. Sample 1506-S-08 DL shows compliant recoveries for all surrogates; the recovery of internal standard 1,4-Difluorobenzene was outside quality control limits. Due to severe matrix, sample 1506-S-08 DL was not reanalyzed.

Sample 1506-S-12 yielded a recovery for surrogate 1,2-Dichloroethane-D4 which was outside quality control limits. Due to high concentrations of Tetrachloroethene, this sample was not reanalyzed. Sample 1506-S-12 DL shows compliant recoveries for all surrogates.

Samples 1506-S-17, 1506-S-17 MS and 1506-S-17 SD yielded recoveries for surrogate 1,2-Dichloroethane-D4 which were outside quality control limits.

Sample 1506-S-17 SD yielded a spike recovery for Trichloroethene which was outside quality control limits.

#### METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The recovery of Cadmium fell outside of quality control limits in sample 1506-T-19 Matrix Spike.

The relative percent difference between sample 1506-S-17 and the Matrix Duplicate performed on this sample exceeded quality control limits for Chromium.

The relative percent difference between sample 1506-T-19 and the Matrix Duplicate performed on this sample exceeded quality control limits for Lead.



The Laboratory Control Sample for Mercury is lot #227.

#### HEXAVALENT CHROMIUM DATA

Please note that the Hexavalent Chromium analyses were performed by the Wet Chemistry group.

The relative percent difference between recoveries of the Matrix Spike Blank and Matrix Spike Blank Duplicate was outside of quality control limits; individual spike recoveries were compliant.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

  
Kenneth E. Rasperek  
Laboratory Manager

6/10/98  
Date

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000005

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: RECRA LABNET, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-04	A8126101	-	-	-	-	ASP95	-
1506-S-05	A8126102	-	-	-	-	ASP95	-
1506-S-06	A8126103	-	-	-	-	ASP95	-
1506-S-07	A8126104	-	-	-	-	ASP95	-
1506-S-08	A8128901	ASP95	-	-	-	-	-
1506-S-09	A8128902	ASP95	-	-	-	-	-
1506-S-10	A8128903	ASP95	-	-	-	-	-
1506-S-11	A8128904	ASP95	-	-	-	-	-
1506-S-12	A8128905	ASP95	-	-	-	-	-
1506-S-13	A8128906	ASP95	-	-	-	ASP95	-
1506-S-14	A8128907	ASP95	-	-	-	-	-
1506-S-15	A8128908	-	-	-	-	ASP95	-
1506-S-16	A8128909	ASP95	-	-	-	ASP95	-
1506-S-17	A8128910	ASP95	-	-	-	ASP95	-
1506-T-19	A8128912	-	-	-	-	ASP95	-

NYSDEC-1



000002

## CASE NARRATIVE

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNV

Contract Number: NY97-209

Sample Identifications: 1506-S-21  
1506-S-22  
1506-S-22 MATRIX DUPLICATE  
1506-S-22 MATRIX SPIKE

## METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

## COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.

## METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The serial dilution on sample 1506-S-22 was performed at a dilution factor of four instead of five.



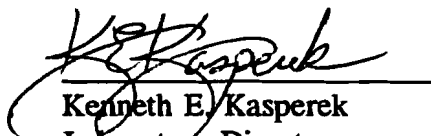
000003

HEXA VALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

The relative percent difference between recoveries of the Matrix Spike Blank A8177005 and Matrix Spike Blank Duplicate A8177006 was outside of quality control limits. The individual spike recovery for the Matrix Spike was also non-compliant; the MSD was compliant.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

6/17/98  
Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



CASE NARRATIVE

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-20  
1506-S-23  
1506-S-24  
1506-S-25  
1506-S-26  
1506-S-27  
1506-S-28  
1506-S-29  
1506-S-30  
1506-S-31  
1506-S-32  
1506-S-33  
1506-S-33 MATRIX DUPLICATE  
1506-S-33 MATRIX SPIKE  
1506-S-34  
1506-S-35  
1506-S-35 MATRIX DUPLICATE  
1506-S-35 MATRIX SPIKE  
1506-S-36  
1506-S-37  
1506-S-38  
1506-S-38 MATRIX DUPLICATE  
1506-S-38 MATRIX SPIKE  
1506-S-39  
1506-S-40  
1506-S-41  
Trip Blank

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.



## METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The serial dilution on sample 1506-S-28 was non-compliant for Potassium.

The serial dilution on sample 1506-S-35 was non-compliant for Potassium and Chromium.

Sample 1506-S-28 required a dilution of ten for Selenium.


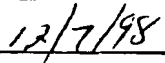
Sample 1506-S-35 Matrix Spike yielded non-compliant recoveries for Antimony, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Silver and Zinc. Sample 1506-S-35 Matrix Duplicate was non-compliant for Chromium, Copper and Lead.

Sample 1506-S-28 Matrix Spike yielded recoveries outside of quality control limits for Antimony, Arsenic, Beryllium, Cadmium, Selenium and Silver. Sample 1506-S-28 Matrix Duplicate was non-compliant for Zinc, Cadmium, Copper, Silver and Molybdenum. These samples and sample 1506-S-28 were redigested to confirm matrix interference.

## HEXAVALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director  
  
Date

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**CASE NARRATIVE**

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-42  
1506-S-43  
1506-S-44  
1506-S-45  
1506-S-46  
1506-S-46 MS  
1506-S-46 MSD  
1506-S-47  
1506-S-48  
1506-S-49  
1506-S-50  
1506-S-51

**METHODOLOGY**

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

**COMMENTS**

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Page.

**VOLATILE DATA**

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.



VOLATILE DATA Continued

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

No deviations from protocol were encountered during the analytical procedures.

METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

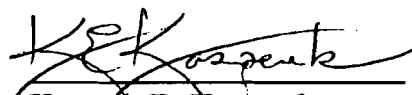
The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

HEXAVALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

No deviations from protocol were encountered during the analytical procedures.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

12/2/98  
Date



000004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATIONSAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

AB NAME: RECRA LABNET, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-42	A8414701	-	-	-	-	ASP95	-
1506-S-43	A8414702	-	-	-	-	ASP95	ASP95
1506-S-44	A8414703	-	-	-	-	ASP95	ASP95
1506-S-45	A8414704	-	-	-	-	ASP95	ASP95
1506-S-46	A8417701	ASP95	-	-	-	-	-
1506-S-47	A8417702	ASP95	-	-	-	-	-
1506-S-48	A8417703	ASP95	-	-	-	-	-
1506-S-49	A8417704	ASP95	-	-	-	-	-
1506-S-51	A8417706	ASP95	-	-	-	-	-
1506-S-50	A8417705	ASP95	-	-	-	-	-

NYSDEC-1







000002

## CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-S-52  
1506-S-53  
1506-S-54  
1506-S-55  
1506-S-55 MD  
1506-S-55 MS  
1506-S-56  
1506-T-57

## METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

## COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

Analyses for Metals were performed by Recra LabNet's Lionville, PA facility and are enclosed as a self contained data package (SUBCONTRACTED DATA) within this report.

## VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

No deviations from protocol were encountered during the analytical procedures.

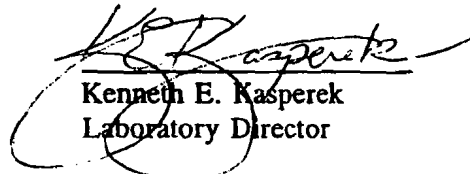
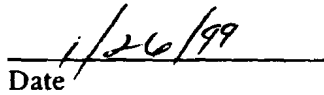


000003

METALS DATA

Case narrative is enclosed within the data package.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director  
  
  
Date

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000004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATIONSAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-52	A8508201	-	-	-	-	ASP95	-
1506-S-53	A8508202	-	-	-	-	ASP95	-
1506-S-54	A8508203	-	-	-	-	ASP95	-
506-S-55	A8508204	-	-	-	-	ASP95	-
1506-T-57	A8508206	ASP95	-	-	-	-	-
1506-S-56	A8508205	ASP95	-	-	-	-	-

NYSDEC-1



Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

SDG Number: 1506NM

Sample Identification: 1506-N-MW9

### METHODOLOGY

Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Teknivant Datasystem and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

Sample 1506-N-MW9 was analyzed at an initial dilution factor of 500 due to the high concentration of some compounds of interest.

All samples were preserved to a pH of less than 2.

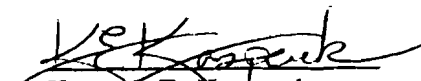
### METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

600603



I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

2/12/99

Date

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000004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: STL BUFFALO

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	OTHER
1506-N-MW9	A8619401	ASP95	-	-	-	ASP95	-

NYSDEC-1

**CASE NARRATIVE**

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

SDG Number: 1506N

Sample Identifications: 1506-N-MW9  
1506-W-MW1  
1506-W-MW10  
1506-W-MW11  
1506-W-MW12  
1506-W-MW13  
1506-W-MW14  
1506-W-MW16  
1506-W-MW17  
1506-W-MW17 MD  
1506-W-MW17 MS  
1506-W-MW17 MSD  
1506-W-MW18  
1506-W-MW19  
1506-W-MW20  
1506-W-MW21  
1506-W-MW3  
1506-W-MW4  
1506-W-MW6  
1506-W-MW7  
1506-W-MW8  
1506-W-MW8 MD  
1506-W-MW8 MS  
1506-W-MW8 MSD  
1506-W-MW9  
1506-W-SUMP  
TRIP BLANK

**METHODOLOGY**

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.



## COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

## VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

Samples 1506-W-MW20 and 1506-W-MW21 yielded a pH of seven; all other samples were preserved to a pH of less than two.

Due to high concentrations of target compounds, samples 1506-W-MW8, 1506-W-MW12, 1506-W-MW8 MS, and 1506-W-MW8 SD were analyzed at initial dilutions of ten.

Sample 1506-W-MW10 contained high concentrations of target compounds and required an initial dilution of fifty.

Samples 1506-W-MW17, 1506-W-SUMP, 1506-W-MW17 MS, and 1506-W-MW17 SD were analyzed at initial dilutions of forty due to high concentrations of target compounds.

Sample 1506-W-MW12 yielded recoveries for surrogates p-Bromofluorobenzene and Toluene-D8 which were outside quality control limits. Due to high concentrations of Tetrachloroethene, this sample was reanalyzed at a dilution. Sample 1506-W-MW12 DL yielded compliant recoveries for all surrogates.

Sample 1506-W-MW9 yielded recoveries for surrogates p-Bromofluorobenzene, 1,2-Dichloroethane-D4, and Toluene-D8 which were outside quality control limits. Due to high concentrations of target compounds, this sample was reanalyzed at a dilution. Sample 1506-W-MW9 DL yielded compliant recoveries for all surrogates.





### SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Finnigan Autoquantitation and Recri LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

The MSBLANK yielded spike recoveries for 1,2,4-Trichlorobenzene, 4-Nitrophenol, and Pyrene which were above quality control limits. Sample 1506-W-MW17 MS yielded spike recoveries for 4-Nitrophenol and Pentachlorophenol which were above quality control limits. Sample 1506-W-MW17 SD yielded a spike recovery for 4-Nitrophenol which was above quality control limits. Compound 4-Nitrophenol was not detected in any of the associated samples.

### PESTICIDES\AROCLORS DATA

Samples 1506-W-MW17, 1506-W-MW17 MS and 1506-W-MW17 SD yielded recoveries for surrogates DCB1 and DCB2 which were outside advisory quality control limits.

Sample 1506-W-MW17 MS yielded spike recoveries for Aldrin and 4,4'-DDT which were outside quality control limits. Sample 1506-W-MW17 SD yielded spike recoveries for Heptachlor, Aldrin, and 4,4'-DDT which were outside quality control limits. The relative percent difference between spike recoveries of these two samples is outside of quality control limits for Aldrin and 4,4'-DDT. Sample MSB02 was compliant.

### METALS DATA

Sample 1506-W-MW17 MS yielded recoveries outside of quality control limits for Aluminum, Magnesium, Selenium, and Sodium.

The relative percent difference between samples 1506-W-MW17 and 1506-W-MW17 MD was outside of quality control limits for Aluminum, Lead, Magnesium, Potassium, and Sodium.



"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Susan L. Tinsmith  
Laboratory Manager

Date

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000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-N-MW9	A8616901	ASP95	-	-	-	ASP95	-
1506-W-MW1	A8618601	ASP95	-	-	-	ASP95	-
1506-W-MW10	A8618608	ASP95	-	-	-	ASP95	-
1506-W-MW11	A8618609	ASP95	-	-	-	ASP95	-
1506-W-MW12	A8618610	ASP95	-	-	-	ASP95	-
1506-W-MW13	A8618611	ASP95	-	-	-	ASP95	-
1506-W-MW14	A8618612	ASP95	-	-	-	ASP95	-
1506-W-MW16	A8618613	ASP95	ASP95	-	ASP95	ASP95	-
1506-W-MW17	A8618614	ASP95	ASP95	-	ASP95	ASP95	-
1506-W-MW18	A8618615	ASP95	-	-	-	ASP95	-
1506-W-MW19	A8618616	ASP95	-	-	-	ASP95	-
1506-W-MW20	A8618617	ASP95	-	-	-	ASP95	-
1506-W-MW21	A8618618	ASP95	-	-	-	ASP95	-
1506-W-MW3	A8618602	ASP95	-	-	-	ASP95	-
1506-W-MW4	A8618603	ASP95	-	-	-	ASP95	-
1506-W-MW6	A8618604	ASP95	-	-	-	ASP95	-
1506-W-MW7	A8618605	ASP95	-	-	-	ASP95	-
1506-W-MW8	A8618606	ASP95	-	-	-	ASP95	-
1506-W-MW9	A8618607	ASP95	ASP95	-	ASP95	ASP95	-
TRIP BLANK	A8618619	ASP95	-	-	-	-	-
1506-W-SUMP	A8618620	ASP95	-	-	-	ASP95	-



000002

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-S-58  
1506-S-58 MD  
1506-S-58 MS  
1506-S-58 MSD

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

Samples 1506-S-58 Matrix Spike and Matrix Spike Duplicate yielded spike recoveries for Trichloroethene which were above quality control limits.



000003

SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

The MSBLANK and sample 1506-S-58 Matrix Spike Duplicate yielded spike recoveries for 2,4-Dinitrotoluene which were above quality control limits.

PESTICIDES\AROCLORS DATA

PEM02 analyzed on column RTXCLP2 on 02/16/99 exhibited a percent difference of 4,4'-DDT which was slightly above quality control limits.

The pesticide GPC calibration of 03/03/99 shows the percent recoveries for Dieldrin and Endrin as slightly above quality control limits.

Sample 1506-S-58 Matrix Spike yielded a recovery for Endrin which was above quality control limits.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Susan L. Tinsmith  
Laboratory Manager

Date

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000004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-58	A9095401	ASP95	ASP95	-	ASP95	-	-

NYSDEC-1

## Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, NY 12853

Phone (518) 251-4429

Facsimile (518) 251-4428

### Facsimile Transmission

TO: Jeff Danzinger

COMPANY: Day Environmental

FAX NUMBER: 716 292 0425

FROM: Judy Harry *JH*

DATE: 06-18-99

No. of pages (including cover): 2

COMMENTS: RE: Former General Circuits Site  
RECRA ID # A98-1770

Please produce a written clarification regarding the date that the two samples were collected for this delivery group. One (1506-S-22) shows a collection date of 5-15-99 (see attached custody), but a relinquish/receive date of 5/14/99.

Please fax the response to the number above. Thank you.

☐ Hardcopy to follow

☒ Hardcopy not to follow

# **DAY ENVIRONMENTAL, INC.**

AN AFFILIATE OF DAY ENGINEERING, P.C.

ENVIRONMENTAL CONSULTANTS

## **FAX TRANSMISSION**

**DATE:** June 18, 1999  
**FROM:** Jeff Danzinger (ext. 111)  
**FAX #:** (716) 292-0425  
**TO:** Judy Harry  
**COMPANY:** Data Validation Services  
**FAX#:** (518) 251-4428  
**PAGES TO FOLLOW:** 0

Dear Judy:

In response to your 6/18/99 facsimile, the collection date of 5/15/99 for sample 1506-S-22 as written on the chain of custody is incorrect. Samples 1506-S-21 and 1506-S-22 were collected on 5/13/99.

If there are any questions, please contact this office.

\*\*\*\*\*  
The information contained in this transmission is privileged and confidential. It is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, the reader is hereby notified that any consideration, dissemination or duplication of this communication is strictly prohibited.

If you have received this communication in error, please return this transmission to us at the above address by mail. We will reimburse you for postage. In addition, if this communication was received in the U.S., please notify us immediately by telephone (call collect). Thank you.



# **DAY ENVIRONMENTAL, INC.**

AN AFFILIATE OF DAY ENGINEERING, P.C.

ENVIRONMENTAL CONSULTANTS

## **FAX TRANSMISSION**

**DATE:** June 21, 1999  
**FROM:** Jeff Danzinger (ext. 111)  
**FAX #:** (716) 292-0425  
**TO:** Judy Harry  
**COMPANY:** Data Validation Services  
**FAX#:** (518) 251-4428  
**PAGES TO FOLLOW:** 0

Dear Judy:

This facsimile contains Day Environmental, Inc.'s (DAY's) responses to your questions left on voice mail on 6/21/99.

During the time between sample collection and sample shipment to the laboratory for analytical testing, the samples were in DAY's custody. Prior to shipment, samples to be selected for analysis were kept cold with one exception as follows:

- In a July 14, 1998 correspondence from the NYSDEC to DAY, the NYSDEC requested that some previously collected samples, which had not been kept cold be analyzed for total chromium (specifically samples 1506-S-20, 1506-S-23, 1506-S-23, 1506-S-24, and 1506-S-25). In this correspondence, the NYSDEC accepted that the test results for these samples would be biased low.

In some instances, DAY retained samples for greater than 48 hours prior to shipping to the laboratory. This was necessary when decisions on which soil samples to be analyzed could not be made until the specific sampling event (e.g., collecting soil samples from a series of test borings) was completed, which many times took longer than 48 hours.

Holding times for samples were not specified in the NYSDEC-approved work plan for this RI/FS project; however, since the laboratory protocol was ASP, it is assumed that the holding times identified in ASP would apply to this project. Additionally, there was no agreement between DAY and the analytical laboratory regarding extensions of holding times for this project.

If there are any questions, please contact this office.

\*\*\*\*\*

The information contained in this transmission is privileged and confidential. It is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, the reader is hereby notified that any consideration, dissemination or duplication of this communication is strictly prohibited.

If you have received this communication in error, please return this transmission to us at the above address by mail. We will reimburse you for postage. In addition, if this communication was received in the U.S., please notify us immediately by telephone (call collect). Thank you.

## **APPENDIX F**

### **Pertinent Portions of Analytical Laboratory Reports**



RECRA  
LabNet

a division of Recra Environmental, Inc.

Virtual Laboratories Everywhere

Mr. Jeff Danzinger  
Day Engineering  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

May 11, 1998

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil & Aqueous  
Samples Received: 04/14/98  
Sample Dates: 04/13 & 14/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Engineering with environmental testing services. We look forward to serving you in the future.

Sincerely,

RECRA LABNET, INC.

*Candace L. Fox*

Candace L. Fox  
Program Manager

*KEK*  
Kenneth E. Kasperek  
Laboratory Manager

CLF/KEK/lhb  
Enclosure

I.D. #A98-1237  
#NY8A7861

This report contains 238 pages which are individually numbered.

000001

SAMPLE DATA SUMMARY PACKAGE



**CASE NARRATIVE**

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-01  
1506-S-02  
1506-S-03

**METHODOLOGY**

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

**COMMENTS**

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.

**METALS DATA**

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

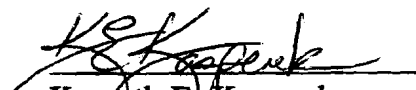
No quality control was digested or analyzed due to a laboratory oversight.

**HEXAVALENT CHROMIUM DATA**

The relative percent difference between recoveries of the Matrix Spike Blank and Matrix Spike Blank Duplicate was outside of quality control limits; individual spike recoveries were compliant.



"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Manager  
5/11/98  
Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



INORGANIC DATA COMMENT PAGE

Laboratory Name: Recra Labnet, Inc.

USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- +
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50 % of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.



## NYSDEC ASP

000005

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209

Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150602

Protocol Version: ASP95

## NYSDEC Sample No.

## Lab Sample ID.

1506S1

AD804959

1506S2

AD804960

1506S3

AD804961

BLKSPK1

AD804984

BLKSPK2

AD804985

Were ICP interelement corrections applied ?

Yes/No YES

Were ICP background corrections applied ?

Yes/No YES

If yes - were raw data generated before  
application of background corrections ?

Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the Protocol, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Kenneth E. Kasperek

Date: 5/11/98

Title: Laboratory Director

COVER PAGE - IN

10/95



## INORGANIC ANALYSES DATA SHEET

1506S1

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: 150602

Matrix (soil/water): SOIL\_ Lab Sample ID: AD804959

Level (low/med): LOW\_ Date Received: 04/14/98

Solids: \_91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRAY\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_ Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8123701-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-01

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

1506S2

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209 \_\_\_\_\_

Lab Code: RECNY \_\_\_\_\_ Case No.: 7861 \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150602

Matrix (soil/water): SOIL \_\_\_\_\_ Lab Sample ID: AD804960

Level (low/med): LOW \_\_\_\_\_ Date Received: 04/14/98

Solids: \_\_\_\_\_ 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.5			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRAY \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW \_\_\_\_\_ Clarity After: CLEAR \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

LAB\_SAMPLE\_ID: A8123702-STA00242 \_\_\_\_\_

CLIENT\_SAMPLE\_ID: 1506-S-02 \_\_\_\_\_

000008

## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

1506S3

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209

Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150602

Matrix (soil/water): SOIL Lab Sample ID: AD804961

Level (low/med): LOW Date Received: 04/14/98

Solids: 91.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: GRAY Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8123703-STA00242

CLIENT SAMPLE ID: 1506-S-03

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1237  
 Lab Sample ID: A8123701  
 Client Sample ID: 1506-S-01  
 SDG No: 150602

RECNY

Matrix: Soil  
 Sample Date: 04/13/98  
 Dilution Factor: 1  
 % Dry Weight: 90.48

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	2.6	

600000

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1237  
 Lab Sample ID: A8123702  
 Client Sample ID: 1506-S-02  
 SDG No: 150602

RECNY

Matrix: Soil  
 Sample Date: 04/13/98  
 Dilution Factor: 1  
 % Dry Weight: 81.68

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	0.54	

000010

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1237  
 Lab Sample ID: A8123703  
 Client Sample ID: 1506-S-03  
 SDG No: 150602

RECNY

Matrix: Soil  
 Sample Date: 04/13/98  
 Dilution Factor: 1  
 % Dry Weight: 92.14

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.5	

000011





RECRA  
ENVIRONMENTAL  
INC.

Chemical and Environmental Measurement Information

June 16, 1998

Mr. Jeff Danzinger  
Day Engineering  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

RE: Revised Analytical Results

Dear Mr. Danzinger:

Enclosed are revised results concerning the samples submitted by your firm. All pages have been revised to remove any reference to Cyanide analysis. This method was not performed on any samples in this data package. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil & Aqueous  
Samples Received: 04/16/98  
Sample Dates: 04/13, 14 & 15/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Engineering with environmental testing services. We look forward to serving you in the future.

Sincerely,

RECRA LABNET, INC.

Candace L. Fox  
Program Manager

Kenneth E. Kasperek  
Laboratory Manager

CLF/KEK/lrb  
Enclosure

I.D. #A98-1261, 1289  
#NY8A7861

This report contains 865 pages which are individually numbered.



100000

## SAMPLE DATA SUMMARY PACKAGE



## CASE NARRATIVE

000002

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-04  
1506-S-05  
1506-S-06  
1506-S-07  
1506-S-08  
1506-S-09  
1506-S-10  
1506-S-11  
1506-S-12  
1506-S-13  
1506-S-14  
1506-S-15  
1506-S-16  
1506-S-17  
1506-S-17 MATRIX DUPLICATE  
1506-S-17 MATRIX SPIKE  
1506-S-17 MATRIX SPIKE DUPLICATE  
1506-T-19  
1506-T-19 MATRIX DUPLICATE  
1506-T-19 MATRIX SPIKE

## METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

## COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.



The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Sample 1506-S-08 yielded a recovery for surrogate p-Bromofluorobenzene which was outside of quality control limits. Due to severe matrix this sample was not reanalyzed. Sample 1506-S-08 DL shows compliant recoveries for all surrogates; the recovery of internal standard 1,4-Difluorobenzene was outside quality control limits. Due to severe matrix, sample 1506-S-08 DL was not reanalyzed.

Sample 1506-S-12 yielded a recovery for surrogate 1,2-Dichloroethane-D4 which was outside quality control limits. Due to high concentrations of Tetrachloroethene, this sample was not reanalyzed. Sample 1506-S-12 DL shows compliant recoveries for all surrogates.

Samples 1506-S-17, 1506-S-17 MS and 1506-S-17 SD yielded recoveries for surrogate 1,2-Dichloroethane-D4 which were outside quality control limits.

Sample 1506-S-17 SD yielded a spike recovery for Trichloroethene which was outside quality control limits.

### METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The recovery of Cadmium fell outside of quality control limits in sample 1506-T-19 Matrix Spike.

The relative percent difference between sample 1506-S-17 and the Matrix Duplicate performed on this sample exceeded quality control limits for Chromium.

The relative percent difference between sample 1506-T-19 and the Matrix Duplicate performed on this sample exceeded quality control limits for Lead.



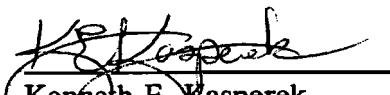
The Laboratory Control Sample for Mercury is lot #227.

#### HEXAVALENT CHROMIUM DATA

Please note that the Hexavalent Chromium analyses were performed by the Wet Chemistry group.

The relative percent difference between recoveries of the Matrix Spike Blank and Matrix Spike Blank Duplicate was outside of quality control limits; individual spike recoveries were compliant.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Manager  
6/10/98  
Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



000005

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: RECRA LABNET, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-04	A8126101	-	-	-	-	ASP95	-
1506-S-05	A8126102	-	-	-	-	ASP95	-
1506-S-06	A8126103	-	-	-	-	ASP95	-
1506-S-07	A8126104	-	-	-	-	ASP95	-
1506-S-08	A8128901	ASP95	-	-	-	-	-
1506-S-09	A8128902	ASP95	-	-	-	-	-
06-S-10	A8128903	ASP95	-	-	-	-	-
1506-S-11	A8128904	ASP95	-	-	-	-	-
1506-S-12	A8128905	ASP95	-	-	-	-	-
1506-S-13	A8128906	ASP95	-	-	-	ASP95	-
1506-S-14	A8128907	ASP95	-	-	-	-	-
1506-S-15	A8128908	-	-	-	-	ASP95	-
1506-S-16	A8128909	ASP95	-	-	-	ASP95	-
1506-S-17	A8128910	ASP95	-	-	-	ASP95	-
1506-T-19	A8128912	-	-	-	-	ASP95	-

NYSDEC-1



000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE ANALYSIS

LAB NAME: RECRA LABNET, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-S-08	SOIL	04/13/98	04/16/98	-	04/21/98
1506-S-09	SOIL	04/13/98	04/16/98	-	04/22/98
1506-S-10	SOIL	04/14/98	04/16/98	-	04/22/98
1506-S-11	SOIL	04/15/98	04/16/98	-	04/22/98
1506-S-12	SOIL	04/15/98	04/16/98	-	04/21/98
1506-S-13	SOIL	04/15/98	04/16/98	-	04/22/98
1506-S-14	SOIL	04/15/98	04/16/98	-	04/22/98
1506-S-16	SOIL	04/15/98	04/16/98	-	04/22/98
1506-S-17	SOIL	04/15/98	04/16/98	-	04/22/98

NYSDEC-2



000007

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY  
INORGANIC ANALYSIS

LAB NAME: RECRA LABNET, INC.

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
1506-S-04	SOIL	S CR+6	04/15/98	04/23/98	04/22 & 30/98
1506-S-05	SOIL	S CR+6	04/15/98	04/23/98	04/22 & 30/98
1506-S-06	SOIL	ME	04/15/98	04/23 & 24/98	04/22 - 28/98
1506-S-07	SOIL	S CR+6	04/15/98	04/23/98	04/22 & 30/98
1506-S-13	SOIL	S CR+6	04/16/98	04/23/98	04/22 & 30/98
76-S-15	SOIL	ME	04/16/98	04/23 & 24/98	04/22 - 28/98
1506-S-16	SOIL	S CR+6	04/16/98	04/23/98	04/22 & 30/98
1506-S-17	SOIL	S CR+6	04/16/98	04/23/98	04/22 & 30/98
1506-T-19	SOIL	ME	04/16/98	04/23 & 24/98	04/24 & 28/98

NYSDEC-5



000008

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
ORGANIC ANALYSIS

LAB NAME: RECRA LABNET, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
1506-S-08	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-09	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-10	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-11	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-12	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-13	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-14	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-16	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-17	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED

NYSDEC-6





NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

000000

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

LAB NAME: RECRA LABNET, INC.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
1506-S-04	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-05	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-06	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-07	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-13	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-15	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-16	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-17	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-T-19	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED

NYSDEC-7



000010

## GCMS TENTATIVELY IDENTIFIED ALKANES

INST. I.D. I50HMATRIX SoilJOB A98-1289SDG/CASE 150601FILE H6351LAB ID A8128901DATE 04/21/98CLIENT ID 1506-S-08

RT	COMPOUND	CAS NUMBER	ESTIMATED CONC. (µg/kg)
19.10	TYPE 3		510
19.45	TYPE 2		480
19.65	TYPE 2		290
20.95	TYPE 3		1000
21.17	TYPE 2		1300
21.43	TYPE 2		4300
21.80	TYPE 2		3800
22.02	TYPE 2		1000
22.28	TYPE 3		2300
22.62	TYPE 3		8300
22.95	TYPE 3		1700
23.55	TYPE 2		2000
24.13	TYPE 2		2400
24.27	TYPE 3		1000

•ALKANE TYPES: TYPE 1 = UNKNOWN STRAIGHT CHAIN ALKANE  
TYPE 2 = UNKNOWN BRANCHED ALKANE  
TYPE 3 = UNKNOWN CYCLIC ALKANE  
TYPE 4 = UNKNOWN ALKANE



000011

## GCMS TENTATIVELY IDENTIFIED ALKANES

INST. I.D. I50HMATRIX SoilJOB A98-1289SDG/CASE 150601FILE H6377LAB ID A8128901DLDATE 04/22/98CLIENT ID 1506-S-08

RT	COMPOUND	CAS NUMBER	ESTIMATED CONC.( $\mu$ g/kg)
21.42	TYPE 3		90
23.10	TYPE 2		100

•ALKANE TYPES: TYPE 1= UNKNOWN STRAIGHT CHAIN ALKANE  
TYPE 2= UNKNOWN BRANCHED ALKANE  
TYPE 3= UNKNOWN CYCLIC ALKANE  
TYPE 4= UNKNOWN ALKANE



ORGANIC DATA COMMENT PAGE

Laboratory Name: Recra Labnet, Inc.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.



## INORGANIC DATA COMMENT PAGE

000013

Laboratory Name: Recra Labnet, Inc.

### USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- +
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50 % of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000014

Client No.

1506-S-08

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128901

Sample wt/vol: 5.13 (g/mL) G

Lab File ID: H6351.RR

Level: (low/med) LOW

Date Samp/Recv: 04/13/98 04/16/98

% Moisture: not dec. 12.4 Heated Purge: Y Date Analyzed: 04/21/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	11	U
67-64-1-----	Acetone	11	U
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	18	
100-42-5-----	Styrene	11	
1330-20-7-----	Total Xylenes	18	

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000015

Client No.

1506-S-08

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128901

Sample wt/vol: 5.13 (g/mL) G

Lab File ID: H6351.RR

Level: (low/med) LOW

Date Samp/Recv: 04/13/98 04/16/98

% Moisture: not dec. 12.4

Date Analyzed: 04/21/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 10

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN CYCLIC HYDROCARBON	22.73	1800	J
2.	UNKNOWN	23.13	7000	J
3.	TRIMETHYLBENZENE ISOMER	23.33	3100	J
4.	UNKNOWN	23.75	6900	J
5.	UNKNOWN	23.85	7200	J
6.	ALKYL BENZENE	24.45	1500	J
7.	DIETHYLBENZENE ISOMER	24.55	2100	J
8.	UNKNOWN	24.68	7200	J
9.	ALKYL BENZENE	24.90	5000	J
10.	ALKYL BENZENE	25.08	7000	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

Client No.

000016

1506-S-08 DL

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128901DL

Sample wt/vol: 0.58 (g/mL) G

Lab File ID: H6377.RR

Level: (low/med) LOW

Date Samp/Recv: 04/13/98 04/16/98

% Moisture: not dec. 12.4 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3	Chloromethane	98	U
74-83-9	Bromomethane	98	U
75-01-4	Vinyl chloride	98	U
75-00-3	Chloroethane	98	U
75-09-2	Methylene chloride	98	U
67-64-1	Acetone	98	U
75-15-0	Carbon Disulfide	98	U
75-35-4	1,1-Dichloroethene	98	U
75-34-3	1,1-Dichloroethane	98	U
540-59-0	1,2-Dichloroethene (Total)	98	U
67-66-3	Chloroform	98	U
107-06-2	1,2-Dichloroethane	98	U
78-93-3	2-Butanone	98	U
71-55-6	1,1,1-Trichloroethane	98	U
56-23-5	Carbon Tetrachloride	98	U
75-27-4	Bromodichloromethane	98	U
78-87-5	1,2-Dichloropropane	98	U
10061-01-5	cis-1,3-Dichloropropene	98	U
79-01-6	Trichloroethene	98	U
124-48-1	Dibromochloromethane	98	U
79-00-5	1,1,2-Trichloroethane	98	U
71-43-2	Benzene	98	U
10061-02-6	trans-1,3-Dichloropropene	98	U
75-25-2	Bromoform	98	U
108-10-1	4-Methyl-2-pentanone	98	U
591-78-6	2-Hexanone	98	U
127-18-4	Tetrachloroethene	36	DJ
108-88-3	Toluene	98	U
79-34-5	1,1,2,2-Tetrachloroethane	98	U
108-90-7	Chlorobenzene	98	U
100-41-4	Ethylbenzene	12	DJ
100-42-5	Styrene	98	U
1330-20-7	Total Xylenes	98	U



ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000017

Client No.

1506-S-08 DL

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128901DL

Sample wt/vol: 0.58 (g/mL) G

Lab File ID: H6377.RR

Level: (low/med) LOW

Date Samp/Recv: 04/13/98 04/16/98

% Moisture: not dec. 12.4

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 10

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	TRIMETHYLBENZENE ISOMER	22.62	310	J
2.	TRIMETHYLBENZENE ISOMER	23.30	230	J
3.	METHYLMETHYLETHYLBENZENE ISO	23.73	180	J
4.	ETHYLDIMETHYLBENZENE ISOMER	23.83	130	J
5.	METHYLPROPYLBENZENE ISOMER	24.42	270	J
6. 105-05-5	1,4-DIETHYLBENZENE	24.50	170	JN
7.	DECAHYDRONAPHTHALENE ISOMER	24.63	170	J
8.	METHYLPROPYL BENZENE ISOMER	24.87	240	J
9.	METHYLMETHYLETHYLBENZENE ISO	25.05	450	J
10.	METHYLMETHYLETHYLBENZENE ISO	25.18	420	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000018

Client No.

1506-S-09

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128902

Sample wt/vol: 5.10 (g/mL) G

Lab File ID: H6370.RR

Level: (low/med) LOW

Date Samp/Recv: 04/13/98 04/16/98

% Moisture: not dec. 9.5 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene chloride	11	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	3	J
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (Total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
108-88-3	Toluene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

1506-S-09

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128902

Sample wt/vol: 5.10 (g/mL) G

Lab File ID: H6370.RR

Level: (low/med) LOW

Date Samp/Recv: 04/13/98 04/16/98

% Moisture: not dec. 9.5

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000020

Client No.

1506-S-10

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128903

Sample wt/vol: 5.02 (g/mL) G

Lab File ID: H6371.RR

Level: (low/med) LOW

Date Samp/Recv: 04/14/98 04/16/98

% Moisture: not dec. 9.1

Heated Purge: Y

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	11	U
67-64-1-----	Acetone	11	U
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	3	J
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS **h00021**

Client No.

1506-S-10

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128903

Sample wt/vol: 5.02 (g/mL) G

Lab File ID: H6371.RR

Level: (low/med) LOW

Date Samp/Recv: 04/14/98 04/16/98

% Moisture: not dec. 9.1

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000022

Client No.

1506-S-11

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128904

Sample wt/vol: 5.03 (g/mL) G

Lab File ID: H6372.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 9.5 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	11	U
67-64-1-----	Acetone	11	U
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	3	J
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Total Xylenes	11	L

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

1506-S-11

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL Lab Sample ID: A8128904

Sample wt/vol: 5.03 (g/mL) G Lab File ID: H6372.RR

Level: (low/med) LOW Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 9.5 Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000024

Client No.

1506-S-12

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128905

Sample wt/vol: 5.12 (g/mL) G

Lab File ID: H6355.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 10.1 Heated Purge: Y Date Analyzed: 04/21/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	11	U
67-64-1-----	Acetone	5	J
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	2	J
540-59-0-----	1,2-Dichloroethene (Total)	15	
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	120	
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	910	E
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Total Xylenes	11	U



ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000025

Client No.

1506-S-12

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL Lab Sample ID: A8128905

Sample wt/vol: 5.12 (g/mL) G Lab File ID: H6355.RR

Level: (low/med) LOW Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 10.1 Date Analyzed: 04/21/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000026

Client No.

1506-S-12 DL

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128905DL

Sample wt/vol: 4.18 (g/mL) G

Lab File ID: H6410.RR

Level: (low/med) MED

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 10.1 Heated Purge: N Date Analyzed: 04/24/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100.00 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3	-----Chloromethane	1300	U
74-83-9	-----Bromomethane	1300	U
75-01-4	-----Vinyl chloride	1300	U
75-00-3	-----Chloroethane	1300	U
75-09-2	-----Methylene chloride	1300	U
67-64-1	-----Acetone	1300	U
75-15-0	-----Carbon Disulfide	1300	U
75-35-4	-----1,1-Dichloroethene	1300	U
75-34-3	-----1,1-Dichloroethane	1300	U
540-59-0	-----1,2-Dichloroethene (Total)	1300	U
67-66-3	-----Chloroform	1300	U
107-06-2	-----1,2-Dichloroethane	1300	U
78-93-3	-----2-Butanone	1300	U
71-55-6	-----1,1,1-Trichloroethane	1300	U
56-23-5	-----Carbon Tetrachloride	1300	U
75-27-4	-----Bromodichloromethane	1300	U
78-87-5	-----1,2-Dichloropropane	1300	U
10061-01-5	-----cis-1,3-Dichloropropene	1300	U
79-01-6	-----Trichloroethene	1300	U
124-48-1	-----Dibromochloromethane	1300	U
79-00-5	-----1,1,2-Trichloroethane	1300	U
71-43-2	-----Benzene	1300	U
10061-02-6	-----trans-1,3-Dichloropropene	1300	U
75-25-2	-----Bromoform	1300	U
108-10-1	-----4-Methyl-2-pentanone	1300	U
591-78-6	-----2-Hexanone	1300	U
127-18-4	-----Tetrachloroethene	3200	D
108-88-3	-----Toluene	1300	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1300	U
108-90-7	-----Chlorobenzene	1300	U
100-41-4	-----Ethylbenzene	1300	U
100-42-5	-----Styrene	1300	U
1330-20-7	-----Total Xylenes	1300	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000027

Client No.

1506-S-12 DL

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECN Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL Lab Sample ID: A8128905DL

Sample wt/vol: 4.18 (g/mL) G Lab File ID: H6410.RR

Level: (low/med) MED Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 10.1 Date Analyzed: 04/24/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100.00 (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000028

Client No.

1506-S-13

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128906

Sample wt/vol: 5.07 (g/mL) G

Lab File ID: H6373.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 20.5 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3-----	Chloromethane	12	U
74-83-9-----	Bromomethane	12	U
75-01-4-----	Vinyl chloride	12	U
75-00-3-----	Chloroethane	12	U
75-09-2-----	Methylene chloride	12	U
67-64-1-----	Acetone	31	
75-15-0-----	Carbon Disulfide	12	U
75-35-4-----	1,1-Dichloroethene	12	U
75-34-3-----	1,1-Dichloroethane	12	U
540-59-0-----	1,2-Dichloroethene (Total)	140	
67-66-3-----	Chloroform	12	U
107-06-2-----	1,2-Dichloroethane	12	U
78-93-3-----	2-Butanone	6	J
71-55-6-----	1,1,1-Trichloroethane	12	U
56-23-5-----	Carbon Tetrachloride	12	U
75-27-4-----	Bromodichloromethane	12	U
78-87-5-----	1,2-Dichloropropane	12	U
10061-01-5----	cis-1,3-Dichloropropene	12	U
79-01-6-----	Trichloroethene	6	J
124-48-1-----	Dibromochloromethane	12	U
79-00-5-----	1,1,2-Trichloroethane	12	U
71-43-2-----	Benzene	12	U
10061-02-6----	trans-1,3-Dichloropropene	12	U
75-25-2-----	Bromoform	12	U
108-10-1-----	4-Methyl-2-pentanone	12	U
591-78-6-----	2-Hexanone	12	U
127-18-4-----	Tetrachloroethene	2	J
108-88-3-----	Toluene	12	U
79-34-5-----	1,1,2,2-Tetrachloroethane	12	U
108-90-7-----	Chlorobenzene	12	U
100-41-4-----	Ethylbenzene	12	U
100-42-5-----	Styrene	12	
1330-20-7-----	Total Xylenes	12	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000029

Client No.

1506-S-13

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128906

Sample wt/vol: 5.07 (g/mL) G

Lab File ID: H6373.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 20.5

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000030

Client No.

1506-S-14

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128907

Sample wt/vol: 5.16 (g/mL) G

Lab File ID: H6374.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 10.5 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3	-----Chloromethane	11	U
74-83-9	-----Bromomethane	11	U
75-01-4	-----Vinyl chloride	11	U
75-00-3	-----Chloroethane	11	U
75-09-2	-----Methylene chloride	11	U
67-64-1	-----Acetone	11	U
75-15-0	-----Carbon Disulfide	11	U
75-35-4	-----1,1-Dichloroethene	6	J
75-34-3	-----1,1-Dichloroethane	2	J
540-59-0	-----1,2-Dichloroethene (Total)	11	U
67-66-3	-----Chloroform	11	U
107-06-2	-----1,2-Dichloroethane	11	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	11	U
56-23-5	-----Carbon Tetrachloride	11	U
75-27-4	-----Bromodichloromethane	11	U
78-87-5	-----1,2-Dichloropropane	11	U
10061-01-5	-----cis-1,3-Dichloropropene	11	U
79-01-6	-----Trichloroethene	11	U
124-48-1	-----Dibromochloromethane	11	U
79-00-5	-----1,1,2-Trichloroethane	11	U
71-43-2	-----Benzene	11	U
10061-02-6	-----trans-1,3-Dichloropropene	11	U
75-25-2	-----Bromoform	11	U
108-10-1	-----4-Methyl-2-pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	11	U
108-88-3	-----Toluene	11	U
79-34-5	-----1,1,2,2-Tetrachloroethane	11	U
108-90-7	-----Chlorobenzene	11	U
100-41-4	-----Ethylbenzene	11	U
100-42-5	-----Styrene	11	U
1330-20-7	-----Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000031

Client No.

1506-S-14

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128907

Sample wt/vol: 5.16 (g/mL) G

Lab File ID: H6374.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 10.5

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000032

Client No.

1506-S-16

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128909

Sample wt/vol: 5.13 (g/mL) G

Lab File ID: H6375.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 12.5 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3	-----Chloromethane	11	U
74-83-9	-----Bromomethane	11	U
75-01-4	-----Vinyl chloride	11	U
75-00-3	-----Chloroethane	11	U
75-09-2	-----Methylene chloride	11	U
67-64-1	-----Acetone	11	U
75-15-0	-----Carbon Disulfide	11	U
75-35-4	-----1,1-Dichloroethene	11	U
75-34-3	-----1,1-Dichloroethane	11	U
540-59-0	-----1,2-Dichloroethene (Total)	3	J
67-66-3	-----Chloroform	11	U
107-06-2	-----1,2-Dichloroethane	11	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	11	U
56-23-5	-----Carbon Tetrachloride	11	U
75-27-4	-----Bromodichloromethane	11	U
78-87-5	-----1,2-Dichloropropane	11	U
10061-01-5	-----cis-1,3-Dichloropropene	11	U
79-01-6	-----Trichloroethene	12	
124-48-1	-----Dibromochloromethane	11	U
79-00-5	-----1,1,2-Trichloroethane	11	U
71-43-2	-----Benzene	11	U
10061-02-6	-----trans-1,3-Dichloropropene	11	U
75-25-2	-----Bromoform	11	U
108-10-1	-----4-Methyl-2-pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	40	
108-88-3	-----Toluene	11	U
79-34-5	-----1,1,2,2-Tetrachloroethane	11	U
108-90-7	-----Chlorobenzene	11	U
100-41-4	-----Ethylbenzene	11	U
100-42-5	-----Styrene	11	U
1330-20-7	-----Total Xylenes	11	U



ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS **Annex 33**

Client No.

1506-S-16

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL Lab Sample ID: A8128909

Sample wt/vol: 5.13 (g/mL) G Lab File ID: H6375.RR

Level: (low/med) LOW Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 12.5 Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000034

Client No.

1506-S-17

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128910

Sample wt/vol: 5.18 (g/mL) G

Lab File ID: H6359.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 12.8 Heated Purge: Y Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
74-87-3	-----Chloromethane		11	U
74-83-9	-----Bromomethane		11	U
75-01-4	-----Vinyl chloride		11	U
75-00-3	-----Chloroethane		11	U
75-09-2	-----Methylene chloride		11	U
67-64-1	-----Acetone		11	U
75-15-0	-----Carbon Disulfide		2	J
75-35-4	-----1,1-Dichloroethene		11	U
75-34-3	-----1,1-Dichloroethane		5	J
540-59-0	-----1,2-Dichloroethene (Total)		12	
67-66-3	-----Chloroform		11	U
107-06-2	-----1,2-Dichloroethane		11	U
78-93-3	-----2-Butanone		11	U
71-55-6	-----1,1,1-Trichloroethane		11	U
56-23-5	-----Carbon Tetrachloride		11	U
75-27-4	-----Bromodichloromethane		11	U
78-87-5	-----1,2-Dichloropropane		11	U
10061-01-5	-----cis-1,3-Dichloropropene		11	U
79-01-6	-----Trichloroethene		21	
124-48-1	-----Dibromochloromethane		11	U
79-00-5	-----1,1,2-Trichloroethane		11	U
71-43-2	-----Benzene		11	U
10061-02-6	-----trans-1,3-Dichloropropene		11	U
75-25-2	-----Bromoform		11	U
108-10-1	-----4-Methyl-2-pentanone		11	U
591-78-6	-----2-Hexanone		11	U
127-18-4	-----Tetrachloroethene		84	
108-88-3	-----Toluene		11	U
79-34-5	-----1,1,2,2-Tetrachloroethane		11	U
108-90-7	-----Chlorobenzene		11	U
100-41-4	-----Ethylbenzene		11	U
100-42-5	-----Styrene		11	
1330-20-7	-----Total Xylenes		11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000035

Client No.

1506-S-17

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) SOIL

Lab Sample ID: A8128910

Sample wt/vol: 5.18 (g/mL) G

Lab File ID: H6359.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. 12.8

Date Analyzed: 04/22/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

Client No. \_\_\_\_\_

000036

1506-T-18

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 150601

Matrix: (soil/water) WATER

Lab Sample ID: A8128911

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: H6350.RR

Level: (low/med) LOW

Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: Y

Date Analyzed: 04/21/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene chloride	10	U
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	10	U
75-35-4	-----1,1-Dichloroethene	10	U
75-34-3	-----1,1-Dichloroethane	10	U
540-59-0	-----1,2-Dichloroethene (Total)	10	U
67-66-3	-----Chloroform	10	U
107-06-2	-----1,2-Dichloroethane	10	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
75-27-4	-----Bromodichloromethane	10	U
78-87-5	-----1,2-Dichloropropane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
79-01-6	-----Trichloroethene	10	U
124-48-1	-----Dibromochloromethane	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
71-43-2	-----Benzene	10	U
10061-02-6	-----trans-1,3-Dichloropropene	10	U
75-25-2	-----Bromoform	10	U
108-10-1	-----4-Methyl-2-pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	10	U
108-88-3	-----Toluene	10	U
79-34-5	-----1,1,2,2-Tetrachloroethane	10	U
108-90-7	-----Chlorobenzene	10	U
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
1330-20-7	-----Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

1506-T-18

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Matrix: (soil/water) WATER Lab Sample ID: A8128911

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: H6350.RR

Level: (low/med) LOW Date Samp/Recv: 04/15/98 04/16/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/21/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_INC.\_\_\_\_\_ Contract: NY97-209\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.:150601

Version: ASP95

NYSDEC Sample No.	Lab Sample ID
S04	AD804962
S05	AD804963
S06	AD804964
S07	AD804965
S13	AD804975
S15	AD804976
S16	AD804977
S17	AD804978
S17D	AD804979
S17S	AD804980
T19	AD804981
T19D	AD804982
T19S	AD804983

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before  
application of background corrections ? Yes/No NO\_

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Kenneth\_E.\_Kasperek\_\_\_\_\_

Date: 5/8/98

Title: Laboratory\_Director\_\_\_\_\_

## NYSDEC-ASP

000039

NYSDEC SAMPLE NO.

1

## INORGANIC ANALYSES DATA SHEET

S04

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804962  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	157		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: GRAY  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8126101-STA00242

CLIENT SAMPLE ID: 1506-S-04

## NYSDEC-ASP

1

000040  
NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

S05

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804963  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	337		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8126102-STA00242  
 CLIENT SAMPLE ID: 1506-S-05



## INORGANIC ANALYSES DATA SHEET

S06

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804964  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 85.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.2	B		P
7440-39-3	Barium				NR
7440-41-7	Beryllium	0.23	U		P
7440-43-9	Cadmium	0.12	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.0		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.2			P
7439-89-6	Iron				NR
7439-92-1	Lead	4.0		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	4.7	B		P
7440-09-7	Potassium	840	B		P
7782-49-2	Selenium	1.2	U		P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	16.5		E	P
1333-82-0	HexaChrom				NR
	MOLYBDENU	0.55			P

Color Before: BROWN Clarity Before: Clarity After: CLEAR Texture: MEDIUM  
 Color After: YELLOW Artifacts:

## Comments:

LAB SAMPLE ID: A8126103-CGA01029

CLIENT SAMPLE ID: 1506-S-06

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S07

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804965  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.6		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:   
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8126104-STA00242  
 CLIENT\_SAMPLE\_ID: 1506-S-07

## NYSDEC-ASP

000043

NYSDEC SAMPLE NO.

1  
INORGANIC ANALYSES DATA SHEET

S13

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804975  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 83.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.5		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

Comments:

LAB SAMPLE ID: A8128906-STA00242  
 CLIENT SAMPLE ID: 1506-S-13

## NYSDEC-ASP

000044

NYSDEC SAMPLE NO.

1  
INORGANIC ANALYSES DATA SHEET

S15

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804976  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 89.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.3	B		P
7440-39-3	Barium				NR
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.11	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.4		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.8			P
7439-89-6	Iron				NR
7439-92-1	Lead	4.4		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	6.1	B		P
7440-09-7	Potassium	805	B		P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	23.3		E	P
1333-82-0	HexaChrom				NR
	MOLYBDENU	0.47	U		P

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:   
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8128908-CGA01029  
 CLIENT\_SAMPLE\_ID: 1506-S-15

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S16

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804977  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	330		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: GRAY  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8128909-STA00242

CLIENT SAMPLE ID: 1506-S-16

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S17

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804978  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	300		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: GRAY  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8128910-STA00242  
 CLIENT\_SAMPLE\_ID: 1506-S-17

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

T19

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804981  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		—		NR
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.8	B		P
7440-39-3	Barium				NR
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.11	U	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.6		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	8.0			P
7439-89-6	Iron				NR
7439-92-1	Lead	2.9		*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	6.3	B		P
7440-09-7	Potassium	758	B		P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	19.3		E	P
1333-82-0	HexaChrom				NR
	MOLYBDENU	0.47	U		P

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8128912-CGA01029

CLIENT SAMPLE ID: 1506-T-19

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1261  
 Lab Sample ID: A8126101  
 Client Sample ID: 1506-S-04  
 SDG No: 150601

RECNV

Matrix: Soil  
 Sample Date: 04/14/98  
 Dilution Factor: 1  
 % Dry Weight: 91.91

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.7	

870000



# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1261  
 Lab Sample ID: A8126102  
 Client Sample ID: 1506-S-05  
 SDG No: 150601

RECNY

Matrix: Soil  
 Sample Date: 04/14/98  
 Dilution Factor: 1  
 % Dry Weight: 79.19

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	16.7	

670000

# Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-1261  
Lab Sample ID: A8126103  
Client Sample ID: 1506-S-06  
SDG No: 150601

RECNY

Matrix: Soil  
Sample Date: 04/14/98

Dilution Factor: 1  
% Dry Weight: 87.45

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	10.2	

050000

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1261  
 Lab Sample ID: A8126104  
 Client Sample ID: 1506-S-07  
 SDG No: 150601

RECNV

Matrix: Soil  
 Sample Date: 04/14/98  
 Dilution Factor: 1  
 % Dry Weight: 89.35

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.3	

150601

# Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-1289  
Lab Sample ID: A8128906  
Client Sample ID: 1506-S-13  
SDG No: 150601

RECNY

Matrix: Soil  
Sample Date: 04/15/98

Dilution Factor: 1  
% Dry Weight: 79.46

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	0.40	U

250000

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1289  
 Lab Sample ID: A8128908  
 Client Sample ID: 1506-S-15  
 SDG No: 150601

RECNY

Matrix: Soil  
 Sample Date: 04/15/98

Dilution Factor: 1  
 % Dry Weight: 89.27

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.2	

000000

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1289  
 Lab Sample ID: A8128909  
 Client Sample ID: 1506-S-16  
 SDG No: 150601

RECNY

Matrix: Soil  
 Sample Date: 04/15/98

Dilution Factor: 1  
 % Dry Weight: 87.49

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	6.5	

000054

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1289  
 Lab Sample ID: A8128910  
 Client Sample ID: 1506-S-17  
 SDG No: 150601

RECNY

Matrix: Soil  
 Sample Date: 04/15/98

Dilution Factor: 1  
 % Dry Weight: 87.22

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	2.5	

00055





**RECRA LABNET**, a division of Recra Environmental, Inc. Recra# NY 8A7861 CHAIN OF CUSTODY RECORD

PROJECT NO		SITE NAME		NO OF CON TAINERS	ASP	TOTAL CR	HEX CR+6	TAL METALS	TCL VOCs	REMARKS	
1506R-97		95 Mt. Read Blvd. Rochester, NY									
SAMPLERS (SIGNATURE)											
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION						
001	4/13/98	1345		X	1506-S-08			X		TB-20 (8-10')	
002	4/13/98	1720		X	1506-S-09			X		TB-6 (8-9.3')	
003	4/14/98	1420		X	1506-S-10			X		TB-8 (12-15')	
004	4/14/98	1518		X	1506-S-11			X		TB-14 (8-12')	
005	4/15/98	1253		X	1506-S-12			X		TB-11 (12-14.5')	
006	4/15/98	1235		X	1506-S-13	X	X	X		TB-11 (0-4')	
007	4/15/98	1055		X	1506-S-14			X		TB-5 (8-12')	
008	4/15/98	1415		X	1506-S-15		X	X		TB-10A (8-11.3')	
009	4/15/98	1245		X	1506-S-16	X	X	X		TB-11 (8-12')	
010	4/15/98	1245		X	1506-S-17	X	X	X		TB-11 (8-12') <sup>organic</sup> MS/MSD or <sup>inorganic</sup> MS/MSD	
011	4/2/98	NA		X	1506-T-18			X		TRIP BLANK	
012	4/15/98	1415		X	1506-S-19			X		TB-10A (8-11.3') <sup>inorganic</sup> MS/MSD	
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)	
		4/16/98 11:28									
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)	
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY (SIGNATURE)		DATE/TIME		REMARKS			
						4/16/98 11:28					

Distribution: Original accompanies shipment copy to Coordinator field files





**RECRA  
ENVIRONMENTAL  
INC.**

*Chemical and Environmental Measurement Information*

Mr. Jeff Danzinger  
Day Engineering  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

June 17, 1998

JUN 19 1998

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil  
Samples Received: 05/14/98  
Sample Dates: 05/13/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Engineering with environmental testing services. We look forward to serving you in the future.

Sincerely,

RECRA LABNET, INC.

*Candace L. Fox*

Candace L. Fox  
Program Manager

*Kenneth E. Kasperek*  
Kenneth E. Kasperek  
Laboratory Director

CLF/KEK/lrb  
Enclosure

I.D. #A98-1770  
#NY8A7861

This report contains 204 pages which are individually numbered.

000001

**SAMPLE DATA SUMMARY PACKAGE**



000002

## CASE NARRATIVE

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-21  
1506-S-22  
1506-S-22 MATRIX DUPLICATE  
1506-S-22 MATRIX SPIKE

## METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

## COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.

## METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The serial dilution on sample 1506-S-22 was performed at a dilution factor of four instead of five.



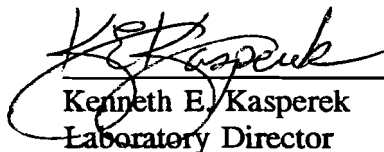
000003

HEXAVALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

The relative percent difference between recoveries of the Matrix Spike Blank A8177005 and Matrix Spike Blank Duplicate A8177006 was outside of quality control limits. The individual spike recovery for the Matrix Spike was also non-compliant; the MSD was compliant.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

6/17/98  
Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



INORGANIC DATA COMMENT PAGE

Laboratory Name: Recra Labnet, Inc.

USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- +
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50 % of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.



~~Lab~~ Name: RECRA LABNET INC. Contract: NY97-209

Lab Code: RECNY Case No.: 7861 SAS No.: \_\_\_\_\_ SDG No.:150621

[illegible]

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the Protocol, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Kenneth E. Kasperek

Date: (0) 6/17/98 Title: Laboratory Director

10/95



000006

## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEETNYSDEC SAMPLE NO. 1506S21

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209 \_\_\_\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: 150621

Matrix (soil/water): SOIL\_ Lab Sample ID: AD806267

Level (low/med): LOW\_ Date Received: 05/14/98

% Solids: \_90.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.7			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_ Clarity Before: \_\_\_\_\_ Texture: FINE\_

Color After: YELLOW\_ Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8177001-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-21

000007

## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

506S22

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209 \_\_\_\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: 150621

Matrix (soil/water): SOIL\_ Lab Sample ID: AD806268

Level (low/med): LOW\_ Date Received: 05/14/98

% Solids: \_90.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.4			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_ Clarity Before: \_\_\_\_\_ Texture: FINE\_

Color After: YELLOW\_ Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8177002-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-22

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1770  
 Lab Sample ID: A8177001  
 Client Sample ID: 1506-S-21  
 SDG No: 150621

RECNV

Matrix: Soil  
 Sample Date: 05/13/98  
 Dilution Factor: 1  
 % Dry Weight: 90.94

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	05/22/98	0.40	U

800000

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-1770  
 Lab Sample ID: A8177002  
 Client Sample ID: 1506-S-22  
 SDG No: 150621

RECNY

Matrix: Soil  
 Sample Date: 05/13/98  
 Dilution Factor: 1  
 % Dry Weight: 90.38

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	05/22/98	0.40	U

600000





**RECRA  
ENVIRONMENTAL  
INC.**

*Chemical and Environmental Measurement Information*

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

December 1, 1998

RECEIVED  
DEC 03 1998

RE: Analytical Results

Dear Mr. Danzinger:


Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil  
Samples Received: 09/30 & 10/01/98  
Sample Dates: 09/23, 28 & 29/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

RECRA LABNET, INC.

  
Candace L. Fox  
Program Manager

  
Kenneth E. Kasperek  
Laboratory Director

CLF/KEK/lrb  
Enclosure

I.D. #A98-4147, 4177  
#NY8A7861

This report contains 307 pages which are individually numbered.

000001

## **SAMPLE DATA SUMMARY PACKAGE**



**CASE NARRATIVE**

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-42  
1506-S-43  
1506-S-44  
1506-S-45  
1506-S-46  
1506-S-46 MS  
1506-S-46 MSD  
1506-S-47  
1506-S-48  
1506-S-49  
1506-S-50  
1506-S-51

**METHODOLOGY**

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

**COMMENTS**

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Page.

**VOLATILE DATA**

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.





VOLATILE DATA Continued

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

No deviations from protocol were encountered during the analytical procedures.

METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

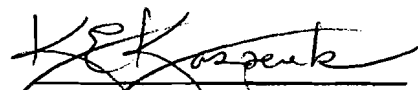
The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

HEXAVALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

No deviations from protocol were encountered during the analytical procedures.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

12/2/98  
Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



000004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: RECRA LABNET, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-42	A8414701	-	-	-	-	ASP95	-
1506-S-43	A8414702	-	-	-	-	ASP95	ASP95
1506-S-44	A8414703	-	-	-	-	ASP95	ASP95
1506-S-45	A8414704	-	-	-	-	ASP95	ASP95
1506-S-46	A8417701	ASP95	-	-	-	-	-
1506-S-47	A8417702	ASP95	-	-	-	-	-
1506-S-48	A8417703	ASP95	-	-	-	-	-
1506-S-49	A8417704	ASP95	-	-	-	-	-
1506-S-51	A8417706	ASP95	-	-	-	-	-
1506-S-50	A8417705	ASP95	-	-	-	-	-

NYSDEC-1



NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE ANALYSIS

LAB NAME: RECRA LABNET, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-S-51	WATER	09/23/98	10/01/98	-	10/09/98
1506-S-46	SOIL	09/23/98	10/01/98	-	10/09/98
1506-S-47	SOIL	09/23/98	10/01/98	-	10/09/98
1506-S-48	SOIL	09/23/98	10/01/98	-	10/09/98
1506-S-49	SOIL	09/28/98	10/01/98	-	10/09/98
6-S-50	SOIL	09/28/98	10/01/98	-	10/09/98

NYSDEC-2



000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY  
INORGANIC ANALYSIS

LAB NAME: RECRA LABNET, INC.

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
1506-S-42	SOIL	T CR	09/30/98	10/02/98	10/05/98

NYSDEC-5



000007

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
ORGANIC ANALYSIS

LAB NAME: RECRA LABNET, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
1506-S-51	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-46	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-47	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-48	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-49	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-50	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED

NYSDEC-6



NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

LAB NAME: RECRA LABNET, INC.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
1506-S-42	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-43	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-44	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-45	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED

NYSDEC-7



**ORGANIC DATA COMMENT PAGE**

Laboratory Name: Recra Labnet, Inc.

**USEPA Defined Organic Data Qualifiers:**

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.



**INORGANIC DATA COMMENT PAGE**

Laboratory Name: Recra Labnet, Inc.

**USEPA Defined Inorganic Data Qualifiers:**

- B** - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U** - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N** - Indicates spike sample recovery is not within the control limits.
- K** - Indicates the post digestion spike recovery is not within the control limits.
- \*** - Indicates duplicate analysis is not within the control limits.
- S** - Indicates value determined by the Method of Standard Addition.
- +** - Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M** - Indicates duplicate injection results exceeded control limits.
- W** - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50 % of spike absorbance.
- E** - Indicates a value estimated or not reported due to the presence of interference.





ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000011

Client No.

1506-S-46

L Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: S42

Matrix: (soil/water) SOIL

Lab Sample ID: A8417701

Sample wt/vol: 5.17 (g/mL) G

Lab File ID: H9272.RR

Level: (low/med) LOW

Date Samp/Recv: 09/23/98 10/01/98

% Moisture: not dec. 10.3 Heated Purge: Y Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	3	J
67-64-1-----	Acetone	11	U
-15-0-----	Carbon Disulfide	2	J
-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	14	
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
330-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000012

Client No.

1506-S-46

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix: (soil/water) SOIL Lab Sample ID: A8417701

Sample wt/vol: 5.17 (g/mL) G Lab File ID: H9272.RR

Level: (low/med) LOW Date Samp/Recv: 09/23/98 10/01/98

% Moisture: not dec. 10.3 Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE	5.62	18	JN
2.	UNKNOWN SILICONE CMPD	21.28	31	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000013

Client No.

1506-S-47

L Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: S42

Matrix: (soil/water) SOIL

Lab Sample ID: A8417702

Sample wt/vol: 5.14 (g/mL) G

Lab File ID: H9275.RR

Level: (low/med) LOW

Date Samp/Recv: 09/23/98 10/01/98

% Moisture: not dec. 8.5 Heated Purge: Y Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg)

UG/KG

Q

CAS NO.

COMPOUND

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	3	J
67-64-1-----	Acetone	11	U
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	1	J
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
130-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000014

Client No.

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

1506-S-47

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: S42

Matrix: (soil/water) SOIL

Lab Sample ID: A8417702

Sample wt/vol: 5.14 (g/mL) G

Lab File ID: H9275.RR

Level: (low/med) LOW

Date Samp/Recv: 09/23/98 10/01/98

% Moisture: not dec. 8.5

Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRCHLOROFLUOROMETHANE	5.60	14	JN
2.	UNKNOWN SILICON CMPD	21.27	22	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000015

Client No.

1506-S-48

L Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix: (soil/water) SOIL Lab Sample ID: A8417703

Sample wt/vol: 5.02 (g/mL) G Lab File ID: H9276.RR

Level: (low/med) LOW Date Samp/Recv: 09/23/98 10/01/98

% Moisture: not dec. 9.5 Heated Purge: Y Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	3	J
67-64-1-----	Acetone	11	U
-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
30-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000016

Client No.

1506-S-48

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: S42

Matrix: (soil/water) SOIL

Lab Sample ID: A8417703

Sample wt/vol: 5.02 (g/mL) G

Lab File ID: H9276.RR

Level: (low/med) LOW

Date Samp/Recv: 09/23/98 10/01/98

% Moisture: not dec. 9.5

Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE	5.60	6	JN
2.	UNKNOWN SILICON CMPD	21.28	23	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000017

Client No.

1506-S-49

L Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix: (soil/water) SOIL Lab Sample ID: A8417704

Sample wt/vol: 5.21 (g/mL) G Lab File ID: H9277.RR

Level: (low/med) LOW Date Samp/Recv: 09/28/98 10/01/98

% Moisture: not dec. 12.1 Heated Purge: Y Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	3	J
67-64-1-----	Acetone	11	U
-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
70-42-5-----	Styrene	11	U
30-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000018

Client No.

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

1506-S-49

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix: (soil/water) SOIL Lab Sample ID: A8417704

Sample wt/vol: 5.21 (g/mL) G Lab File ID: H9277.RR

Level: (low/med) LOW Date Samp/Recv: 09/28/98 10/01/98

% Moisture: not dec. 12.1 Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE	5.58	19	JN
2.	UNKNOWN SILICON CMPD	21.28	28	J



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000019

Client No.

1506-S-50

1. Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: S42

Matrix: (soil/water) SOIL

Lab Sample ID: A8417705

Sample wt/vol: 5.34 (g/mL) G

Lab File ID: H9278.RR

Level: (low/med) LOW

Date Samp/Recv: 09/28/98 10/01/98

% Moisture: not dec. 11.0 Heated Purge: Y Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	2	J
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
5-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	12	
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000020

Client No.

1506-S-50

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: S42

Matrix: (soil/water) SOIL

Lab Sample ID: A8417705

Sample wt/vol: 5.34 (g/mL) G

Lab File ID: H9278.RR

Level: (low/med) LOW

Date Samp/Recv: 09/28/98 10/01/98

% Moisture: not dec. 11.0

Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE	5.62	9	JN
2.	UNKNOWN SILICON CMPD	21.30	27	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000021

Client No.

1506-S-51

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix: (soil/water) WATER Lab Sample ID: A8417706

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: H9270.RR

Level: (low/med) LOW Date Samp/Recv: 09/29/98 10/01/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: Y Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	2	J
67-64-1-----	Acetone	10	U
15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	2	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000022

Client No.

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

1506-S-51

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix: (soil/water) WATER

Lab Sample ID: A8417706

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: H9270.RR

Level: (low/med) LOW

Date Samp/Recv: 09/29/98 10/01/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 10/09/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILICON CMPD	17.32	6	J
2.	UNKNOWN SILICON CMPD	21.30	18	J

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Protocol Version: ASP-95

[illegible]

Comments:

I certify that this data package is in compliance with the terms and conditions of the Protocol, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Date: ( ) 12/2/98 Title: Laboratory Director

COVER PAGE - IN

000024

## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO

42

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: S42

Matrix (soil/water): SOIL\_ Lab Sample ID: AD812835

Level (low/med): LOW\_ Date Received: 09/30/98

% Solids: \_91.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.6			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_ Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8414701-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-42

## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

43

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: S42\_\_\_\_\_

Matrix (soil/water): SOIL\_ Lab Sample ID: AD812836

Level (low/med): LOW\_ Date Received: 09/30/98

% Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.3			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_ Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8414702-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-43

## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO

44

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209

Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S42

Matrix (soil/water): SOIL Lab Sample ID: AD812837

Level (low/med): LOW Date Received: 09/30/98

% Solids: 90.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8414703-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-44



## NYSDEC ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

45

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209 \_\_\_\_\_

Lab Code: RECNY \_\_\_\_\_ Case No.: 7861 \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S42 \_\_\_\_\_

Matrix (soil/water): SOIL \_\_\_\_\_ Lab Sample ID: AD812838

Level (low/med): LOW \_\_\_\_\_ Date Received: 09/30/98

% Solids: \_\_\_\_\_ 91.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW \_\_\_\_\_ Clarity After: CLEAR \_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8414704-STA00242 \_\_\_\_\_

CLIENT SAMPLE ID: 1506-S-45 \_\_\_\_\_

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4147  
 Lab Sample ID: A8414702  
 Client Sample ID: 1506-S-43  
 SDG No: S42

RECNY

Matrix: Soil  
 Sample Date: 09/29/98

Dilution Factor: 1  
 % Dry Weight: 88.19

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/29/98	1.2	

000028

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4147  
 Lab Sample ID: A8414703  
 Client Sample ID: 1506-S-44  
 SDG No: S42

RECNY

Matrix: Soil  
 Sample Date: 09/29/98  
 Dilution Factor: 1  
 % Dry Weight: 90.31

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/29/98	1.2	

000029

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4147  
 Lab Sample ID: A8414704  
 Client Sample ID: 1506-S-45  
 SDG No: S42

RECNV

Matrix: Soil  
 Sample Date: 09/29/98

Dilution Factor: 1  
 % Dry Weight: 91.50

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/29/98	0.70	

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000055

4147

### CHAIN OF CUSTODY RECORD

[illegible]

000056



RECRA  
LabNet

a division of Recra Environmental, Inc.

Virtual Laboratories Everywhere

December 7, 1998

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

RECEIVED  
DEC 08 1998

RE: Analytical Results

Dear Mr. Danzinger:

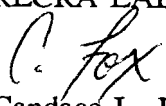
Please find enclosed the *revised report* concerning the samples submitted by your firm. The Matrix Spikes and Matrix Spike Duplicates for samples 1506-S-28, 1506-S-39, 1506-S-40 have been removed from this report, as per the request of Jeff Danzinger. The pertinent information regarding these analyses is listed below:

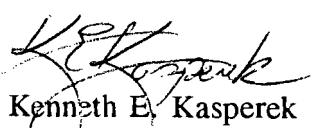
Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil & Aqueous  
Samples Received: 09/23, 24, 25 & 30/98  
Sample Dates: 05/12, 09/22, 23, 24 & 28/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

RECRA LABNET, INC.

  
Candace L. Fox  
Program Manager

  
Kenneth E. Kasperek  
Laboratory Director

CLF/KEK/lrb  
Enclosure

I.D. #A98-4049, 4067,  
4076, 4146  
#NY8A7861

This report contains 983 pages which are individually numbered.

000001

## SAMPLE DATA SUMMARY PACKAGE





CASE NARRATIVE

Laboratory Name: Recra LabNet, Inc.

Laboratory Code: RECNY

Contract Number: NY97-209

Sample Identifications: 1506-S-20  
1506-S-23  
1506-S-24  
1506-S-25  
1506-S-26  
1506-S-27  
1506-S-28  
1506-S-29  
1506-S-30  
1506-S-31  
1506-S-32  
1506-S-33  
1506-S-33 MATRIX DUPLICATE  
1506-S-33 MATRIX SPIKE  
1506-S-34  
1506-S-35  
1506-S-35 MATRIX DUPLICATE  
1506-S-35 MATRIX SPIKE  
1506-S-36  
1506-S-37  
1506-S-38  
1506-S-38 MATRIX DUPLICATE  
1506-S-38 MATRIX SPIKE  
1506-S-39  
1506-S-40  
1506-S-41  
Trip Blank

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.



## METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The serial dilution on sample 1506-S-28 was non-compliant for Potassium.

The serial dilution on sample 1506-S-35 was non-compliant for Potassium and Chromium.

Sample 1506-S-28 required a dilution of ten for Selenium.

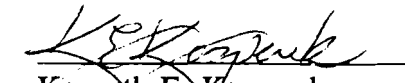
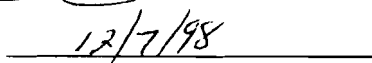
Sample 1506-S-35 Matrix Spike yielded non-compliant recoveries for Antimony, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Silver and Zinc. Sample 1506-S-35 Matrix Duplicate was non-compliant for Chromium, Copper and Lead.

Sample 1506-S-28 Matrix Spike yielded recoveries outside of quality control limits for Antimony, Arsenic, Beryllium, Cadmium, Selenium and Silver. Sample 1506-S-28 Matrix Duplicate was non-compliant for Zinc, Cadmium, Copper, Silver and Molybdenum. These samples and sample 1506-S-28 were redigested to confirm matrix interference.

## HEXAVALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director  
  
Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



INORGANIC DATA COMMENT PAGE

Laboratory Name: Recra Labnet, Inc.

USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- + - Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50 % of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.



## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
Version: ASP-95

NYSDEC Sample No.	Lab Sample ID
20	AD812583
23	AD812584
24	AD812585
25	AD812586
26	AD812587
27	AD812588
28	AD812589
29	AD812592
30	AD812593
31	AD812594
32	AD812595
33	AD812899
33D	AD812900/MD
33S	AD812901/MS
34	AD812597
35	AD812598
35D	AD812599/MD
35S	AD812600/MS
36	AD812601
37	AD812602

Were ICP interelement corrections applied ? Yes/No YES  
Were ICP background corrections applied ? Yes/No YES  
If yes - were raw data generated before application of background corrections ? Yes/No NO

## Comments:

HC and HexaChrom represent Hexavalent Chromium.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: K. E. Kasperek Name: Kenneth E. Kasperek  
Date: 12/7/98 Title: Laboratory Director

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209\_\_\_\_\_  
Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: S20\_\_\_\_\_  
Version: ASP-95

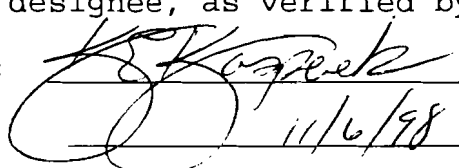
NYSDEC Sample No.	Lab Sample ID
36	AD812601
37	AD812602
38	AD812603
38D	AD812604/MD
38S	AD812605/MS
39	AD812578
39D	A8407605D
39S	A8407605S
40	AD812831
40D	AD812832/MD
40S	AD812833/MS
41	AD812834

Were ICP interelement corrections applied ? Yes/No YES  
Were ICP background corrections applied ? Yes/No YES  
If yes - were raw data generated before application of background corrections ? Yes/No NO\_

## Comments:

\_\_\_\_\_ HC and HexaChrom represent Hexavalent Chromium. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Kenneth\_E.\_Kasperek\_\_\_\_\_  
Date: 11/6/98 Title: Laboratory\_Director\_\_\_\_\_

Lab Name: RECRA\_LABNET\_INC.\_\_\_\_\_ Contract: NY97-209\_\_\_\_  
Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.:S20\_\_\_\_  
Version: ASP-95

[illegible]

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: \_\_\_\_\_ HC and HexaChrom represent Hexavalent Chromium. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Kenneth E. Kasperek Name: Kenneth\_E.\_Kasperek\_\_\_\_  
Date: 12/7/98 Title: Laboratory Director

COVER PAGE - IN

10/95

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

23

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812584  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 88.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8404902-STA00242  
 CLIENT SAMPLE ID: 1506-S-23

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

24

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812585  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 89.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: GRAY Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8404903-STA00242

CLIENT SAMPLE ID: 1506-S-24



## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

25

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812586  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 90.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8404904-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-25

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

26

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812587  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8404905-STA00242

CLIENT SAMPLE ID: 1506-S-26

000012

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

27

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812588  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 85.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8404906-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-27

000013

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

28

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812589  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	1.9	B	N	P
7440-38-2	Arsenic	14.0			P
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.6		N	P
7440-43-9	Cadmium	9.9		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	55.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	1310		N*	P
7439-89-6	Iron				NR
7439-92-1	Lead	565		N*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	19.3		N	P
7440-09-7	Potassium	1980		E	P
7782-49-2	Selenium	12.1	U		P
7440-22-4	Silver	0.71	B	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	2.0	B		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	2770		N	P
	Cyanide				NR
7439-98-7	Molybdenum	23.1			P
	HexaChrom				NR

\*

Color Before: BLACK Clarity Before: Texture: FINE  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8404907-CGA01515

CLIENT SAMPLE ID: 1506-S-28

\* Sample was diluted for Se at 1:10 level due to matrix interference.  
 Result was below IDL. Used IDL at level 10x(instrument IDL).

FORM I - IN

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

29

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812592  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 91.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.9		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: GRAY Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8406701-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-29

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

30

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812593  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 81.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8406702-STA00242

CLIENT SAMPLE ID: 1506-S-30

## INORGANIC ANALYSES DATA SHEET

31

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812594  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 79.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	508		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8406703-STA00242

CLIENT SAMPLE ID: 1506-S-31

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

32

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812595  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 89.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	408		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8406704-STA00242

CLIENT SAMPLE ID: 1506-S-32



1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

33

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812899  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	371		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8406705-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-33

000019

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

34

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812597  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 81.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	41.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8406706-STA00242

CLIENT SAMPLE ID: 1506-S-34

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

35

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812598  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony	1.3	U	N	P
7440-38-2	Arsenic	5.2			P
7440-39-3	Barium				NR
7440-41-7	Beryllium	1.1		N	P
7440-43-9	Cadmium	6.2		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	23.6		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper	122		N*	P
7439-89-6	Iron				NR
7439-92-1	Lead	86.5		N*	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	14.0		N	P
7440-09-7	Potassium	1730		E	P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.86	B	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	61.7		N	P
	Cyanide				NR
7439-98-7	Molybdenum	0.86	B		P
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: FINE  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8407601-CGA01515

CLIENT\_SAMPLE\_ID: 1506-S-35

000021

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

36

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812601  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	222		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8407602-STA00242

CLIENT SAMPLE ID: 1506-S-36

000022

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

37

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812602  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.2		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8407603-STA00242

CLIENT SAMPLE ID: 1506-S-37

000030

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

38

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812603  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.1		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8407604-STA00242  
 CLIENT SAMPLE ID: 1506-S-38

000024

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

39

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): WATER Lab Sample ID: AD812578  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	1.8	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom	17.0	U		A

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8407605-STA00273

CLIENT\_SAMPLE\_ID: 1506-S-39

## NYSDEC-ASP

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

40

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812831  
 Level (low/med): LOW Date Received: 09/30/98  
 % Solids: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.5		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8414601-STA00242

CLIENT SAMPLE ID: 1506-S-40



1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

41

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209 \_\_\_\_\_  
 Lab Code: RECNY \_\_\_\_\_ Case No.: 7861 \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: S20 \_\_\_\_\_  
 Matrix (soil/water): SOIL \_\_\_\_\_ Lab Sample ID: AD812834 \_\_\_\_\_  
 Level (low/med): LOW \_\_\_\_\_ Date Received: 09/30/98 \_\_\_\_\_  
 % Solids: \_\_\_\_\_ 89.6 \_\_\_\_\_

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM  
 Color After: YELLOW \_\_\_\_\_ Clarity After: CLEAR \_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8414602-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-41

## Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-4049  
Lab Sample ID: A8404905  
Client Sample ID: 1506-S-26  
SDG No: S20

RECNY

Matrix: Soil  
Sample Date: 09/22/98  
Dilution Factor: 1  
% Dry Weight: 89.40

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	0.48	

000024

## Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-4049  
Lab Sample ID: A8404906  
Client Sample ID: 1506-S-27  
SDG No: S20

RECNY

Matrix: Soil  
Sample Date: 09/22/98

Dilution Factor: 1  
% Dry Weight: 85.84

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	0.97	

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## Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-4049  
Lab Sample ID: A8404907  
Client Sample ID: 1506-S-28  
SDG No: S20

RECNY

Matrix: Soil  
Sample Date: 09/22/98  
Dilution Factor: 1  
% Dry Weight: 80.00

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	1.9	

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# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4067  
 Lab Sample ID: A8406701  
 Client Sample ID: 1506-S-29  
 SDG No: S20

RECNY

Matrix: Soil  
 Sample Date: 09/23/98

Dilution Factor: 1  
 % Dry Weight: 91.09

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	8.7	U

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## Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-4067  
Lab Sample ID: A8406703  
Client Sample ID: 1506-S-31  
SDG No: S20

RECNY

Matrix: Soil  
Sample Date: 09/23/98  
Dilution Factor: 25  
% Dry Weight: 79.01

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	69.0	U

600031

# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4067  
 Lab Sample ID: A8406706  
 Client Sample ID: 1506-S-34  
 SDG No: S20

RECNV

Matrix: Soil  
 Sample Date: 09/23/98

Dilution Factor: 1  
 % Dry Weight: 81.26

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	8.4	U

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# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4076  
 Lab Sample ID: A8407602  
 Client Sample ID: 1506-S-36  
 SDG No: S20

RECNY

Matrix: Soil  
 Sample Date: 09/24/98  
 Dilution Factor: 25  
 % Dry Weight: 88.22

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	54.0	

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# Soluble Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4076  
 Lab Sample ID: A8407603  
 Client Sample ID: 1506-S-37  
 SDG No: S20

RECNY

Matrix: Soil  
 Sample Date: 09/24/98  
 Dilution Factor: 1  
 % Dry Weight: 90.72

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	0.40	U

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## Soluble Metals Analysis

Laboratory: Recra LabNet  
Lab Job No: A98-4076  
Lab Sample ID: A8407604  
Client Sample ID: 1506-S-38  
SDG No: S20

RECNY

Matrix: Soil  
Sample Date: 09/24/98

Dilution Factor: 1  
% Dry Weight: 88.19

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	4.4	

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# Total Metals Analysis

Laboratory: Recra LabNet  
 Lab Job No: A98-4076  
 Lab Sample ID: A8407605  
 Client Sample ID: 1506-S-39  
 SDG No: S20

- RECNY

Matrix: Aqueous  
 Sample Date: 09/24/98

Dilution Factor: 1

Parameter	Units	Method	Digestion Date	Analysis Date	Result	Q
Hexavalent Chromium - Total	UG/L	A		09/25/98	17.0	U

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NYSDEC SAMPLE NO.

33S

% Solids for Sample: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

[illegible]

Comments:

LAB SAMPLE ID: A8406705MS-STA00242

CLIENT SAMPLE ID: 1506-S-33 MS

Day Environmental, Inc. (716) 292-1090

**RECRA LABNET**, a division of Recra Environmental, Inc. (#NYBA7861)

CHAIN OF CUSTODY RECORD

PROJECT NO 1506 R-97					SITE NAME 95 Mt. Read Blvd. Rochester, New York		NO OF CON TAINERS	ASP	Total Chrome (U-P-M)	Hex Chrome (U-P-M)	TAL VOCs (95-1)	TAL Metals			REMARKS
SAMPLERS (SIGNATURE) 															
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION										
001	5/12/98	1230		X	1506-S-20	1	X								TB-17 (2-4')
002	5/12/98	1305		X	1506-S-23	1	X								TB-17 (8-10')
003	5/13/98	1110		X	1506-S-24	1	X								TB-3 (8-10')
004	4/14/98	1204		X	1506-S-25	1	X								TB-7 (8-10')
005	9/22/98	1105		X	1506-S-26	1	X	X							TB-28 (8-10')
006	9/22/98	1400		X	1506-S-27	1	X	X							TB-34 (10-11.4')
007	9/22/98	1655		X	1506-S-28	1		X		X					TB-27A (1.5-3.0)
RELINQUISHED BY (SIGNATURE) 			DATE/TIME 9/24/98 1815		RECEIVED BY (SIGNATURE)			RELINQUISHED BY (SIGNATURE)			DATE/TIME		RECEIVED BY (SIGNATURE)		
RELINQUISHED BY (SIGNATURE)			DATE/TIME		RECEIVED BY (SIGNATURE)			RELINQUISHED BY (SIGNATURE)			DATE/TIME		RECEIVED BY (SIGNATURE)		
RELINQUISHED BY (SIGNATURE)			DATE/TIME		RECEIVED FOR LABORATORY BY (SIGNATURE) 			DATE/TIME 9/23/98 0945		REMARKS					

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DAY Environmental, Inc. (716) 292-1090

**RECRA LABNET**, a division of Recra Environmental, Inc. (# NYBA 7861)

CHAIN OF CUSTODY RECORD

PROJECT NO		SITE NAME		NO OF CONTAINERS	ASP	Total (CLP-M)	Hex Chrome (CLP-M)	Hex Chrome	TAL Metals			REMARKS
1506R-97		95 Mt. Read Blvd Rochester, NY										
SAMPLERS (SIGNATURE)												
<i>Joseph Darty</i>												
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION							
1	9/24/98	09:30		X	1506-S-35	1		X				TB-30 (0-4') Also do MS/MSD
2	9/24/98	09:55		X	1506-S-36	1	X	X				TB-30 (8'-10')
3	9/24/98	10:45		X	1506-S-37	1	X	X				TB-32 (11.5'-12.5')
4	9/24/98	11:40		X	1506-S-38	1	X	X				TB-35 (11'-12') Also do MS/MSD
5	9/24/98	15:15		X	1506-S-39	4	X	X				Equipment Rinsate
→					Trip Blank							
<p><u>Note:</u> In 2 Coolers</p>												
RELINQUISHED BY (SIGNATURE)		DATE / TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE / TIME		RECEIVED BY (SIGNATURE)		
<i>Joseph Darty</i>		9/24/98 19:20										
RELINQUISHED BY (SIGNATURE)		DATE / TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE / TIME		RECEIVED BY (SIGNATURE)		
RELINQUISHED BY (SIGNATURE)		DATE / TIME		RECEIVED FOR LABORATORY BY (SIGNATURE)		DATE / TIME		REMARKS				

000074

## CHAIN OF CUSTODY RECORD

24000



NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO. 000077

20

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
Matrix (soil/water): SOIL Lab Sample ID: AD812583  
Level (low/med): LOW Date Received: 09/23/98  
% Solids: 94.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: GRAY Clarity Before: Texture: FINE  
Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB\_SAMPLE\_ID: A8404901-STA00242  
CLIENT\_SAMPLE\_ID: 1506-S-20



January 26, 1999

**Severn Trent Laboratories**  
10 Hazelwood Drive  
Amherst, NY 14228

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil  
Samples Received: 11/06/98  
Sample Dates: 10/27 & 28, 11/02, 04 & 05/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

Kenneth E. Kasperek  
Laboratory Director

CLF/KEK/lfb  
Enclosure

I.D. #A98-5082  
#NY8A7861

This report contains 374 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Corporation

SAMPLE DATA SUMMARY PACKAGE



000002

### CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-S-52  
1506-S-53  
1506-S-54  
1506-S-55  
1506-S-55 MD  
1506-S-55 MS  
1506-S-56  
1506-T-57

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

Analyses for Metals were performed by Recra LabNet's Lionville, PA facility and are enclosed as a self contained data package (SUBCONTRACTED DATA) within this report.

### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

No deviations from protocol were encountered during the analytical procedures.

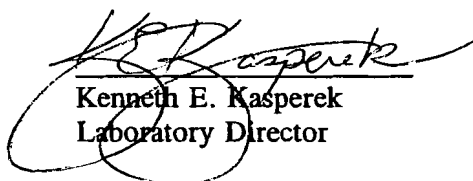


000003

METALS DATA

Case narrative is enclosed within the data package.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

1/26/99  
Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent, Inc.

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-52	A8508201	-	-	-	-	ASP95	-
1506-S-53	A8508202	-	-	-	-	ASP95	-
1506-S-54	A8508203	-	-	-	-	ASP95	-
1506-S-55	A8508204	-	-	-	-	ASP95	-
1506-T-57	A8508206	ASP95	-	-	-	-	-
1506-S-56	A8508205	ASP95	-	-	-	-	-

NYSDEC-1

000005

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-T-57	SOIL	11/05/98	11/06/98	-	11/14/98
1506-S-56	SOIL	11/05/98	11/06/98	-	11/14/98

NYSDEC-2

000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY  
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
1506-S-52	SOIL	T CR	11/06/98	-	-
1506-S-53	SOIL	T CR	11/06/98	-	-
1506-S-54	SOIL	T CR	11/06/98	-	-
1506-S-55	SOIL	HSLME+CN	11/06/98	11/17/98	11/17/98

NYSDEC-5



000007

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
ORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
1506-T-57	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-56	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED

NYSDEC-6

000008

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
1506-S-52	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-53	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-54	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-S-55	SOIL	ASP95	ASP95	AS REQUIRED	AS REQUIRED

NYSDEC-7

**ORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES INC.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000010

Client No.

1506-S-56

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A8508205

Sample wt/vol: 5.21 (g/mL) G

Lab File ID: H1059.RR

Level: (low/med) LOW

Date Samp/Recv: 11/05/98 11/06/98

% Moisture: not dec. 9.6 Heated Purge: Y Date Analyzed: 11/14/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	1	J
67-64-1-----	Acetone	11	U
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	160	
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	760	E
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000011

Client No.

1506-S-56

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A8508205

Sample wt/vol: 5.21 (g/mL) G

Lab File ID: H1059.RR

Level: (low/med) LOW

Date Samp/Recv: 11/05/98 11/06/98

% Moisture: not dec. 9.6

Date Analyzed: 11/14/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000012

Client No.

1506-S-56DL

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A8508205DL

Sample wt/vol: 0.56 (g/mL) G

Lab File ID: H1066.RR

Level: (low/med) LOW

Date Samp/Recv: 11/05/98 11/06/98

% Moisture: not dec. 9.6 Heated Purge: Y Date Analyzed: 11/14/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3-----	Chloromethane	99	U
74-83-9-----	Bromomethane	99	U
75-01-4-----	Vinyl chloride	99	U
75-00-3-----	Chloroethane	99	U
75-09-2-----	Methylene chloride	99	U
67-64-1-----	Acetone	99	U
75-15-0-----	Carbon Disulfide	99	U
75-35-4-----	1,1-Dichloroethene	99	U
75-34-3-----	1,1-Dichloroethane	99	U
540-59-0-----	1,2-Dichloroethene (Total)	99	U
67-66-3-----	Chloroform	99	U
107-06-2-----	1,2-Dichloroethane	99	U
78-93-3-----	2-Butanone	99	U
71-55-6-----	1,1,1-Trichloroethane	99	U
56-23-5-----	Carbon Tetrachloride	99	U
75-27-4-----	Bromodichloromethane	99	U
78-87-5-----	1,2-Dichloropropane	99	U
10061-01-5----	cis-1,3-Dichloropropene	99	U
79-01-6-----	Trichloroethene	120	D
124-48-1-----	Dibromochloromethane	99	U
79-00-5-----	1,1,2-Trichloroethane	99	U
71-43-2-----	Benzene	99	U
10061-02-6----	trans-1,3-Dichloropropene	99	U
75-25-2-----	Bromoform	99	U
108-10-1-----	4-Methyl-2-pentanone	99	U
591-78-6-----	2-Hexanone	99	U
127-18-4-----	Tetrachloroethene	720	D
108-88-3-----	Toluene	99	U
79-34-5-----	1,1,2,2-Tetrachloroethane	99	U
108-90-7-----	Chlorobenzene	99	U
100-41-4-----	Ethylbenzene	99	U
100-42-5-----	Styrene	99	U
1330-20-7-----	Total Xylenes	99	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000013

Client No.

1506-S-56DL

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A8508205DL

Sample wt/vol: 0.56 (g/mL) G

Lab File ID: H1066.RR

Level: (low/med) LOW

Date Samp/Recv: 11/05/98 11/06/98

% Moisture: not dec. 9.6

Date Analyzed: 11/14/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000014

Client No.

1506-T-57

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) WATER

Lab Sample ID: A8508206

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: H1057.RR

Level: (low/med) LOW

Date Samp/Recv: 10/27/98 11/06/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: Y Date Analyzed: 11/14/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U



ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000015

Client No.

1506-T-57

Lab Name: Recra LabNet

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506S

Matrix: (soil/water) WATER Lab Sample ID: A8508206

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: H1057.RR

Level: (low/med) LOW Date Samp/Recv: 10/27/98 11/06/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 11/14/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

DAY ENVIRONMENTAL, INC.

**RECRA LABNET**, a division of Recra Environmental, Inc. (#NYBA7861)

### CHAIN OF CUSTODY RECORD

[illegible]

SUBCONTRACTED DATA

# **INORGANIC (METALS) COMPLETE SDG FILE (CSF) INVENTORY SHEET**

LABORATORY NAME:	<u>Recra LabNet Philadelphia</u>
CITY/STATE:	<u>Lionville, PA</u>
CASE/SDG NO.:	<u>1506/506552</u>
CLIENT NAME:	<u>Day Environmental</u>
WORK ORDER NO.:	<u>99999-999-999-9999-99</u>
METHOD BASED ON:	<u>SW846/ CLP ILMO3.0/ CLP ILMO4.0/ MCAA WW (200 series)</u>

All documents in the Client's copy of the complete SDG file must be legible, clearly labeled, paginated, single-sided original documents; or of sufficient copy quality to be reproducible to fourth generation copies. (Purge file documents, e.g., original-copy chain-of-custody, etc. assembled per specific contract request only.)

RECRA No.: <u>9811L519</u>		Page Nos.		Check (initials)		
		From	To	Lab	Data	Client
0	Inventory Sheet (Do not number)	2		NA		
1	Cover Page (Lab Chron)	001	004	yp	Pl	
2	Table of Contents	005	005	MS	Pl	
3	Shipping, Receiving, and Custody Records <ul style="list-style-type: none"> <li>• Lab Chain of Custody/Work Request</li> <li>• Client Custody Reports/Packing Lists</li> <li>• Airbills</li> </ul>	006	009	yp	Pl	
4	Case Narrative	009	013	yp	Pl	
5	Inorganic Analysis Data Package (divider sheet)	014	014	yp	Pl	
6	Cover Page with Lab Manager Signature	015	015	yp	Pl	
7	Inorganic Analysis Data Sheet (Form I-IN)	016	019	yp	Pl	
8	Initial & Continuing Calibration Verification (Form IIA-IN)	020	022	yp	Pl	
9	CRDL Standards for AA and ICP (Form IIB-IN)	023	023	yp	Pl	
10	Blanks (Form III-IN)	024	025	yp	Pl	
11	ICP Interference Check Sample (Form IV-IN)	026	026	yp	Pl	
12	Spike Sample Recovery (Form VA-IN)	027	027	yp	Pl	
13	Post Digest Spike Sample Recovery (Form VB-IN)	028	028	yp	Pl	
14	Duplicates (Form VI-IN)	029	029	yp	Pl	
15	Laboratory Control Sample (Form VII-IN)	030	031	yp	Pl	
16	Standard Addition Results (Form VIII-IN)	—		NA		
17	ICP Serial Dilutions (Form IX-IN)	032	032	yp	Pl	
18	Instrument Detection Limits (Form X-IN)	033	034	yp	Pl	

RECRA No.: 98112519		Page Nos.		Check (Initials)		
		From	To	Lab	Data	Client
19	ICP Interelement Correction (Form XIA-IN & XIB-IN)	035	037	upp	Pl	
20	ICP Linear Ranges (Form XII-IN)	038	038	upp	Pl	
21	Preparation Log (Form XIII-IN)	039	040	upp	Pl	
22	Analysis Run Log (Form XIV-IN)	041	044	upp	Pl	
23	ICP Raw Data	045	207	upp	Pl	
24	Furnace Raw Data	-	-	11/10/95 NA	Pl	
25	Mercury Raw Data	208	211	upp	Pl	
26	Cyanide Raw Data	-	-	NA	Pl	
27	Preparation Logs Raw Data, in order: ICP, AA, Mercury, Cyanide-Distillation	212	215	upp	Pl	
28	Percent Solids Determination Log	216	216	upp	Pl	
29	Analysis Logbook Pages	217	218	upp	Pl	
30	Standards Preparation Records, in order ICP, AA, Mercury, Cyanide	219	220	upp	Pl	
31	Other/Miscellaneous					
	End of Package Page	221	221		Pl	

## COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Checked by:  
(Laboratory)

Yair M. Gersh  
Signature

Gail M. Beegle  
Printed Name/Title

11/17/95  
Date

Checked by:  
(Data Reporting)

Pat E.  
Signature

Patricia E. Feldman  
Printed Name/Title

1-21-95  
Date

Checked by:  
(Client)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name/Title

\_\_\_\_\_  
Date

Recra LabNet - Lionville Laboratory  
INORGANIC ANALYTICAL DATA PACKAGE FOR  
DAY ENVIRONMENTAL

DATE RECEIVED: 11/28/98

RFW LOT # :9811L519

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
1506-S-52						
CHROMIUM, TOTAL	001	S	98L1477	10/27/98	12/15/98	01/03/99
1506-S-53						
CHROMIUM, TOTAL	002	S	98L1477	10/28/98	12/15/98	01/03/99
1506-S-54						
CHROMIUM, TOTAL	003	S	98L1477	11/02/98	12/15/98	01/03/99
1506-S-55						
SILVER, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
SILVER, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
SILVER, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
ALUMINUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
ALUMINUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
ALUMINUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
ARSENIC, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
ARSENIC, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
ARSENIC, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
BARIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
BARIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
BARIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
BERYLLIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
BERYLLIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
BERYLLIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
CALCIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
CALCIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
CALCIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
CADMIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
CADMIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
CADMIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
COBALT, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
COBALT, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99

000155

Recra LabNet - Lionville Laboratory  
INORGANIC ANALYTICAL DATA PACKAGE FOR  
DAY ENVIRONMENTAL

DATE RECEIVED: 11/28/98

RFW LOT # :9811L519

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
COBALT, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
CHROMIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
CHROMIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
CHROMIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
COPPER, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
COPPER, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
COPPER, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
IRON, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
IRON, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
IRON, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
MERCURY, TOTAL	004	S	98C0551	11/04/98	12/01/98	12/02/98
MERCURY, TOTAL	004 REP	S	98C0551	11/04/98	12/01/98	12/02/98
MERCURY, TOTAL	004 MS	S	98C0551	11/04/98	12/01/98	12/02/98
POTASSIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
POTASSIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
POTASSIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
MAGNESIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
MAGNESIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
MAGNESIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
MANGANESE, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
MANGANESE, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
MANGANESE, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
SODIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
SODIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
SODIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
NICKEL, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
NICKEL, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
NICKEL, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
LEAD, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
LEAD, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
LEAD, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
ANTIMONY, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
ANTIMONY, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
ANTIMONY, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
SELENIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
SELENIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
SELENIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
THALLIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99

0002

Recra LabNet - Lionville Laboratory  
INORGANIC ANALYTICAL DATA PACKAGE FOR  
DAY ENVIRONMENTAL

DATE RECEIVED: 11/28/98

RFW LOT # :9811L519

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
THALLIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
THALLIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
VANADIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
VANADIUM, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
VANADIUM, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99
ZINC, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
ZINC, TOTAL	004 REP	S	98L1477	11/04/98	12/15/98	01/03/99
ZINC, TOTAL	004 MS	S	98L1477	11/04/98	12/15/98	01/03/99

LAB QC:

CHROMIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
CHROMIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
SILVER LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
SILVER, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
ALUMINUM LABORTORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
ALUMINUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
ARSENIC LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
ARSENIC, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
BARIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
BARIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
BERYLLIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
BERYLLIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
CALCIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
CALCIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
CADMIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
CADMIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
COBALT LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
COBALT, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
COPPER LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
COPPER, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
IRON LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
IRON, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
MERCURY LABORATORY	LC1 BS	S	98C0551	N/A	12/01/98	12/02/98
MERCURY, TOTAL	MB1	S	98C0551	N/A	12/01/98	12/02/98
POTASSIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
POTASSIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
MAGNESIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99



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Recre LabNet - Lionville Laboratory  
INORGANIC ANALYTICAL DATA PACKAGE FOR  
DAY ENVIRONMENTAL

DATE RECEIVED: 11/28/98

RFW LOT # :9811L519

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MAGNESIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
MANGANESE LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
MANGANESE, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
SODIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
SODIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
NICKEL LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
NICKEL, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
LEAD LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
LEAD, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
ANTIMONY LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
ANTIMONY, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
SELENIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
SELENIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
THALLIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
THALLIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
VANADIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
VANADIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
CADMIUM LABORATORY	LC1 BS	S	98L1477	N/A	12/15/98	01/03/99
ZINC, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99

0004

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## Chain of Custody



FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS. (7) metals (8)

**Special Instructions:**

Use NY hold times for Hg + CN.

**DATE/REVISIONS:**

1. NY Batch - NY8A7861  
12/19/98 2. CN concealed per SDR 98PM771

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

**RECRA LabNet Use Only**

Samples were: ☒ Shipped or Hand Delivered \_\_\_\_\_

Airbill # Sub 120

2) Ambient or Controlled

3) Received in Good Condition ☒ or N

4) Labels Indicate Properly Preserved ☒ or N

5) Received Within Holding Times ☒ or N

COC Tape was: 1) Present on Outer Package ☒ or N

2) Unbroken on Outer Package ☒ or N

3) Present on Sample Y or ☒ N

4) Unbroken on Sample Y or N

COC Record Present Upon Sample Rec't ☒ or N

Cooler Temp. 1 C

Relinquished by	Received by	Date	Time
<u>Ed EF</u>	<u>V. Perry</u>	<u>11-28-99</u>	<u>1000</u>

Relinquished by	Received by	Date	Time
		<u>1</u>	

Discrepancies Between Samples Labels and COC Record? Y or ☒ N

NOTES:

440095640760

000160

## Sample Custody Transfer Record

RFW BATCH #: 978112519

CLIENT: Day

Page \_\_\_\_ of \_\_\_\_

**LF = Locked Refrigerator**

[illegible]

19100

0008

## Case Narrative




**Recra LabNet Philadelphia  
Analytical Report****Client : DAY ENVIRONMENTAL**  
**RFW# : 9811L519****W.O.# : 99999-999-999-9999-99**  
**Date Received: 11-28-98****CLP/ILM04.0 METALS**

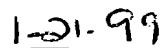
1. This narrative covers the analyses of 4 soil samples.
2. The samples were prepared and analyzed in accordance with CLP/ILM04.0 protocol.
3. ICVs, CCVs, and LCSs stock standards were purchased from Inorganic Ventures and High Purity.
4. All analyses were performed within the required holding times.
5. The cooler temperature has been recorded on the Chain of Custody.
6. All Initial and Continuing Calibration Verifications (ICV/CCVs) were within control limits.
7. All Initial and Continuing Calibration Blanks (ICB/CCBs) were within control limits.
8. All preparation/method blanks were below reporting limits. Refer to form 3.
9. All ICP Interference Check Samples (ICSA and ICSAB) were within control limits. Refer to form 4.
10. All laboratory control samples (LCS) were within the 80-120% control limits. Refer to form 7.
11. The serial dilution percent differences for 2 analytes were outside CLP control limits. Refer to form 9.
12. The matrix spike (MS) recoveries for 3 analytes were outside the 75-125% control limits (exception allowed when sample concentration exceeds the spike added concentration by a factor of 4 or more). Refer to form 5A. For analytes where the MS is out of control, a post-digestion MS is performed (exception allowed for Silver). MS analyses are not required for Calcium, Magnesium, Sodium and Potassium in waters and soils. Also, not required for Aluminum and Iron in soils.

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 22 pages.

13. The duplicate analyses for 2 analytes were outside the method criteria. Refer to form 6.
14. All sample IDs were changed to accommodate the EPA naming convention which allows a maximum of 6 characters on all CLP Forms. Refer to the comments section of form 1 for the original ID.
15. Recoveries on the Laboratory Summary Report and CLP forms will vary depending on the number of significant figures used in the recovery calculation.



J. Michael Taylor  
Vice President  
Philadelphia Analytical Laboratory



Date

gmb/m12-519





# METALS METHOD GLOSSARY

000165

The following methods are used as reference for the digestion and analysis of samples contained within this

Recra Lot#: 9811LS19

Leaching Procedure: 1310 1311 1312 Other:

CLP Metals Digestion and Analysis Methods: ILM03.0 ILM04.0

Metals Digestion Methods: 3005A 3010A 3015 3020A 3050A 3051 200.7 SS17  
Other:

## Metals Analysis Methods

	SW846	EPA	STD MTD	EPA OSWR	USATHAMA
Aluminum	6010B	200.7			99
Antimony	6010B 7041 <sup>s</sup>	200.7 204.2			99
Arsenic	6010B 7060A <sup>s</sup>	200.7 206.2	3113B		99
Barium	6010B	200.7			99
Beryllium	6010B	200.7			99
Bismuth	6010B <sup>1</sup>	200.7 <sup>1</sup>		1620	99
Boron	6010B	200.7			99
Cadmium	6010B 7131A <sup>s</sup>	200.7 213.2			99
Calcium	6010B	200.7			99
Chromium	6010B 7191 <sup>s</sup>	200.7 218.2			SS17
Cobalt	6010B	200.7			99
Copper	6010B 7211 <sup>s</sup>	200.7 220.2			99
Iron	6010B	200.7			99
Lead	6010B 7421 <sup>s</sup>	200.7 239.2	3113B		99
Lithium	6010B 7430 <sup>4</sup>	200.7		1620	99
Magnesium	6010B	200.7			99
Manganese	6010B	200.7			99
Mercury	7470A <sup>3</sup> 7471A <sup>3</sup>	245.1 <sup>2</sup> 245.5 <sup>2</sup>			99
Molybdenum	6010B	200.7			99
Nickel	6010B	200.7			99
Potassium	6010B 7610 <sup>4</sup>	200.7 258.1 <sup>4</sup>			99
Rare Earths	6010B <sup>1</sup>	200.7 <sup>1</sup>		1620	99
Selenium	6010B 7740 <sup>s</sup>	200.7 270.2	3113B		99
Silicon	6010B <sup>1</sup>	200.7		1620	99
Silica	6010B	200.7		1620	99
Silver	6010B 7761 <sup>s</sup>	200.7 272.2			99
Sodium	6010B 7770 <sup>4</sup>	200.7 273.1 <sup>4</sup>			99
Strontium	6010B	200.7			99
Thallium	6010B 7841 <sup>s</sup>	200.7 279.2 200.9			99
Tin	6010B	200.7			99
Titanium	6010B	200.7			99
Uranium	6010B <sup>1</sup>	200.7 <sup>1</sup>		1620	99
Vanadium	6010B	200.7			99
Zinc	6010B	200.7			99
Zirconium	6010B <sup>1</sup>	200.7 <sup>1</sup>		1620	99

Other:

Method:

## METHOD REFERENCES AND DATA QUALIFIERS

### DATA QUALIFIERS

- U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.
- B = Indicates that the parameter was between the Instrument Detection Limit (IDL) and the Contract Required Detection Limit (CRDL)

### Q QUALIFIERS

- E = The reported value is estimated because of the presence of interference.
- M = Duplicate injection precision not met.
- N = Spiked sample recovery not within control limits.
- S = The reported value was determined by the Method of Standard Additions (MSA).
- W = Post Digestion spike for Furnace AA analysis is out of control limits (85 -115 %), while sample absorbance is less than 50% of spike absorbance.
- \* = Duplicate analysis not within control limits.
- + = Correlation coefficient for the MSA is less than 0.995.

### ABBREVIATIONS

- PB = Method or Preparation Blank.
- S = Matrix Spike.
- T = Matrix Spike Duplicate.
- R or D = Sample Replicate

### ANALYTICAL METAL METHODS

1. Not included in the method element list.
2. Modified Hg: Hg1 and Hg2 require less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionately scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 mL. For soils, 0.1 grams of sample is taken to a final volume of 50 mL (including all reagents).
3. Modified Hg: Hg1 and Hg2 require less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionately scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 mL. For soils, three 0.1 gram of sample is taken to a final volume of 50 mL (including all reagents).
4. Flame AA.
5. Graphite Furnace AA.

**000167**

## **Inorganic Analysis Data Package**



**0014**

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_\_\_\_\_ Contract: 99999\_\_\_\_\_

Lab Code: RECRA\_ Case No.: 1506\_ SAS No.: \_\_\_\_\_ SDG No.: 506S52

SOW No.: SW846\_ILM04.0

upb  
1/17/99

EPA Sample No.

506S52\_\_\_\_\_  
506S53\_\_\_\_\_  
506S54\_\_\_\_\_  
506S55\_\_\_\_\_  
506S55D\_\_\_\_\_  
506S55S\_\_\_\_\_

Lab Sample ID

9811L519-001\_\_\_\_\_  
9811L519-002\_\_\_\_\_  
9811L519-003\_\_\_\_\_  
9811L519-004\_\_\_\_\_  
9811L519-004D\_\_\_\_\_  
9811L519-004S\_\_\_\_\_

Were ICP interelement corrections applied ?

Yes/No YES

Were ICP background corrections applied ?

Yes/No YES

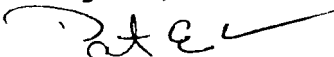
If yes - were raw data generated before  
application of background corrections ?

Yes/No NO\_

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_



Name: \_\_\_\_\_

PATRICIA E Feldman

Date: \_\_\_\_\_

1-21-99

Title: \_\_\_\_\_

Data Mgt Supervisor

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

506S52

Lab Name: RECRA\_LABNET\_\_\_\_\_ Contract: 99999\_\_\_\_\_

Lab Code: RECRA\_\_\_\_\_ Case No.: 1506\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 506S52

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 9811L519-001

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/28/98

% Solids: \_\_\_\_\_88.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.7			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

1506-S-52\_\_\_\_\_

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

506S53

Lab Name: RECRA\_LABNET Contract: 99999

Lab Code: RECRA Case No.: 1506 SAS No.: SDG No.: 506S52

Matrix (soil/water): SOIL Lab Sample ID: 9811L519-002

Level (low/med): LOW Date Received: 11/28/98

% Solids: 93.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.0			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

1506-S-53

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

506S54

Lab Name: RECRA\_LABNET\_\_\_\_\_ Contract: 99999\_\_\_\_\_  
Lab Code: RECRA\_ Case No.: 1506\_ SAS No.: \_\_\_\_\_ SDG No.: 506S52  
Matrix (soil/water): SOIL\_ Lab Sample ID: 9811L519-003  
Level (low/med): LOW\_ Date Received: 11/28/98  
% Solids: \_95.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_  
Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

1506-S-54\_\_\_\_\_

## U.S. EPA - CLP

000172

1  
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

506S55

Lab Name: RECRA\_LABNET\_\_\_\_\_ Contract: 99999\_\_\_\_\_

Lab Code: RECRA\_\_\_\_\_ Case No.: 1506\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 506S52

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: 9811L519-004

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/28/98

% Solids: \_\_\_\_\_90.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4510	-	*	P
7440-36-0	Antimony	0.74	U	N	P
7440-38-2	Arsenic	2.4	-		P
7440-39-3	Barium	71.3	-		P
7440-41-7	Beryllium	0.34	B		P
7440-43-9	Cadmium	0.15	B		P
7440-70-2	Calcium	51600	-		P
7440-47-3	Chromium	7.6	-		P
7440-48-4	Cobalt	4.3	B		P
7440-50-8	Copper	12.3	-	E	P
7439-89-6	Iron	10900	-		P
7439-92-1	Lead	4.6	-		P
7439-95-4	Magnesium	10500	-	*	P
7439-96-5	Manganese	353	-	N	P
7439-97-6	Mercury	0.03	U	N	AV
7440-02-0	Nickel	8.5	-		P
7440-09-7	Potassium	830	B	E	P
7782-49-2	Selenium	0.76	U		P
7440-22-4	Silver	0.11	U		P
7440-23-5	Sodium	272	B		P
7440-28-0	Thallium	0.59	U		P
7440-62-2	Vanadium	14.3	-		P
7440-66-6	Zinc	27.8	-		P

Color Before: \_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: \_\_\_\_\_

Color After: \_\_\_\_\_ Clarity After: \_\_\_\_\_ Artifacts: \_\_\_\_\_

Comments:

1506-S-55





RECEIVED

FEB 16 1999

February 12, 1999

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

Severn Trent Laboratories  
10 Hazelwood Drive  
Amherst, NY 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the sample submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Water  
Samples Received: 12/23/98  
Sample Dates: 12/21/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

Kenneth E. Kasperek  
Laboratory Director

CLF/KEK/dms  
Enclosure

I.D. #A98-6184  
#NY8A7861

This report contains 205 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Laboratories



000001

## SAMPLE DATA SUMMARY PACKAGE



Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

SDG Number: 1506NM

Sample Identification: 1506-N-MW9

### METHODOLOGY

Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Teknivant Datasystem and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

Sample 1506-N-MW9 was analyzed at an initial dilution factor of 500 due to the high concentration of some compounds of interest.

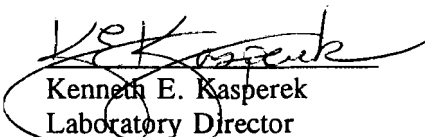
All samples were preserved to a pH of less than 2.

### METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.



"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

  
Kenneth E. Kasperek  
Laboratory Director

2/12/99  
Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent, Inc.



600004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: STL BUFFALO

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	OTHER
1506-N-MW9	A8619401	ASP95	-	-	-	ASP95	-

NYSDEC-1



000005

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE ANALYSIS

LAB NAME: STL BUFFALO

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-N-MW9	WATER	12/21/98	12/23/98	-	12/31/98

NYSDEC-2



000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY  
INORGANIC ANALYSIS

LAB NAME: STL BUFFALO

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
1506-N-MW9	WATER	Total CR	12/23/98	12/28/98	01/01/99

NYSDEC-5

000007



NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
ORGANIC ANALYSIS

LAB NAME: STL BUFFALO

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
1506-N-MW9	WATER	ASP95	-	AS REQUIRED	AS REQUIRED

NYSDEC-6





000008

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

LAB NAME: STL BUFFALO

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
1506-N-MW9	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED

NYSDEC-7



## ORGANIC DATA COMMENT PAGE

000009

Laboratory Name: SEVERN TRENT LABORATORIES INC.

### USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.



## INORGANIC DATA COMMENT PAGE

000010

Laboratory Name: SEVERN TRENT LABORATORIES, INC.

### USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates compound was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- +
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000011

Client No.

1506-N-MW9

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506NM

Matrix: (soil/water) WATER

Lab Sample ID: A8619401

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2188.RR

Level: (low/med) LOW

Date Samp/Recv: 12/21/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 500.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	-----Chloromethane	5000	U
74-83-9	-----Bromomethane	5000	U
75-01-4	-----Vinyl chloride	5000	U
75-00-3	-----Chloroethane	5000	U
75-09-2	-----Methylene chloride	5000	U
67-64-1	-----Acetone	5000	U
75-15-0	-----Carbon Disulfide	5000	U
75-35-4	-----1,1-Dichloroethene	5000	U
75-34-3	-----1,1-Dichloroethane	5000	U
540-59-0	-----1,2-Dichloroethene (Total)	2000	J
67-66-3	-----Chloroform	5000	U
107-06-2	-----1,2-Dichloroethane	5000	U
78-93-3	-----2-Butanone	5000	U
71-55-6	-----1,1,1-Trichloroethane	5000	U
56-23-5	-----Carbon Tetrachloride	5000	U
75-27-4	-----Bromodichloromethane	5000	U
78-87-5	-----1,2-Dichloropropane	5000	U
10061-01-5	-----cis-1,3-Dichloropropene	5000	U
79-01-6	-----Trichloroethene	51000	
124-48-1	-----Dibromochloromethane	5000	U
79-00-5	-----1,1,2-Trichloroethane	5000	U
71-43-2	-----Benzene	5000	U
10061-02-6	-----trans-1,3-Dichloropropene	5000	U
75-25-2	-----Bromoform	5000	U
108-10-1	-----4-Methyl-2-pentanone	5000	U
591-78-6	-----2-Hexanone	5000	U
127-18-4	-----Tetrachloroethene	66000	B
108-88-3	-----Toluene	5000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	5000	U
108-90-7	-----Chlorobenzene	5000	U
100-41-4	-----Ethylbenzene	5000	U
100-42-5	-----Styrene	5000	U
100-20-7	-----Total Xylenes	5000	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000012

Client No.

1506-N-MW9

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506NM

Matrix: (soil/water) WATER

Lab Sample ID: A8619401

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2188.RR

Level: (low/med) LOW

Date Samp/Recv: 12/21/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 500.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

## NYSDEC ASP

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.:1506NM

Protocol Version: ASP-95

NYSDEC Sample No.  
\_1506-N-\_\_\_\_\_Lab Sample ID.  
\_AD818692\_\_\_\_\_

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before  
application of background corrections ? Yes/No NO\_

Comments:

I certify that this data package is in compliance with the terms and conditions of the Protocol, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Kenneth\_E.\_Kasperek\_\_\_\_\_Date: 2/12/99 Title: Laboratory\_Director\_\_\_\_\_

COVER PAGE - IN

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO. \_\_\_\_\_

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209 \_\_\_\_\_

1506-N-

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: 1506NM

Matrix (soil/water): WATER

Lab Sample ID: AD818692

Level (low/med): LOW\_

Date Received: 12/23/98

% Solids: \_\_\_\_\_0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	955			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8619401-STA00273 \_\_\_\_\_

CLIENT\_SAMPLE\_ID: 1506-N-MW9 \_\_\_\_\_

### CHAIN OF CUSTODY RECORD

[illegible]

cooler @  $11^{\circ}\text{C}$





**Committed To Your Success**

March 22, 1999

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

**Severn Trent Laboratories**  
10 Hazelwood Drive  
Amherst, NY 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil  
Sample Received: 02/24/99  
Sample Date: 02/19/99

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

Susan L. Tinsmith  
Laboratory Manager

CLF/SLT/lrb  
Enclosure

I.D. #A99-0954  
#NY8A7861

This report contains 658 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Services Inc.

000001

## SAMPLE DATA SUMMARY PACKAGE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-S-58  
1506-S-58 MD  
1506-S-58 MS  
1506-S-58 MSD

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

### VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

Samples 1506-S-58 Matrix Spike and Matrix Spike Duplicate yielded spike recoveries for Trichloroethene which were above quality control limits.



000003

SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

The MSBLANK and sample 1506-S-58 Matrix Spike Duplicate yielded spike recoveries for 2,4-Dinitrotoluene which were above quality control limits.

PESTICIDES\AROCLORS DATA

PEM02 analyzed on column RTXCLP2 on 02/16/99 exhibited a percent difference of 4,4'-DDT which was slightly above quality control limits.

The pesticide GPC calibration of 03/03/99 shows the percent recoveries for Dieldrin and Endrin as slightly above quality control limits.

Sample 1506-S-58 Matrix Spike yielded a recovery for Endrin which was above quality control limits.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Susan L. Tinsmith  
Laboratory Manager

  
Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent, Inc.

000004

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-58	A9095401	ASP95	ASP95	-	ASP95	-	-

NYSDEC-1

000005

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1 506-S-58	SOIL	02/19/99	02/24/99	-	03/01/99

NYSDEC-2

000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
B\N-A ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-S-58	SOIL	02/19/99	02/24/99	03/06/99	03/13/99

NYSDEC-3

000007

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
PESTICIDE/PCB ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-S-58	SOIL	02/19/99	02/24/99	03/04/99	03/10/99

NYSDEC-4



000008

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
ORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
1506-S-58	SOIL	ASP95	SONC	AS REQUIRED	AS REQUIRED

NYSDEC-6

**ORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES INC.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000010 Client No.

1506-S-58

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A9095401

Sample wt/vol: 5.07 (g/mL) G

Lab File ID: H2486.RR

Level: (low/med) LOW

Date Samp/Recv: 02/19/99 02/24/99

% Moisture: not dec. 13.4

Heated Purge: Y

Date Analyzed: 03/01/99

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene chloride	11	U
67-64-1-----	Acetone	11	U
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (Total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-01-5----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	9	J
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-02-6----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	17	B
108-88-3-----	Toluene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Total Xylenes	11	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000011

Client No.

1506-S-58

~~Lab~~ Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A9095401

Sample wt/vol: 5.07 (g/mL) G

Lab File ID: H2486.RR

Level: (low/med) LOW

Date Samp/Recv: 02/19/99 02/24/99

% Moisture: not dec. 13.4

Date Analyzed: 03/01/99

CC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000012

Client No.

1506-S-58

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A9095401

Sample wt/vol: 30.13 (g/mL) G

Lab File ID: Z26849.RR

Level: (low/med) LOW

Date Samp/Recv: 02/19/99 02/24/99

% Moisture: 9.1 decanted: (Y/N) N

Date Extracted: 03/06/99

Concentrated Extract Volume: 500 (uL)

Date Analyzed: 03/13/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

108-95-2-----	Phenol	360	U
111-44-4-----	Bis(2-chloroethyl) ether	360	U
95-57-8-----	2-Chlorophenol	360	U
541-73-1-----	1,3-Dichlorobenzene	360	U
106-46-7-----	1,4-Dichlorobenzene	360	U
95-50-1-----	1,2-Dichlorobenzene	360	U
95-48-7-----	2-Methylphenol	360	U
108-60-1-----	2,2'-Oxybis(1-Chloropropane)	360	U
106-44-5-----	4-Methylphenol	360	U
621-64-7-----	N-Nitroso-Di-n-propylamine	360	U
67-72-1-----	Hexachloroethane	360	U
98-95-3-----	Nitrobenzene	360	U
78-59-1-----	Isophorone	360	U
88-75-5-----	2-Nitrophenol	360	U
105-67-9-----	2,4-Dimethylphenol	360	U
111-91-1-----	Bis(2-chloroethoxy) methane	360	U
120-83-2-----	2,4-Dichlorophenol	360	U
120-82-1-----	1,2,4-Trichlorobenzene	360	U
91-20-3-----	Naphthalene	360	U
106-47-8-----	4-Chloroaniline	360	U
87-68-3-----	Hexachlorobutadiene	360	U
59-50-7-----	4-Chloro-3-methylphenol	360	U
91-57-6-----	2-Methylnaphthalene	360	U
77-47-4-----	Hexachlorocyclopentadiene	360	U
88-06-2-----	2,4,6-Trichlorophenol	360	U
95-95-4-----	2,4,5-Trichlorophenol	880	U
91-58-7-----	2-Chloronaphthalene	360	U
88-74-4-----	2-Nitroaniline	880	U
131-11-3-----	Dimethyl phthalate	360	U
208-96-8-----	Acenaphthylene	360	U
606-20-2-----	2,6-Dinitrotoluene	360	U
99-09-2-----	3-Nitroaniline	880	U

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000013

Client No.

1506-S-58

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A9095401

Sample wt/vol: 30.13 (g/mL) G

Lab File ID: Z26849.RR

Level: (low/med) LOW

Date Samp/Recv: 02/19/99 02/24/99

% Moisture: 9.1 decanted: (Y/N) N

Date Extracted: 03/06/99

Concentrated Extract Volume: 500 (uL)

Date Analyzed: 03/13/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/KG

Q

83-32-9-----	Acenaphthene	360	U
51-28-5-----	2,4-Dinitrophenol	880	U
100-02-7-----	4-Nitrophenol	880	U
32-64-9-----	Dibenzofuran	360	U
21-14-2-----	2,4-Dinitrotoluene	360	U
84-66-2-----	Diethyl phthalate	360	U
7005-72-3-----	4-Chlorophenyl phenyl ether	360	U
86-73-7-----	Fluorene	360	U
100-01-6-----	4-Nitroaniline	880	U
534-52-1-----	4,6-Dinitro-2-methylphenol	880	U
86-30-6-----	N-nitrosodiphenylamine	360	U
101-55-3-----	4-Bromophenyl phenyl ether	360	U
118-74-1-----	Hexachlorobenzene	360	U
87-86-5-----	Pentachlorophenol	880	U
85-01-8-----	Phenanthrene	360	U
120-12-7-----	Anthracene	360	U
86-74-8-----	Carbazole	360	U
84-74-2-----	Di-n-butyl phthalate	77	J
206-44-0-----	Fluoranthene	360	U
129-00-0-----	Pyrene	360	U
85-68-7-----	Butyl benzyl phthalate	360	U
91-94-1-----	3,3'-Dichlorobenzidine	360	U
56-55-3-----	Benzo(a)anthracene	360	U
218-01-9-----	Chrysene	360	U
117-81-7-----	Bis(2-ethylhexyl) phthalate	100	J
117-84-0-----	Di-n-octyl phthalate	360	U
205-99-2-----	Benzo(b)fluoranthene	360	U
207-08-9-----	Benzo(k)fluoranthene	360	U
50-32-8-----	Benzo(a)pyrene	360	U
93-39-5-----	Indeno(1,2,3-cd)pyrene	360	U
53-70-3-----	Dibenzo(a,h)anthracene	360	U
191-24-2-----	Benzo(ghi)perylene	360	U

ASP 95 - SEMIVOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000014

Client No.

1506-S-58

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506S

Matrix: (soil/water) SOIL

Lab Sample ID: A9095401

Sample wt/vol: 30.13 (g/mL) G

Lab File ID: Z26849.RR

Level: (low/med) LOW

Date Samp/Recv: 02/19/99 02/24/99

% Moisture: 9.1 decanted: (Y/N) N

Date Extracted: 03/06/99

Concentrated Extract Volume: 500 (uL)

Date Analyzed: 03/13/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

Number TICs found: 11

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNSATURATED HYDROCARBON	2.40	85	F
2.	UNKNOWN	2.91	81	BJ
3.	SUSPECTED ALDOL COND.PRODUCT	3.91	4000	ABJ
4.	OXYGENATED CMPD	4.11	300	BJ
5.	UNKNOWN HYDROCARBON	4.50	81	BJ
6. 930-68-7	2-CYCLOHEXEN-1-ONE	5.83	75	JN
7.	UNKNOWN HYDROCARBON	6.33	750	BJ
8.	UNKNOWN KETONE	7.33	110	J
9. 57-10-3	HEXADECANOIC ACID	23.56	100	BJN
10.	UNKNOWN ACID	28.48	370	BJ
11.	UNKNOWN	29.60	600	BJ

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

000015  
EPA SAMPLE NO.

1506S58

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506S

Matrix: (soil/water) SOIL Lab Sample ID: A9095401

Sample wt/vol: 30.3 (g/mL) G Lab File ID: \_\_\_\_\_

% Moisture: 9 decanted: (Y/N) N Date Received: 02/24/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/04/99

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 03/10/99

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) Y

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4'-DDE	3.6	U
72-20-8	Endrin	1.0	BJ
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4'-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4'-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	73	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U



0952

NY847861 1

**RECRA LABNET**, a division of Recra Environmental, Inc. (# ~~100~~ BA 7861)

### CHAIN OF CUSTODY RECORD

[illegible]

000047



**Committed To Your Success**

March 30, 1999

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

**Severn Trent Laboratories**

10 Hazelwood Drive  
Amherst, NY 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Water  
Samples Received: 12/23/98  
Sample Date: 12/22/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

*Candace L. Fox*  
for Candace L. Fox  
Program Manager

*Susan L. Tinsmith*  
Susan L. Tinsmith  
Laboratory Manager

CLF/SLT/lth  
Enclosure

I.D. #A98-6169, 6186  
#NY8A7861

This report contains 176 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Laboratories, Inc.

000001

## **SAMPLE DATA SUMMARY PACKAGE**



000002

### CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

SDG Number: 1506N

Sample Identifications:

- 1506-N-MW9
- 1506-W-MW1
- 1506-W-MW10
- 1506-W-MW11
- 1506-W-MW12
- 1506-W-MW13
- 1506-W-MW14
- 1506-W-MW16
- 1506-W-MW17
- 1506-W-MW17 MD
- 1506-W-MW17 MS
- 1506-W-MW17 MSD
- 1506-W-MW18
- 1506-W-MW19
- 1506-W-MW20
- 1506-W-MW21
- 1506-W-MW3
- 1506-W-MW4
- 1506-W-MW6
- 1506-W-MW7
- 1506-W-MW8
- 1506-W-MW8 MD
- 1506-W-MW8 MS
- 1506-W-MW8 MSD
- 1506-W-MW9
- 1506-W-SUMP
- TRIP BLANK

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.



## COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic and Inorganic Data Comment Pages.

## VOLATILE DATA

Volatile sample and standard areas are listed on the corresponding data system printouts.

Volatile data was processed utilizing Finnigan Autoquantitation and Recra LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

Compounds Ortho-xylene and Meta & Para-xylene elute separately on a capillary column. They are reported in this package as Total Xylenes. The concentration is calculated by adding the areas of Ortho-xylene and Meta & Para-xylene, and using only the response factor from Ortho-xylene to calculate the nanogram amount.

Samples 1506-W-MW20 and 1506-W-MW21 yielded a pH of seven; all other samples were preserved to a pH of less than two.

Due to high concentrations of target compounds, samples 1506-W-MW8, 1506-W-MW12, 1506-W-MW8 MS, and 1506-W-MW8 SD were analyzed at initial dilutions of ten.

Sample 1506-W-MW10 contained high concentrations of target compounds and required an initial dilution of fifty.

Samples 1506-W-MW17, 1506-W-SUMP, 1506-W-MW17 MS, and 1506-W-MW17 SD were analyzed at initial dilutions of forty due to high concentrations of target compounds.

Sample 1506-W-MW12 yielded recoveries for surrogates p-Bromofluorobenzene and Toluene-D8 which were outside quality control limits. Due to high concentrations of Tetrachloroethene, this sample was reanalyzed at a dilution. Sample 1506-W-MW12 DL yielded compliant recoveries for all surrogates.

Sample 1506-W-MW9 yielded recoveries for surrogates p-Bromofluorobenzene, 1,2-Dichloroethane-D4, and Toluene-D8 which were outside quality control limits. Due to high concentrations of target compounds, this sample was reanalyzed at a dilution. Sample 1506-W-MW9 DL yielded compliant recoveries for all surrogates.



### SEMIVOLATILE DATA

Semivolatile sample and standard areas are listed on the corresponding data system printouts.

Semivolatile data was processed utilizing Finnigan Autoquantitation and Recri LabNet's Analytical Information Management Systems (AIMS®) software. All compounds determined to be present by the computer generated autoquantitation were subjected to a manual ion search for secondary and tertiary ions. Unedited quantitation reports have been submitted with this analytical data package.

The MSBLANK yielded spike recoveries for 1,2,4-Trichlorobenzene, 4-Nitrophenol, and Pyrene which were above quality control limits. Sample 1506-W-MW17 MS yielded spike recoveries for 4-Nitrophenol and Pentachlorophenol which were above quality control limits. Sample 1506-W-MW17 SD yielded a spike recovery for 4-Nitrophenol which was above quality control limits. Compound 4-Nitrophenol was not detected in any of the associated samples.

### PESTICIDES\AROCLORS DATA

Samples 1506-W-MW17, 1506-W-MW17 MS and 1506-W-MW17 SD yielded recoveries for surrogates DCB1 and DCB2 which were outside advisory quality control limits.

Sample 1506-W-MW17 MS yielded spike recoveries for Aldrin and 4,4'-DDT which were outside quality control limits. Sample 1506-W-MW17 SD yielded spike recoveries for Heptachlor, Aldrin, and 4,4'-DDT which were outside quality control limits. The relative percent difference between spike recoveries of these two samples is outside of quality control limits for Aldrin and 4,4'-DDT. Sample MSB02 was compliant.

### METALS DATA

Sample 1506-W-MW17 MS yielded recoveries outside of quality control limits for Aluminum, Magnesium, Selenium, and Sodium.

The relative percent difference between samples 1506-W-MW17 and 1506-W-MW17 MD was outside of quality control limits for Aluminum, Lead, Magnesium, Potassium, and Sodium.



"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Susan L. Tinsmith  
Laboratory Manager

Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent, Inc.

000006

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION  
AND  
ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS					
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-N-MW9	A8616901	ASP95	-	-	-	ASP95	-
1506-W-MW1	A8618601	ASP95	-	-	-	ASP95	-
1506-W-MW10	A8618608	ASP95	-	-	-	ASP95	-
1506-W-MW11	A8618609	ASP95	-	-	-	ASP95	-
1506-W-MW12	A8618610	ASP95	-	-	-	ASP95	-
1506-W-MW13	A8618611	ASP95	-	-	-	ASP95	-
1506-W-MW14	A8618612	ASP95	-	-	-	ASP95	-
1506-W-MW16	A8618613	ASP95	ASP95	-	ASP95	ASP95	-
1506-W-MW17	A8618614	ASP95	ASP95	-	ASP95	ASP95	-
1506-W-MW18	A8618615	ASP95	-	-	-	ASP95	-
1506-W-MW19	A8618616	ASP95	-	-	-	ASP95	-
1506-W-MW20	A8618617	ASP95	-	-	-	ASP95	-
1506-W-MW21	A8618618	ASP95	-	-	-	ASP95	-
1506-W-MW3	A8618602	ASP95	-	-	-	ASP95	-
1506-W-MW4	A8618603	ASP95	-	-	-	ASP95	-
1506-W-MW6	A8618604	ASP95	-	-	-	ASP95	-
1506-W-MW7	A8618605	ASP95	-	-	-	ASP95	-
1506-W-MW8	A8618606	ASP95	-	-	-	ASP95	-
1506-W-MW9	A8618607	ASP95	ASP95	-	ASP95	ASP95	-
TRIP BLANK	A8618619	ASP95	-	-	-	-	-
1506-W-SUMP	A8618620	ASP95	-	-	-	ASP95	-



000007

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-N-MW9	WATER	12/21/98	12/23/98	-	12/31/99
1506-W-MW1	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW10	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-MW11	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW12	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-MW13	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW14	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW16	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW17	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW18	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-MW19	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-MW20	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-MW21	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-MW3	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW4	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW6	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW7	WATER	12/22/98	12/23/98	-	12/31/99
1506-W-MW8	WATER	12/22/98	12/23/98	-	12/29/99
1506-W-MW9	WATER	12/22/98	12/23/98	-	12/29/99
TRIP BLANK	WATER	12/22/98	12/23/98	-	12/30/99
1506-W-SUMP	WATER	12/22/98	12/23/98	-	12/31/99

000008

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
B\N-A ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-W-MW16	WATER	12/22/98	12/23/98	12/28/99	01/13/99
1506-W-MW17	WATER	12/22/98	12/23/98	12/28/99	01/11/99
1506-W-MW9	WATER	12/22/98	12/23/98	12/28/99	01/11/99

NYSDEC-3

000009

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
PESTICIDE/PCB ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	DATE COLLECTED	DATE RECEIVED AT LAB	DATE EXTRACTED	DATE ANALYZED
1506-W-MW16	WATER	12/22/98	12/23/98	12/28/99	12/29/99
1506-W-MW17	WATER	12/22/98	12/23/98	12/28/99	12/29/99
1506-W-MW9	WATER	12/22/98	12/23/98	12/28/99	12/29/99

NYSDEC-4

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY  
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
1506-N-MW9	WATER	T CR	12/23/98	12/22 & 12/28/98	01/01,12/22
1506-W-MW1	WATER	T CR	12/23/98	12/23/98, 01/07/99	03/21,12/23
1506-W-MW10	WATER	T CR	12/23/98	12/23/98, 01/07/99	03/21,12/23
1506-W-MW11	WATER	T CR	12/23/98	12/23/98, 01/07/99	03/21,12/23
1506-W-MW12	WATER	T CR	12/23/98	12/23/98, 01/07/99	03/21,12/23
1506-W-MW13	WATER	T CR	12/23/98	12/23/98, 01/07/99	03/21,12/23
1506-W-MW14	WATER	T CR	12/23/98	12/23/98, 01/07/99	03/21,12/23
1506-W-MW16	WATER	T CR+6	12/23/98	12/23/98-02/16/99	12/29/98-03/16/99
1506-W-MW17	WATER	T CR+6	12/23/98	12/23/98-02/16/99	12/23/98-03/16/99
1506-W-MW18	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW19	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW20	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW21	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW3	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW4	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW6	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 01/07/99
1506-W-MW7	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW8	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99
1506-W-MW9	WATER	T CR+6	12/23/98	12/23/98-03/16/99	12/23/98-03/16/99
1506-W-SUMP	WATER	T CR	12/23/98	12/23/98, 01/07/99	12/23/98, 03/21/99

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
ORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
1506-N-MW9	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW1	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW10	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW11	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW12	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW13	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW14	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
06-W-MW16	WATER	ASP95	CONT	AS REQUIRED	AS REQUIRED
1506-W-MW17	WATER	ASP95	CONT	AS REQUIRED	AS REQUIRED
1506-W-MW18	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW19	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW20	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW21	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW3	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW4	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW6	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW7	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW8	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-MW9	WATER	ASP95	CONT	AS REQUIRED	AS REQUIRED
TRIP BLANK	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
1506-W-SUMP	WATER	ASP95	-	AS REQUIRED	AS REQUIRED

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
1506-N-MW9	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW1	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW10	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW11	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW12	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW13	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW14	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW16	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW17	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW18	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW19	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW20	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW21	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW3	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW4	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW6	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW7	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW8	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-MW9	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED
1506-W-SUMP	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED

**ORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES INC.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25 % difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.

**INORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES, INC.

USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates compound was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- +
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000015  
Client No.

1506-W-MW1

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618601

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2174.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	6	BJ
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
70-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000016  
Client No.

1506-W-MW1

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618601

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2174.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	16	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000017  
Client No.

1506-W-MW3

Sample Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618602

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2175.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
5-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	8	J
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	2	BJ
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000018  
Client No.

1506-W-MW3

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618602

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2175.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000019  
Client No.

1506-W-MW4

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618603

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2176.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	1	BJ
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
90-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000020  
Client No.

1506-W-MW4

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506N

Matrix: (soil/water) WATER Lab Sample ID: A8618603

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: J2176.RR

Level: (low/med) LOW Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.40	14	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000021  
Client No.

1506-W-MW6

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618604

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2177.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	2	J
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	100	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	3	J
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000022  
Client No.

1506-W-MW6

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618604

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2177.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000023 Client No.

1506-W-MW7

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618605

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2178.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000024  
Client No.

1506-W-MW7

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618605

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2178.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	5.18	12	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000025  
Client No.

1506-W-MW8

Sub Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506N

Matrix: (soil/water) WATER Lab Sample ID: A8618606

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: J2130.RR

Level: (low/med) LOW Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/29/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 10.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	-----Chloromethane		100	U
74-83-9	-----Bromomethane		100	U
75-01-4	-----Vinyl chloride		100	U
75-00-3	-----Chloroethane		100	U
75-09-2	-----Methylene chloride		100	U
67-64-1	-----Acetone		100	U
5-15-0	-----Carbon Disulfide		100	U
75-35-4	-----1,1-Dichloroethene		100	U
75-34-3	-----1,1-Dichloroethane		100	U
540-59-0	-----1,2-Dichloroethene (Total)		100	U
67-66-3	-----Chloroform		100	U
107-06-2	-----1,2-Dichloroethane		100	U
78-93-3	-----2-Butanone		100	U
71-55-6	-----1,1,1-Trichloroethane		100	U
56-23-5	-----Carbon Tetrachloride		100	U
75-27-4	-----Bromodichloromethane		100	U
78-87-5	-----1,2-Dichloropropane		100	U
10061-01-5	-----cis-1,3-Dichloropropene		100	U
79-01-6	-----Trichloroethene		540	
124-48-1	-----Dibromochloromethane		100	U
79-00-5	-----1,1,2-Trichloroethane		100	U
71-43-2	-----Benzene		100	U
10061-02-6	-----trans-1,3-Dichloropropene		100	U
75-25-2	-----Bromoform		100	U
108-10-1	-----4-Methyl-2-pentanone		100	U
591-78-6	-----2-Hexanone		100	U
127-18-4	-----Tetrachloroethene		1600	
108-88-3	-----Toluene		100	U
79-34-5	-----1,1,2,2-Tetrachloroethane		100	U
108-90-7	-----Chlorobenzene		100	U
100-41-4	-----Ethylbenzene		100	U
00-42-5	-----Styrene		100	U
1330-20-7	-----Total Xylenes		100	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

Client No. 000028

1506-W-MW8

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618606

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2130.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 10.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000027  
Client No

1506-W-MW9

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2139.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 12/29/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3-----	Chloromethane		10	U
74-83-9-----	Bromomethane		10	U
75-01-4-----	Vinyl chloride		10	U
75-00-3-----	Chloroethane		10	U
75-09-2-----	Methylene chloride		5	J
67-64-1-----	Acetone		53	
5-15-0-----	Carbon Disulfide		12	
75-35-4-----	1,1-Dichloroethene		17	
75-34-3-----	1,1-Dichloroethane		23	
540-59-0-----	1,2-Dichloroethene (Total)		2000	E
67-66-3-----	Chloroform		5	J
107-06-2-----	1,2-Dichloroethane		10	U
78-93-3-----	2-Butanone		10	U
71-55-6-----	1,1,1-Trichloroethane		10	U
56-23-5-----	Carbon Tetrachloride		10	U
75-27-4-----	Bromodichloromethane		10	U
78-87-5-----	1,2-Dichloropropane		10	U
10061-01-5----	cis-1,3-Dichloropropene		10	U
79-01-6-----	Trichloroethene		9800	E
124-48-1-----	Dibromochloromethane		10	U
79-00-5-----	1,1,2-Trichloroethane		10	U
71-43-2-----	Benzene		3	J
10061-02-6----	trans-1,3-Dichloropropene		10	U
75-25-2-----	Bromoform		10	U
108-10-1-----	4-Methyl-2-pentanone		4	J
591-78-6-----	2-Hexanone		10	U
127-18-4-----	Tetrachloroethene		19000	E
108-88-3-----	Toluene		370	E
79-34-5-----	1,1,2,2-Tetrachloroethane		10	U
108-90-7-----	Chlorobenzene		10	U
100-41-4-----	Ethylbenzene		7	J
100-42-5-----	Styrene		10	U
1330-20-7-----	Total Xylenes		70	

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000028  
Client No.

1506-W-MW9

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2139.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/29/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000029  
Client No.

1506-W-MW9 DL

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607DL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2164.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 500.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	5000	U	
74-83-9	Bromomethane	5000	U	
75-01-4	Vinyl chloride	5000	U	
75-00-3	Chloroethane	5000	U	
75-09-2	Methylene chloride	5000	U	
67-64-1	Acetone	5000	U	
5-15-0	Carbon Disulfide	5000	U	
75-35-4	1,1-Dichloroethene	5000	U	
75-34-3	1,1-Dichloroethane	5000	U	
540-59-0	1,2-Dichloroethene (Total)	1400	DJ	
67-66-3	Chloroform	5000	U	
107-06-2	1,2-Dichloroethane	5000	U	
78-93-3	2-Butanone	5000	U	
71-55-6	1,1,1-Trichloroethane	5000	U	
56-23-5	Carbon Tetrachloride	5000	U	
75-27-4	Bromodichloromethane	5000	U	
78-87-5	1,2-Dichloropropane	5000	U	
10061-01-5	cis-1,3-Dichloropropene	5000	U	
79-01-6	Trichloroethene	59000	D	
124-48-1	Dibromochloromethane	5000	U	
79-00-5	1,1,2-Trichloroethane	5000	U	
71-43-2	Benzene	5000	U	
10061-02-6	trans-1,3-Dichloropropene	5000	U	
75-25-2	Bromoform	5000	U	
108-10-1	4-Methyl-2-pentanone	5000	U	
591-78-6	2-Hexanone	5000	U	
127-18-4	Tetrachloroethene	95000	BD	
108-88-3	Toluene	5000	U	
79-34-5	1,1,2,2-Tetrachloroethane	5000	U	
108-90-7	Chlorobenzene	5000	U	
100-41-4	Ethylbenzene	5000	U	
70-42-5	Styrene	5000	U	
330-20-7	Total Xylenes	5000	U	

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000030

Client No.

1506-W-MW9 DL

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607DL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2164.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 500.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000031

Client No.

1506-W-MW10

Site Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618608

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2151.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 50.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	500	U
74-83-9-----	Bromomethane	500	U
75-01-4-----	Vinyl chloride	260	J
75-00-3-----	Chloroethane	500	U
75-09-2-----	Methylene chloride	500	U
67-64-1-----	Acetone	500	U
5-15-0-----	Carbon Disulfide	500	U
75-35-4-----	1,1-Dichloroethene	120	J
75-34-3-----	1,1-Dichloroethane	500	U
540-59-0-----	1,2-Dichloroethene (Total)	2100	
67-66-3-----	Chloroform	500	U
107-06-2-----	1,2-Dichloroethane	500	U
78-93-3-----	2-Butanone	500	U
71-55-6-----	1,1,1-Trichloroethane	500	U
56-23-5-----	Carbon Tetrachloride	500	U
75-27-4-----	Bromodichloromethane	500	U
78-87-5-----	1,2-Dichloropropane	500	U
10061-01-5----	cis-1,3-Dichloropropene	500	U
79-01-6-----	Trichloroethene	17000	E
124-48-1-----	Dibromochloromethane	500	U
79-00-5-----	1,1,2-Trichloroethane	500	U
71-43-2-----	Benzene	500	U
10061-02-6----	trans-1,3-Dichloropropene	500	U
75-25-2-----	Bromoform	500	U
108-10-1-----	4-Methyl-2-pentanone	500	U
591-78-6-----	2-Hexanone	500	U
127-18-4-----	Tetrachloroethene	500	U
108-88-3-----	Toluene	500	U
79-34-5-----	1,1,2,2-Tetrachloroethane	500	U
108-90-7-----	Chlorobenzene	500	U
100-41-4-----	Ethylbenzene	500	U
00-42-5-----	Styrene	500	U
1330-20-7-----	Total Xylenes	500	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000032

Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW10

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618608

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2151.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 50.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000033 Client No.

1506-W-MW10 DL

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618608DL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2184.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 100.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	1000	U
74-83-9-----	Bromomethane	1000	U
75-01-4-----	Vinyl chloride	230	DJ
75-00-3-----	Chloroethane	1000	U
75-09-2-----	Methylene chloride	1000	U
67-64-1-----	Acetone	1000	U
5-15-0-----	Carbon Disulfide	1000	U
75-35-4-----	1,1-Dichloroethene	110	DJ
75-34-3-----	1,1-Dichloroethane	1000	U
540-59-0-----	1,2-Dichloroethene (Total)	2000	D
67-66-3-----	Chloroform	1000	U
107-06-2-----	1,2-Dichloroethane	1000	U
78-93-3-----	2-Butanone	1000	U
71-55-6-----	1,1,1-Trichloroethane	1000	U
56-23-5-----	Carbon Tetrachloride	1000	U
75-27-4-----	Bromodichloromethane	1000	U
78-87-5-----	1,2-Dichloropropane	1000	U
10061-01-5----	cis-1,3-Dichloropropene	1000	U
79-01-6-----	Trichloroethene	18000	D
124-48-1-----	Dibromochloromethane	1000	U
79-00-5-----	1,1,2-Trichloroethane	1000	U
71-43-2-----	Benzene	1000	U
10061-02-6----	trans-1,3-Dichloropropene	1000	U
75-25-2-----	Bromoform	1000	U
108-10-1-----	4-Methyl-2-pentanone	1000	U
591-78-6-----	2-Hexanone	1000	U
127-18-4-----	Tetrachloroethene	1000	U
108-88-3-----	Toluene	1000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1000	U
108-90-7-----	Chlorobenzene	1000	U
100-41-4-----	Ethylbenzene	1000	U
00-42-5-----	Styrene	1000	U
1330-20-7-----	Total Xylenes	1000	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000034  
Client No.

1506-W-MW10 DL

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506N

Matrix: (soil/water) WATER Lab Sample ID: A8618608DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: J2184.RR

Level: (low/med) LOW Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 100.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000035 Client No.

1506-W-MW11

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618609

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2179.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	
75-34-3-----	1,1-Dichloroethane	10	
540-59-0-----	1,2-Dichloroethene (Total)	22	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	2	J
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	37	
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	120	B
108-88-3-----	Toluene	1	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000036  
Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW11

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618609

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2179.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	7	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000037  
Client No.

1506-W-MW12

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618610

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2153.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 10.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	100	U
74-83-9-----	Bromomethane	100	U
75-01-4-----	Vinyl chloride	100	U
75-00-3-----	Chloroethane	100	U
75-09-2-----	Methylene chloride	100	U
67-64-1-----	Acetone	100	U
5-15-0-----	Carbon Disulfide	100	U
75-35-4-----	1,1-Dichloroethene	100	U
75-34-3-----	1,1-Dichloroethane	100	U
540-59-0-----	1,2-Dichloroethene (Total)	100	U
67-66-3-----	Chloroform	100	U
107-06-2-----	1,2-Dichloroethane	100	U
78-93-3-----	2-Butanone	100	U
71-55-6-----	1,1,1-Trichloroethane	100	U
56-23-5-----	Carbon Tetrachloride	100	U
75-27-4-----	Bromodichloromethane	100	U
78-87-5-----	1,2-Dichloropropane	100	U
10061-01-5---	cis-1,3-Dichloropropene	100	U
79-01-6-----	Trichloroethene	550	
124-48-1-----	Dibromochloromethane	100	U
79-00-5-----	1,1,2-Trichloroethane	100	U
71-43-2-----	Benzene	100	U
10061-02-6---	trans-1,3-Dichloropropene	100	U
75-25-2-----	Bromoform	100	U
108-10-1-----	4-Methyl-2-pentanone	100	U
591-78-6-----	2-Hexanone	100	U
127-18-4-----	Tetrachloroethene	6700	BE
108-88-3-----	Toluene	100	U
79-34-5-----	1,1,2,2-Tetrachloroethane	100	U
108-90-7-----	Chlorobenzene	100	U
100-41-4-----	Ethylbenzene	100	U
00-42-5-----	Styrene	100	U
330-20-7-----	Total Xylenes	100	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000038

Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW12

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618610

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2153.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 10.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000039

Client No.

1506-W-MW12 DL

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618610DL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2185.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 50.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	500	U
74-83-9-----	Bromomethane	500	U
75-01-4-----	Vinyl chloride	500	U
75-00-3-----	Chloroethane	500	U
75-09-2-----	Methylene chloride	500	U
67-64-1-----	Acetone	500	U
5-15-0-----	Carbon Disulfide	500	U
75-35-4-----	1,1-Dichloroethene	500	U
75-34-3-----	1,1-Dichloroethane	500	U
540-59-0-----	1,2-Dichloroethene (Total)	500	U
67-66-3-----	Chloroform	500	U
107-06-2-----	1,2-Dichloroethane	500	U
78-93-3-----	2-Butanone	500	U
71-55-6-----	1,1,1-Trichloroethane	500	U
56-23-5-----	Carbon Tetrachloride	500	U
75-27-4-----	Bromodichloromethane	500	U
78-87-5-----	1,2-Dichloropropane	500	U
10061-01-5----	cis-1,3-Dichloropropene	500	U
79-01-6-----	Trichloroethene	380	DJ
124-48-1-----	Dibromochloromethane	500	U
79-00-5-----	1,1,2-Trichloroethane	500	U
71-43-2-----	Benzene	500	U
10061-02-6----	trans-1,3-Dichloropropene	500	U
75-25-2-----	Bromoform	500	U
108-10-1-----	4-Methyl-2-pentanone	500	U
591-78-6-----	2-Hexanone	500	U
127-18-4-----	Tetrachloroethene	4500	BD
108-88-3-----	Toluene	500	U
79-34-5-----	1,1,2,2-Tetrachloroethane	500	U
108-90-7-----	Chlorobenzene	500	U
100-41-4-----	Ethylbenzene	500	U
00-42-5-----	Styrene	500	U
1330-20-7-----	Total Xylenes	500	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000040  
Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW12 DL

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618610DL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2185.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 50.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO..	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000041

Client No.

1506-W-MW13

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618611

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2180.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	10	U
67-64-1	Acetone	10	U
5-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (Total)	71	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	30	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	B
108-88-3	Toluene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
00-42-5	Styrene	10	U
330-20-7	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000042 Client No.

1506-W-MW13

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618611

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2180.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 1

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	20	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000043

Client No.

1506-W-MW14

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618612

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2181.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5---	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6---	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	2	BJ
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000044

Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW14

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618612

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2181.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	33	J
2.	UNKNOWN SILANE PEAK	13.25	12	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000045  
Client No.

1506-W-MW16

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618613

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2182.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	1	J
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	5	J
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	11	
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	8	BJ
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
70-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000046

Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW16

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618613

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2182.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 2

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	13	J
2.	UNKNOWN SILANE PEAK	13.18	12	J



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000047

Client No.

1506-W-MW17

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618614

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2173.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 40.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

74-87-3-----	Chloromethane	400	U
74-83-9-----	Bromomethane	400	U
75-01-4-----	Vinyl chloride	400	U
75-00-3-----	Chloroethane	400	U
75-09-2-----	Methylene chloride	400	U
57-64-1-----	Acetone	400	U
5-15-0-----	Carbon Disulfide	400	U
75-35-4-----	1,1-Dichloroethene	400	U
75-34-3-----	1,1-Dichloroethane	400	U
540-59-0-----	1,2-Dichloroethene (Total)	270	J
67-66-3-----	Chloroform	400	U
107-06-2-----	1,2-Dichloroethane	400	U
78-93-3-----	2-Butanone	400	U
71-55-6-----	1,1,1-Trichloroethane	400	U
56-23-5-----	Carbon Tetrachloride	400	U
75-27-4-----	Bromodichloromethane	400	U
78-87-5-----	1,2-Dichloropropane	400	U
10061-01-5----	cis-1,3-Dichloropropene	400	U
79-01-6-----	Trichloroethene	3000	
124-48-1-----	Dibromochloromethane	400	U
79-00-5-----	1,1,2-Trichloroethane	400	U
71-43-2-----	Benzene	400	U
10061-02-6----	trans-1,3-Dichloropropene	400	U
75-25-2-----	Bromoform	400	U
108-10-1-----	4-Methyl-2-pentanone	400	U
591-78-6-----	2-Hexanone	400	U
127-18-4-----	Tetrachloroethene	5800	B
108-88-3-----	Toluene	400	U
79-34-5-----	1,1,2,2-Tetrachloroethane	400	U
108-90-7-----	Chlorobenzene	400	U
100-41-4-----	Ethylbenzene	400	U
00-42-5-----	Styrene	400	U
1330-20-7-----	Total Xylenes	400	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000048  
Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW17

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618614

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2173.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 40.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000049

Client No.

1506-W-MW18

Sub Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618615

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2158.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	24	
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	UU
67-64-1-----	Acetone	10	UU
5-15-0-----	Carbon Disulfide	10	UU
75-35-4-----	1,1-Dichloroethene	8	J
75-34-3-----	1,1-Dichloroethane	2	J
540-59-0-----	1,2-Dichloroethene (Total)	81	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	UU
78-93-3-----	2-Butanone	10	UU
71-55-6-----	1,1,1-Trichloroethane	10	UU
56-23-5-----	Carbon Tetrachloride	10	UU
75-27-4-----	Bromodichloromethane	10	UU
78-87-5-----	1,2-Dichloropropane	10	UU
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	14	
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	UU
71-43-2-----	Benzene	10	UU
10061-02-6----	trans-1,3-Dichloropropene	10	UU
75-25-2-----	Bromoform	10	UU
108-10-1-----	4-Methyl-2-pentanone	10	UU
591-78-6-----	2-Hexanone	10	UU
127-18-4-----	Tetrachloroethene	6	BJ
108-88-3-----	Toluene	10	UU
79-34-5-----	1,1,2,2-Tetrachloroethane	10	UU
108-90-7-----	Chlorobenzene	10	UU
100-41-4-----	Ethylbenzene	10	UU
00-42-5-----	Styrene	10	UU
1330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000050

Client No.

1506-W-MW18

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618615

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2158.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000051 Client No.

1506-W-MW19

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618616

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2159.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	1	BJ
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000052

Client No.

1506-W-MW19

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618616

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2159.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000053  
Client No.

1506-W-MW20

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618617

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2160.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Heated Purge: N

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	14	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5---	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6---	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000054

Client No.

1506-W-MW20

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618617

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2160.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000055

Client No.

1506-W-MW21

Sub Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618618

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2161.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	4	J
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	140	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000056

Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW21

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618618

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2161.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000057

Client No.

1506-W-SUMP

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618620

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2186.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 40.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	400	U
74-83-9-----	Bromomethane	400	U
75-01-4-----	Vinyl chloride	110	J
75-00-3-----	Chloroethane	400	U
75-09-2-----	Methylene chloride	400	U
67-64-1-----	Acetone	400	U
5-15-0-----	Carbon Disulfide	400	U
75-35-4-----	1,1-Dichloroethene	140	J
75-34-3-----	1,1-Dichloroethane	400	U
540-59-0-----	1,2-Dichloroethene (Total)	3200	
67-66-3-----	Chloroform	400	U
107-06-2-----	1,2-Dichloroethane	400	U
78-93-3-----	2-Butanone	400	U
71-55-6-----	1,1,1-Trichloroethane	400	U
56-23-5-----	Carbon Tetrachloride	400	U
75-27-4-----	Bromodichloromethane	400	U
78-87-5-----	1,2-Dichloropropane	400	U
10061-01-5----	cis-1,3-Dichloropropene	400	U
79-01-6-----	Trichloroethene	4900	
124-48-1-----	Dibromochloromethane	400	U
79-00-5-----	1,1,2-Trichloroethane	400	U
71-43-2-----	Benzene	400	U
10061-02-6----	trans-1,3-Dichloropropene	400	U
75-25-2-----	Bromoform	400	U
108-10-1-----	4-Methyl-2-pentanone	400	U
591-78-6-----	2-Hexanone	400	U
127-18-4-----	Tetrachloroethene	2400	B
108-88-3-----	Toluene	400	U
79-34-5-----	1,1,2,2-Tetrachloroethane	400	U
108-90-7-----	Chlorobenzene	400	U
100-41-4-----	Ethylbenzene	400	U
00-42-5-----	Styrene	400	U
1330-20-7-----	Total Xylenes	400	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000058

Client No.

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-SUMP

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618620

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2186.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/31/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 40.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000059

Client No.

TRIP BLANK

Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618619

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2162.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
5-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5---	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6---	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
00-42-5-----	Styrene	10	U
330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000060

Client No.

TRIP BLANK

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618619

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: J2162.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/30/98

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000061

Client No

1506-W-MW9

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECN

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26485.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/9

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/11/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

108-95-2-----	Phenol	10	U
111-44-4-----	Bis(2-chloroethyl) ether	10	U
95-57-8-----	2-Chlorophenol	10	U
41-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	Bis(2-chloroethoxy) methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethyl phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000062

Client No

1506-W-MW9

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26485.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/11/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethyl phthalate	10	U
7005-72-3-----	4-Chlorophenyl phenyl ether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-nitrosodiphenylamine	10	U
101-55-3-----	4-Bromophenyl phenyl ether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-butyl phthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butyl benzyl phthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a)anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	Bis(2-ethylhexyl) phthalate	3	J
117-84-0-----	Di-n-octyl phthalate	10	U
205-99-2-----	Benzo(b)fluoranthene	10	U
207-08-9-----	Benzo(k)fluoranthene	10	U
50-32-8-----	Benzo(a)pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	10	U
53-70-3-----	Dibenzo(a,h)anthracene	10	U
191-24-2-----	Benzo(ghi)perylene	10	U



ASP 95 - SEMIVOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000063

Client No

1506-W-MW9

Lab. Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618607

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26485.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/11/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

Number TICs found: 4

(ug/L or ug/Kg) UG/L

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 79-01-6	TRICHLOROETHENE	2.13	300	BJN
2. 127-18-4	TETRACHLOROETHENE	4.05	990	JN
3.	UNKNOWN	11.26	20	J
4. 7704-34-9	SULFUR	25.78	20	JN

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000064

Client No. \_\_\_\_\_

1506-W-MW16

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618613

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26488.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/13/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	10	U
111-44-4-----	Bis(2-chloroethyl) ether	20	
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	Bis(2-chloroethoxy) methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethyl phthalate	10	
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000065

Client No

1506-W-MW16

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618613

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26488.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/13/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
32-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethyl phthalate	10	U
7005-72-3-----	4-Chlorophenyl phenyl ether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-nitrosodiphenylamine	10	U
101-55-3-----	4-Bromophenyl phenyl ether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-butyl phthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butyl benzyl phthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a)anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	Bis(2-ethylhexyl) phthalate	10	U
117-84-0-----	Di-n-octyl phthalate	10	U
205-99-2-----	Benzo(b)fluoranthene	10	U
207-08-9-----	Benzo(k)fluoranthene	10	U
50-32-8-----	Benzo(a)pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	10	U
53-70-3-----	Dibenzo(a,h)anthracene	10	U
191-24-2-----	Benzo(ghi)perylene	10	U

ASP 95 - SEMIVOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000066

Client No.

1506-W-MW16

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618613

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26488.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/13/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Number TICs found: 15

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	2.10	3	
2.	UNKNOWN	2.13	2	BJ
3. 127-18-4	TETRACHLOROETHENE	3.60	36	JN
4.	UNKNOWN	4.41	4	J
5.	OXYGENATED CMPD	4.70	8	J
6. 15980-15-1	1,4-OXATHIANE	5.43	37	JN
7.	CHLOROPYRIDINE ISOMER	6.48	52	J
8.	DICHLOROPYRIDINE ISOMER	10.13	10	J
9. 105-60-2	CAPROLACTAM	13.45	5	JN
10.	UNKNOWN	16.96	11	J
11.	UNKNOWN	29.38	3	J
12.	UNKNOWN	31.55	2	J
13.	UNKNOWN	31.65	3	J
14.	UNKNOWN	36.43	3	J
15.	UNKNOWN	36.55	2	BJ

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000067

Client No

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

1506-W-MW17

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618614

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26482.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/11/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
(ug/L or ug/Kg)

CAS NO.	COMPOUND	UG/L	Q
108-95-2-----	Phenol	10	U
111-44-4-----	Bis(2-chloroethyl) ether	10	U
95-57-8-----	2-Chlorophenol	10	U
41-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-Oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	Bis(2-chloroethoxy) methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethyl phthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U

ASP 95 - SEMIVOLATILES  
ANALYSIS DATA SHEET

000068

Client No.

1506-W-MW17

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618614

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26482.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/11/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg)

UG/L

Q

83-32-9-----	Acenaphthene	10	U
51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethyl phthalate	10	U
7005-72-3-----	4-Chlorophenyl phenyl ether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-nitrosodiphenylamine	10	U
101-55-3-----	4-Bromophenyl phenyl ether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-butyl phthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butyl benzyl phthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a)anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	Bis(2-ethylhexyl) phthalate	1	J
117-84-0-----	Di-n-octyl phthalate	10	U
205-99-2-----	Benzo(b)fluoranthene	10	U
207-08-9-----	Benzo(k)fluoranthene	10	U
50-32-8-----	Benzo(a)pyrene	10	
193-39-5-----	Indeno(1,2,3-cd)pyrene	10	
53-70-3-----	Dibenzo(a,h)anthracene	10	U
191-24-2-----	Benzo(ghi)perylene	10	U

ASP 95 - SEMIVOLATILES  
TENTATIVELY IDENTIFIED COMPOUNDS

000069

Client No.

1506-W-MW17

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 1506N

Matrix: (soil/water) WATER

Lab Sample ID: A8618614

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: Z26482.RR

Level: (low/med) LOW

Date Samp/Recv: 12/22/98 12/23/98

% Moisture: \_\_\_\_\_ decanted: (Y/N) N

Date Extracted: 12/28/98

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/11/99

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

Number TICs found: 4

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 79-01-6	TRICHLOROETHENE	2.13	120	BJN
2. 127-18-4	TETRACHLOROETHENE	3.85	980	JN
3.	UNKNOWN	19.68	17	J
4. 7704-34-9	SULFUR	25.91	360	JN

000070

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1506WMW9

Lab Name: STL Buffalo Contract: \_\_\_\_\_Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506NMatrix: (soil/water) WATER Lab Sample ID: A8618607Sample wt/vol: 1000 (g/mL) ML Lab File ID: \_\_\_\_\_% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Received: 12/23/98Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/28/98Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/29/98Injection Volume: 1.00 (uL) Dilution Factor: 1.00GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
---------	----------	---	---

319-84-6-----	alpha-BHC	0.050	U
319-85-7-----	beta-BHC	0.050	U
319-86-8-----	delta-BHC	0.050	U
58-89-9-----	gamma-BHC (Lindane)	0.050	U
76-44-8-----	Heptachlor	0.050	U
309-00-2-----	Aldrin	0.050	U
1024-57-3-----	Heptachlor epoxide	0.050	U
959-98-8-----	Endosulfan I	0.050	U
60-57-1-----	Dieldrin	0.10	U
72-55-9-----	4,4'-DDE	0.10	U
72-20-8-----	Endrin	0.10	U
33213-65-9-----	Endosulfan II	0.10	U
72-54-8-----	4,4'-DDD	0.10	U
1031-07-8-----	Endosulfan sulfate	0.10	U
50-29-3-----	4,4'-DDT	0.10	U
72-43-5-----	Methoxychlor	0.50	U
53494-70-5-----	Endrin ketone	0.10	U
7421-93-4-----	Endrin aldehyde	0.10	U
5103-71-9-----	alpha-Chlordane	0.050	U
5103-74-2-----	gamma-Chlordane	0.050	U
8001-35-2-----	Toxaphene	5.0	U
12674-11-2-----	Aroclor-1016	1.0	U
11104-28-2-----	Aroclor-1221	2.0	U
11141-16-5-----	Aroclor-1232	1.0	U
53469-21-9-----	Aroclor-1242	1.0	U
12672-29-6-----	Aroclor-1248	1.0	U
11097-69-1-----	Aroclor-1254	1.0	U
11096-82-5-----	Aroclor-1260	1.0	U



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

000071  
EPA SAMPLE NO.

1506WMW16

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506N

Matrix: (soil/water) WATER Lab Sample ID: A8618613

Sample wt/vol: 1000 (g/mL) ML Lab File ID: \_\_\_\_\_

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Received: 12/23/98

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/28/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/29/98

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
319-84-6-----	alpha-BHC	0.050	U
319-85-7-----	beta-BHC	0.050	U
319-86-8-----	delta-BHC	0.050	U
58-89-9-----	gamma-BHC (Lindane)	0.050	U
76-44-8-----	Heptachlor	0.050	U
309-00-2-----	Aldrin	0.050	U
1024-57-3-----	Heptachlor epoxide	0.050	U
959-98-8-----	Endosulfan I	0.050	U
60-57-1-----	Dieldrin	0.10	U
72-55-9-----	4,4'-DDE	0.10	U
72-20-8-----	Endrin	0.10	U
33213-65-9-----	Endosulfan II	0.10	U
72-54-8-----	4,4'-DDD	0.10	U
1031-07-8-----	Endosulfan sulfate	0.10	U
50-29-3-----	4,4'-DDT	0.10	U
72-43-5-----	Methoxychlor	0.50	U
53494-70-5-----	Endrin ketone	0.10	U
7421-93-4-----	Endrin aldehyde	0.10	U
5103-71-9-----	alpha-Chlordane	0.050	U
5103-74-2-----	gamma-Chlordane	0.050	U
8001-35-2-----	Toxaphene	5.0	U
12674-11-2-----	Aroclor-1016	1.0	U
11104-28-2-----	Aroclor-1221	2.0	U
11141-16-5-----	Aroclor-1232	1.0	U
53469-21-9-----	Aroclor-1242	1.0	U
12672-29-6-----	Aroclor-1248	1.0	U
11097-69-1-----	Aroclor-1254	1.0	U
11096-82-5-----	Aroclor-1260	1.0	U

000072

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1506WMW17

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 1506N

Matrix: (soil/water) WATER Lab Sample ID: A8618614

Sample wt/vol: 1000 (g/mL) ML Lab File ID: \_\_\_\_\_

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Received: 12/23/98

Extraction: (SepF/Cont/Sonc) CONT Date Extracted: 12/28/98

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 12/29/98

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
319-84-6-----	alpha-BHC	0.050	U
319-85-7-----	beta-BHC	0.050	U
319-86-8-----	delta-BHC	0.050	U
58-89-9-----	gamma-BHC (Lindane)	0.050	U
76-44-8-----	Heptachlor	0.050	U
309-00-2-----	Aldrin	0.050	U
1024-57-3-----	Heptachlor epoxide	0.050	U
959-98-8-----	Endosulfan I	0.050	U
60-57-1-----	Dieldrin	0.10	U
72-55-9-----	4,4'-DDE	0.10	U
72-20-8-----	Endrin	0.10	U
33213-65-9-----	Endosulfan II	0.10	U
72-54-8-----	4,4'-DDD	0.10	U
1031-07-8-----	Endosulfan sulfate	0.10	U
50-29-3-----	4,4'-DDT	0.10	U
72-43-5-----	Methoxychlor	0.50	U
53494-70-5-----	Endrin ketone	0.10	U
7421-93-4-----	Endrin aldehyde	0.10	U
5103-71-9-----	alpha-Chlordane	0.050	U
5103-74-2-----	gamma-Chlordane	0.050	U
8001-35-2-----	Toxaphene	5.0	U
12674-11-2-----	Aroclor-1016	1.0	U
11104-28-2-----	Aroclor-1221	2.0	U
11141-16-5-----	Aroclor-1232	1.0	U
53469-21-9-----	Aroclor-1242	1.0	U
12672-29-6-----	Aroclor-1248	1.0	U
11097-69-1-----	Aroclor-1254	1.0	U
11096-82-5-----	Aroclor-1260	1.0	U

## INORGANIC ANALYSES DATA SHEET

N-MW9

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: A8616901  
 Level (low/med): LOW Date Received: 12/22/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	394			A

Color Before: \_\_\_\_\_  
 Color After: \_\_\_\_\_

Clarity Before: \_\_\_\_\_  
 Clarity After: \_\_\_\_\_

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

Comments:

LAB\_SAMPLE\_ID: A8616901-STA00268

CLIENT\_SAMPLE\_ID: 1506-N-MW9

000074

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NC

W-MW1

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900110  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	16.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618601-STA00273  
 CLIENT SAMPLE ID: 1506-W-MW1

000075

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

W-MW10

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900118  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.5			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

Comments:

LAB SAMPLE ID: A8618608-STA00273

CLIENT SAMPLE ID: 1506-W-MW10

000076

## NYSDEC-ASP

1

NYSDEC SAMPLE NC

## INORGANIC ANALYSES DATA SHEET

W-MW11

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900119  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.9	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618609-STA00273

CLIENT SAMPLE ID: 1506-W-MW11

## INORGANIC ANALYSES DATA SHEET

W-MW12

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900120  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	621			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	587			A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

Comments:

LAB SAMPLE ID: A8618610-STA00273

CLIENT SAMPLE ID: 1506-W-MW12

000078

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NC

W-MW13

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900121  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.4	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618611-STA00273

CLIENT SAMPLE ID: 1506-W-MW13



## INORGANIC ANALYSES DATA SHEET

W-MW14

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900122  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8618612-STA00273

CLIENT\_SAMPLE\_ID: 1506-W-MW14

## INORGANIC ANALYSES DATA SHEET

W-MW16

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD818847  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	456	-	EN*	P
7440-36-0	Antimony	20.6	B		P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	147	B		P
7440-41-7	Beryllium	1.2	B		P
7440-43-9	Cadmium	10	-		P
7440-70-2	Calcium	191000	-	E	P
7440-47-3	Chromium	11.8	-		P
7440-48-4	Cobalt	19.9	B		P
7440-50-8	Copper	233	-		P
7439-89-6	Iron	13400	-		P
7439-92-1	Lead	24.4	-	*	P
7439-95-4	Magnesium	55000	-	EN*	P
7439-96-5	Manganese	230	-	E	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	30.9	B		P
7440-09-7	Potassium	25800	-	*	P
7782-49-2	Selenium	18.5	-	N	P
7440-22-4	Silver	2.8	B		P
7440-23-5	Sodium	418000	-	EN*	P
7440-28-0	Thallium	6.0	U		P
7440-62-2	Vanadium	25.3	B		P
7440-66-6	Zinc	218	-		P
	Cyanide	10.0	U		C
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618613-CGA02077  
 CLIENT SAMPLE ID: 1506-W-MW16  
 REDIGESTION NUMBER: AD902474

000081

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

W-MW17

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD818848  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4090	-	EN*	P
7440-36-0	Antimony	17.0	U		P
7440-38-2	Arsenic	5.0	U		P
7440-39-3	Barium	173	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	4.4	B		P
7440-70-2	Calcium	194000	-	E	P
7440-47-3	Chromium	16.2	-		P
7440-48-4	Cobalt	2.0	B		P
7440-50-8	Copper	14.8	B		P
7439-89-6	Iron	7340	-		P
7439-92-1	Lead	80.9	-	*	P
7439-95-4	Magnesium	65200	-	EN*	P
7439-96-5	Manganese	145	-	E	P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	12.0	B		P
7440-09-7	Potassium	8900	-	*	P
7782-49-2	Selenium	5.0	U	N	P
7440-22-4	Silver	1.5	U		P
7440-23-5	Sodium	93600	-	EN*	P
7440-28-0	Thallium	6.0	U		P
7440-62-2	Vanadium	8.1	B		P
7440-66-6	Zinc	64.6	-		P
	Cyanide	10.0	U		C
	HexaChrom	10.0	U		A

Color Before: GRAY Clarity Before: CLOUDY Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

LAB SAMPLE ID: A8618614-CGA02077  
 CLIENT SAMPLE ID: 1506-W-MW17  
 REDIGESTION NUMBER: AD902475

## INORGANIC ANALYSES DATA SHEET

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900123  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

W-MW18

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.8			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8618615-STA00273  
 CLIENT\_SAMPLE\_ID: 1506-W-MW18

000083

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

W-MW19

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900124  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.1	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8618616-STA00273

CLIENT\_SAMPLE\_ID: 1506-W-MW19

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO

W-MW20

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900125  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618617-STA00273  
 CLIENT SAMPLE ID: 1506-W-MW20

000085

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

W-MW21

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900126  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	53.5			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: GRAY  
 Color After: YELLOW

Clarity Before: CLOUDY  
 Clarity After: CLEAR

Texture:  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8618618-STA00273

CLIENT SAMPLE ID: 1506-W-MW21

000086

## NYSDEC-ASP

1

NYSDEC SAMPLE NO

## INORGANIC ANALYSES DATA SHEET

W-MW3

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900111  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618602-STA00273  
 CLIENT SAMPLE ID: 1506-W-MW3



000087

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

W-MW4

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900112  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.2	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A8618603-STA00273  
 CLIENT\_SAMPLE\_ID: 1506-W-MW4

## INORGANIC ANALYSES DATA SHEET

W-MW6

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900113  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.7	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS  
 Color After: COLORLESS

Clarity Before: CLEAR  
 Clarity After: CLEAR

Texture: \_\_\_\_\_  
 Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618604-STA00273

CLIENT SAMPLE ID: 1506-W-MW6

000089

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

W-MW7

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900114  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.8	B		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618605-STA00273

CLIENT SAMPLE ID: 1506-W-MW7

000090

## NYSDEC-ASP

1

NYSDEC SAMPLE NO

## INORGANIC ANALYSES DATA SHEET

W-MW8

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900115  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	49100			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	32300			A

Color Before: YELLOW Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618606-STA00273

CLIENT SAMPLE ID: 1506-W-MW8

1

NYSDEC SAMPLE NO.

## INORGANIC ANALYSES DATA SHEET

W-MW9

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
Matrix (soil/water): WATER Lab Sample ID: AD818846  
Level (low/med): LOW Date Received: 12/23/98  
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

[illegible]

Color Before: COLORLESS      Clarity Before: CLEAR      Texture: \_\_\_\_\_  
Color After: COLORLESS      Clarity After: CLEAR      Artifacts: \_\_\_\_\_

Comments:

LAB SAMPLE ID: A8618607-CGA02077

CLIENT SAMPLE ID: 1506-W-MW9

REDIGESTION NUMBER: AD902473

000092

## NYSDEC-ASP

1

NYSDEC SAMPLE NC

## INORGANIC ANALYSES DATA SHEET

W-SUMP

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 1506N  
 Matrix (soil/water): WATER Lab Sample ID: AD900127  
 Level (low/med): LOW Date Received: 12/23/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	134			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
	HexaChrom	10.0	U		A

Color Before: BROWN Clarity Before: CLOUDY Texture: \_\_\_\_\_  
 Color After: YELLOW Clarity After: CLEAR Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A8618620-STA00273

CLIENT SAMPLE ID: 1506-W-SUMP



## RECRA LABNET, a division of Recra Environmental, Inc. (#NY8A7B61)

## CHAIN OF CUSTODY RECORD

PROJECT NO		SITE NAME		NO OF CON. TAINERS		ANALYSIS				REMARKS	
1506R-97		95 mt. Read Blvd. Rochester, New York				(45-1, 45-2, 45-3 + CLP-m)					
SAMPLERS (SIGNATURE)											
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION	Full TCU/TAL + Cyanide	TCL VOCs (9.5-1)	Total Chrome (CLP-m)	Hex Chrome (CLP-m)		
001	12/22/98	1357		X	1506-W-mw1	4	X	X	X	Hex Cr. collected at 1630 * (All other parameters collected at time specified) *	
002	12/22/98	1318		X	1506-W-mw3	4	X	X	X	Hex Cr. collected at 1735 *	
003	12/22/98	1412		X	1506-W-mw4	4	X	X	X	Hex Cr. collected at 1605 *	
004	12/22/98	1347		X	1506-W-mw6	4	X	X	X	Hex Cr. collected at 1630 *	
005	12/22/98	1425		X	1506-W-mw7	4	X	X	X	Hex Cr. collected at 1615 *	
006	12/22/98	1130		X	1506-W-mw8	8	X	X	X	Hex Cr. collected at 1525 * also do MS/MSD	
007	12/22/98	1300		X	1506-W-mw9	6	X		X	Hex Cr. collected at 1545 *	
008	12/22/98	1510		X	1506-W-mw10	4	X	X	X	Hex Cr. collected at 1510 *	
009	12/22/98	1355		X	1506-W-mw11	4	X	X	X	Hex Cr. collected at 1355 *	
010	12/22/98	1510		X	1506-W-mw12	4	X	X	X	Hex Cr. collected at 1540 *	
011	12/22/98	1511		X	1506-W-mw13	4	X	X	X	Hex Cr. collected at 1611 *	
012	12/22/98	0855		X	1506-W-mw14	4	X	X	X	Hex Cr. collected at 1730 *	
013	12/22/98			X	1506-W-mw15		X	X	X	Hex Cr. collected at 1730 *	
014	12/22/98	1005		X	1506-W-mw16	6	X		X	Hex Cr. collected at 1737 *	

RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
	12/22/98 1745				
RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY (SIGNATURE)	DATE/TIME	REMARKS	
			12/22/98	cool @ 4°C	

Distribution: Original accompanies shipment copy to coordinator field files

000146



## RECRA LABNET, a division of Recra Environmental, Inc. (#NY8A 7861)

## CHAIN OF CUSTODY RECORD

PROJECT NO 1506R-97		SITE NAME 95 Mt. Read Blvd. Rochester, New York		NO OF CON- TAINERS		ASD Full Total + CN 95-18-2, 95-3, 4, 5 TCL VOCs (95-1) Total Chrome (CLP-m) Hex Chrome (CLP-m)						REMARKS	
SAMPLERS (SIGNATURE) <i>[Signature]</i>													
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION								
015	12/22/98	1115		X	1506-W - MW17	11	X			X			also do "ms/msd" Hex Cr. collected at 155*
016	12/22/98	1030		X	1506-W - MW18	4		X	X	X			Hex Cr. collected at 1710*
017	12/22/98	1031		X	1506-W - MW19	4		X	X	X			Hex Cr. collected at 1735*
018	12/22/98	1050		X	1506-W - MW20	4		X	X	X			Hex Cr. collected at 1645*
019	12/22/98	1400		X	1506-W - MW21	4		X	X	X			Hex Cr. collected at 1355*
020	12/24/98	-		X	1506-W - Trip	2		X					
021	12/22/98	1625		X	1506-W - Sump	4		X	X	X			Hex Cr. collected at 1625*
022	12/22/98	1635		X	1506-N - MW9	3		X	X				
RELINQUISHED BY (SIGNATURE) <i>[Signature]</i>		DATE/TIME 12/22/98 1745		RECEIVED BY (SIGNATURE) <i>[Signature]</i>		RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)			
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)			
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY (SIGNATURE) <i>[Signature]</i>		DATE/TIME 12/23/98 1200		REMARKS cooler @ 4°C					

1

2

3



**Committed To Your Success**

April 1, 1999

Mr. Jeff Danzinger  
Day Engineering  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

RECEIVED

APR 05 1999

**Severn Trent Laboratories**

10 Hazelwood Drive  
Amherst, NY 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed is an addendum to an analytical data package previously submitted. Specifically, reprocessing was performed to include additional Metals. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil & Aqueous  
Samples Received: 04/16/98  
Sample Dates: 04/13, 14 & 15/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Engineering with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

Susan L. Tinsmith  
Laboratory Manager

CLF/SLT/lrb  
Enclosure

I.D. #A98-1261, 1289  
#NY8A7861

This report contains 97 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Rochester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Laboratories, Inc.

000001

## SAMPLE DATA SUMMARY PACKAGE



### CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications:

- 1506-S-04
- 1506-S-05
- 1506-S-06
- 1506-S-07
- 1506-S-08
- 1506-S-09
- 1506-S-10
- 1506-S-11
- 1506-S-12
- 1506-S-13
- 1506-S-14
- 1506-S-15
- 1506-S-16
- 1506-S-17
- 1506-S-17 MATRIX DUPLICATE
- 1506-S-17 MATRIX SPIKE
- 1506-S-17 MATRIX SPIKE DUPLICATE
- 1506-T-19
- 1506-T-19 MATRIX DUPLICATE
- 1506-T-19 MATRIX SPIKE

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.



000003

## METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The recovery of Cadmium fell outside of quality control limits in sample 1506-T-19 Matrix Spike.

The relative percent difference between sample 1506-S-17 and the Matrix Duplicate performed on this sample exceeded quality control limits for Chromium.

The relative percent difference between sample 1506-T-19 and the Matrix Duplicate performed on this sample exceeded quality control limits for Lead.

CCB #1 from ICP run 980428A was above the CRDL for Aluminum. All samples from this SDG were analyzed later in the run between compliant CCBs.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Susan L. Tinsmith  
Laboratory Manager

Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent Laboratories, Inc.

**ORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES INC.

USEPA Defined Organic Data Qualifiers:

- U - Indicates compound was analyzed for but not detected.
- J - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A - This flag indicates that a TIC is a suspected aldol-condensation product.

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_INC. \_\_\_\_\_ Contract: NY97-209\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: 150601

Version: ASP95

NYSDEC Sample No.	Lab Sample ID
S04	AD804962
S05	AD804963
S06	AD804964
S07	AD804965
S13	AD804975
S15	AD804976
S16	AD804977
S17	AD804978
S17D	AD804979
S17S	AD804980
T19	AD804981
T19D	AD804982
T19S	AD804983

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before  
application of background corrections ? Yes/No NO\_

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Susan L. Tinsmith

Name: Susan L. Tinsmith

Date: 4/1/99

Title: Laboratory Manager



1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO. ▲

S04

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804962  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	157		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: GRAY  
 Color After: YELLOW

Clarity Before:   
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8126101-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-04

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S05

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804963  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	337		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8126102-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-05

## INORGANIC ANALYSES DATA SHEET

S06

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804964  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 85.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3210	—	—	P
7440-36-0	Antimony	1.2	U	—	P
7440-38-2	Arsenic	1.2	B	—	P
7440-39-3	Barium	28.1	B	E	P
7440-41-7	Beryllium	0.23	U	—	P
7440-43-9	Cadmium	0.12	U	N	P
7440-70-2	Calcium	49700	—	—	P
7440-47-3	Chromium	8.0	—	*	P
7440-48-4	Cobalt	2.8	B	—	P
7440-50-8	Copper	8.2	—	—	P
7439-89-6	Iron	6940	—	—	P
7439-92-1	Lead	4.0	—	*	P
7439-95-4	Magnesium	17800	—	—	P
7439-96-5	Manganese	271	—	—	P
7439-97-6	Mercury	0.11	U	—	CV
7440-02-0	Nickel	4.7	B	—	P
7440-09-7	Potassium	840	B	—	P
7782-49-2	Selenium	1.2	U	—	P
7440-22-4	Silver	0.26	U	—	P
7440-23-5	Sodium	1430	—	—	P
7440-28-0	Thallium	1.4	U	—	P
7440-62-2	Vanadium	8.0	B	—	P
7440-66-6	Zinc	16.5	—	E	P
	Cyanide	—	—	—	NR
1333-82-0	HexaChrom	—	—	—	NR
	MOLYBDENU	0.55	—	—	P
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:   
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8126103-CGA01029

CLIENT\_SAMPLE\_ID: 1506-S-06

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S07

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804965  
 Level (low/med): LOW Date Received: 04/15/98  
 % Solids: 88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.6		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8126104-STA00242

CLIENT SAMPLE ID: 1506-S-07

## INORGANIC ANALYSES DATA SHEET

S13

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804975  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 83.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	14.5		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8128906-STA00242

CLIENT SAMPLE ID: 1506-S-13

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S15

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804976  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 89.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3600	-		P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	1.3	B		P
7440-39-3	Barium	38.8	B	E	P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.11	U	N	P
7440-70-2	Calcium	42100	-		P
7440-47-3	Chromium	5.4	-	*	P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	8.8	-		P
7439-89-6	Iron	8260	-		P
7439-92-1	Lead	4.4	-	*	P
7439-95-4	Magnesium	9990	-		P
7439-96-5	Manganese	385	-		P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	6.1	B		P
7440-09-7	Potassium	805	B		P
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium	914	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	9.7	B		P
7440-66-6	Zinc	23.3	-	E	P
	Cyanide		-		NR
1333-82-0	HexaChrom		-		NR
	MOLYBDENU	0.47	U		P

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8128908-CGA01029

CLIENT SAMPLE ID: 1506-S-15

000012

## NYSDEC-ASP

1

NYSDEC SAMPLE NO

## INORGANIC ANALYSES DATA SHEET

S16

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804977  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	330		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: GRAY  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8128909-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-16

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

S17

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804978  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	300		*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
1333-82-0	HexaChrom				NR
	MOLYBDENU				NR

Color Before: GRAY Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8128910-STA00242

CLIENT SAMPLE ID: 1506-S-17



000014

## NYSDEC-ASP

1

NYSDEC SAMPLE NO

## INORGANIC ANALYSES DATA SHEET

T19

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: 150601  
 Matrix (soil/water): SOIL Lab Sample ID: AD804981  
 Level (low/med): LOW Date Received: 04/16/98  
 % Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3420	—	—	P
7440-36-0	Antimony	1.2	U	—	P
7440-38-2	Arsenic	1.8	B	—	P
7440-39-3	Barium	35.8	B	E	P
7440-41-7	Beryllium	0.22	U	—	P
7440-43-9	Cadmium	0.11	U	N	P
7440-70-2	Calcium	39400	—	—	P
7440-47-3	Chromium	6.6	—	*	P
7440-48-4	Cobalt	3.3	B	—	P
7440-50-8	Copper	8.0	—	—	P
7439-89-6	Iron	7080	—	—	P
7439-92-1	Lead	2.9	—	*	P
7439-95-4	Magnesium	9940	—	—	P
7439-96-5	Manganese	329	—	—	P
7439-97-6	Mercury	0.11	U	—	CV
7440-02-0	Nickel	6.3	B	—	P
7440-09-7	Potassium	758	B	—	P
7782-49-2	Selenium	1.1	U	—	P
7440-22-4	Silver	0.25	U	—	P
7440-23-5	Sodium	984	B	—	P
7440-28-0	Thallium	1.3	U	—	P
7440-62-2	Vanadium	7.8	B	—	P
7440-66-6	Zinc	19.3	—	E	P
	Cyanide	—	—	—	NR
1333-82-0	HexaChrom	—	—	—	NR
	MOLYBDENU	0.47	U	—	P
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—
			—	—	—

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:   
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8128912-CGA01029

CLIENT\_SAMPLE\_ID: 1506-T-19



DAY Environmental, Inc (716) 242-1090

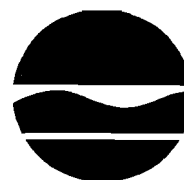
# RECRA LABNET, a division of Recra Environmental, Inc. Recra# NY 8A7861 CHAIN OF CUSTODY RECORD

PROJECT NO		SITE NAME		NO OF CONTAINERS	ASAP	TOTAL CR	HEX CR+6	TAL METALS	TCL VOCs	REMARKS
1506R-97		95 Mt. Read Blvd. Rochester, NY								
SAMPLERS (SIGNATURE)										
STATION NO	DATE	TIME	COMP	GRAB	STATION LOCATION					
001	4/13/98	1345		X	1506-S-08	1			X	TB-20 (8-10')
002	4/13/98	1720		X	1506-S-09	1			X	TB-6 (8-9.3')
003	4/14/98	1420		X	1506-S-10	1			X	TB-8 (12-15')
004	4/14/98	1518		X	1506-S-11	1			X	TB-14 (8-12')
005	4/15/98	1253		X	1506-S-12	1			X	TB-11 (12-14.5')
006	4/15/98	1235		X	1506-S-13	2	X	X	X	TB-11 (0-4')
007	4/15/98	1055		X	1506-S-14	1			X	TB-5 (8-12')
008	4/15/98	1415		X	1506-S-15	1		X	X	TB-10A (8-11.3')
009	4/15/98	1245		X	1506-S-16	2	X	X	X	TB-11 (8-12')
010	4/15/98	1245		X	1506-S-17	2	X	X	X	TB-11 (8-12') <sup>organic</sup> MS/MSD or <sup>inorganic</sup> MS/MSD
011	4/2/98	NA		X	1506-T-18	2			X	TRIP BLANK
012	4/15/98	1415		X	1506-S-19	1			X	TB-10A (8-11.3') <sup>inorganic</sup> MS/MSD
RELINQUISHED BY (SIGNATURE) DATE/TIME RECEIVED BY (SIGNATURE) DATE/TIME RECEIVED BY (SIGNATURE)										
RELINQUISHED BY (SIGNATURE) DATE/TIME RECEIVED BY (SIGNATURE) DATE/TIME RECEIVED BY (SIGNATURE)										
RELINQUISHED BY (SIGNATURE) DATE/TIME RECEIVED FOR LABORATORY BY (SIGNATURE) DATE/TIME REMARKS										

Distribution: Original accompanies shipment copy to Coordinator field files

000032

**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation, Region 8**  
6274 East Avon-Lima Road, Avon, New York 14414-9519  
Phone: (716) 226-2466 FAX: (716) 226-8696



John P. Cahill  
Commissioner

RECEIVED

APR 13 1999

April 13, 1999

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

Dear Mr. Danzinger:

**RE: General Circuits Inactive Hazardous Waste Disposal Site, Site #8-28-085**  
**Analytical Results For December 22, 1998 Sampling Event**

Enclosed please find one copy of the analytical data for the split-samples I collected on December 22, 1998 at General Circuits. Please include these results in the Remedial Investigation report you are preparing for the site.

Please contact me if you have any questions.

Sincerely,

Frank L. Sowers  
Environmental Engineer 1  
Division of Environmental Remediation

cc w/o enclosure:  
Thomas Maguire  
William H. Helferich, III, Esq.  
David E. Day, P.E. (Day Environmental, Inc.)  
Mary Jane Peachey, P.E. (NYSDEC)  
Edward R. Belmore, P.E. (NYSDEC)  
Glen R. Bailey, Esq. (NYSDEC)  
G. Anders Carlson (NYSDOH)  
David Napier (NYSDOH)  
Richard Elliot, P.E. (MCDOH)



RECEIVED

APR 13 1999

February 12, 1999

Mr. Frank Sowers  
NYS DEC  
6274 East Avon-Lima Road  
Avon, NY 14414

PROJECT: GENERAL CIRCUITS  
CASE #: SH898  
SDG #: 12422  
SAMPLE #'S: B21616, B21617, B21618, B21620, B21608, COOLER BLANK  
Submission #: 9812000296

Dear Mr. Sowers:

Enclosed are the analytical results of the analyses requested. All data has been reviewed prior to report submission. Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Michael Perry  
Laboratory Director

Enc.

cc: Mr. John M. Ryan  
NYS DEC  
Bureau of Watershed Assessment & Research  
50 Wolf Road, Room 392  
Albany, NY 12233-3502

## CASE NARRATIVE

COMPANY: NYS DEC - Region 8  
PROJECT: General Circuits  
SUBMISSION #: 9812000296  
SDG#: 12422  
Case #: SH898

NYS DEC samples were collected on 12/22/98 and received at CAS on 12/22/98 in good condition at cooler temperature of 5.0 °C. See CAS CLP Batching sheets for a cross reference between Client ID and CAS Job # and analyses requested.

### VOLATILE ORGANIC ANALYSIS

Three water samples were analyzed for Target Compound List (TCL) volatile organics by Method 95-1 from the NYS DEC 1995 ASP.

All Tuning criteria for BFB were within limits.

The initial and continuing calibration criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate compounds were within QC limits for recovery.

Matrix Spike/Matrix Spike Duplicate recoveries for sample B21608DL, the % RPD, and the Blank Spike recoveries were all acceptable.

All Laboratory Blanks were free from contamination.

Library Searches against the NBS/EPA library were conducted on all samples, reanalyzes, and blanks. The 30 largest peaks within 10 % of the nearest Internal Standard were searched. A summary of detected peaks is included following the Target data. Any analyte detected was quantitated based on the closest internal standard and has been reported flagged with a "J" as estimated.

Sample B21608 was reanalyzed at a dilution to bring target analytes within the calibration range of the method. Both dilutions were reported with target analytes over the calibration range flagged with an "E". Sample B21178 was analyzed at a dilution after prescreening to bring target analytes within the calibration range of the method.

No other analytical or QC problems were encountered during the analysis of this SDG.

0001

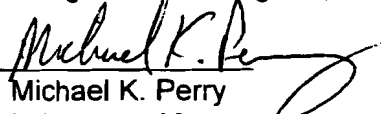
**METALS ANALYSIS**

Three water samples were analyzed for Total TAL Metals using NYSDEC 1995 ASP protocol. Mercury was analyzed by cold vapor methodology, Selenium was analyzed by GFAA, and all other metals were analyzed by ICP. One sample was analyzed for Hexavalent Chromium by SW-846 method 7196A.

Matrix Spike/Matrix Spike Duplicate recoveries for the soils were done on samples B21608. The following QC problems were seen: The Arsenic (134%), Selenium (57%), and Zinc (60%) Matrix Spike recoveries were outside of NYSDEC ASP QC limits (75-125 %) and the sample results were flagged with an "N" , accordingly. The RPD results and the Blank Spike recoveries (LCS) were all acceptable.

No other analytical problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

  
Michael K. Perry  
Laboratory Manager

2/12/99  
Date

## CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SDG #:12422 CASE No.:SH898

BATCH COMPLETE: yes

DATE REVISED:

SUBMISSION 9812000296

DISKETTE REQUESTED: Y      N    X

DATE DUE: 1/28/99

CLIENT: NYS DEC - Region 8

DATE: 12/28/98

PROTOCOL: ASP-B

CLIENT REP: Michael Perry

CUSTODY SEAL: PRESENT/ABSENT:

SHIPPING No. :

PROJECT: GENERAL CIRCUITS

CHAIN OF CUSTODY: PRESENT/ABSENT:

[illegible]

BATCHIN1.XLS

12/20/98



## ORGANIC QUALIFIERS

- U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. The flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search.
- P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and ALL concentration values reported on that Form I are flagged with the "D" flag.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- X - As specified in Case Narrative.

10/95

0004

## INORGANIC QUALIFIERS

C (Concentration) qualifier - Enter "B" if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but was greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for, but not detected, a "U" must be entered.

Q qualifier - Specified entries and their meanings are as follows:

E - The reported value is estimated because of the presence of interference.

M - Duplicate injection precision not met.

N - Spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

W - Post-digestion spike for Furnace AA Analysis is out of control limits (85-115), while sample absorbance is less than 50% of spike absorbance.

\* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the MSA is less than 0.995.

M (Method) qualifier - Enter:

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for Flame AA when Microwave Digestion is used
- "FM" for Furnace M when Microwave Digestion is used
- "CV" for Manual Cold Vapor AA
- "AV" for Automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- " " where no data has been entered
- "NR" if the analyte is not required to be analyzed

[illegible]

**Columbia Analytical Services Inc.**  
Cooler Receipt And Preservation Check Form

Project/Client NYSDEC Submission Number 12-296

Cooler received on 12/22/98 and opened on 12/22/98 by DS

1. Were custody seals on outside of cooler? YES NO  
If yes, how many and where? \_\_\_\_\_
2. Were signature & date correct? YES NO
3. Were custody papers properly filled out (ink, signed, etc)? YES NO
4. Did all bottles arrive in good condition (unbroken)? YES NO
5. Were all bottle labels complete (i.e. analysis, preservation, etc)? YES NO
6. Did all bottle labels and tags agree with custody papers? YES NO
7. Were correct bottles used for the tests indicated? YES NO
8. Were VOA vials checked for absence of air bubbles, and noted if so? YES NO
9. Where did the bottles originate? CAS/A CAS/K CAS/S CAS/L CAS/X CAS/J CAS/R
10. Temperature of cooler(s) upon receipt: 5.0  
Is the temperature within  $4 \pm 2^\circ \text{C}$ ? Yes ☒ Yes ☐ Yes ☐ Yes ☐ Yes ☐  
If No, Explain Below No ☐ No ☐ No ☐ No ☐ No ☐  
Date/Time Temperatures Taken: 12/22/98 1210  
Thermometer ID: #139 Circle One: Temp Blank Sample Bottle Cooler Temp.

Explain any discrepancies: \_\_\_\_\_

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO <sub>3</sub>	<input checked="" type="checkbox"/>				
2	H <sub>2</sub> SO <sub>4</sub>					
5-9*	P/PCBs (608 only)					

YES = All samples OK

NO = Samples were preserved at lab as listed

\*If pH adjustment is required, use NaOH and/or H<sub>2</sub>SO<sub>4</sub>

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

CLIENT NOTIFICATION: \_\_\_\_\_

0007

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: CAS/ROCH Contract: NYSDEC

Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422

Matrix: (soil/water) WATER Lab Sample ID: MET BLK

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4204.D

Level: (low/med) LOW Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	10	U
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	o-Xylene	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U
108383& 106423	(m+p) Xylene	10	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

**VBK01**

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: MET BLK  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4204.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0

(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

**VBK01MS**

Lab Name: CAS/ROCH

Contract: NYSDEC

Lab Code: 10145

Case No.: 9812-296

SAS No.: \_\_\_\_\_

SDG No.: 12422

Matrix: (soil/water) WATER

Lab Sample ID: BLK SPK

Sample wt/vol: 5.0 (g/ml) ML

Lab File ID: A4206.D

Level: (low/med) LOW

Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.                      COMPOUND                      (ug/L or ug/Kg)                      UG/L                      Q

74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	49	
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	49	
79-01-6	Trichloroethene	47	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	50	
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	10	U
1330-20-7	o-Xylene	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U
108383& 106423	(m+p) Xylene	10	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

**VBK01MS**

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: BLK SPK  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4206.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21617

Lab Name: CAS/ROCH

Contract: NYSDEC

Lab Code: 10145

Case No.: 9812-296

SAS No.: \_\_\_\_\_

SDG No.: 12422

Matrix: (soil/water) WATER

Lab Sample ID: 263990 25

Sample wt/vol: 5.0 (g/ml) ML

Lab File ID: A4215.D

Level: (low/med) LOW

Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm)

Dilution Factor: 10 25 10/1/99

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.                      COMPOUND                      (ug/L or ug/Kg)                      UG/L                      Q

74-87-3	Chloromethane	250	U
75-01-4	Vinyl chloride	250	U
75-00-3	Chloroethane	250	U
74-83-9	Bromomethane	250	U
67-64-1	Acetone	250	U
75-35-4	1,1-Dichloroethene	250	U
75-09-2	Methylene chloride	250	U
75-15-0	Carbon disulfide	250	U
75-34-3	1,1-Dichloroethane	250	U
78-93-3	2-Butanone	250	U
540-59-0	1,2-Dichloroethene (total)	230	J
67-66-3	Chloroform	250	U
107-06-2	1,2-Dichloroethane	250	U
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon tetrachloride	250	U
71-43-2	Benzene	250	U
79-01-6	Trichloroethene	2000	
78-87-5	1,2-Dichloropropane	250	U
75-27-4	Bromodichloromethane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
79-00-5	1,1,2-Trichloroethane	250	U
124-48-1	Dibromochloromethane	250	U
75-25-2	Bromoform	250	U
108-10-1	4-Methyl-2-pentanone	250	U
108-88-3	Toluene	250	U
591-78-6	2-Hexanone	250	U
127-18-4	Tetrachloroethene	3700	
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
1330-20-7	o-Xylene	250	U
100-42-5	Styrene	250	U
108-88-3	1,1,2,2-Tetrachloroethane	250	U
108383& 106423	(m+p) Xylene	250	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B21617

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263990 25  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4215.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 10 25 On 1/13/99  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

**B21618**

Lab Name: CAS/ROCH

Contract: NYSDEC

Lab Code: 10145

Case No.: 9812-296

SAS No.: \_\_\_\_\_

SDG No.: 12422

Matrix: (soil/water) WATER

Lab Sample ID: 263991 1.0

Sample wt/vol: 5.0 (g/ml) ML

Lab File ID: A4216.D

Level: (low/med) LOW

Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.                      COMPOUND                      (ug/L or ug/Kg)                      UG/L                      Q

74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	30	
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	10	J
75-09-2	Methylene chloride	10	U
75-15-0	Carbon disulfide	10	U
75-34-3	1,1-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
540-59-0	1,2-Dichloroethene (total)	72	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
71-43-2	Benzene	10	U
79-01-6	Trichloroethene	13	
78-87-5	1,2-Dichloropropane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-5	1,1,2-Trichloroethane	10	U
124-48-1	Dibromochloromethane	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
108-88-3	Toluene	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
1330-20-7	o-Xylene	10	U
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	U
108383& 106423	(m+p) Xylene	10	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

**B21618**

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263991 1.0  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4216.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21608

Lab Name: CAS/ROCH Contract: NYSDEC

Lab Code: 10145 Case No.: 9812-296 SAS No.:        SDG No.: 12422

Matrix: (soil/water) WATER Lab Sample ID: 263993 5.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4210.D

Level: (low/med) LOW Date Received: 12/22/98

% Moisture: not dec.        Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0 5 gm 1/13/99

Soil Extract Volume:        (uL) Soil Aliquot Volume:        (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane		50	U
75-01-4	Vinyl chloride		50	U
75-00-3	Chloroethane		50	U
74-83-9	Bromomethane		50	U
67-64-1	Acetone		50	U
75-35-4	1,1-Dichloroethene		50	U
75-09-2	Methylene chloride		50	U
75-15-0	Carbon disulfide		50	U
75-34-3	1,1-Dichloroethane		50	U
78-93-3	2-Butanone		50	U
540-59-0	1,2-Dichloroethene (total)		6	J
67-66-3	Chloroform		50	U
107-06-2	1,2-Dichloroethane		50	U
71-55-6	1,1,1-Trichloroethane		50	U
56-23-5	Carbon tetrachloride		50	U
71-43-2	Benzene		50	U
79-01-6	Trichloroethene		460	
78-87-5	1,2-Dichloropropane		50	U
75-27-4	Bromodichloromethane		50	U
10061-01-5	cis-1,3-Dichloropropene		50	U
10061-02-6	trans-1,3-Dichloropropene		50	U
79-00-5	1,1,2-Trichloroethane		50	U
124-48-1	Dibromochloromethane		50	U
75-25-2	Bromoform		50	U
108-10-1	4-Methyl-2-pentanone		50	U
108-88-3	Toluene		50	U
591-78-6	2-Hexanone		50	U
127-18-4	Tetrachloroethene		1300	E
108-90-7	Chlorobenzene		50	U
100-41-4	Ethylbenzene		50	U
1330-20-7	o-Xylene		50	U
100-42-5	Styrene		50	U
108-88-3	1,1,2,2-Tetrachloroethane		50	U
108383& 106423	(m+p) Xylene		50	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

**B21608**

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263993 5.0  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4210.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 10 5 1/13/99  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

**B21608DL**

Lab Name: CAS/ROCH

Contract: NYSDEC

Lab Code: 10145

Case No.: 9812-296

SAS No.: \_\_\_\_\_

SDG No.: 12422

Matrix: (soil/water) WATER

Lab Sample ID: 263993 10

Sample wt/vol: 5.0 (g/ml) ML

Lab File ID: A4211.D

Level: (low/med) LOW

Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm)

Dilution Factor: 10.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.                      COMPOUND                      (ug/L or ug/Kg)                      UG/L                      Q

74-87-3	Chloromethane	100	U
75-01-4	Vinyl chloride	100	U
75-00-3	Chloroethane	100	U
74-83-9	Bromomethane	100	U
67-64-1	Acetone	100	U
75-35-4	1,1-Dichloroethene	100	U
75-09-2	Methylene chloride	100	U
75-15-0	Carbon disulfide	100	U
75-34-3	1,1-Dichloroethane	100	U
78-93-3	2-Butanone	100	U
540-59-0	1,2-Dichloroethene (total)	100	U
67-66-3	Chloroform	100	U
107-06-2	1,2-Dichloroethane	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon tetrachloride	100	U
71-43-2	Benzene	100	U
79-01-6	Trichloroethene	480	D
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
124-48-1	Dibromochloromethane	100	U
75-25-2	Bromoform	100	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	100	U
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	1400	D
108-90-7	Chlorobenzene	100	U
100-41-4	Ethylbenzene	100	U
1330-20-7	o-Xylene	100	U
100-42-5	Styrene	100	U
108-88-3	1,1,2,2-Tetrachloroethane	100	U
108383& 106423	(m+p) Xylene	100	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

**B21608DL**

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263993 10  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4211.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 10.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

**B21608DLMS**

Lab Name: CAS/ROCH Contract: NYSDEC

Lab Code: 10145 Case No.: 9812-296 SAS No.:            SDG No.: 12422

Matrix: (soil/water) WATER Lab Sample ID: 263993 10 MS

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4212.D

Level: (low/med) LOW Date Received: 12/22/98

% Moisture: not dec.                      Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 10.0

Soil Extract Volume:                      (uL) Soil Aliquot Volume:                      (uL)

CONCENTRATION UNITS:

CAS NO.                      COMPOUND                      (ug/L or ug/Kg)                      UG/L                      Q

74-87-3	Chloromethane	100	U
75-01-4	Vinyl chloride	100	U
75-00-3	Chloroethane	100	U
74-83-9	Bromomethane	100	U
67-64-1	Acetone	100	U
75-35-4	1,1-Dichloroethene	500	D
75-09-2	Methylene chloride	100	U
75-15-0	Carbon disulfide	100	U
75-34-3	1,1-Dichloroethane	100	U
78-93-3	2-Butanone	100	U
540-59-0	1,2-Dichloroethene (total)	100	U
67-66-3	Chloroform	100	U
107-06-2	1,2-Dichloroethane	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon tetrachloride	100	U
71-43-2	Benzene	500	D
79-01-6	Trichloroethene	930	D
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
124-48-1	Dibromochloromethane	100	U
75-25-2	Bromoform	100	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	500	D
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	1400	D
108-90-7	Chlorobenzene	490	D
100-41-4	Ethylbenzene	100	U
1330-20-7	o-Xylene	100	U
100-42-5	Styrene	100	U
108-88-3	1,1,2,2-Tetrachloroethane	100	U
108383& 106423	(m+p) Xylene	100	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B21608DLMS

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.:          SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263993 10 MS  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4212.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec.          Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 10.0  
Soil Extract Volume:          (uL) Soil Aliquot Volume:          (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

**B21608DLMSD**

Lab Name: CAS/ROCH

Contract: NYSDEC

Lab Code: 10145

Case No.: 9812-296

SAS No.: \_\_\_\_\_

SDG No.: 12422

Matrix: (soil/water) WATER

Lab Sample ID: 263993 10 MS

Sample wt/vol: 5.0 (g/ml) ML

Lab File ID: A4213.D

Level: (low/med) LOW

Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 12/24/98

GC Column: RTX502. ID: 0.53 (mm)

Dilution Factor: 10.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.                      COMPOUND                      (ug/L or ug/Kg)                      UG/L                      Q

74-87-3	Chloromethane	100	U
75-01-4	Vinyl chloride	100	U
75-00-3	Chloroethane	100	U
74-83-9	Bromomethane	100	U
67-64-1	Acetone	100	U
75-35-4	1,1-Dichloroethene	480	D
75-09-2	Methylene chloride	100	U
75-15-0	Carbon disulfide	100	U
75-34-3	1,1-Dichloroethane	100	U
78-93-3	2-Butanone	100	U
540-59-0	1,2-Dichloroethene (total)	100	U
67-66-3	Chloroform	100	U
107-06-2	1,2-Dichloroethane	100	U
71-55-6	1,1,1-Trichloroethane	100	U
56-23-5	Carbon tetrachloride	100	U
71-43-2	Benzene	510	D
79-01-6	Trichloroethene	930	D
78-87-5	1,2-Dichloropropane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
124-48-1	Dibromochloromethane	100	U
75-25-2	Bromoform	100	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	510	D
591-78-6	2-Hexanone	100	U
127-18-4	Tetrachloroethene	1400	D
108-90-7	Chlorobenzene	500	D
100-41-4	Ethylbenzene	100	U
1330-20-7	o-Xylene	100	U
100-42-5	Styrene	100	U
108-88-3	1,1,2,2-Tetrachloroethane	100	U
108383& 106423	(m+p) Xylene	100	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

**B21608DLMSD**

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263993 10 MS  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4213.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 10.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS/ROCH Contract: NYSDEC

Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422

Matrix: (soil/water) WATER Lab Sample ID: 263994 1.0

Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4217.D

Level: (low/med) LOW Date Received: 12/22/98

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98

GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
75-00-3	Chloroethane		10	U
74-83-9	Bromomethane		10	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		10	U
75-09-2	Methylene chloride		10	U
75-15-0	Carbon disulfide		10	U
75-34-3	1,1-Dichloroethane		10	U
78-93-3	2-Butanone		10	U
540-59-0	1,2-Dichloroethene (total)		10	U
67-66-3	Chloroform		10	U
107-06-2	1,2-Dichloroethane		10	U
71-55-6	1,1,1-Trichloroethane		10	U
56-23-5	Carbon tetrachloride		10	U
71-43-2	Benzene		10	U
79-01-6	Trichloroethene		10	U
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
124-48-1	Dibromochloromethane		10	U
75-25-2	Bromoform		10	U
108-10-1	4-Methyl-2-pentanone		10	U
108-88-3	Toluene		10	U
591-78-6	2-Hexanone		10	U
127-18-4	Tetrachloroethene		10	U
108-90-7	Chlorobenzene		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	o-Xylene		10	U
100-42-5	Styrene		10	U
108-88-3	1,1,2,2-Tetrachloroethane		10	U
108383& 106423	(m+p) Xylene		10	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

COOLER BLK

Lab Name: CAS/ROCH Contract: NYSDEC  
Lab Code: 10145 Case No.: 9812-296 SAS No.: \_\_\_\_\_ SDG No.: 12422  
Matrix: (soil/water) WATER Lab Sample ID: 263994 1.0  
Sample wt/vol: 5.0 (g/ml) ML Lab File ID: A4217.D  
Level: (low/med) LOW Date Received: 12/22/98  
% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 12/24/98  
GC Column: RTX502 ID: 0.53 (mm) Dilution Factor: 1.0  
Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

Number TICs found: 0 (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	RT	EST. CONC.	Q
---------	----------	----	------------	---

## INORGANIC CLP

## COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: 9812000296SDG No.: 12422

Lab Code:

Case No.: SH898

SAS No.:

SOW No.: NYS ASP 12/91Sample No.B21616B21620B21608B21608DB21608SB21608SLab Sample ID.263989263992263993263993D263993S263993SF

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YESIf yes-were raw data generated before  
application of background corrections?Yes/No NO

Comments:

see the attached case narrative

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Michael K. Perry

Name:

Michael K. Perry

Date:

2/12/99

Title:

Laboratory Manager

## INORGANIC CLP

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

B21616

Contract: 9812000296

Lab Code:

Case No.: SH898

SAS No.:

SDG NO.: 12422

Matrix (soil/water): WATER

Lab Sample ID: 263989

Level (low/med): LOW

Date Received: 12/22/98

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µg/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	167	B		P
7440-36-0	Antimony	3.0	U		P
7440-38-2	Arsenic	4.0	U	N	P
7440-39-3	Barium	102	B		P
7440-41-7	Beryllium	2.8	B		P
7440-43-9	Cadmium	3.6	B		P
7440-70-2	Calcium	188000			P
7440-47-3	Chromium	1.4	B		P
7440-48-4	Cobalt	4.3	U		P
7440-50-8	Copper	5.1	U		P
7439-89-6	Iron	18200			P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	48900			P
7439-96-5	Manganese	270			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium	5260			P
7782-49-2	Selenium	1.5	U	WN	F
7440-22-4	Silver	2.3	B		P
7440-23-5	Sodium	510000			P
7440-28-0	Thallium	28.4			P
7440-62-2	Vanadium	3.4	U	N	P
7440-66-6	Zinc	30.1			P

Color Before: COLORLESS

Clarity Before: CLOUDY

Texture

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

0042



## INORGANIC CLP

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

B21620

Contract: 9812000296

Lab Code:

Case No.: SH898

SAS No.:

SDG NO.: 12422

Matrix (soil/water): WATER

Lab Sample ID: 263992

Level (low/med): LOW

Date Received: 12/22/98

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µg/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3260			P
7440-36-0	Antimony	3.0	U		P
7440-38-2	Arsenic	4.0	U	N	P
7440-39-3	Barium	121	B		P
7440-41-7	Beryllium	2.0	B		P
7440-43-9	Cadmium	2.2	B		P
7440-70-2	Calcium	169000			P
7440-47-3	Chromium	14.4			P
7440-48-4	Cobalt	4.3	U		P
7440-50-8	Copper	28.0			P
7439-89-6	Iron	11200			P
7439-92-1	Lead	9.0			P
7439-95-4	Magnesium	86200			P
7439-96-5	Manganese	186			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	9.0	B		P
7440-09-7	Potassium	7700			P
7782-49-2	Selenium	1.5	U	WN	F
7440-22-4	Silver	3.1	B		P
7440-23-5	Sodium	108000			P
7440-28-0	Thallium	19.2			P
7440-62-2	Vanadium	8.6	B	N	P
7440-66-6	Zinc	37.2			P

Color Before: GREY

Clarity Before: CLOUDY

Texture

:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

0043

## INORGANIC CLP

-1-

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

B21608

Contract: 9812000296

Lab Code:

Case No.: SH898

SAS No.:

SDG NO.: 12422

Matrix (soil/water): WATER

Lab Sample ID: 263993

Level (low/med): LOW

Date Received: 12/22/98

Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µg/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	721			P
7440-36-0	Antimony	780			P
7440-38-2	Arsenic	24.7		N	P
7440-39-3	Barium	26.9	B		P
7440-41-7	Beryllium	0.35	B		P
7440-43-9	Cadmium	0.88	U		P
7440-70-2	Calcium	373000			P
7440-47-3	Chromium	52300			P
7440-48-4	Cobalt	4.3	B		P
7440-50-8	Copper	10.1	B		P
7439-89-6	Iron	1710			P
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	151000			P
7439-96-5	Manganese	123			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	16.3	B		P
7440-09-7	Potassium	10500			P
7782-49-2	Selenium	1.6	B	WN	F
7440-22-4	Silver	3.7	B		P
7440-23-5	Sodium	64200			P
7440-28-0	Thallium	111			P
7440-62-2	Vanadium	3.4	U	N	P
7440-66-6	Zinc	9.3	B		P

Color Before: YELLOW

Clarity Before: CLEAR

Texture

:

Color After: GREEN

Clarity After: CLEAR

Artifacts:

Comments:

COLUMBIA ANALYTICAL SERVICES

Reported: 02/12/99

NYS DEC - Region 8  
Project Reference:GENERAL CIRCUITS  
Client Sample ID :B21608

Date Sampled :12/22/98	Order #:263993	Sample Matrix:WATER
Date Received:12/22/98	Submission #:9812000296	

ANALYTE	PQL	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
HEXAVALENT CHROMIUM	0.0100	42.0	MG/L	12/23/98	200.0

0255

—

—

—

RECEIVED

APR 19 1999



**Severn Trent Laboratories**

10 Hazelwood Drive  
Amherst, NY 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton-Henrietta Town Line Road  
Rochester, NY 14623

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed is an addendum to a data package previously submitted to your firm. Specifically, the data were reprocessed to include additional Metals. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil & Aqueous

Samples Received: 09/23, 24, 25 & 30/98  
Sample Dates: 05/12, 09/22, 23, 24 & 28/98

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Engineering with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

Susan L. Tinsmith  
Laboratory Manager

CLF/SLT/lrb  
Enclosure

I.D. #A98-4049, 4067, 4076,  
4146  
#NY8A7861

This report contains 122 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

SEVERN TRENT LABORATORIES, INC.



000001

### CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-S-20  
1506-S-23  
1506-S-24  
1506-S-25  
1506-S-26  
1506-S-27  
1506-S-28  
1506-S-29  
1506-S-30  
1506-S-31  
1506-S-32  
1506-S-33  
1506-S-34  
1506-S-35  
1506-S-35 MATRIX DUPLICATE  
1506-S-35 MATRIX SPIKE  
1506-S-36  
1506-S-37  
1506-S-38  
1506-S-38 MATRIX DUPLICATE  
1506-S-38 MATRIX SPIKE  
1506-S-39  
1506-S-40  
1506-S-41  
Trip Blank

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- Analyses were performed in accordance with 1995 New York State Analytical Services protocol.



## COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.

## METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

The serial dilution on sample 1506-S-28 was non-compliant for Potassium.

The serial dilution on sample 1506-S-35 was non-compliant for Potassium and Chromium.

Sample 1506-S-28 required a dilution of ten for Selenium.

Sample 1506-S-28 Matrix Spike yielded recoveries outside of quality control limits for Antimony, Arsenic, Beryllium, Cadmium, Selenium and Silver. Sample 1506-S-28 Matrix Duplicate was non-compliant for Zinc, Cadmium, Copper, Silver and Molybdenum. These samples and sample 1506-S-28 were redigested to confirm matrix interference.

Sample 1506-S-35 Matrix Spike yielded non-compliant recoveries for Antimony, Beryllium, Cadmium, Chromium, Copper, Lead, Nickel, Silver and Zinc. Sample 1506-S-35 Matrix Duplicate was non-compliant for Chromium, Copper and Lead.

The first and third CCBs on the ICP run of 09/29/98 were non-complaint for Aluminum. The samples associated with job A98-4049 were analyzed later in the run between compliant CCBs. The Aluminum results for job A98-4076 were taken from run 981010A since they were affected by the non-compliant CCBs.

## HEXAVALENT CHROMIUM DATA

The Hexavalent Chromium analyses were performed by the Wet Chemistry group.

Sample 1506-S-28 Matrix Spike yielded a spike recovery below quality control limits. The LFB yielded a recovery above quality control limits. All other associated QC was compliant.

000003



"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

Susan L. Tinsmith  
Laboratory Manager

4/10/99  
Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent Laboratories.



Day Environmental, Inc. (716) 292-1090

**RECRA LABNET**, a division of Recra Environmental, Inc. (#NYBA7861)

### CHAIN OF CUSTODY RECORD

[illegible]

### CHAIN OF CUSTODY RECORD

[illegible]

DAY Environmental, Inc. (716) 292-1090

**RECRA LABNET**, a division of Recra Environmental, Inc. (# NYBA7861)

### CHAIN OF CUSTODY RECORD

PROJECT NO		1506R-97		SITE NAME		95 Mt. Read Blvd Rochester, NY		NO OF CON- TAINERS		ASP Total (CLP-M) Hex Chlorine Hex Chlorine Total Metals		REMARKS	
STATION NO		DATE		TIME		COMP		GRAB		STATION LOCATION			
1		7/24/98		09:30				X		1506-S-35		1 TB-30 (0-4') Also do MS/MSD	
2		7/24/98		09:55				X		1506-S-36		1 TB-30 (8'-10')	
3		7/24/98		10:45				X		1506-S-37		1 TB-32 (11.5'-12.5')	
4		7/24/98		11:40				X		1506-S-38		1 TB-35 (11'-12') Also do MS/MSD	
5		7/24/98		15:15				X		1506-S-39		4 Equipment Rinseate	
→										Trip Blank			
<u>Note:</u> In 2 Coolers													
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)			
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)		RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED BY (SIGNATURE)			
RELINQUISHED BY (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY		DATE/TIME		REMARKS					

90000

### CHAIN OF CUSTODY RECORD

[illegible]

000008

## NYSDEC-ASP

## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA\_LABNET\_INC.\_\_\_\_\_ Contract: NY97-209\_\_

Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: S20\_\_

Version: ASP-95

NYSDEC Sample No.	Lab Sample ID
20	AD812583
23	AD812584
24	AD812585
25	AD812586
26	AD812587
27	AD812588
28	AD812589
29	AD812592
30	AD812593
31	AD812594
32	AD812595
33	AD812899
33D	AD812900/MD
33S	AD812901/MS
34	AD812597
35	AD812598
35D	AD812599/MD
35S	AD812600/MS
36	AD812601
37	AD812602

Were ICP interelement corrections applied ? Yes/No YES

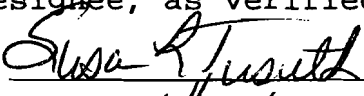
Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before  
application of background corrections ? Yes/No NO\_

## Comments:

HC and HexaChrom represent Hexavalent Chromium.\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Kenneth\_E.\_Kasperek\_\_\_\_\_

Date: 4/16/99

Title: Laboratory\_Director\_\_\_\_\_

Lab Name: RECRA\_LABNET\_INC.\_\_\_\_\_ Contract: NY97-209\_\_\_\_  
Lab Code: RECNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.:S20\_\_\_\_  
Version: ASP-95

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

COVER PAGE - IN 10/95

## NYSDEC-ASP

000010

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO

20

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812583  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 94.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: GRAY Clarity Before: Texture: FINE  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8404901-STA00242  
 CLIENT SAMPLE ID: 1506-S-20

000011

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

23

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812584  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 88.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB\_SAMPLE\_ID: A8404902-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-23



000012

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

24

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812585  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 89.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: GRAY  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8404903-STA00242  
 CLIENT SAMPLE ID: 1506-S-24

000013

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

25

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812586  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 90.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB\_SAMPLE\_ID: A8404904-STA00242  
 CLIENT\_SAMPLE\_ID: 1506-S-25

000014

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

26

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812587  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8404905-STA00242  
 CLIENT\_SAMPLE\_ID: 1506-S-26

000015

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

27

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812588  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 85.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	11.0		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8404906-STA00242  
 CLIENT SAMPLE ID: 1506-S-27

000016

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

28

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812589  
 Level (low/med): LOW Date Received: 09/23/98  
 % Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22900		*	P
7440-36-0	Antimony	1.9	B	N	P
7440-38-2	Arsenic	14.0			P
7440-39-3	Barium	2650			P
7440-41-7	Beryllium	1.6		N	P
7440-43-9	Cadmium	9.9		N	P
7440-70-2	Calcium	56100		*	P
7440-47-3	Chromium	55.0		EN*	P
7440-48-4	Cobalt	10.6	B	N	P
7440-50-8	Copper	1310		N*	P
7439-89-6	Iron	15000		N*	P
7439-92-1	Lead	565		N*	P
7439-95-4	Magnesium	10100			P
7439-96-5	Manganese	2120			P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	19.3		N	P
7440-09-7	Potassium	1980		E	P
7782-49-2	Selenium	12.1	U		P
7440-22-4	Silver	0.71	B	N	P
7440-23-5	Sodium	1540			P
7440-28-0	Thallium	2.0	B		P
7440-62-2	Vanadium	25.8			P
7440-66-6	Zinc	2770		N	P
	Cyanide				NR
7439-98-7	Molybdenum	23.1			P
	HexaChrom				NR

Color Before: BLACK Clarity Before: Clarity After: CLEAR Texture: FINE  
 Color After: YELLOW Artifacts:

## Comments:

LAB SAMPLE ID: A8404907-CGA01515

CLIENT SAMPLE ID: 1506-S-28

\* Sample was diluted for Se at 1:10 level due to matrix interference.  
 Result was below IDL. Used IDL at level 10x(instrument IDL).

FORM I - IN

10/95

000017

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

29

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812592  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 91.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.9		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: GRAY Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8406701-STA00242  
 CLIENT SAMPLE ID: 1506-S-29

000018

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

30

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812593  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 81.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8406702-STA00242  
 CLIENT SAMPLE ID: 1506-S-30

000019

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

31

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812594  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 79.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	508		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8406703-STA00242

CLIENT SAMPLE ID: 1506-S-31



000020

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

32

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812595  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 89.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	408		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8406704-STA00242  
 CLIENT SAMPLE ID: 1506-S-32

000021

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

33

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812899  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	371		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8406705-STA00242

CLIENT SAMPLE ID: 1506-S-33

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

34

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812597  
 Level (low/med): LOW Date Received: 09/24/98  
 % Solids: 81.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	41.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A8406706-STA00242  
 CLIENT SAMPLE ID: 1506-S-34

000023

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

35

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812598  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4990	—	*	NR
7440-36-0	Antimony	1.3	U	N	P
7440-38-2	Arsenic	5.2	—	—	P
7440-39-3	Barium	57.4	—	—	NR
7440-41-7	Beryllium	1.1	—	N	P
7440-43-9	Cadmium	6.2	—	N	P
7440-70-2	Calcium	82.2	B	*	NR
7440-47-3	Chromium	23.6	—	EN*	P
7440-48-4	Cobalt	3.6	B	N	NR
7440-50-8	Copper	122	—	N*	P
7439-89-6	Iron	9550	—	—	NR
7439-92-1	Lead	86.5	—	N*	P
7439-95-4	Magnesium	44400	—	—	NR
7439-96-5	Manganese	238	—	—	NR
7439-97-6	Mercury	0.11	U	—	CV
7440-02-0	Nickel	14.0	—	N	P
7440-09-7	Potassium	1730	—	E	P
7782-49-2	Selenium	1.1	U	—	P
7440-22-4	Silver	0.86	B	N	P
7440-23-5	Sodium	851	B	—	NR
7440-28-0	Thallium	1.3	U	—	P
7440-62-2	Vanadium	11.0	B	—	NR
7440-66-6	Zinc	61.7	—	N	P
	Cyanide	—	—	—	NR
7439-98-7	Molybdenum	0.86	B	—	P
	HexaChrom	—	—	—	NR

Color Before: BROWN Clarity Before: Texture: FINE  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB SAMPLE ID: A8407601-CGA01515  
 CLIENT SAMPLE ID: 1506-S-35

000024

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

36

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812601  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	222		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Clarity After: CLEAR Texture: MEDIUM  
 Color After: YELLOW Artifacts:

## Comments:

LAB SAMPLE ID: A8407602-STA00242  
 CLIENT SAMPLE ID: 1506-S-36

000025

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

37

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812602  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 90.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.2		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB\_SAMPLE\_ID: A8407603-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-37

000026

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

38

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812603  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 88.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.1		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A8407604-STA00242  
 CLIENT\_SAMPLE\_ID: 1506-S-38

## NYSDEC-ASP

4/6/98  
000026

000027

NYSDEC SAMPLE NO.

1  
INORGANIC ANALYSES DATA SHEET

39

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): WATER Lab Sample ID: AD812578  
 Level (low/med): LOW Date Received: 09/25/98  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	1.8	U		P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom	17.0	U		A

Color Before: COLORLESS Clarity Before: CLEAR Texture: \_\_\_\_\_  
 Color After: COLORLESS Clarity After: CLEAR Artifacts: \_\_\_\_\_

Comments:

LAB SAMPLE ID: A8407605-STA00273  
 CLIENT SAMPLE ID: 1506-S-39



000028

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

40

Lab Name: RECRA LABNET INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812831  
 Level (low/med): LOW Date Received: 09/30/98  
 % Solids: 89.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.5		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	Hexachrom				NR

Color Before: BROWN  
 Color After: YELLOW

Clarity Before:  
 Clarity After: CLEAR

Texture: MEDIUM  
 Artifacts:

## Comments:

LAB SAMPLE ID: A8414601-STA00242  
 CLIENT SAMPLE ID: 1506-S-40

000029

## NYSDEC-ASP

1  
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

41

Lab Name: RECRA\_LABNET\_INC. Contract: NY97-209  
 Lab Code: RECNY Case No.: 7861 SAS No.: SDG No.: S20  
 Matrix (soil/water): SOIL Lab Sample ID: AD812834  
 Level (low/med): LOW Date Received: 09/30/98  
 % Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.4		EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR
7439-98-7	Molybdenum				NR
	HexaChrom				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM  
 Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

LAB\_SAMPLE\_ID: A8414602-STA00242  
 CLIENT\_SAMPLE\_ID: 1506-S-41



**Committed To Your Success**

January 4, 2000

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Rd.  
Rochester, NY 14623

**Severn Trent Laboratories**  
10 Hazelwood Drive  
Suite 106  
Amherst, New York 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Soil; Water  
Samples Received: 11/10/99  
Sample Date: 11/08/99

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

Susan L. Tinsmith  
Laboratory Manager

CLF/SLT/mfg  
Enclosure

I.D. #A99-7525  
#NY8A7861

This report contains 4.55 pages which are individually numbered.

**Other Laboratory Locations:**

- Mobile, AL
- Monroe, CT
- Miramar, FL
- Pensacola, FL
- Tallahassee, FL
- Tampa, FL
- Savannah, GA
- University Park, IL
- Billerica, MA
- Westfield, MA
- Sparks, MD
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Sales Office Locations:**

- Cantonment, FL
- Orlando, FL
- South Pasadena, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Mt. Laurel, NJ
- Morristown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Services Inc.

000001

## **SAMPLE DATA SUMMARY PACKAGE**



### CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-S-59  
1506-S-60  
1506-S-61  
1506-S-62  
1506-S-62 MD  
1506-S-62 MS  
1506-S-63  
1506-S-64  
1506-S-65  
1506-S-66  
1506-S-67  
1506-S-68  
1506-S-69

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- \* Analyses were performed in accordance with 1995 New York State Analytical Services protocol.
- \* "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Third Edition, Update III, December 1996, United States Environmental Protection Agency Office of Solid Waste.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Inorganic Data Comment Page.



000003

### METALS DATA

Sample identifications have been abbreviated due to the character limitations of the software.

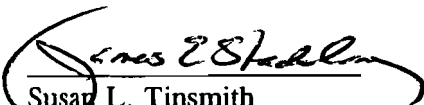
The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

No deviations from protocol were observed during the analytical procedures.

### WET CHEMISTRY DATA

No deviations from protocol were observed during the analytical procedures.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

For   
Susan L. Tinsmith  
Laboratory Manager

1/4/2000  
Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent Laboratories, Inc.

**INORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES, INC.

USEPA Defined Inorganic Data Qualifiers:

- B - Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- U - Indicates compound was analyzed for but not detected. Report with the detection limit value (e.g., 100).
- N - Indicates spike sample recovery is not within the control limits.
- K - Indicates the post digestion spike recovery is not within the control limits.
- \* - Indicates duplicate analysis is not within the control limits.
- S - Indicates value determined by the Method of Standard Addition.
- +
- Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.
- M - Indicates duplicate injection results exceeded control limits.
- W - Post digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- E - Indicates a value estimated or not reported due to the presence of interference.

Project: NY8A7861  
Task: 1 Day Environmental - Former General Circuits Site

Job No	Lab Sample	Client Sample ID	Test Grp	Description	No. of Tests No.		Error	Severity
					in TestGrp	TICS		
A99-7525	A9752501	1506-S-59	STA00242	CHROMIUM - TOTAL - S	1			
	A9752502	1506-S-60	STA00242	CHROMIUM - TOTAL - S	1			
	A9752503	1506-S-61	STA00242	CHROMIUM - TOTAL - S	1			
	A9752504	1506-S-62	STA00242	CHROMIUM - TOTAL - S	1			
	A9752504MD	1506-S-62 MD	STA00242	CHROMIUM - TOTAL - S	1			
	A9752504MS	1506-S-62 MS	STA00242	CHROMIUM - TOTAL - S	1			
	A9752505	1506-S-63	STA00242	CHROMIUM - TOTAL - S	1			
	A9752506	1506-S-64	STA00242	CHROMIUM - TOTAL - S	1			
	A9752507	1506-S-65	STA00242	CHROMIUM - TOTAL - S	1			
	A9752508	1506-S-66	STA00242	CHROMIUM - TOTAL - S	1			
	A9752509	1506-S-67	STA00242	CHROMIUM - TOTAL - S	1			
	A9752510	1506-S-68	STA00242	CHROMIUM - TOTAL - S	1			
	A9752511	1506-S-69	STA00273	CHROMIUM - TOTAL - W	1			
	A9752512	LFB	STA00273	CHROMIUM - TOTAL - W	1			
	A9752513	Method Blank	STA00273	CHROMIUM - TOTAL - W	1			
	A9752514	LCSS	STA00242	CHROMIUM - TOTAL - S	1			
	A9752515	Method Blank	STA00242	CHROMIUM - TOTAL - S	1			

000005



## COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_

Lab Code: STLNY\_ Case No.: 7861\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Protocol Version: ASP95

DAYENV Sample No.	Lab Sample ID.
S-59_____	AD920253_____
S-60_____	AD920254_____
S-61_____	AD920255_____
S-62_____	AD920256_____
S-62D_____	AD920257/M_____
S-62S_____	AD920258/M_____
S-63_____	AD920259_____
S-64_____	AD920260_____
S-65_____	AD920261_____
S-66_____	AD920262_____
S-67_____	AD920263_____
S-68_____	AD920264_____
S-69_____	AD920024_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before  
application of background corrections ? Yes/No NO\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the Protocol, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  For Name: Susan L. Tinsmith\_\_\_\_\_Date: 01/04/2000 Title: Laboratory Manager\_\_\_\_\_

COVER PAGE - IN

000007

## DAY ENVIRONMENTAL

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

S-59

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920253

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_84.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	21.4			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A9752501-STA00242\_\_\_\_\_

CLIENT\_SAMPLE\_ID: 1506-S-59\_\_\_\_\_

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

S-60

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920254

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A9752502-STA00242

CLIENT SAMPLE ID: 1506-S-60

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

S-61

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920255

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_90.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	4.6			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A9752503-STA00242\_\_\_\_\_

CLIENT\_SAMPLE\_ID: 1506-S-61\_\_\_\_\_

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO

Lab Name: STL\_BUFFALO Contract: NY97-209

S-62

Lab Code: STLNY Case No.: 7861 SAS No.: SDG No.: 150659

Matrix (soil/water): SOIL Lab Sample ID: AD920256

Level (low/med): LOW Date Received: 11/10/99

% Solids: 87.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A9752504-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-62

## DAY ENVIRONMENTAL

000011

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

S-63

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920259

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_95.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	16.2			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A9752505-STA00242\_\_\_\_\_

CLIENT\_SAMPLE\_ID: 1506-S-63\_\_\_\_\_

000012

## DAY ENVIRONMENTAL

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO

S-64

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920260

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_91.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.4			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A9752506-STA00242\_\_\_\_\_

CLIENT\_SAMPLE\_ID: 1506-S-64\_\_\_\_\_

000013

## DAY ENVIRONMENTAL

1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

S-65

Lab Name: STL\_BUFFALO Contract: NY97-209

Lab Code: STLNY Case No.: 7861 SAS No.: SDG No.: 150659

Matrix (soil/water): SOIL Lab Sample ID: AD920261

Level (low/med): LOW Date Received: 11/10/99

% Solids: 89.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	29.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB SAMPLE ID: A9752507-STA00242

CLIENT SAMPLE ID: 1506-S-65



1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO. \_\_\_\_\_

S-66

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920262

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_94.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	8.9			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: RED\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

6  
DUPLICATES

DAYENV SAMPLE NO.

S-62D

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Level (low/med): LOW\_\_\_\_\_

% Solids for Sample: \_87.9 % Solids for Duplicate: \_87.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium	2.2090	6.8944		6.2177		10.3		P
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Cyanide								NR

## Wet Chemistry Analysis

000016  
Client Sample No.Lab Name: SIL Buffalo

Contract: \_\_\_\_\_

1506-S-69

Lab Code: RECNYCase No.: 7861

SAS No.: \_\_\_\_\_

SDG No.: 150659Matrix (soil/water): WATERLab Sample ID: A9752511% Solids: 0.0Date Samp/Recv: 11/08/1999 11/10/1999

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/L	0.010	U		A	7196A	11/10/1999

Comments:

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1  
INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

S-67

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): SOIL\_\_\_\_\_ Lab Sample ID: AD920263

Level (low/med): LOW\_\_\_\_\_ Date Received: 11/10/99

% Solids: \_\_\_\_\_84.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN\_\_\_\_\_ Clarity Before: \_\_\_\_\_ Texture: MEDIUM

Color After: YELLOW\_\_\_\_\_ Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB SAMPLE ID: A9752509-STA00242\_\_\_\_\_

CLIENT SAMPLE ID: 1506-S-67\_\_\_\_\_

## INORGANIC ANALYSES DATA SHEET

S-68

Lab Name: STL\_BUFFALO Contract: NY97-209

Lab Code: STLNY Case No.: 7861 SAS No.: SDG No.: 150659

Matrix (soil/water): SOIL Lab Sample ID: AD920264

Level (low/med): LOW Date Received: 11/10/99

% Solids: 81.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	40.8			P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury				NR
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

## Comments:

LAB\_SAMPLE\_ID: A9752510-STA00242

CLIENT\_SAMPLE\_ID: 1506-S-68

## DAY ENVIRONMENTAL

1  
INORGANIC ANALYSES DATA SHEET

DAY ENVIRONMENTAL SAMPLE NO. 000046

S-69

Lab Name: STL\_BUFFALO\_\_\_\_\_ Contract: NY97-209\_\_\_\_\_

Lab Code: STLNY\_\_\_\_\_ Case No.: 7861\_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 150659

Matrix (soil/water): WATER

Lab Sample ID: AD920024

Level (low/med): LOW\_\_\_\_\_

Date Received: 11/10/99

% Solids: \_\_\_\_\_0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L\_\_\_\_\_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	_____	---	_____	NR
7440-36-0	Antimony	_____	---	_____	NR
7440-38-2	Arsenic	_____	---	_____	NR
7440-39-3	Barium	_____	---	_____	NR
7440-41-7	Beryllium	_____	---	_____	NR
7440-43-9	Cadmium	_____	---	_____	NR
7440-70-2	Calcium	_____	---	_____	NR
7440-47-3	Chromium	3.4	B	_____	P
7440-48-4	Cobalt	_____	---	_____	NR
7440-50-8	Copper	_____	---	_____	NR
7439-89-6	Iron	_____	---	_____	NR
7439-92-1	Lead	_____	---	_____	NR
7439-95-4	Magnesium	_____	---	_____	NR
7439-96-5	Manganese	_____	---	_____	NR
7439-97-6	Mercury	_____	---	_____	NR
7440-02-0	Nickel	_____	---	_____	NR
7440-09-7	Potassium	_____	---	_____	NR
7782-49-2	Selenium	_____	---	_____	NR
7440-22-4	Silver	_____	---	_____	NR
7440-23-5	Sodium	_____	---	_____	NR
7440-28-0	Thallium	_____	---	_____	NR
7440-62-2	Vanadium	_____	---	_____	NR
7440-66-6	Zinc	_____	---	_____	NR
_____	Cyanide	_____	---	_____	NR

Color Before: COLORLESS Clarity Before: CLEAR\_\_\_\_\_ Texture: \_\_\_\_\_

Color After: COLORLESS Clarity After: CLEAR\_\_\_\_\_ Artifacts: \_\_\_\_\_

## Comments:

LAB\_SAMPLE\_ID: A9752511-STA00273

CLIENT\_SAMPLE\_ID: 1506-S-69



**Committed To *Your* Success**

January 19, 2000

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Rd.  
Rochester, NY 14623

**Severn Trent Laboratories**

10 Hazelwood Drive  
Amherst, NY 14228

Tel: (716) 691-2600  
Fax: (716) 691-7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Enclosed are analytical results concerning the samples submitted by your firm. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project: Former General Circuits Site  
Matrix: Water  
Samples Received: 12/30/99; 01/03/00  
Sample Dates: 12/28,29,30/99

If you have any questions concerning these data, please contact Ms. Candace Fox, Program Manager, at (716) 691-2600 and refer to the I.D. numbers listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

SEVERN TRENT LABORATORIES, INC.

Candace L. Fox  
Program Manager

  
for Susan L. Tinsmith  
Laboratory Manager

CLF/SLT/mfg  
Enclosure

I.D. #A99-8821; A00-0007  
#NY8A7861

This report contains 312 pages which are individually numbered.

**Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- University Park, IL
- Billerica, MA
- Westfield, MA
- Edison, NJ
- Whippany, NJ
- Newburgh, NY
- Houston, TX
- Colchester, VT

**Service Center Locations:**

- Mt. Laurel, NJ
- Glen Cove, NY
- Dallas, TX

**Sales Office Locations:**

- Cantonment, FL
- New Orleans, LA
- Waterford, MI
- Blairstown, NJ
- Schenectady, NY
- Cleveland, OH

a part of

Severn Trent Services Inc.



000001

## **SAMPLE DATA SUMMARY PACKAGE**



000002

### CASE NARRATIVE

Laboratory Name: Severn Trent Laboratories, Inc.

Laboratory Code: STL Buffalo

Contract Number: NY97-209

Sample Identifications: 1506-21 (33-37')  
1506-21 (28-33')  
1506-21 (23-28')  
1506-21 (18-23')  
1506-17 (33-37.5')  
1506-ER  
1506-17 (28-33)  
1506-17 (28-33) MS  
1506-17 (28-33) SD  
TRIP BLANK  
1506-17 (23-28')  
1506-17 (18.3-23')

### METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results are indicated on the specific data tables. The method numbers presented refer to the following reference:

- \* Analyses were performed in accordance with 1995 New York State Analytical Services protocol.

### COMMENTS

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Organic Data Comment Page.

## VOLATILES DATA

Client Sample 1506-17 (18.3-23') was analyzed at an initial dilution factor of 20 and exhibited results for Tetrachloroethene that exceeded the calibration range of the instrument. The sample was reanalyzed at a dilution factor of 25 and was found to be compliant. The reanalyzed vial contained headspace. Both sets of data are reported.

Client Sample 1506-17 (23-28') was analyzed at an initial dilution factor of 1 and exhibited results for 1,2-Dichloroethene; Trichloroethene; and Tetrachloroethene that exceeded the calibration range of the instrument. The sample was reanalyzed at a dilution factor of 40 and was found to be compliant. The reanalyzed vial contained headspace. Both sets of data are reported.

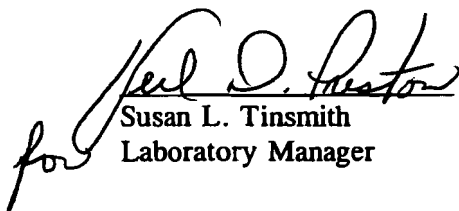
Client Sample 1506-17 (28-33) was analyzed at an initial dilution factor of 1 and exhibited results for 1,2-Dichloroethene; Trichloroethene; and Tetrachloroethene that exceeded the calibration range of the instrument. The sample was reanalyzed at a dilution factor of 20 and was found to be compliant. Both sets of data are reported.

Client Sample 1506-17 (33-37.5') was analyzed at an initial dilution factor of 1 and exhibited results for 1,2-Dichloroethene and Tetrachloroethene that exceeded the calibration range of the instrument. The sample was reanalyzed at a dilution factor of 40 and was found to be compliant. The reanalyzed vial contained headspace. Both sets of data are reported.

Client Sample 1506-17 (28-33) (MS) and 1506-17 (28-33) (SD) exhibited spike recovery results above quality control limits for Trichloroethene. However, the Matrix Spike Blank was compliant.

No other deviations from protocol were observed during the analytical procedures.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or her designee, as verified by the following signature."

  
Susan L. Tinsmith  
Laboratory Manager

01/19/00  
Date

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent Laboratories, Inc.

**ORGANIC DATA COMMENT PAGE**

Laboratory Name: SEVERN TRENT LABORATORIES INC.

**USEPA Defined Organic Data Qualifiers:**

- U** - Indicates compound was analyzed for but not detected.
- J** - Indicates an estimate value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C** - This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B** - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E** - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D** - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- T** - This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- N** - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.
- P** - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".
- A** - This flag indicates that a TIC is a suspected aldol-condensation product.

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000005

Client No.

1506-17 (18.3-23')

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: 251SR

SAS No.: \_\_\_\_\_

SDG No.: 123099

Matrix: (soil/water) WATER

Lab Sample ID: A0000702

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: M3502.RR

Level: (low/med) LOW

Date Samp/Recv: 12/30/1999 01/03/2000

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm)

Dilution Factor: 20.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	200	U
74-83-9-----	Bromomethane	200	U
75-01-4-----	Vinyl chloride	200	U
75-00-3-----	Chloroethane	200	U
75-09-2-----	Methylene chloride	200	U
67-64-1-----	Acetone	200	U
75-15-0-----	Carbon Disulfide	200	U
75-35-4-----	1,1-Dichloroethene	200	U
75-34-3-----	1,1-Dichloroethane	200	U
540-59-0-----	1,2-Dichloroethene (Total)	360	
67-66-3-----	Chloroform	200	U
107-06-2-----	1,2-Dichloroethane	200	U
78-93-3-----	2-Butanone	200	U
71-55-6-----	1,1,1-Trichloroethane	200	U
56-23-5-----	Carbon Tetrachloride	200	U
75-27-4-----	Bromodichloromethane	200	U
78-87-5-----	1,2-Dichloropropane	200	U
10061-01-5----	cis-1,3-Dichloropropene	200	U
79-01-6-----	Trichloroethene	2600	
124-48-1-----	Dibromochloromethane	200	U
79-00-5-----	1,1,2-Trichloroethane	200	U
71-43-2-----	Benzene	200	U
10061-02-6----	trans-1,3-Dichloropropene	200	U
75-25-2-----	Bromoform	200	U
108-10-1-----	4-Methyl-2-pentanone	200	U
591-78-6-----	2-Hexanone	200	U
127-18-4-----	Tetrachloroethene	4100	E
108-88-3-----	Toluene	29	J
79-34-5-----	1,1,2,2-Tetrachloroethane	200	U
108-90-7-----	Chlorobenzene	200	U
100-41-4-----	Ethylbenzene	200	U
100-42-5-----	Styrene	200	U
1330-20-7----	Total Xylenes	200	U

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000006

Client No.

1506-17 (18.3-23',

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: 251SR SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A0000702DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3508.RR

Level: (low/med) LOW Date Samp/Recv: 12/30/1999 01/03/2000

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 25.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	-----Chloromethane	250	U	
74-83-9	-----Bromomethane	250	U	
75-01-4	-----Vinyl chloride	250	U	
75-00-3	-----Chloroethane	250	U	
75-09-2	-----Methylene chloride	250	U	
67-64-1	-----Acetone	250	U	
75-15-0	-----Carbon Disulfide	250	U	
75-35-4	-----1,1-Dichloroethene	250	U	
75-34-3	-----1,1-Dichloroethane	250	U	
540-59-0	-----1,2-Dichloroethene (Total)	250	D	
67-66-3	-----Chloroform	250	U	
107-06-2	-----1,2-Dichloroethane	250	U	
78-93-3	-----2-Butanone	250	U	
71-55-6	-----1,1,1-Trichloroethane	250	U	
56-23-5	-----Carbon Tetrachloride	250	U	
75-27-4	-----Bromodichloromethane	250	U	
78-87-5	-----1,2-Dichloropropane	250	U	
10061-01-5	-----cis-1,3-Dichloropropene	250	U	
79-01-6	-----Trichloroethene	1500	D	
124-48-1	-----Dibromochloromethane	1500	D	
79-00-5	-----1,1,2-Trichloroethane	250	U	
71-43-2	-----Benzene	250	U	
10061-02-6	-----trans-1,3-Dichloropropene	250	U	
75-25-2	-----Bromoform	250	U	
108-10-1	-----4-Methyl-2-pentanone	250	U	
591-78-6	-----2-Hexanone	250	U	
127-18-4	-----Tetrachloroethene	2300	D	
108-88-3	-----Toluene	250	U	
79-34-5	-----1,1,2,2-Tetrachloroethane	250	U	
108-90-7	-----Chlorobenzene	250	U	
100-41-4	-----Ethylbenzene	250	U	
100-42-5	-----Styrene	250	U	
1330-20-7	-----Total Xylenes	250	U	

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000007

Client No.

1506-17 (23-28')

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: REQNY

Case No.: 251SR

SAS No.: \_\_\_\_\_

SDG No.: 123099

Matrix: (soil/water) WATER

Lab Sample ID: A0000701

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: M3480.RR

Level: (low/med) LOW

Date Samp/Recv: 12/30/1999 01/03/2000

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3-----	Chloromethane		10	U
74-83-9-----	Bromomethane		10	U
75-01-4-----	Vinyl chloride		2	J
75-00-3-----	Chloroethane		10	U
75-09-2-----	Methylene chloride		10	U
67-64-1-----	Acetone		3	J
75-15-0-----	Carbon Disulfide		10	U
75-35-4-----	1,1-Dichloroethene		18	
75-34-3-----	1,1-Dichloroethane		5	J
540-59-0-----	1,2-Dichloroethene (Total)		660	E
67-66-3-----	Chloroform		10	U
107-06-2-----	1,2-Dichloroethane		10	U
78-93-3-----	2-Butanone		10	U
71-55-6-----	1,1,1-Trichloroethane		10	U
56-23-5-----	Carbon Tetrachloride		10	U
75-27-4-----	Bromodichloromethane		10	U
78-87-5-----	1,2-Dichloropropane		10	U
10061-01-5----	cis-1,3-Dichloropropene		10	U
79-01-6-----	Trichloroethene		1100	E
124-48-1-----	Dibromochloromethane		10	U
79-00-5-----	1,1,2-Trichloroethane		10	U
71-43-2-----	Benzene		10	U
10061-02-6----	trans-1,3-Dichloropropene		10	U
75-25-2-----	Bromoform		10	U
108-10-1-----	4-Methyl-2-pentanone		10	U
591-78-6-----	2-Hexanone		10	U
127-18-4-----	Tetrachloroethene		1300	E
108-88-3-----	Toluene		57	
79-34-5-----	1,1,2,2-Tetrachloroethane		10	U
108-90-7-----	Chlorobenzene		10	U
100-41-4-----	Ethylbenzene		2	J
100-42-5-----	Styrene		10	U
1330-20-7-----	Total Xylenes		15	

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000008

Client No.

1506-17 (23-28')

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: REONY

Case No.: 251SR

SAS No.: \_\_\_\_\_

SDG No.: 123099

Matrix: (soil/water) WATER

Lab Sample ID: A0000701DL

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: M3507.RR

Level: (low/med) LOW

Date Samp/Recv: 12/30/1999 01/03/2000

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm)

Dilution Factor: 40.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	-----Chloromethane		400	U
74-83-9	-----Bromomethane		400	U
75-01-4	-----Vinyl chloride		400	U
75-00-3	-----Chloroethane		400	U
75-09-2	-----Methylene chloride		400	U
67-64-1	-----Acetone		400	U
75-15-0	-----Carbon Disulfide		400	U
75-35-4	-----1,1-Dichloroethene		400	U
75-34-3	-----1,1-Dichloroethane		400	U
540-59-0	-----1,2-Dichloroethene (Total)		460	D
67-66-3	-----Chloroform		400	U
107-06-2	-----1,2-Dichloroethane		400	U
78-93-3	-----2-Butanone		400	U
71-55-6	-----1,1,1-Trichloroethane		400	U
56-23-5	-----Carbon Tetrachloride		400	U
75-27-4	-----Bromodichloromethane		400	U
78-87-5	-----1,2-Dichloropropane		400	U
10061-01-5	----cis-1,3-Dichloropropene		400	U
79-01-6	-----Trichloroethene		2100	D
124-48-1	-----Dibromochloromethane		400	U
79-00-5	-----1,1,2-Trichloroethane		400	U
71-43-2	-----Benzene		400	U
10061-02-6	----trans-1,3-Dichloropropene		400	U
75-25-2	-----Bromoform		400	U
108-10-1	-----4-Methyl-2-pentanone		400	U
591-78-6	-----2-Hexanone		400	U
127-18-4	-----Tetrachloroethene		2900	D
108-88-3	-----Toluene		42	DJ
79-34-5	-----1,1,2,2-Tetrachloroethane		400	U
108-90-7	-----Chlorobenzene		400	U
100-41-4	-----Ethylbenzene		400	U
100-42-5	-----Styrene		400	U
1330-20-7	-----Total Xylenes		400	U



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000009

Client No.

1506-17 (28-33)

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882107

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3488.RR

Level: (low/med) LOW Date Samp/Recv: 12/30/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	7	J
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	22	
75-34-3-----	1,1-Dichloroethane	4	J
540-59-0-----	1,2-Dichloroethene (Total)	1400	E
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	700	E
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	510	E
108-88-3-----	Toluene	24	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	6	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000010

Client No.

1506-17 (28-33)

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882107DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3498.RR

Level: (low/med) LOW Date Samp/Recv: 12/30/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 20.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3	-----Chloromethane	200	U
74-83-9	-----Bromomethane	200	U
75-01-4	-----Vinyl chloride	200	U
75-00-3	-----Chloroethane	200	U
75-09-2	-----Methylene chloride	200	U
67-64-1	-----Acetone	200	U
75-15-0	-----Carbon Disulfide	200	U
75-35-4	-----1,1-Dichloroethene	22	DJ
75-34-3	-----1,1-Dichloroethane	200	U
540-59-0	-----1,2-Dichloroethene (Total)	3100	D
67-66-3	-----Chloroform	200	U
107-06-2	-----1,2-Dichloroethane	200	U
78-93-3	-----2-Butanone	200	U
71-55-6	-----1,1,1-Trichloroethane	200	U
56-23-5	-----Carbon Tetrachloride	200	U
75-27-4	-----Bromodichloromethane	200	U
78-87-5	-----1,2-Dichloropropane	200	U
10061-01-5	-----cis-1,3-Dichloropropene	200	U
79-01-6	-----Trichloroethene	940	D
124-48-1	-----Dibromochloromethane	200	U
79-00-5	-----1,1,2-Trichloroethane	200	U
71-43-2	-----Benzene	200	U
10061-02-6	-----trans-1,3-Dichloropropene	200	U
75-25-2	-----Bromoform	200	U
108-10-1	-----4-Methyl-2-pentanone	200	U
591-78-6	-----2-Hexanone	200	U
127-18-4	-----Tetrachloroethene	610	D
108-88-3	-----Toluene	200	U
79-34-5	-----1,1,2,2-Tetrachloroethane	200	U
108-90-7	-----Chlorobenzene	200	U
100-41-4	-----Ethylbenzene	200	U
100-42-5	-----Styrene	200	U
1330-20-7	-----Total Xylenes	200	U

ASP, 95 - VOLATILES  
ANALYSIS DATA SHEET

000011

Client No.

1506-17 (28-33) MS

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER

Lab Sample ID: A9882107MS

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: M3499.RR

Level: (low/med) LOW

Date Samp/Recv: 12/30/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm)

Dilution Factor: 20.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	200	U
74-83-9-----	Bromomethane	200	U
75-01-4-----	Vinyl chloride	200	U
75-00-3-----	Chloroethane	200	U
75-09-2-----	Methylene chloride	200	U
67-64-1-----	Acetone	200	U
75-15-0-----	Carbon Disulfide	200	U
75-35-4-----	1,1-Dichloroethene	980	
75-34-3-----	1,1-Dichloroethane	200	U
540-59-0-----	1,2-Dichloroethene (Total)	3500	
67-66-3-----	Chloroform	200	U
107-06-2-----	1,2-Dichloroethane	27	J
78-93-3-----	2-Butanone	200	U
71-55-6-----	1,1,1-Trichloroethane	200	U
56-23-5-----	Carbon Tetrachloride	200	U
75-27-4-----	Bromodichloromethane	200	U
78-87-5-----	1,2-Dichloropropane	200	U
10061-01-5----	cis-1,3-Dichloropropene	200	U
79-01-6-----	Trichloroethene	2100	
124-48-1-----	Dibromochloromethane	200	U
79-00-5-----	1,1,2-Trichloroethane	200	U
71-43-2-----	Benzene	1000	
10061-02-6----	trans-1,3-Dichloropropene	200	U
75-25-2-----	Bromoform	200	U
108-10-1-----	4-Methyl-2-pentanone	200	U
591-78-6-----	2-Hexanone	200	U
127-18-4-----	Tetrachloroethene	700	
108-88-3-----	Toluene	1000	
79-34-5-----	1,1,2,2-Tetrachloroethane	200	U
108-90-7-----	Chlorobenzene	980	
100-41-4-----	Ethylbenzene	200	U
100-42-5-----	Styrene	200	U
1330-20-7-----	Total Xylenes	200	U

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000012

Client No.

1506-17 (28-33) SD

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: REONY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 123099

Matrix: (soil/water) WATER

Lab Sample ID: A9882107SD

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: M3500.RR

Level: (low/med) LOW

Date Samp/Recv: 12/30/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm)

Dilution Factor: 20.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	-----Chloromethane		200	U
74-83-9	-----Bromomethane		200	U
75-01-4	-----Vinyl chloride		200	U
75-00-3	-----Chloroethane		200	U
75-09-2	-----Methylene chloride		200	U
67-64-1	-----Acetone		200	U
75-15-0	-----Carbon Disulfide		200	U
75-35-4	-----1,1-Dichloroethene		970	
75-34-3	-----1,1-Dichloroethane		200	U
540-59-0	-----1,2-Dichloroethene (Total)		3000	
67-66-3	-----Chloroform		200	U
107-06-2	-----1,2-Dichloroethane		25	J
78-93-3	-----2-Butanone		200	U
71-55-6	-----1,1,1-Trichloroethane		200	U
56-23-5	-----Carbon Tetrachloride		200	U
75-27-4	-----Bromodichloromethane		200	U
78-87-5	-----1,2-Dichloropropane		200	U
10061-01-5	-----cis-1,3-Dichloropropene		200	U
79-01-6	-----Trichloroethene		2000	
124-48-1	-----Dibromochloromethane		200	U
79-00-5	-----1,1,2-Trichloroethane		200	U
71-43-2	-----Benzene		1000	
10061-02-6	-----trans-1,3-Dichloropropene		200	U
75-25-2	-----Bromoform		200	U
108-10-1	-----4-Methyl-2-pentanone		200	U
591-78-6	-----2-Hexanone		200	U
127-18-4	-----Tetrachloroethene		630	
108-88-3	-----Toluene		1000	
79-34-5	-----1,1,2,2-Tetrachloroethane		200	U
108-90-7	-----Chlorobenzene		1000	
100-41-4	-----Ethylbenzene		200	U
100-42-5	-----Styrene		200	U
1330-20-7	-----Total Xylenes		200	U

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000013

Client No.

1506-17 (33-37.5')

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882105

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3486.RR

Level: (low/med) LOW Date Samp/Recv: 12/29/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	120	
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	3	J
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	34	
75-34-3-----	1,1-Dichloroethane	7	J
540-59-0-----	1,2-Dichloroethene (Total)	1900	E
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	190	
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	3	J
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	240	E
108-88-3-----	Toluene	1	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	1	J
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	3	J

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000014

Client No.

1506-17 (33-37.5')

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882105DL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3509.RR

Level: (low/med) LOW Date Samp/Recv: 12/29/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 40.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	400	U	
74-83-9	Bromomethane	400	U	
75-01-4	Vinyl chloride	70	DJ	
75-00-3	Chloroethane	400	U	
75-09-2	Methylene chloride	400	U	
67-64-1	Acetone	400	U	
75-15-0	Carbon Disulfide	400	U	
75-35-4	1,1-Dichloroethene	400	U	
75-34-3	1,1-Dichloroethane	400	U	
540-59-0	1,2-Dichloroethene (Total)	4800	D	
67-66-3	Chloroform	400	U	
107-06-2	1,2-Dichloroethane	400	U	
78-93-3	2-Butanone	400	U	
71-55-6	1,1,1-Trichloroethane	400	U	
56-23-5	Carbon Tetrachloride	400	U	
75-27-4	Bromodichloromethane	400	U	
78-87-5	1,2-Dichloropropane	400	U	
10061-01-5	cis-1,3-Dichloropropene	400	U	
79-01-6	Trichloroethene	120	DJ	
124-48-1	Dibromochloromethane	400	U	
79-00-5	1,1,2-Trichloroethane	400	U	
71-43-2	Benzene	400	U	
10061-02-6	trans-1,3-Dichloropropene	400	U	
75-25-2	Bromoform	400	U	
108-10-1	4-Methyl-2-pentanone	400	U	
591-78-6	2-Hexanone	400	U	
127-18-4	Tetrachloroethene	190	DJ	
108-88-3	Toluene	400	U	
79-34-5	1,1,2,2-Tetrachloroethane	400	U	
108-90-7	Chlorobenzene	400	U	
100-41-4	Ethylbenzene	64	DJ	
100-42-5	Styrene	400	U	
1330-20-7	Total Xylenes	220	DJ	

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000015

Client No.

1506-21 (18-23')

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882104

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3485.RR

Level: (low/med) LOW Date Samp/Recv: 12/29/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	4	J
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	3	J
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	21	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	2	J
108-88-3-----	Toluene	6	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	11	

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000016

Client No.

1506-21 (23-28')

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882103

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3484.RR

Level: (low/med) LOW Date Samp/Recv: 12/28/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	4	J
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	28	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	3	J
108-88-3-----	Toluene	4	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	2	J
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	42	



ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000017  
Client No.

1506-21 (28-33')

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882102

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3483.RR

Level: (low/med) LOW Date Samp/Recv: 12/28/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	11	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	7	J
108-88-3-----	Toluene	4	J
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	1	J
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	21	

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000018

Client No.

1506-21 (33-37')

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882101

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3496.RR

Level: (low/med) LOW Date Samp/Recv: 12/28/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	13	
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000019

Client No.

1506-ER

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER

Lab Sample ID: A9882106

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: M3487.RR

Level: (low/med) LOW

Date Samp/Recv: 12/30/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N

Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	6	J
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	6	J
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	5	J
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7----	Total Xylenes	10	U

ASP 95 - VOLATILES  
ANALYSIS DATA SHEET

000020

Client No. \_\_\_\_\_

TRIP BLANK

Lab Name: STL Buffalo Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 123099

Matrix: (soil/water) WATER Lab Sample ID: A9882108

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3478.RR

Level: (low/med) LOW Date Samp/Recv: 12/30/1999 12/30/1999

% Moisture: not dec. \_\_\_\_\_ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: 502.2 ID: 0.25 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (uL) Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene chloride	10	U
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (Total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-02-6----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
108-88-3-----	Toluene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Total Xylenes	10	U





**Internal Use Only**

Contact: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: **SAME** \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
PO#: \_\_\_\_\_ Quote: \_\_\_\_\_

[illegible]

**Additional Analyses / Remarks**

**Bill of Lading:**

**SEVERN  
TRENT  
SERVICES**

September 25, 2000

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton-Henrietta T.L. Rd  
Rochester, NY 14623

RECEIVED  
SEP 26 2000

**STL Buffalo**

10 Hazelwood Drive  
Suite 106  
Amherst, NY 14228

Tel: 716 691 2600  
Fax: 716 691 7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:


Please find enclosed analytical results concerning the samples recently submitted to STL Buffalo. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project Name: Day Environmental - Former General Circuits Site  
Matrix: Soil  
Samples Received: 08/30/00  
Sample Date: 08/28/00


If you have any questions concerning these data, please contact me at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo



Candace L. Fox  
Program Manager



Susan L. Tinsmith  
Laboratory Director

CLF/SLT/csm

I.D. #A00-6097  
#NY8A7861

This report contains 265 pages which are individually numbered.

**000001**

## **SAMPLE DATA SUMMARY PACKAGE**



SDG NARRATIVE

Laboratory Name: STL Buffalo  
Laboratory Code: STL Buffalo  
Contract Number: NY97-209  
Sample Identifications: 1506-S-70

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical results is indicated on the specific data tables. The method number presented refers to the following U.S. Environmental Protection Agency reference:

- "Analytical Services Protocol," New York State Department of Environmental Conservation, Document No. 0102, Volumes 1-10, September 1989 with 12-91 and 12-95 Revisions and updates.

COMMENTS

Comments pertain to data on one or all pages of this report.

The enclosed data has been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

The cooler was received at temperatures of 5°C.

000003

### METALS DATA

The results of soil samples have been corrected for percent solids and are reported on a dry weight basis.

No other deviations from protocol that affected the acceptability of the analytical results were encountered during the analytical procedures.

### WET CHEMISTRY DATA

Sample LCS exhibited spike recovery results below quality control limits for Hexavalent Chromium.

No other deviations from protocol that affected the acceptability of the analytical results were encountered during the analytical procedures.

"I certify that this data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Director or her designee, as verified by the following signature."



Susan L. Tinsmith  
Laboratory Director

9/25/00  
Date

This data report shall not be reproduced, except in full, without the written authorization of STL Buffalo.

## DATA COMMENT PAGE

### ORGANIC DATA QUALIFIERS

ND or U Indicates compound was analyzed for, but not detected.

- J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
- C This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B This flag is used when the analyte is found in the associated blank, as well as in the sample.
- E This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
- D This flag identifies all compounds identified in an analysis at the secondary dilution factor.
- N Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
- P This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the data page and flagged with a "P".
- A This flag indicates that a TIC is a suspected aldol-condensation product.
- 1 Indicates coelution.
- \* Indicates analysis is not within the quality control limits.

### INORGANIC DATA QUALIFIERS

ND or U Indicates element was analyzed for, but not detected. Report with the detection limit value.

- J or B Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
- N Indicates spike sample recovery is not within the quality control limits.
- K Indicates the post digestion spike recovery is not within the quality control limits.
- S Indicates value determined by the Method of Standard Addition.
- M Indicates duplicate injection results exceeded quality control limits.
- W Post digestion spike for Furnace AA analysis is out of quality control limits (85-115%) while sample absorbance is less than 50% of spike absorbance.
- E Indicates a value estimated or not reported due to the presence of interferences.
- H Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
- \* Indicates analysis is not within the quality control limits.
- + Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

DAY ENVIRONMENTAL, INC.  
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: NY97-209SDG No.: 083000Lab Code: STLBFLOCase No.: 7861

SAS No.: \_\_\_\_\_

SOW No.: \_\_\_\_\_

Sample ID.1506-S-70Lab Sample No.A0609701

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YESIf yes-were raw data generated before  
application of background corrections?Yes/No NOComments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_

Name: Susan L. Tinsmith

Date: \_\_\_\_\_

Title: Laboratory Director

STL BUFFALO

000006

DAY ENVIRONMENTAL, INC.

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

1506-S-70

Contract: NY97-209

Lab Code: STLBFO

Case No.: 7861

SAS No.:

SDG NO.: 083000

Matrix (soil/water): SOIL

Lab Sample ID: AD014438

Level (low/med): LOW

Date Received: 8/30/00

% Solids: 87.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7440-47-3	Chromium	16.6			P

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: YELLOW

Clarity After: CLEAR

Artifacts:

Comments:

## Wet Chemistry Analysis

000007

Client Sample No.

1506-S-70

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 083000Matrix (soil/water): SOILLab Sample ID: A0609701% Solids: 87.7Date Samp/Recv: 08/28/2000 08/30/2000

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/KG	1.1	U			CLP-WC	09/20/2000

Comments:

COMMENTS:  
ASP Category B deliverables  
part is required  
copy 52

SEVERN  
TRENT  
SERVICES

September 27, 2000

RECEIVED  
SEP 28 2000

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton-Henrietta T.L. Rd  
Rochester, NY 14623

**STL Buffalo**  
10 Hazelwood Drive  
Suite 106  
Amherst, NY 14228

Tel: 716 691 2600  
Fax: 716 691 7991  
www.stl-inc.com

RE: Analytical Results

Dear Mr. Danzinger:

Please find enclosed revised analytical results concerning the samples recently submitted to STL Buffalo. Please replace the pages in the original report with the enclosed corrected pages. The pertinent information regarding these analyses is listed below:

Quote #: NY97-209  
Project Name: Day Environmental - Former General Circuits Site  
Matrix: Soil  
Samples Received: 08/30/00  
Sample Date: 08/28/00

If you have any questions concerning these data, please contact me at (716) 691-2600 and refer to the I.D. number listed below. It has been our pleasure to provide Day Environmental with environmental testing services. We look forward to serving you in the future.

Sincerely,

STL Buffalo



Candace L. Fox  
Program Manager



Susan L. Tinsmith  
Laboratory Director

CLF/SLT/csm

I.D. #A00-6097  
#NY8A7861



## Wet Chemistry Analysis

Client Sample No. **000007**

1506-S-70

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 083000Matrix (soil/water): SOILLab Sample ID: A0609701% Solids: 87.7Date Samp/Recv: 08/28/2000 08/30/2000

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Hexavalent Chromium - Total _____	MG/KG	1.1	U			CLP-WC	09/20/2000

Comments:

## Wet Chemistry Analysis

000255

Client Sample No.

1506-S-70

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 083000Matrix (soil/water): SOILLab Sample ID: A0609701% Solids: 87.7Date Samp/Recv: 08/28/2000 08/30/2000

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/KG	1.1	U			CLP-WC	09/20/2000

Comments:

## Wet Chemistry Analysis

000256

Client Sample No.

LCS

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 083000Matrix (soil/water): SOILLab Sample ID: A0B0744501% Solids: 100.0

Date Samp/Recv: \_\_\_\_\_

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/KG	23.8				CLP-WC	09/20/2000

Comments:

## Wet Chemistry Analysis

Client Sample No. **000257**

Method Blank

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: 083000Matrix (soil/water): SOILLab Sample ID: A0B0744502% Solids: 100.0

Date Samp/Recv: \_\_\_\_\_

Parameter Name	Units of Measure	Result	C	Q	M	Method Number	Analyzed Date
Hexavalent Chromium - Total _____	MG/KG	1.0	U			CLP-WC	09/20/2000

Comments:

SDG: 083000

Client Sample ID: Method Blank

Lab Sample ID: A0B0744502

LCS

A0B0744501

Analyte	Units of Measure	Concentration		% Recovery Blank Spike	QC LIMITS
		Blank Spike	Spike Amount		
WET CHEMISTRY ANALYSIS HEXAVALENT CHROMIUM	MG/KG	23.80	40.0	59 *	82-118

\* Indicates Result is outside QC Limits  
NC = Not Calculated ND = Not Calculated

WET CHEMISTRY  
METHOD BLANK SUMMARY

CL# 00259

Method Blank

Lab Name: STL Buffalo

Contract: \_\_\_\_\_

Lab Code: RECNY Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: 083000

Lab Sample ID: A0B0744502 Lab File ID: \_\_\_\_\_

Matrix: (soil/water) SOIL Instrument ID (1): \_\_\_\_\_

Date Analyzed (1): 09/20/2000 Time Analyzed (1): 15:40

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	CLIENT SAMPLE NO. =====	LAB SAMPLE ID =====	DATE ANALYZED 1 =====	TIME ANALYZED =====
1	1506-S-70	A0609701	09/20/2000	15:40
2	LCS	A0B0744501	09/20/2000	15:40

Comments: \_\_\_\_\_  
\_\_\_\_\_



A FULL SERVICE ENVIRONMENTAL LABORATORY

October 23, 2000

RECEIVED  
OCT 26 2000

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton Henrietta TL Rd.  
Rochester, NY 14623

PROJECT:95 MT. READ, ROCHESTER  
Submission #:R2004148

Dear Mr. Danzinger:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 10/13/00 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

A handwritten signature in black ink, appearing to read 'Janice Jaeger', is written over the typed name and title.

Janice Jaeger  
Project Chemist

Enc.



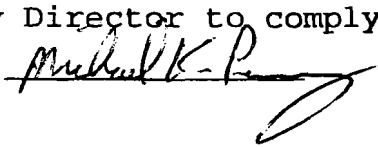
1 Mustard ST.  
Suite 250  
Rochester, NY 14609

**THIS IS AN ANALYTICAL TEST REPORT FOR:**

Client : Day Environmental  
Project Reference: 95 MT. READ, ROCHESTER  
Lab Submission # : R2004148  
Reported : 10/23/00

Report Contains a total of 7 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. 

00001





# **CASE NARRATIVE**

This report contains analytical results for the following samples:

Submission #: R2004148

**Lab ID**

414330

**Client ID**

DI-1(001)

All samples were received in good condition.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.

00002



Effective 04/01/96

### **CAS LIST OF QUALIFIERS**

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

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

### **CAS Lab ID # for State Certifications**

NY ID # in Rochester:	10145	NJ ID # in Rochester:	73004
CT ID # in Rochester:	PH0556	RI ID # in Rochester:	158
MA ID # in Rochester:	M-NY032	NH ID # in Rochester:	294198-A
OH EPA # in Rochester:	VAP	AIHA # in Rochester:	7889

## COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS  
METHOD 8260B TCL  
Reported: 10/23/00Day Environmental  
Project Reference: 95 MT. READ, ROCHESTER  
Client Sample ID : DI-1(001)Date Sampled : 10/06/00 12:05 Order #: 414330 Sample Matrix: WATER  
Date Received: 10/06/00 Submission #: R2004148 Analytical Run 56415

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/12/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115 %)	106	%
TOLUENE-D8	(88 - 110 %)	95	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	117	%

## COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS  
METHOD 8260B TCL  
Reported: 10/23/00Project Reference:  
Client Sample ID : METHOD BLANKDate Sampled : Order #: 415754 Sample Matrix: WATER  
Date Received: Submission #: Analytical Run 56415

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/12/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	103	%
TOLUENE-D8	(88 - 110 %)	99	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	109	%

00005

# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

DATE 10/6/08 PAGE 1 OF 1

[illegible]

**Columbia Analytical Services Inc.**  
**Cooler Receipt And Preservation Check Form**

ject/Client Day Submission Number 12-4148

Cooler received on 10-6-00 by: JE COURIER: CAS UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? 16° - 4 hour Rule CAS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 16°

Is the temperature within 0° - 6° C?: Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐

If No, Explain Below No ☒ No ☐ No ☐ No ☐ No ☐

Date/Time Temperatures Taken: 10-6-00 @ 12:45

Thermometer ID: IR-6111 Temp Blank Sample Bottle Cooler Temp. IR. Gun

If out of Temperature, Client Approval to Run Samples \_\_\_\_\_

Cooler Breakdown: Date: 10/9/00 by: BC

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
  - Did all bottle labels and tags agree with custody papers? YES NO
  - Were correct containers used for the tests indicated? YES NO
  4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A
- Explain any discrepancies: \_\_\_\_\_

		YES	NO	Sample ID.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO <sub>3</sub>					
2	H <sub>2</sub> SO <sub>4</sub>					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9*	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH \_\_\_\_\_

\*If pH adjustment is required, use NaOH and/or H<sub>2</sub>SO<sub>4</sub>

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

00007



A FULL SERVICE ENVIRONMENTAL LABORATORY

November 2, 2000

Mr. Jeff Danzinger  
Day Environmental  
2144 Brighton Henrietta TL Rd.  
Rochester, NY 14623

PROJECT: 95 MT. READ, ROCHESTER  
Submission #: R2004387

Dear Mr. Danzinger:

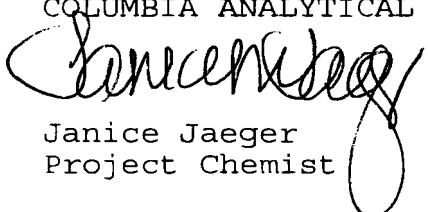
Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 11/01/00 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at (716) 288-5380.

Thank you for letting us provide this service.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

  
Janice Jaeger  
Project Chemist

Enc.



1 Mustard ST.  
Suite 250  
Rochester, NY 14609

**THIS IS AN ANALYTICAL TEST REPORT FOR:**

Client : Day Environmental  
Project Reference: 95 MT. READ, ROCHESTER  
Lab Submission # : R2004387  
Reported : 11/02/00

Report Contains a total of 14 pages

The results reported herein relate only to the samples received by the laboratory. This report may not be reproduced except in full, without the approval of Columbia Analytical Services.

This package has been reviewed by Columbia Analytical Services' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal. *Michael K. [Signature]*

00001





### CASE NARRATIVE

This report contains analytical results for the following samples:

Submission #: R2004387

<u>Lab ID</u>	<u>Client ID</u>
418505	DS-1
418506	DS-2
418507	DS-3
418508	DS-4
418509	DS-5
418510	DS-6
418511	TRIP-1

All samples were received in good condition.

All samples have been analyzed by the approved methods cited on the analytical results pages.

All holding times and associated QC were within limits.

No analytical or QC problems were encountered.



Effective 04/01/96

### CAS LIST OF QUALIFIERS

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

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

### CAS Lab ID # for State Certifications

NY ID # in Rochester:	I0145	NJ ID # in Rochester:	73004
CT ID # in Rochester:	PH0556	RI ID # in Rochester:	158
MA ID # in Rochester:	M-NY032	NH ID # in Rochester:	294198-A
OH EPA # in Rochester:	VAP	AIHA # in Rochester:	7889

00003

COLUMBIA ANALYTICAL SERVICESVOLATILE ORGANICS  
METHOD 8260B TCL  
Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-1

Date Sampled : 10/25/00 09:28 Order #: 418505 Sample Matrix: WATER  
Date Received: 10/25/00 Submission #: R2004387 Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	91	%
TOLUENE-D8	(88 - 110 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	110	%

00004

## COLUMBIA ANALYTICAL SERVICES

## VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-2

Date Sampled : 10/25/00 09:32 Order #: 418506 Sample Matrix: WATER  
Date Received: 10/25/00 Submission #: R2004387 Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1-BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

1-BROMOFLUOROBENZENE	(86 - 115 %)	92	%
TOLUENE-D8	(88 - 110 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	116	%

00005

COLUMBIA ANALYTICAL SERVICES

## VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-3

Date Sampled : 10/25/00 09:37 Order #: 418507      Sample Matrix: WATER  
Date Received: 10/25/00 Submission #: R2004387      Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	: 10/27/00		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIESQC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	92	%
TOLUENE-D8	(88 - 110 %)	92	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	99	%

00006

## COLUMBIA ANALYTICAL SERVICES

## VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-4

Date Sampled : 10/25/00 09:42 Order #: 418508

Sample Matrix: WATER

Date Received: 10/25/00 Submission #: R2004387

Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
IBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	6.0	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.8	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

1-BROMOFLUOROBENZENE	(86 - 115 %)	93	%
TOLUENE-D8	(88 - 110 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	111	%

00007

## COLUMBIA ANALYTICAL SERVICES

## VOLATILE ORGANICS

METHOD 8260B TCL

Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-5

Date Sampled : 10/25/00 09:46 Order #: 418509

Sample Matrix: WATER

Date Received: 10/25/00 Submission #: R2004387

Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/31/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	11	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	7.9	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	98	%
TOLUENE-D8	(88 - 110 %)	97	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	88	%

00008

## COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS  
 METHOD 8260B TCL  
 Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-6

Date Sampled : 10/25/00 09:52 Order #: 418510 Sample Matrix: WATER  
 Date Received: 10/25/00 Submission #: R2004387 Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
1-BROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	6.8	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	6.8	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

1-BROMOFLUOROBENZENE	(86 - 115 %)	93	%
TOLUENE-D8	(88 - 110 %)	94	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	115	%

00009



## COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS  
METHOD 8260B TCL  
Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : TRIP-1

Date Sampled : 10/25/00      Order #: 418511      Sample Matrix: WATER  
Date Received: 10/25/00      Submission #: R2004387      Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED	10/27/00		
ANALYTICAL DILUTION:	1.00		
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	92	%
TOLUENE-D8	(88 - 110 %)	92	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	107	%

00010

## COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS  
METHOD 8260B TCL  
Reported: 11/02/00

Project Reference:  
Client Sample ID : METHOD BLANK

Date Sampled : Order #: 420639 Sample Matrix: WATER  
Date Received: Submission #: Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
, 1-DICHLOROETHANE	5.0	5.0 U	UG/L
, 2-DICHLOROETHANE	5.0	5.0 U	UG/L
1, 1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1, 2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1, 2-DICHLOROETHENE	5.0	5.0 U	UG/L
1, 2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1, 3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1, 3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1, 1, 2, 2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1, 1, 1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1, 1, 2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	93	%
TOLUENE-D8	(88 - 110 %)	93	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	97	%

00011

## COLUMBIA ANALYTICAL SERVICES

VOLATILE ORGANICS  
METHOD 8260B TCL  
Reported: 11/03/00

Project Reference:  
Client Sample ID : METHOD BLANK

Date Sampled :                      Order #: 421319                      Sample Matrix: WATER  
Date Received:                      Submission #:                      Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/30/00			
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

## SURROGATE RECOVERIES

## QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115 %)	98	%
TOLUENE-D8	(88 - 110 %)	97	%
DIBROMOFLUOROMETHANE	(86 - 118 %)	88	%

00012

PROJECT NAME 95 Mt. Road, Rochester  
PROJECT MANAGER/CONTACT Jeff Danzinger  
COMPANY/ADDRESS Day Environmental, Inc.  
2144 BHTL Rd, Rochester, NY 14623  
TEL (716) 292-1090 FAX (716) 292-0425  
SAMPLER'S SIGNATURE [Signature]

**ANALYSIS REQUESTED**

PROJECT NAME					PROJECT MANAGER/CONTACT <u>Jeff Danzinger</u>																		PRESERVATION											
COMPANY/ADDRESS <u>Day Environmental, Inc.</u>					<u>2144 BHTL Rd, Rochester, NY 14623</u>																													
TEL (716) <u>292-1090</u>					FAX (716) <u>292-0425</u>					SAMPLER'S SIGNATURE <u>[Signature]</u>																								
SAMPLE I.D.					DATE		TIME		FOR OFFICE USE ONLY LAB I.D.																			SAMPLE MATRIX						
DS-1 (002)					10/25/00		0928		418505		Water		3		X		53.40'																	
DS-2 (003)					10/25/00		0932		06		Water		3		X		57.30'																	
DS-3 (004)					10/25/00		0937		07		Water		3		X		60.85'																	
DS-4 (005)					10/25/00		0942		08		Water		3		X		67.85'																	
DS-5 (006)					10/25/00		0946		09		Water		3		X		72.05'																	
DS-6 (007)					10/25/00		0952		10		Water		3		X		77.35'																	
Trip-1					10/00		-		✓ 11		Water		3		X																			

**RELINQUISHED BY:**  
Signature [Signature]  
Printed Name Jeff Danzinger  
Firm Day Env.  
Date/Time 10-25-00 / 1023

**RECEIVED BY:**  
Signature [Signature]  
Printed Name Andy Toomey  
Firm Day Env.  
Date/Time 10-25-00 1023

**TURNAROUND REQUIREMENTS**  
— 24 hr. — 48 hr. X 5 day  
— Standard (10-15 working days)  
— Provide Verbal Preliminary Results  
— Provide FAX Preliminary Results  
Requested Report Date \_\_\_\_\_

**REPORT REQUIREMENTS**  
X 1. Routine Report  
— 2. Routine Rep. w/CASE Narrative  
— 3. EPA Level III  
Validatable Package  
— 4. N.J. Reduced Deliverables Level IV  
— 5. NY ASP/CLP Deliverables  
— 6. Site specific QC.

**INVOICE INFORMATION:**  
P.O. #: 1506R-97  
Bill To: SAME

**SAMPLE RECEIPT:**  
Shipping Via: Client  
Shipping #: 80  
Temperature: 80  
Submission No: R2-438

**RELINQUISHED BY:**  
Signature \_\_\_\_\_  
Printed Name \_\_\_\_\_  
Firm \_\_\_\_\_  
Date/Time \_\_\_\_\_

**RECEIVED BY:**  
Signature [Signature]  
Printed Name Brian W. Carter  
Firm Day Env.  
Date/Time 10-25-00 1023

**SPECIAL INSTRUCTIONS/COMMENTS:**

**METALS**

**ORGANICS:** X TCL ☐ PPL ☐ AE Only ☐ BN Only ☐ Special List

\* depth to middle of sampler measured from top of well (floor surface when samplers installed on 10/6/00 in well MW-22)

**Columbia Analytical Services Inc.  
Cooler Receipt And Preservation Check Form**

Project/Client Dry Submission Number R2-4387  
Cooler received on 10-25-00 by: HE COURIER: CAS UPS FEDEX CD&L CLIENT

1. Were custody seals on outside of cooler? YES NO
2. Were custody papers properly filled out (ink, signed, etc.)? YES NO
3. Did all bottles arrive in good condition (unbroken)? YES NO
4. Did any VOA vials have significant air bubbles? YES NO N/A
5. Were Ice or Ice packs present? YES NO
6. Where did the bottles originate? CAS/ROC CLIENT
7. Temperature of cooler(s) upon receipt: 8°

Is the temperature within 0° - 6° C?: Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐

If No, Explain Below No ☒ No ☐ No ☐ No ☐ No ☐

Date/Time Temperatures Taken: 10-25-00 @ 10:35

Thermometer ID: 161 Temp Blank Sample Bottle Cooler Temp. IR Gun

If out of Temperature, Client Approval to Run Samples Temp O.K. 4 hour Rule

Cooler Breakdown: Date: 10/25/00 by: HE

1. Were all bottle labels complete (i.e. analysis, preservation, etc.)? YES NO
  2. Did all bottle labels and tags agree with custody papers? YES NO
  3. Were correct containers used for the tests indicated? YES NO
  4. Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated N/A
- Explain any discrepancies: \_\_\_\_\_

		YES	NO	Sample I.D.	Reagent	Vol. Added
pH	Reagent					
12	NaOH					
2	HNO <sub>3</sub>					
2	H <sub>2</sub> SO <sub>4</sub>					
Residual Chlorine (+/-)	for TCN & Phenol					
5-9*	P/PCBs (608 only)					

YES = All samples OK NO = Samples were preserved at lab as listed PC OK to adjust pH \_\_\_\_\_

\*If pH adjustment is required, use NaOH and/or H<sub>2</sub>SO<sub>4</sub>

VOC Vial pH Verification (Tested after Analysis) Following Samples Exhibited pH > 2				

Other Comments:

00014

## **APPENDIX G**

### **Hydraulic Conductivity Test Data**

Data from file: C:\SUPERSLU\4SLIN.SLG  
 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-4 SLUG IN  
 Casing Radius: 2.5 inches  
 Effective Well Radius: 4 inches  
 Aquifer Thickness: 11.7 feet  
 Water Table to Screen Bottom: 8.7 feet  
 Screen Length: 10 feet  
 Static Water Level: 7.8 decimal feet  
 K ratio is not entered  
 There are 48 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	7.57599	0.224009	1
2	3	3	7.58501	0.214987	0.959725
3	6	6	7.588	0.212001	0.946397
4	9.00003	9.00003	7.592	0.207999	0.928529
5	12	12	7.592	0.207999	0.928529
6	15	15	7.59699	0.203012	0.906269
7	18	18	7.59699	0.203012	0.906269
8	21	21	7.59699	0.203012	0.906269
9	24	24	7.59699	0.203012	0.906269
10	27	27	7.59699	0.203012	0.906269
11	30	30	7.59899	0.201011	0.897333
12	33	33	7.60401	0.195991	0.874926
13	36	36	7.60401	0.195991	0.874926
14	39	39	7.60401	0.195991	0.874926
15	42	42	7.60401	0.195991	0.874926
16	45	45	7.609	0.191004	0.852662
17	48	48	7.615	0.185001	0.825862
18	51	51	7.611	0.189003	0.84373
19	54	54	7.611	0.189003	0.84373
20	57	57	7.611	0.189003	0.84373
21	60	60	7.611	0.189003	0.84373
22	75	75	7.615	0.185001	0.825862
23	90.0003	90.0003	7.61999	0.180014	0.803601
24	105	105	7.62501	0.174994	0.781191
25	120	120	7.62501	0.174994	0.781191
26	135	135	7.62901	0.170991	0.763323
27	150	150	7.62501	0.174994	0.781191
28	165	165	7.62901	0.170991	0.763323
29	180	180	7.62901	0.170991	0.763323
30	210	210	7.634	0.166005	0.741063
31	240	240	7.63901	0.160985	0.718656
32	270	270	7.63901	0.160985	0.718656
33	300	300	7.64299	0.157015	0.700931
34	360	360	7.648	0.151995	0.678524
35	420	420	7.65201	0.147993	0.660656
36	480	480	7.65699	0.143006	0.638396
37	540	540	7.66201	0.137986	0.615985
38	600	600	7.66602	0.133984	0.598117
39	900.003	900.003	7.68501	0.114988	0.513318
40	1200	1200	7.69899	0.101012	0.450929
41	1500	1500	7.71201	0.087987	0.392783
42	1800	1800	7.72599	0.0740113	0.330394
43	2100	2100	7.74	0.0600021	0.267856

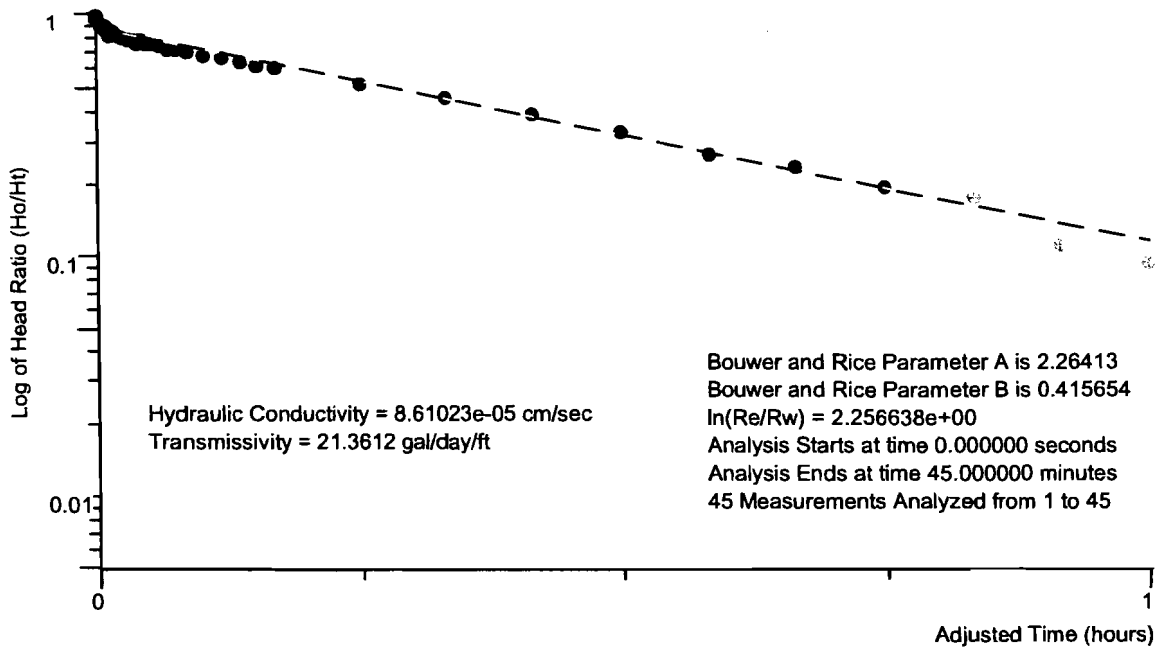
Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal fee	Head (decimal feet)	Head Ratio
44	2400	2400	7.74699	0.0530139	0.236659
45	2700	2700	7.75601	0.0439919	0.196385
46	3000	3000	7.761	0.0390046	0.174121
47	3300	3300	7.775	0.0249961	0.111585
48	3600	3600	7.77901	0.0209936	0.0937175



Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-4 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.224009 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire  
Analysis by Day Environmental, Inc.

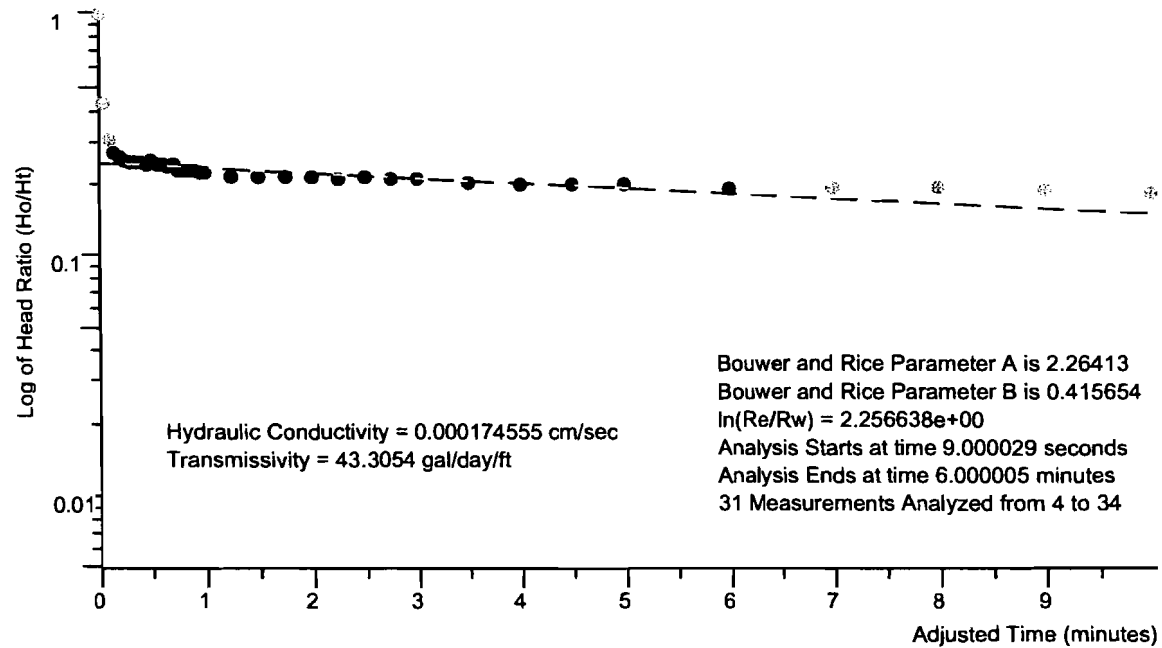
Data from file: C:\SUPERSLU\4SLOUT.SLG  
 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-4 SLUG OUT  
 Casing Radius: 2.5 inches  
 Effective Well Radius: 4 inches  
 Aquifer Thickness: 11.7 feet  
 Water Table to Screen Bo: 8.7 feet  
 Screen Length: 10 feet  
 Static Water Level: 7.8 decimal feet  
 K ratio is not entered  
 There are 38 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	8.51299	0.712987	1
2	3	3	8.104	0.304003	0.426379
3	6	6	8.017	0.216996	0.304347
4	9.00003	9.00003	7.994	0.193997	0.272091
5	12	12	7.98501	0.185008	0.259483
6	15	15	7.97999	0.179988	0.252442
7	18	18	7.975	0.175002	0.245448
8	21	21	7.975	0.175002	0.245448
9	24	24	7.975	0.175002	0.245448
10	27	27	7.973	0.173001	0.242642
11	30	30	7.97799	0.177987	0.249636
12	33	33	7.973	0.173001	0.242642
13	36	36	7.973	0.173001	0.242642
14	39	39	7.96801	0.168013	0.235647
15	42	42	7.973	0.173001	0.242642
16	45	45	7.96401	0.164011	0.230033
17	48	48	7.96401	0.164011	0.230033
18	51	51	7.96401	0.164011	0.230033
19	54	54	7.96401	0.164011	0.230033
20	57	57	7.95899	0.158992	0.222993
21	60	60	7.95899	0.158992	0.222993
22	75	75	7.95499	0.154989	0.21738
23	90.0003	90.0003	7.95499	0.154989	0.21738
24	105	105	7.95499	0.154989	0.21738
25	120	120	7.95499	0.154989	0.21738
26	135	135	7.95	0.150002	0.210386
27	150	150	7.95499	0.154989	0.21738
28	165	165	7.95	0.150002	0.210386
29	180	180	7.95	0.150002	0.210386
30	210	210	7.94502	0.145015	0.203391
31	240	240	7.94301	0.143014	0.200585
32	270	270	7.94301	0.143014	0.200585
33	300	300	7.94301	0.143014	0.200585
34	360	360	7.93799	0.137994	0.193543
35	420	420	7.93799	0.137994	0.193543
36	480	480	7.93799	0.137994	0.193543
37	540	540	7.93399	0.133991	0.18793
38	600	600	7.929	0.129005	0.180936

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-4 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.712987 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

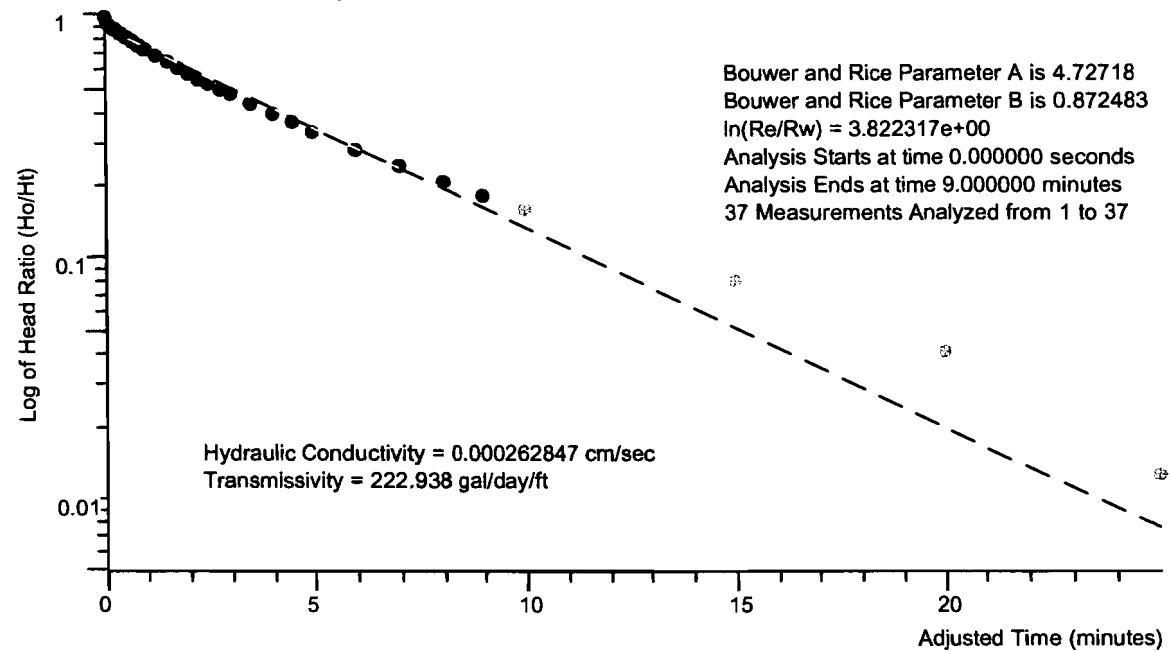
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 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/5/99  
 Well Number: MW-7 SLUG IN  
 Casing Radius: 2 inches  
 Effective Well Radius: 2 inches  
 Aquifer Thickness: 39.9998 feet  
 Water Table to Screen Bottom: 37.64 feet  
 Screen Length: 20 feet  
 Static Water Level: 16.18 decimal feet  
 K ratio is not entered  
 There are 41 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	15.061	1.11899	1
2	3	3	15.142	1.03799	0.92761
3	6	6	15.151	1.029	0.919577
4	9.00003	9.00003	15.17	1.01001	0.902602
5	12	12	15.184	0.995997	0.890083
6	15	15	15.197	0.983005	0.878472
7	18	18	15.211	0.968996	0.865952
8	21	21	15.225	0.954988	0.853434
9	24	24	15.234	0.945997	0.8454
10	27	27	15.248	0.931989	0.832882
11	30	30	15.262	0.918013	0.820391
12	33	33	15.269	0.910992	0.814117
13	36	36	15.283	0.897016	0.801627
14	39	39	15.292	0.887994	0.793564
15	42	42	15.306	0.873984	0.781045
16	45	45	15.315	0.864995	0.773012
17	48	48	15.324	0.856005	0.764977
18	51	51	15.338	0.841997	0.752459
19	54	54	15.343	0.83701	0.748002
20	57	57	15.357	0.823	0.735482
21	60	60	15.361	0.818999	0.731906
22	75	75	15.407	0.773002	0.690801
23	90.0003	90.0003	15.453	0.727004	0.649694
24	105	105	15.488	0.691998	0.618411
25	120	120	15.525	0.654991	0.585339
26	135	135	15.562	0.617983	0.552267
27	150	150	15.589	0.590983	0.528138
28	165	165	15.619	0.560996	0.50134
29	180	180	15.647	0.533011	0.47633
30	210	210	15.693	0.487014	0.435225
31	240	240	15.739	0.440985	0.39409
32	270	270	15.772	0.408012	0.364624
33	300	300	15.806	0.37399	0.33422
34	360	360	15.862	0.317988	0.284173
35	420	420	15.912	0.267988	0.23949
36	480	480	15.949	0.231013	0.206447
37	540	540	15.977	0.202994	0.181408
38	600	600	16.002	0.177995	0.159067
39	900.003	900.003	16.09	0.0900035	0.0804325
40	1200	1200	16.134	0.0460092	0.0411166
41	1500	1500	16.166	0.0139874	0.0124999

Remedial Investigation/Feasibility Study 11/5/99

Bouwer and Rice Graph of MW-7 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 1.11899 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

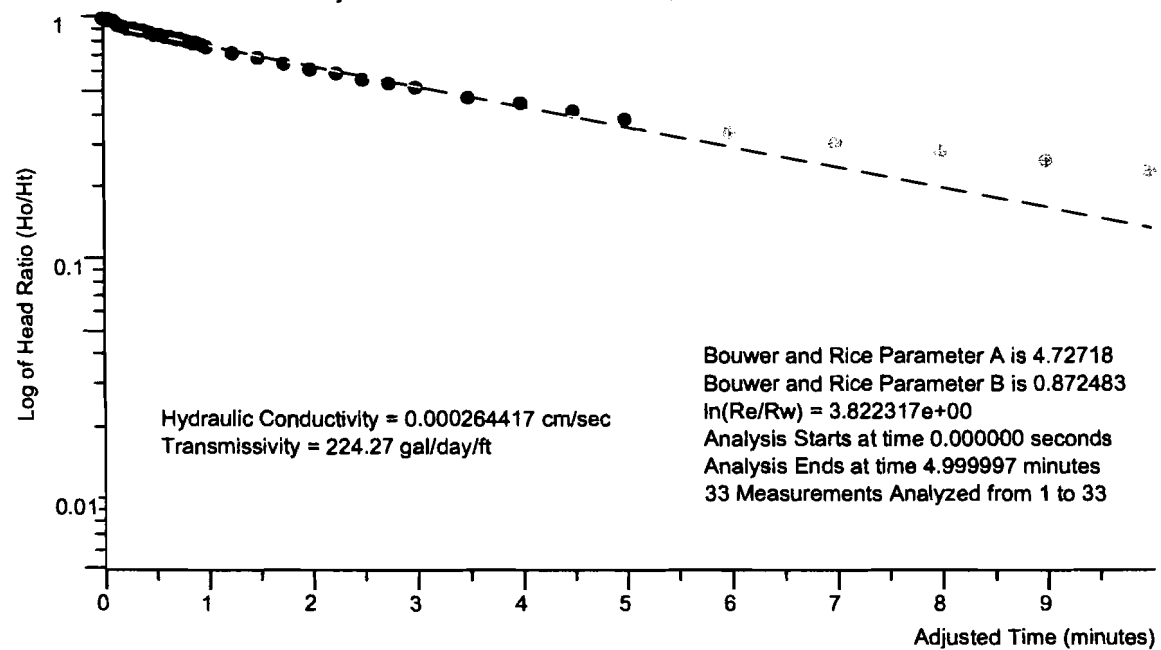
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 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/5/99  
 Well Number: MW-7 SLUG OUT  
 Casing Radius: 2 inches  
 Effective Well Radius: 2 inches  
 Aquifer Thickness: 39.9998 feet  
 Water Table to Screen Bo: 37.64 feet  
 Screen Length: 20 feet  
 Static Water Level: 16.18 decimal feet  
 K ratio is not entered  
 There are 38 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	17.303	1.12301	1
2	3	3	17.287	1.107	0.985742
3	6	6	17.273	1.09299	0.973269
4	9.00003	9.00003	17.232	1.05201	0.936779
5	12	12	17.213	1.03301	0.919865
6	15	15	17.2	1.01999	0.908266
7	18	18	17.186	1.00601	0.895821
8	21	21	17.172	0.992003	0.883346
9	24	24	17.163	0.983014	0.875341
10	27	27	17.153	0.973008	0.866431
11	30	30	17.14	0.960016	0.854862
12	33	33	17.13	0.95001	0.845952
13	36	36	17.123	0.942989	0.8397
14	39	39	17.11	0.929996	0.828131
15	42	42	17.105	0.925009	0.82369
16	45	45	17.091	0.911001	0.811216
17	48	48	17.082	0.902011	0.80321
18	51	51	17.063	0.883016	0.786296
19	54	54	17.059	0.879012	0.782731
20	57	57	17.045	0.865005	0.770258
21	60	60	17.04	0.859984	0.765787
22	75	75	16.992	0.811987	0.723047
23	90.0003	90.0003	16.95	0.769992	0.685652
24	105	105	16.909	0.729015	0.649164
25	120	120	16.872	0.692008	0.61621
26	135	135	16.844	0.663989	0.59126
27	150	150	16.812	0.632002	0.562777
28	165	165	16.787	0.607003	0.540516
29	180	180	16.759	0.579017	0.515595
30	210	210	16.713	0.532987	0.474607
31	240	240	16.676	0.496013	0.441683
32	270	270	16.644	0.463992	0.41317
33	300	300	16.611	0.430986	0.383779
34	360	360	16.558	0.378002	0.336598
35	420	420	16.521	0.340994	0.303644
36	480	480	16.494	0.313994	0.279601
37	540	540	16.466	0.286008	0.254681
38	600	600	16.443	0.26301	0.234201

Remedial Investigation/Feasibility Study 11/5/99

Bouwer and Rice Graph of MW-7 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 1.12301 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire  
Analysis by Day Environmental, Inc.

Data from file: C:\SUPERSLU\9SLIN.SLG  
 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-9 SLUG IN  
 Casing Radius: 2.5 inches  
 Effective Well Radius: 4 inches  
 Aquifer Thickness: 8.11 feet  
 Water Table to Screen Bottom: 5.11 feet  
 Screen Length: 10 feet  
 Static Water Level: 8.49 decimal feet  
 K ratio is not entered  
 There are 48 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	7.65699	0.833006	1
2	3	3	7.80299	0.68701	0.824736
3	6	6	7.88799	0.602005	0.72269
4	9.00003	9.00003	7.93399	0.556008	0.667472
5	12	12	7.994	0.496002	0.595437
6	15	15	8.03999	0.450006	0.540219
7	18	18	8.077	0.412998	0.495792
8	21	21	8.102	0.387998	0.46578
9	24	24	8.18599	0.30401	0.364955
10	27	27	8.24501	0.244989	0.294102
11	30	30	8.26201	0.227994	0.2737
12	33	33	8.26601	0.223991	0.268895
13	36	36	8.271	0.219005	0.262909
14	39	39	8.275	0.215002	0.258104
15	42	42	8.27999	0.210015	0.252117
16	45	45	8.285	0.204995	0.246091
17	48	48	8.28901	0.200993	0.241286
18	51	51	8.28901	0.200993	0.241286
19	54	54	8.29901	0.190986	0.229273
20	57	57	8.30302	0.186983	0.224468
21	60	60	8.30302	0.186983	0.224468
22	75	75	8.31699	0.173008	0.207691
23	90.0003	90.0003	8.32601	0.163985	0.196859
24	105	105	8.335	0.154996	0.186068
25	120	120	8.34501	0.144989	0.174055
26	135	135	8.352	0.138001	0.165666
27	150	150	8.354	0.136	0.163264
28	165	165	8.35899	0.131014	0.157278
29	180	180	8.36299	0.127011	0.152473
30	210	210	8.37201	0.117988	0.141642
31	240	240	8.377	0.113002	0.135655
32	270	270	8.38399	0.106014	0.127266
33	300	300	8.39301	0.0969917	0.116436
34	360	360	8.398	0.0920044	0.110449
35	420	420	8.40698	0.0830153	0.0996574
36	480	480	8.41601	0.0739933	0.0888269
37	540	540	8.42099	0.069006	0.0828397
38	600	600	8.43002	0.0599841	0.0720091
39	900.003	900.003	8.44799	0.0420051	0.0504259
40	1200	1200	8.46699	0.0230093	0.027622
41	1500	1500	8.47201	0.0179899	0.0215964
42	1800	1800	8.481	0.00900004	0.0108043
43	2100	2100	8.481	0.00900004	0.0108043

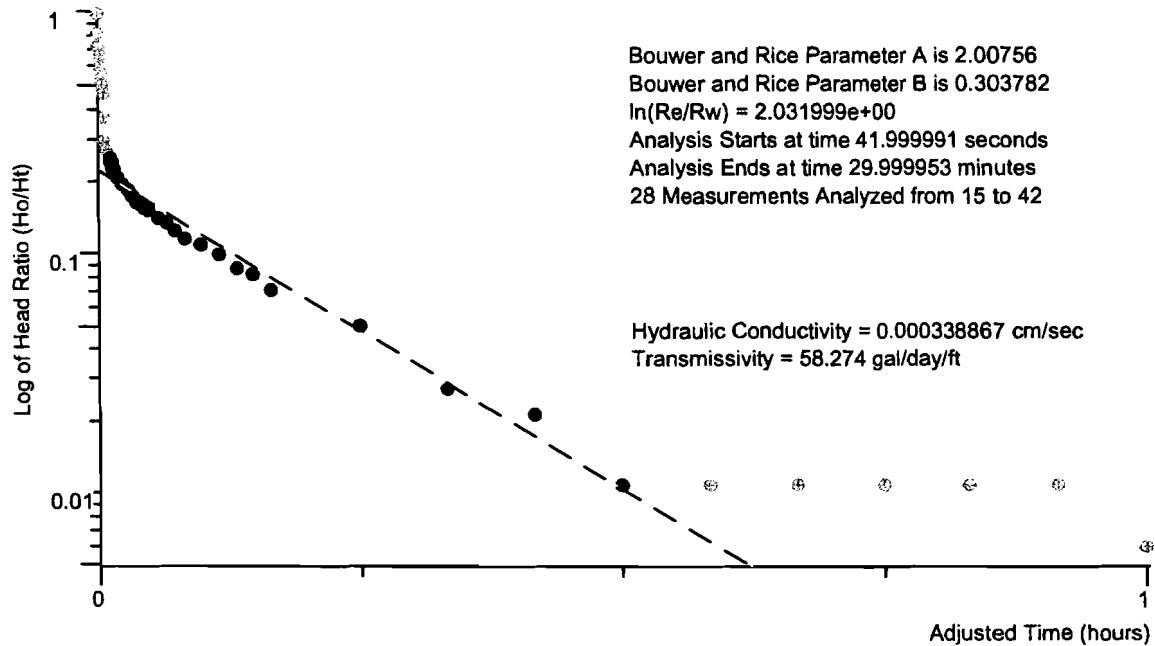


Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal fee	Head (decimal feet)	Head Ratio
44	2400	2400	8.481	0.00900004	0.0108043
45	2700	2700	8.481	0.00900004	0.0108043
46	3000	3000	8.481	0.00900004	0.0108043
47	3300	3300	8.481	0.00900004	0.0108043
48	3600	3600	8.485	0.0049975	0.00599935

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-9 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.833006 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire  
Analysis by Day Environmental, Inc.

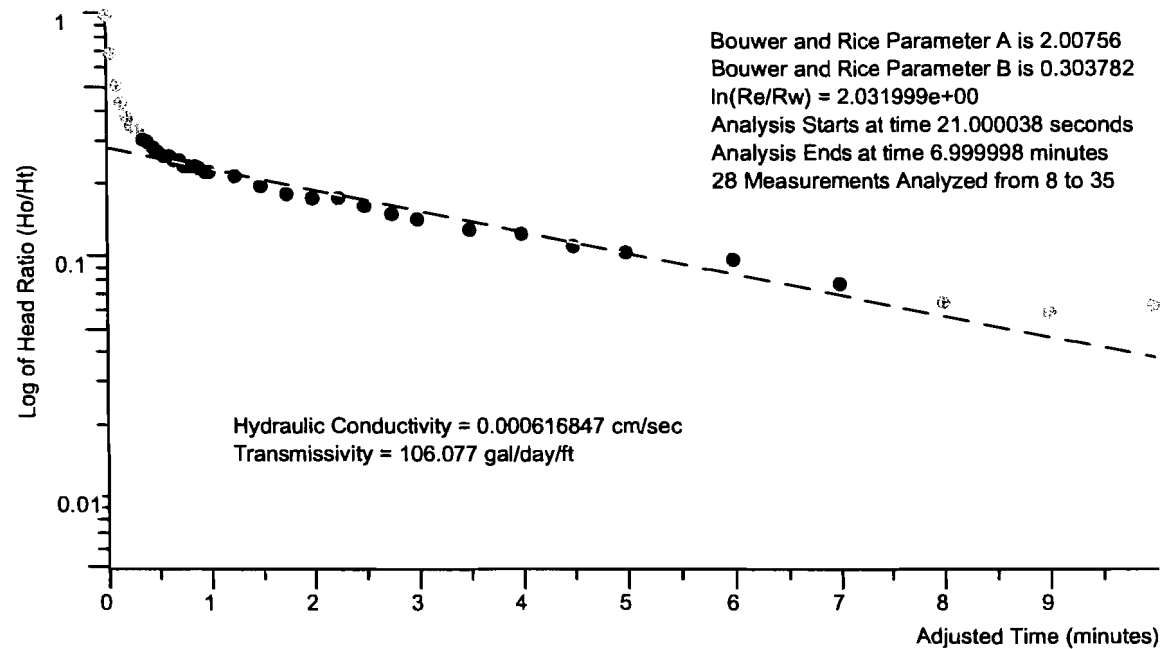
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 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-9 SLUG OUT  
 Casing Radius: 2.5 inches  
 Effective Well Radius: 4 inches  
 Aquifer Thickness: 8.11 feet  
 Water Table to Screen Bo5.11 feet  
 Screen Length: 10 feet  
 Static Water Level: 8.49 decimal feet  
 K ratio is not entered  
 There are 38 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	9.19999	0.709987	1
2	3	3	8.97699	0.486991	0.685915
3	6	6	8.85399	0.363994	0.512677
4	9.00003	9.00003	8.79399	0.303988	0.42816
5	12	12	8.75501	0.265012	0.373264
6	15	15	8.737	0.247	0.347894
7	18	18	8.72299	0.232991	0.328163
8	21	21	8.70501	0.215013	0.302841
9	24	24	8.69999	0.209993	0.29577
10	27	27	8.691	0.201004	0.283109
11	30	30	8.681	0.190997	0.269015
12	33	33	8.67699	0.186994	0.263377
13	36	36	8.67699	0.186994	0.263377
14	39	39	8.66801	0.178005	0.250716
15	42	42	8.66801	0.178005	0.250716
16	45	45	8.658	0.167999	0.236622
17	48	48	8.658	0.167999	0.236622
18	51	51	8.658	0.167999	0.236622
19	54	54	8.654	0.163996	0.230985
20	57	57	8.64901	0.159009	0.223961
21	60	60	8.64901	0.159009	0.223961
22	75	75	8.64199	0.151988	0.214072
23	90.0003	90.0003	8.62801	0.138012	0.194387
24	105	105	8.61899	0.12899	0.18168
25	120	120	8.61499	0.124988	0.176042
26	135	135	8.61499	0.124988	0.176042
27	150	150	8.60501	0.115014	0.161994
28	165	165	8.59599	0.105992	0.149287
29	180	180	8.59101	0.101005	0.142263
30	210	210	8.58202	0.0920153	0.129601
31	240	240	8.57801	0.0880128	0.123964
32	270	270	8.56801	0.0780068	0.109871
33	300	300	8.564	0.0740043	0.104233
34	360	360	8.55898	0.0689841	0.0971625
35	420	420	8.54501	0.0550077	0.0774771
36	480	480	8.53599	0.0459858	0.0647699
37	540	540	8.53202	0.0420161	0.0591787
38	600	600	8.53398	0.0439849	0.0619517

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-9 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.709987 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire  
Analysis by Day Environmental, Inc.

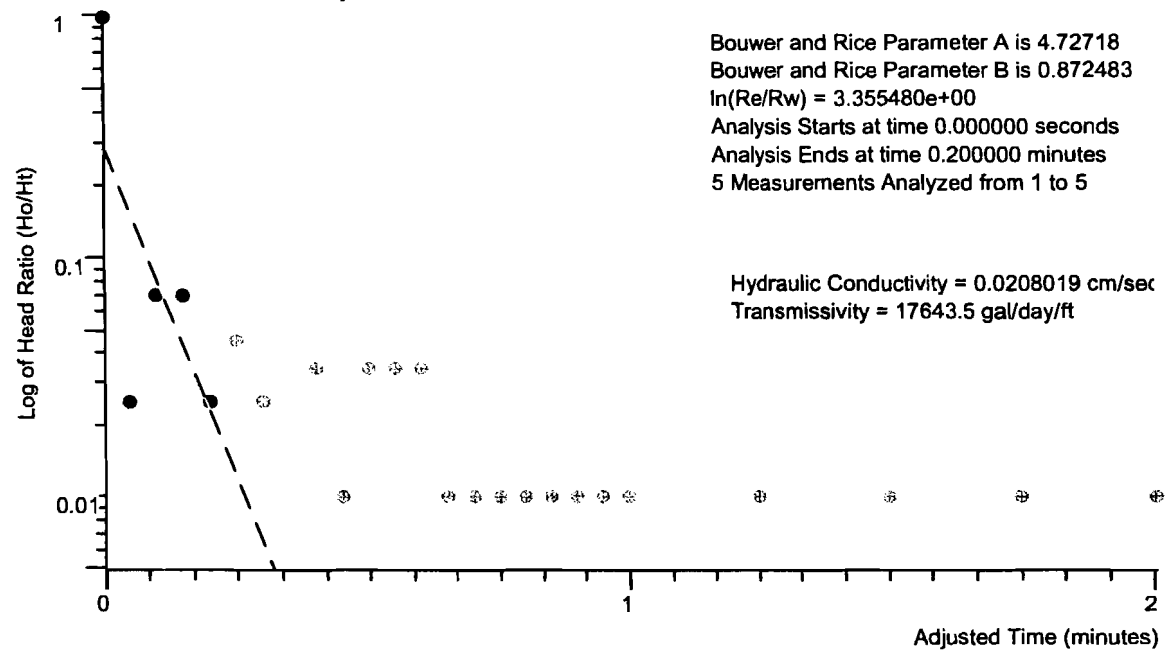
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 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/5/99  
 Well Number: MW-16 SLUG IN  
 Casing Radius: 2 inches  
 Effective Well Radius: 1.5 inches  
 Aquifer Thickness: 39.9998 feet  
 Water Table to Screen Bottom: 22.28 feet  
 Screen Length: 20 feet  
 Static Water Level: 12.72 decimal feet  
 K ratio is not entered  
 There are 24 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	12.519	0.200992	1
2	3	3	12.715	0.00499672	0.0248603
3	6	6	12.706	0.0139866	0.0695878
4	9.00003	9.00003	12.706	0.0139866	0.0695878
5	12	12	12.715	0.00499672	0.0248603
6	15	15	12.711	0.00899925	0.0447742
7	18	18	12.715	0.00499672	0.0248603
8	24	24	12.713	0.00699838	0.0348192
9	27	27	12.718	0.00201105	0.0100056
10	30	30	12.713	0.00699838	0.0348192
11	33	33	12.713	0.00699838	0.0348192
12	36	36	12.713	0.00699838	0.0348192
13	39	39	12.718	0.00201105	0.0100056
14	42	42	12.718	0.00201105	0.0100056
15	45	45	12.718	0.00201105	0.0100056
16	48	48	12.718	0.00201105	0.0100056
17	51	51	12.718	0.00201105	0.0100056
18	54	54	12.718	0.00201105	0.0100056
19	57	57	12.718	0.00201105	0.0100056
20	60	60	12.718	0.00201105	0.0100056
21	75	75	12.718	0.00201105	0.0100056
22	90.0003	90.0003	12.718	0.00201105	0.0100056
23	105	105	12.718	0.00201105	0.0100056
24	120	120	12.718	0.00201105	0.0100056

Remedial Investigation/Feasibility Study 11/5/99

Bouwer and Rice Graph of MW-16 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.200992 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

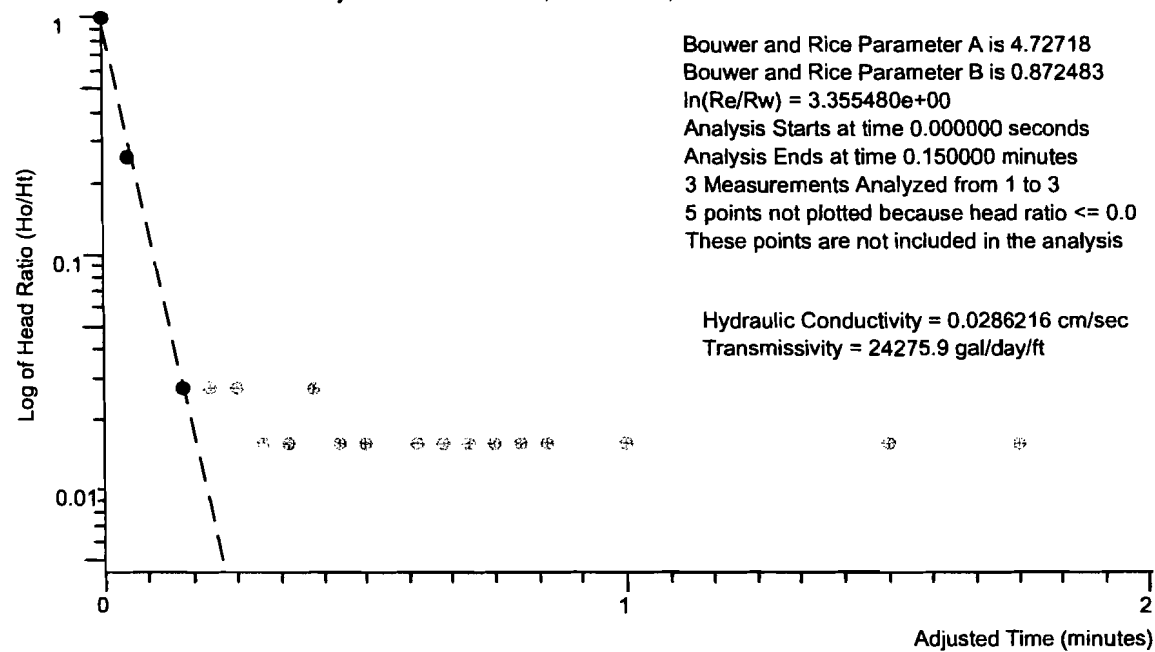
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Title: Remedial Investigation/Feasibility Study  
Site Name: Former General Circuits Facility  
Location: 95 Mt. Read Blvd., Rochester, New York  
Client: Mr. Thomas Maguire  
Project Number: 1506R-97  
Test Date: 11/5/99  
Well Number: MW-16 SLUG OUT  
Casing Radius: 2 inches  
Effective Well Radius: 1.5 inches  
Aquifer Thickness: 39.9998 feet  
Water Table to Screen Bottom: 22.28 feet  
Screen Length: 20 feet  
Static Water Level: 12.72 decimal feet  
K ratio is not entered  
There are 24 time and drawdown measurements  
Tests starts with trial 1  
Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	13.163	0.442996	1
2	3	3	12.835	0.115014	0.259629
3	9.00003	9.00003	12.732	0.0119974	0.0270825
4	12	12	12.732	0.0119974	0.0270825
5	15	15	12.732	0.0119974	0.0270825
6	18	18	12.727	0.00701089	0.0158261
7	21	21	12.727	0.00701089	0.0158261
8	24	24	12.732	0.0119974	0.0270825
9	27	27	12.727	0.00701089	0.0158261
10	30	30	12.727	0.00701089	0.0158261
11	33	33	12.722	0.00199149	0.00449551
12	36	36	12.727	0.00701089	0.0158261
13	39	39	12.727	0.00701089	0.0158261
14	42	42	12.727	0.00701089	0.0158261
15	45	45	12.727	0.00701089	0.0158261
16	48	48	12.727	0.00701089	0.0158261
17	51	51	12.727	0.00701089	0.0158261
18	54	54	12.722	0.00199149	0.00449551
19	57	57	12.722	0.00199149	0.00449551
20	60	60	12.727	0.00701089	0.0158261
21	75	75	12.722	0.00199149	0.00449551
22	90.0003	90.0003	12.727	0.00701089	0.0158261
23	105	105	12.727	0.00701089	0.0158261
24	120	120	12.722	0.00199149	0.00449551

Remedial Investigation/Feasibility Study 11/5/99

Bouwer and Rice Graph of MW-16 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.442996 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.



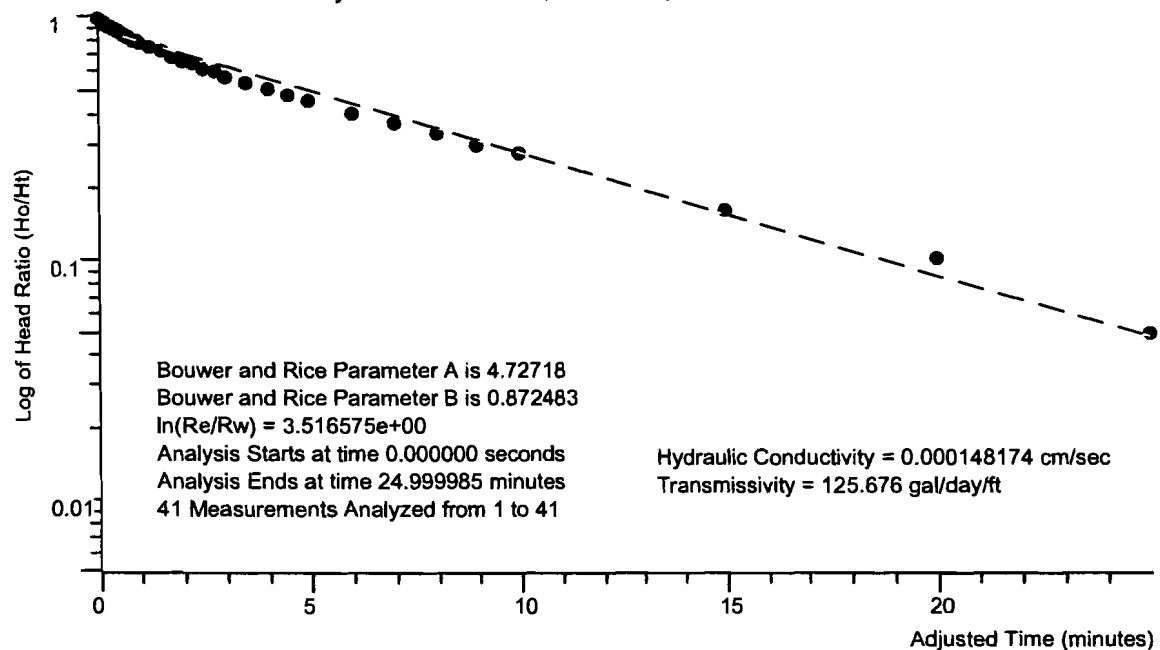
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 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/5/99  
 Well Number: MW-17 SLUG IN  
 Casing Radius: 2 inches  
 Effective Well Radius: 1.5 inches  
 Aquifer Thickness: 39.9998 feet  
 Water Table to Screen Bo28.38 feet  
 Screen Length: 20 feet  
 Static Water Level: 9.91999 decimal feet  
 K ratio is not entered  
 There are 41 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal fee	Head (decimal feet)	Head Ratio
1	0	0	9.214	0.705994	1
2	3	3	9.23299	0.686999	0.973094
3	6	6	9.24201	0.677977	0.960314
4	9.00003	9.00003	9.251	0.668987	0.947581
5	12	12	9.25599	0.664	0.940518
6	15	15	9.27	0.649991	0.920674
7	18	18	9.274	0.645988	0.915005
8	21	21	9.28299	0.636999	0.902273
9	24	24	9.28801	0.631979	0.895162
10	27	27	9.293	0.626993	0.888099
11	30	30	9.30199	0.618003	0.875366
12	33	33	9.31101	0.608981	0.862586
13	36	36	9.316	0.603994	0.855523
14	39	39	9.32499	0.595005	0.84279
15	42	42	9.32899	0.591003	0.837121
16	45	45	9.33401	0.585982	0.83001
17	48	48	9.33899	0.580996	0.822947
18	51	51	9.34798	0.572007	0.810214
19	54	54	9.34798	0.572007	0.810214
20	57	57	9.353	0.566987	0.803104
21	60	60	9.36199	0.557998	0.790371
22	75	75	9.38499	0.534999	0.757795
23	90.0003	90.0003	9.40799	0.512001	0.725219
24	105	105	9.43099	0.489002	0.692644
25	120	120	9.449	0.470991	0.667131
26	135	135	9.46301	0.456981	0.647288
27	150	150	9.482	0.437986	0.620381
28	165	165	9.49601	0.423977	0.600539
29	180	180	9.51399	0.405998	0.575073
30	210	210	9.53699	0.383	0.542497
31	240	240	9.55999	0.360001	0.509921
32	270	270	9.58299	0.337003	0.477345
33	300	300	9.597	0.322994	0.457502
34	360	360	9.634	0.285986	0.405083
35	420	420	9.66199	0.258001	0.365444
36	480	480	9.68499	0.235003	0.332868
37	540	540	9.70799	0.212005	0.300292
38	600	600	9.726	0.193993	0.274779
39	900.003	900.003	9.805	0.114991	0.162878
40	1200	1200	9.84801	0.0719799	0.101955
41	1500	1500	9.88499	0.0350052	0.0495828

Remedial Investigation/Feasibility Study 11/5/99

Bouwer and Rice Graph of MW-17 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.705994 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire  
Analysis by Day Environmental, Inc.

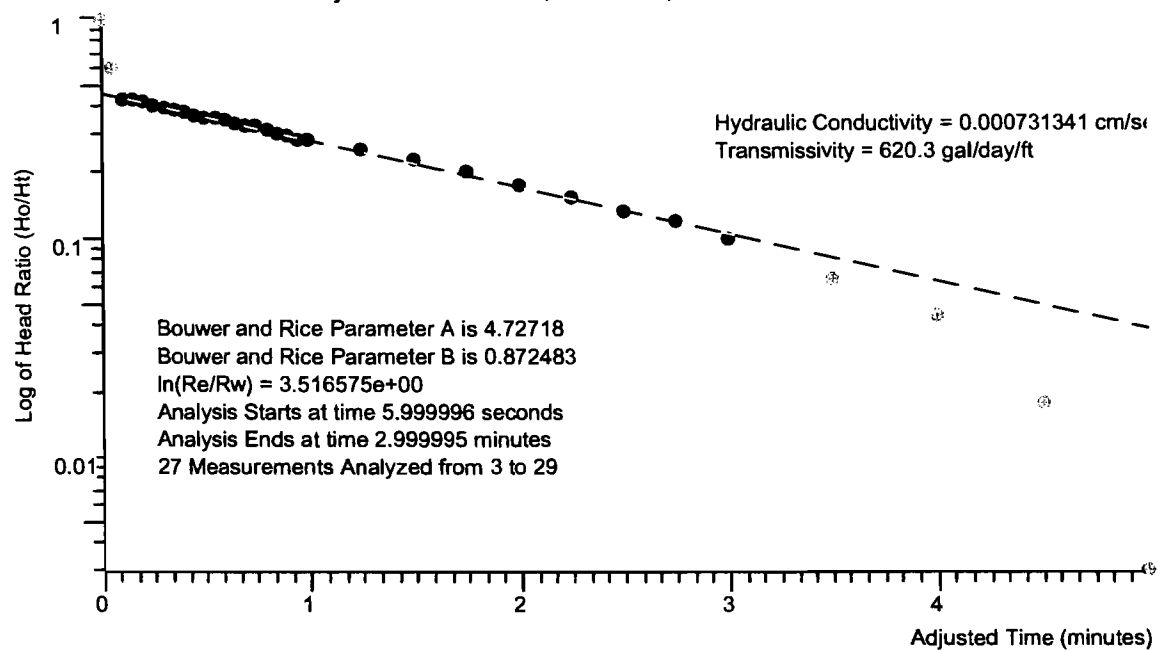
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 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/5/99  
 Well Number: MW-17 SLUG OUT  
 Casing Radius: 2 inches  
 Effective Well Radius: 1.5 inches  
 Aquifer Thickness: 39.9998 feet  
 Water Table to Screen Bo28.38 feet  
 Screen Length: 20 feet  
 Static Water Level: 9.91999 decimal feet  
 K ratio is not entered  
 There are 33 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	10.591	0.671023	1
2	3	3	10.324	0.403999	0.602064
3	6	6	10.208	0.288022	0.429229
4	9.00003	9.00003	10.208	0.288022	0.429229
5	12	12	10.201	0.281001	0.418765
6	15	15	10.192	0.272012	0.405369
7	18	18	10.183	0.263023	0.391973
8	21	21	10.178	0.258003	0.384492
9	24	24	10.174	0.254	0.378527
10	27	27	10.165	0.245011	0.365131
11	30	30	10.16	0.240025	0.3577
12	33	33	10.16	0.240025	0.3577
13	36	36	10.151	0.231002	0.344254
14	39	39	10.146	0.226015	0.336822
15	42	42	10.141	0.220996	0.329342
16	45	45	10.137	0.217026	0.323425
17	48	48	10.128	0.208004	0.30998
18	51	51	10.123	0.203017	0.302549
19	54	54	10.118	0.197998	0.295068
20	57	57	10.109	0.189008	0.281671
21	60	60	10.109	0.189008	0.281671
22	75	75	10.091	0.170996	0.254829
23	90.0003	90.0003	10.072	0.152	0.22652
24	105	105	10.056	0.136023	0.20271
25	120	120	10.038	0.118011	0.175867
26	135	135	10.024	0.104003	0.154991
27	150	150	10.01	0.0899933	0.134114
28	165	165	10.001	0.0810042	0.120718
29	180	180	9.98699	0.066995	0.0998401
30	210	210	9.96399	0.0439966	0.0655665
31	240	240	9.95001	0.0300202	0.044738
32	270	270	9.932	0.0120084	0.0178957
33	300	300	9.92199	0.00200244	0.00298416

Remedial Investigation/Feasibility Study 11/5/99

Bouwer and Rice Graph of MW-17 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.671023 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

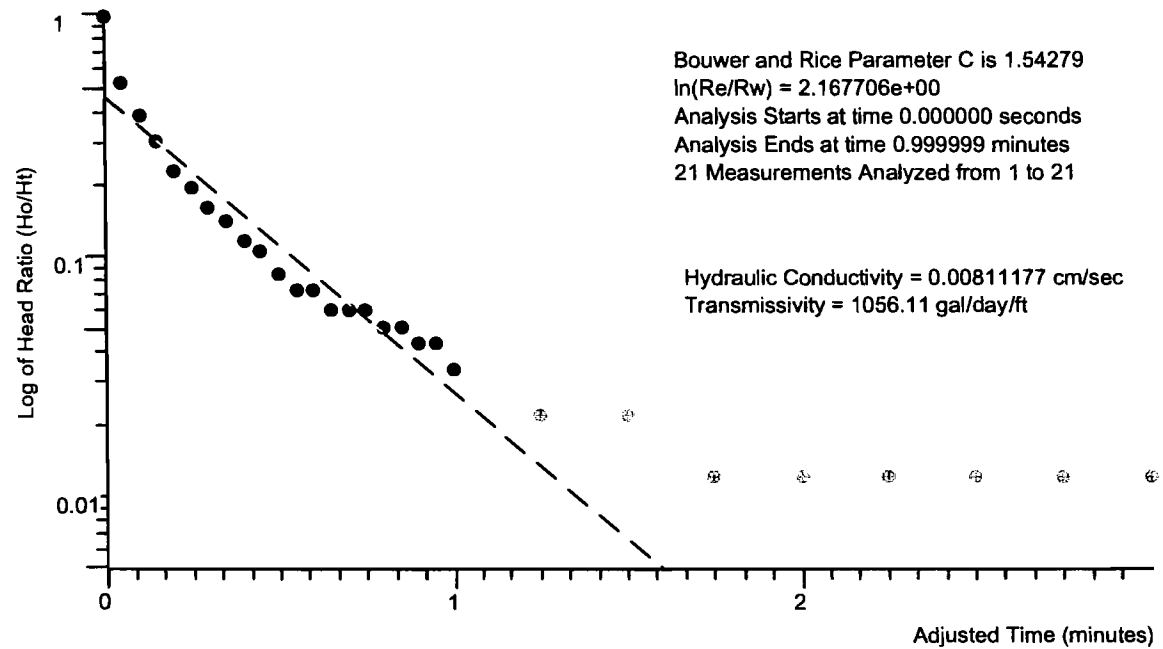
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 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-18 SLUG IN  
 Casing Radius: 2.5 inches  
 Effective Well Radius: 4 inches  
 Aquifer Thickness: 6.14 feet  
 Water Table to Screen Bottom: 6.14 feet  
 Screen Length: 10 feet  
 Static Water Level: 10.46 decimal feet  
 K ratio is not entered  
 There are 29 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	10.047	0.413009	1
2	3	3	10.243	0.217014	0.525446
3	6	6	10.299	0.161011	0.389849
4	9.00003	9.00003	10.335	0.124988	0.302627
5	12	12	10.365	0.095001	0.230022
6	15	15	10.379	0.0809925	0.196103
7	18	18	10.393	0.0670161	0.162263
8	21	21	10.402	0.0579941	0.140419
9	24	24	10.412	0.0479874	0.11619
10	27	27	10.416	0.0439849	0.106499
11	30	30	10.425	0.034995	0.0847318
12	33	33	10.43	0.0300085	0.0726581
13	36	36	10.43	0.0300085	0.0726581
14	39	39	10.435	0.0249891	0.0605049
15	42	42	10.435	0.0249891	0.0605049
16	45	45	10.435	0.0249891	0.0605049
17	48	48	10.439	0.0209865	0.0508137
18	51	51	10.439	0.0209865	0.0508137
19	54	54	10.442	0.0180009	0.0435846
20	57	57	10.442	0.0180009	0.0435846
21	60	60	10.446	0.0139983	0.0338935
22	75	75	10.451	0.00901177	0.0218198
23	90.0003	90.0003	10.451	0.00901177	0.0218198
24	105	105	10.455	0.00500923	0.0121286
25	120	120	10.455	0.00500923	0.0121286
26	135	135	10.455	0.00500923	0.0121286
27	150	150	10.455	0.00500923	0.0121286
28	165	165	10.455	0.00500923	0.0121286
29	180	180	10.455	0.00500923	0.0121286

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-18 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.41302 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

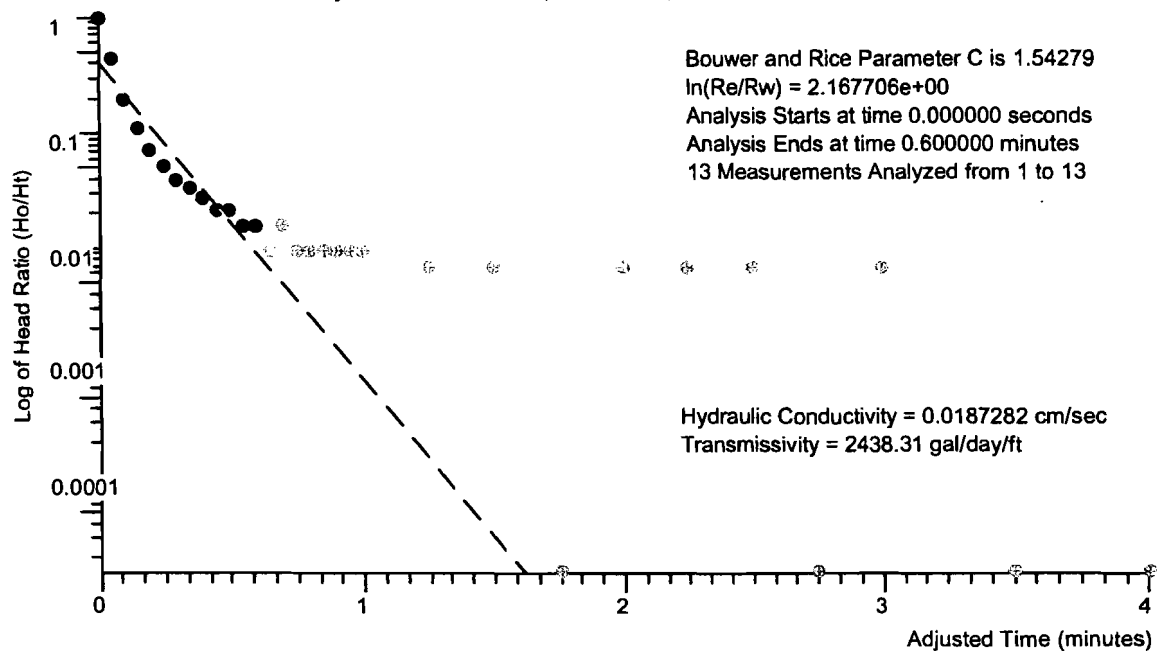
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 Title: Remedial Investigation/Feasibility Study  
 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-18 SLUG OUT  
 Casing Radius: 2.5 inches  
 Effective Well Radius: 4 inches  
 Aquifer Thickness: 6.14 feet  
 Water Table to Screen Bo6.14 feet  
 Screen Length: 10 feet  
 Static Water Level: 10.46 decimal feet  
 K ratio is not entered  
 There are 31 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	11.2	0.739995	1
2	3	3	10.79	0.329994	0.44594
3	6	6	10.608	0.148008	0.200012
4	9.00003	9.00003	10.545	0.0849833	0.114843
5	12	12	10.513	0.0529959	0.0716165
6	15	15	10.499	0.0389866	0.0526849
7	18	18	10.49	0.0299975	0.0405374
8	21	21	10.485	0.0250102	0.0337978
9	24	24	10.481	0.0210076	0.0283889
10	27	27	10.476	0.0159882	0.0216059
11	30	30	10.476	0.0159882	0.0216059
12	33	33	10.472	0.0119857	0.016197
13	36	36	10.472	0.0119857	0.016197
14	39	39	10.467	0.00699916	0.00945838
15	42	42	10.472	0.0119857	0.016197
16	45	45	10.467	0.00699916	0.00945838
17	48	48	10.467	0.00699916	0.00945838
18	51	51	10.467	0.00699916	0.00945838
19	54	54	10.467	0.00699916	0.00945838
20	57	57	10.467	0.00699916	0.00945838
21	60	60	10.467	0.00699916	0.00945838
22	75	75	10.465	0.0049975	0.00675342
23	90.0003	90.0003	10.465	0.0049975	0.00675342
24	105	105	10.46	1.09509e-05	1.47985e-05
25	120	120	10.465	0.0049975	0.00675342
26	135	135	10.465	0.0049975	0.00675342
27	150	150	10.465	0.0049975	0.00675342
28	165	165	10.46	1.09509e-05	1.47985e-05
29	180	180	10.465	0.0049975	0.00675342
30	210	210	10.46	1.09509e-05	1.47985e-05
31	240	240	10.46	1.09509e-05	1.47985e-05

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-18 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.739995 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.



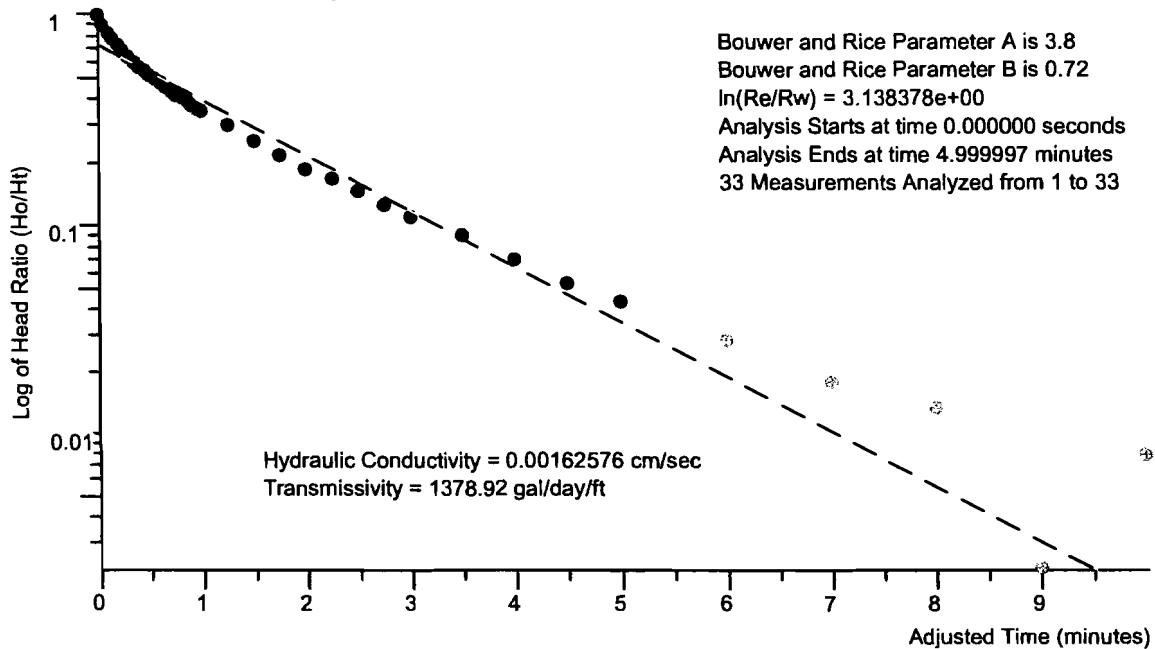
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Site Name: Former General Circuits Facility  
Location: 95 Mt. Read Blvd., Rochester, New York  
Client: Mr. Thomas Maguire  
Project Number: 1506R-97  
Test Date: 11/8/99  
Well Number: MW-19 SLUG IN  
Casing Radius: 3 inches  
Effective Well Radius: 1.5 inches  
Aquifer Thickness: 39.9998 feet  
Water Table to Screen Bo26.75 feet  
Screen Length: 20 feet  
Static Water Level: 10.25 decimal feet  
K ratio is not entered  
There are 38 time and drawdown measurements  
Tests starts with trial 1  
Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Tim (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	9.35701	0.892993	1
2	3	3	9.43801	0.811991	0.909291
3	6	6	9.51199	0.738008	0.826443
4	9.00003	9.00003	9.56301	0.686992	0.769314
5	12	12	9.60599	0.644014	0.721186
6	15	15	9.64801	0.601987	0.674123
7	18	18	9.68499	0.565012	0.632717
8	21	21	9.71301	0.536994	0.601341
9	24	24	9.74001	0.509993	0.571105
10	27	27	9.76301	0.486995	0.545351
11	30	30	9.786	0.463996	0.519596
12	33	33	9.805	0.445	0.498324
13	36	36	9.82101	0.42899	0.480396
14	39	39	9.83899	0.411011	0.460262
15	42	42	9.85798	0.392015	0.43899
16	45	45	9.87199	0.378006	0.423302
17	48	48	9.886	0.363998	0.407615
18	51	51	9.89899	0.351005	0.393066
19	54	54	9.913	0.336997	0.377379
20	57	57	9.92701	0.322988	0.361691
21	60	60	9.936	0.313998	0.351625
22	75	75	9.982	0.268001	0.300115
23	90.0003	90.0003	10.024	0.226007	0.253089
24	105	105	10.054	0.195987	0.219472
25	120	120	10.082	0.168002	0.188134
26	135	135	10.1	0.149991	0.167964
27	150	150	10.119	0.130995	0.146692
28	165	165	10.137	0.112984	0.126523
29	180	180	10.151	0.0990074	0.110871
30	210	210	10.169	0.0809956	0.0907013
31	240	240	10.188	0.0619998	0.0694292
32	270	270	10.202	0.0479905	0.0537412
33	300	300	10.211	0.0390015	0.043675
34	360	360	10.225	0.0249922	0.027987
35	420	420	10.234	0.0160031	0.0179207
36	480	480	10.238	0.0120006	0.0134386
37	540	540	10.248	0.00199384	0.0023276
38	600	600	10.243	0.00701324	0.00785363

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-19 SLUG IN

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.892993 decimal feet at  $t = 0$  sec



Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

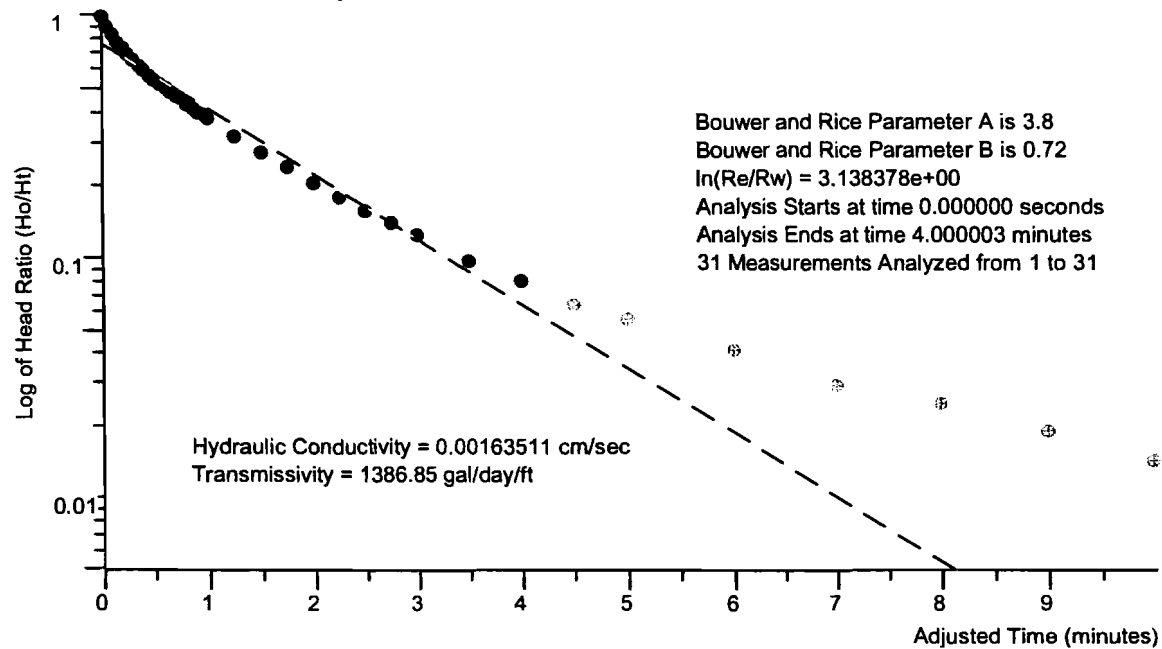
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 Site Name: Former General Circuits Facility  
 Location: 95 Mt. Read Blvd., Rochester, New York  
 Client: Mr. Thomas Maguire  
 Project Number: 1506R-97  
 Test Date: 11/8/99  
 Well Number: MW-19 SLUG OUT  
 Casing Radius: 3 inches  
 Effective Well Radius: 1.5 inches  
 Aquifer Thickness: 39.9998 feet  
 Water Table to Screen Bottom: 26.75 feet  
 Screen Length: 20 feet  
 Static Water Level: 10.25 decimal feet  
 K ratio is not entered  
 There are 38 time and drawdown measurements  
 Tests starts with trial 1  
 Time values will be adjusted by 0 days (0.000000 seconds)

Trial	Time (seconds)	Adjusted Time (seconds)	Drawdown (decimal feet)	Head (decimal feet)	Head Ratio
1	0	0	11.106	0.856001	1
2	3	3	11.018	0.76801	0.897207
3	6	6	10.96	0.710006	0.829445
4	9.00003	9.00003	10.914	0.664009	0.775711
5	12	12	10.873	0.622999	0.727802
6	15	15	10.836	0.585991	0.684568
7	18	18	10.808	0.558006	0.651876
8	21	21	10.781	0.531004	0.620332
9	24	24	10.755	0.504988	0.589939
10	27	27	10.732	0.48199	0.563072
11	30	30	10.714	0.464011	0.542069
12	33	33	10.695	0.445015	0.519877
13	36	36	10.677	0.427003	0.498835
14	39	39	10.663	0.412994	0.482469
15	42	42	10.649	0.398986	0.466104
16	45	45	10.635	0.385009	0.449777
17	48	48	10.617	0.366997	0.428735
18	51	51	10.603	0.352988	0.412369
19	54	54	10.589	0.339013	0.396042
20	57	57	10.582	0.331991	0.38784
21	60	60	10.568	0.318015	0.371513
22	75	75	10.522	0.271986	0.31774
23	90.0003	90.0003	10.481	0.231008	0.269869
24	105	105	10.453	0.20299	0.237138
25	120	120	10.425	0.175006	0.204446
26	135	135	10.402	0.152006	0.177577
27	150	150	10.384	0.133995	0.156537
28	165	165	10.37	0.119986	0.140171
29	180	180	10.356	0.10601	0.123843
30	210	210	10.333	0.0830114	0.0969758
31	240	240	10.319	0.0690029	0.0806108
32	270	270	10.305	0.0549936	0.0642448
33	300	300	10.298	0.0480054	0.056081
34	360	360	10.285	0.0350138	0.0409039
35	420	420	10.275	0.0250071	0.0292138
36	480	480	10.271	0.0210045	0.024538
37	540	540	10.266	0.0159851	0.0186742
38	600	600	10.262	0.0120146	0.0140358

Remedial Investigation/Feasibility Study 11/8/99

Bouwer and Rice Graph of MW-19 SLUG OUT

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York 0.856001 decimal feet at  $t = 0$  sec

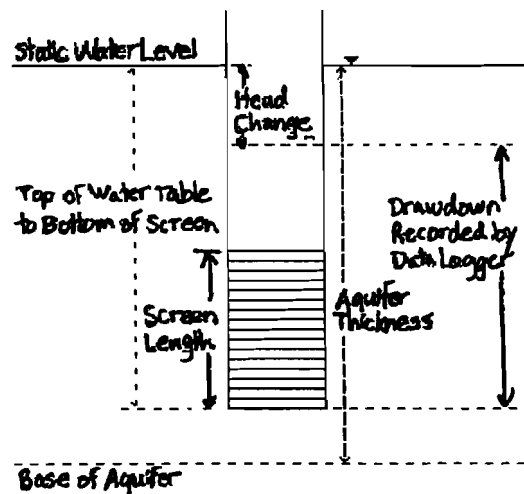


Project Number 1506R-97 for Mr. Thomas Maguire

Analysis by Day Environmental, Inc.

See Also:  
Excluding Points from Analysis  
Text Boxes

The Bouwer and Rice method applies to the aquifer scenario shown in the figure.



The aquifer can be either fully penetrated or partially penetrated by the screened portion of the well. The Bouwer and Rice method is designed for unconfined aquifer scenario's, however use in confined or leaky aquifer scenario's can give reasonable estimates of hydraulic conductivity.

#### Value Substitutions:

In some aquifer scenario's, the Bouwer and Rice formula will result in taking the logarithm of a negative number. The following value substitutions will be made to prevent this occurrence.

1. If the distance from the top of the water table to the bottom of the well screen is greater than the aquifer saturated thickness (screen penetrates below the base of the aquifer), the aquifer saturated thickness is used for the distance from the top of the water table to the bottom of the well screen.
2. If the screen length is greater than the distance from the top of the water table to the bottom of the well screen (screen sticks above the water table), then the top of the water table to the bottom of the well screen is used for the screen length.
3. If the screen length is greater than the aquifer saturated thickness, the aquifer saturated thickness is used for the value of screen length.

Hydraulic conductivity is determined with the equation:

#### Equation 1

$$k = \frac{r_c^2 \ln(R_e/r_w)}{2L_{scr}} \cdot \frac{1}{t} \cdot \ln\left(\frac{H_o}{H_t}\right)$$

**Where:**

$k$  = aquifer hydraulic conductivity

$r_c$  = radius of the well casing

$t$  = time since slug removal or injection

$H_t$  = head in the well at time  $t$

$H_o$  = initial head change from static water level

$R_e$  = radius of influence of the test

$r_w$  = effective radius of the well (radius of well and gravel pack

$L_{scr}$  = length of the well screen or open hole

$\ln(R_e/r_w)$  is determined with one of the equations below:

#### Equation 2

For partially penetrating wells:

$$\ln\left(\frac{R_e}{r_w}\right) = \left[ \frac{1.1}{\ln(Z/r_w)} + \frac{A + B \cdot \ln[(D - Z)/r_w]}{(L_{scr}/r_w)} \right]^{-1}$$

#### Equation 3

For fully penetrating wells:

$$\ln\left(\frac{R_e}{r_w}\right) = \left[ \frac{1.1}{\ln(Z/r_w)} + \frac{C}{L_{scr}/r_w} \right]^{-1}$$

**Where:**

$Z$  = the distance from the water table to the bottom of the well screen or open hole

$D$  = the aquifer thickness

$A$ ,  $B$ , and  $C$  are determined from a graph determined by Bouwer and Rice.

#### Determining Partial or Full Penetration

Equation 2 is used for partially penetrating wells, and Equation 3 is used for wells that fully penetrate the aquifer.

Super Slug automatically determines if the well is fully or partially penetrating and selects the proper parameters. If the well is greater than 95% fully penetrating, Super Slug will assume full penetration and use Equation 3.

### **The Graphical Method**

Super Slug plots a graph of the log of head ratio ( $H_t/H_o$ ) on the vertical axis, and the time on the horizontal axis. A straight line is fit through the data points. The slope and the intercept of the line are used to calculate the time for a head ratio of 0.01. The calculated time, the head ratio 0.01, and the other variables described above are used in Equation 1 to determine hydraulic conductivity.

Note that equation 1 uses a head ratio calculated as  $H_o/H_t$ . All other methods and graphs (including the Bouwer and Rice graph) use a head ratio calculated as  $H_t/H_o$ .

When the graphical method is selected, two pairs of arrow buttons will appear at the bottom of the screen. These buttons are used to control which data points are included in the best fit analysis.

### **Excluding Data Points**

#### **For the end of the test:**

- Data adjustments for the end of the test are controlled by the arrow buttons in the lower right corner of the screen.
- The up arrow key and right arrow button increase the number of points to which the line is fit.
- The down arrow key and left arrow button decrease the number of points to which the line is fit.

#### **For the beginning of the test**

- Data adjustments for the beginning of the test are controlled by the arrow buttons in the lower left corner of the screen.
- Use shift-up arrow key or the left arrow to increase the number of points to which the line is fit.
- Use shift-down arrow key or the right arrow to decrease the number of points to which the line is fit.

Bouwer, H. and R.C. Rice (1976) *A Slug test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells*, Water Resources Research. v 12, pp. 423-428.

Bouwer, H. (1989) *The Bouwer and Rice Slug Test – An Update*, Ground Water, Vol. 27, No.3, pp. 304-309.

Cooper, H.H., Jr., J.D. Bredehoeft, and I.S. Papadopoulos (1967) *Response of a Finite Diameter Well to an Instantaneous Charge of Water*, Water Resources Research, Vol. 3, No. 1.

Ferris, J.C., and D.B. Knowles (1954) *Slug Test for Estimating Transmissibility*, U.S. Geological Survey, Ground Water Note 26, Washington D.C.

Fetter, C.W. (1988) *Applied Hydrogeology*, Merrill Publishing Company.

Hvorslev, M. J. (1951) *Time Lag and Soil Permeability in Ground Water Observations*, U.S. Army Corps of Engineers, Waterways Experiment Station, Washington D.C., Bulletin No. 36.

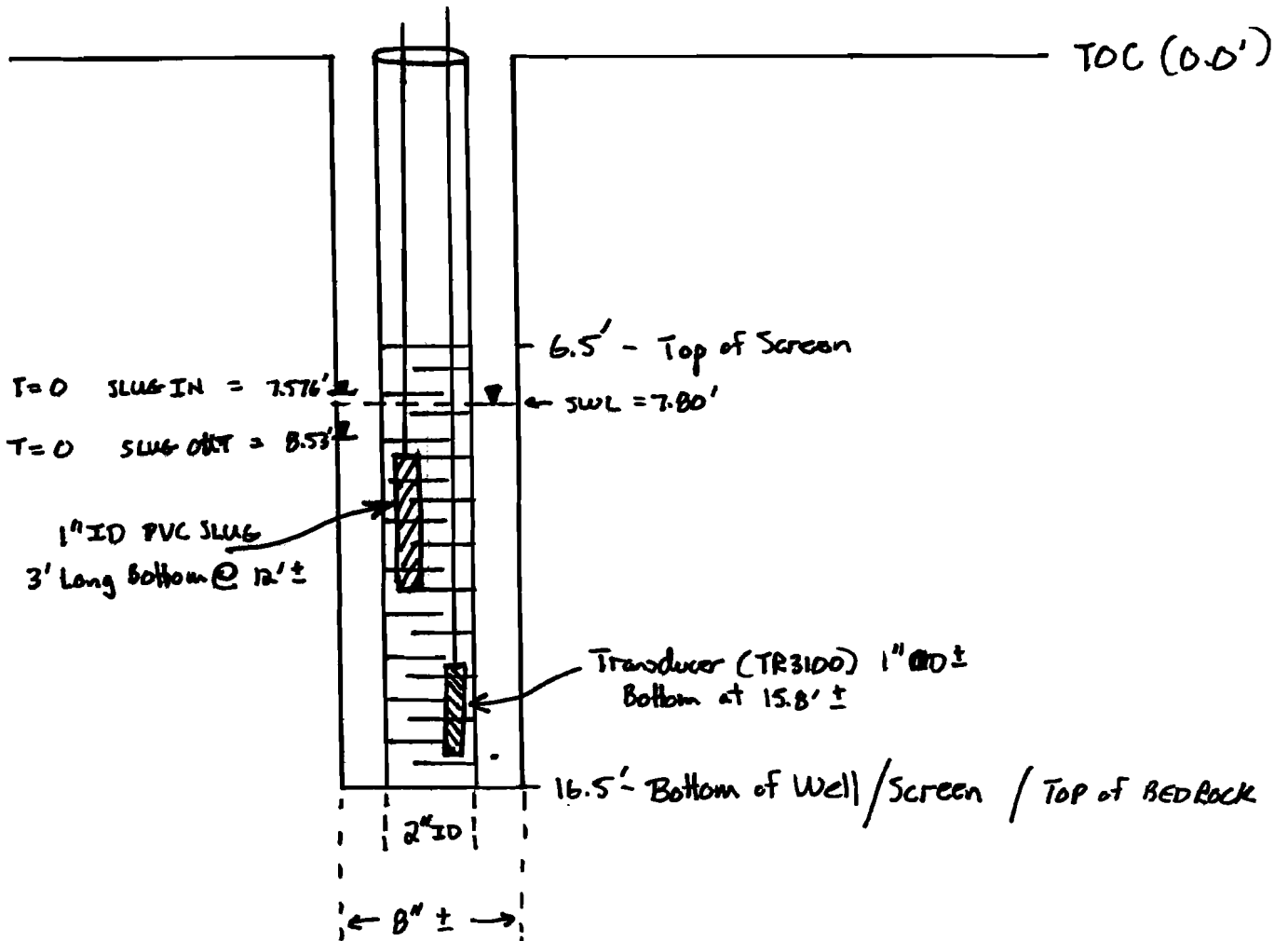
Kemblowski, M.W. and C.L. Klein. (1988) *An Automated Numerical Evaluation of Slug Test Data*, Ground Water, Vol. 26, No. 4.

Kruseman, G.P. and N.A. de Ridder (1991) *Analysis and Evaluation of Pumping Test Data*, International Institute for Land Reclamation and Improvement, Wageningen, The Netherlands.

Papadopoulos, S.S., J.D. Bredehoeft, and H.H. Cooper, Jr. (1973) *On the Analysis of 'Slug Test' Data*, Water Resources Research, Vol. 9, No. 4.



MW-4



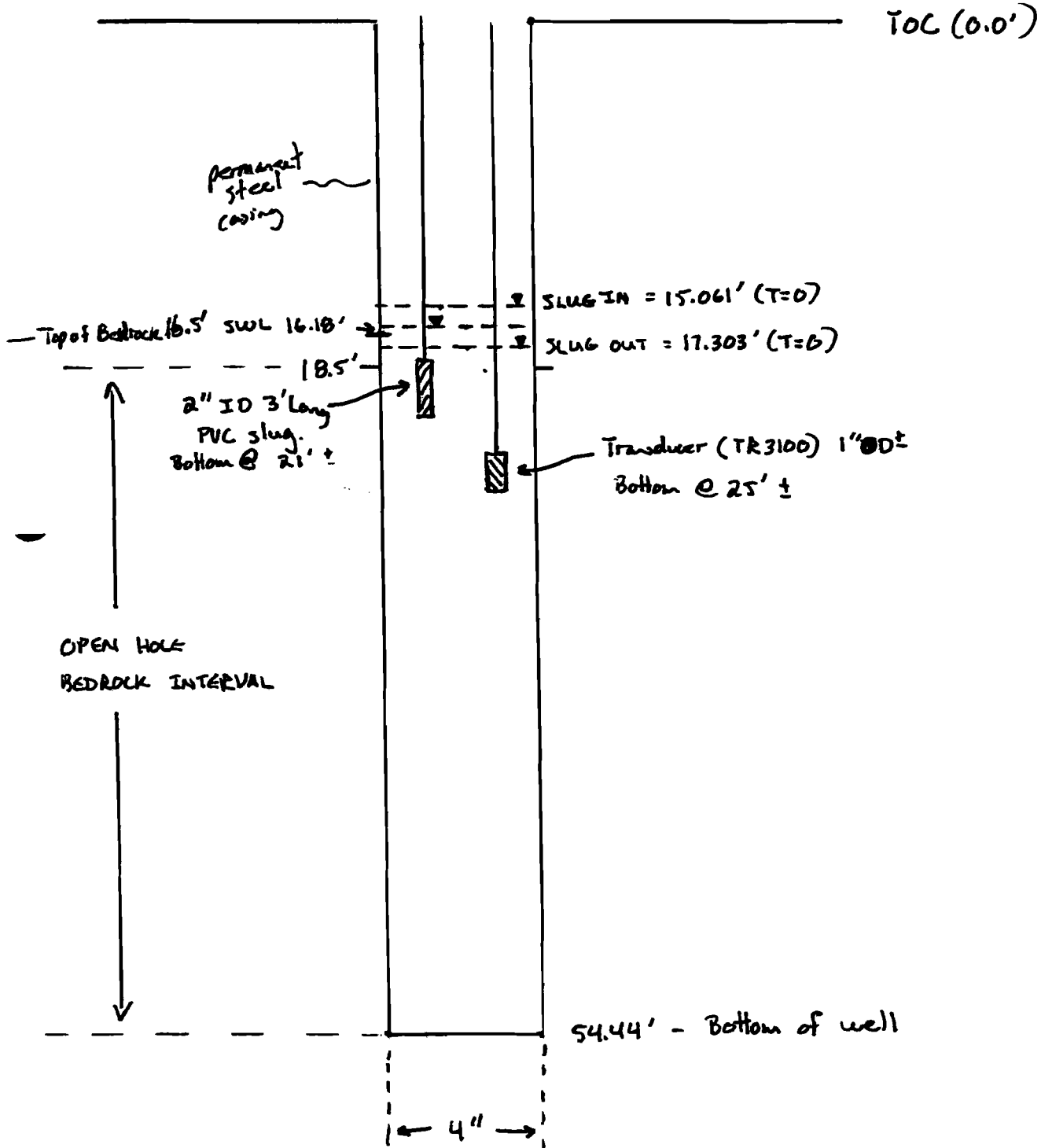
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PROJECT NO.: 1506R-97 / NY5DEC B28085

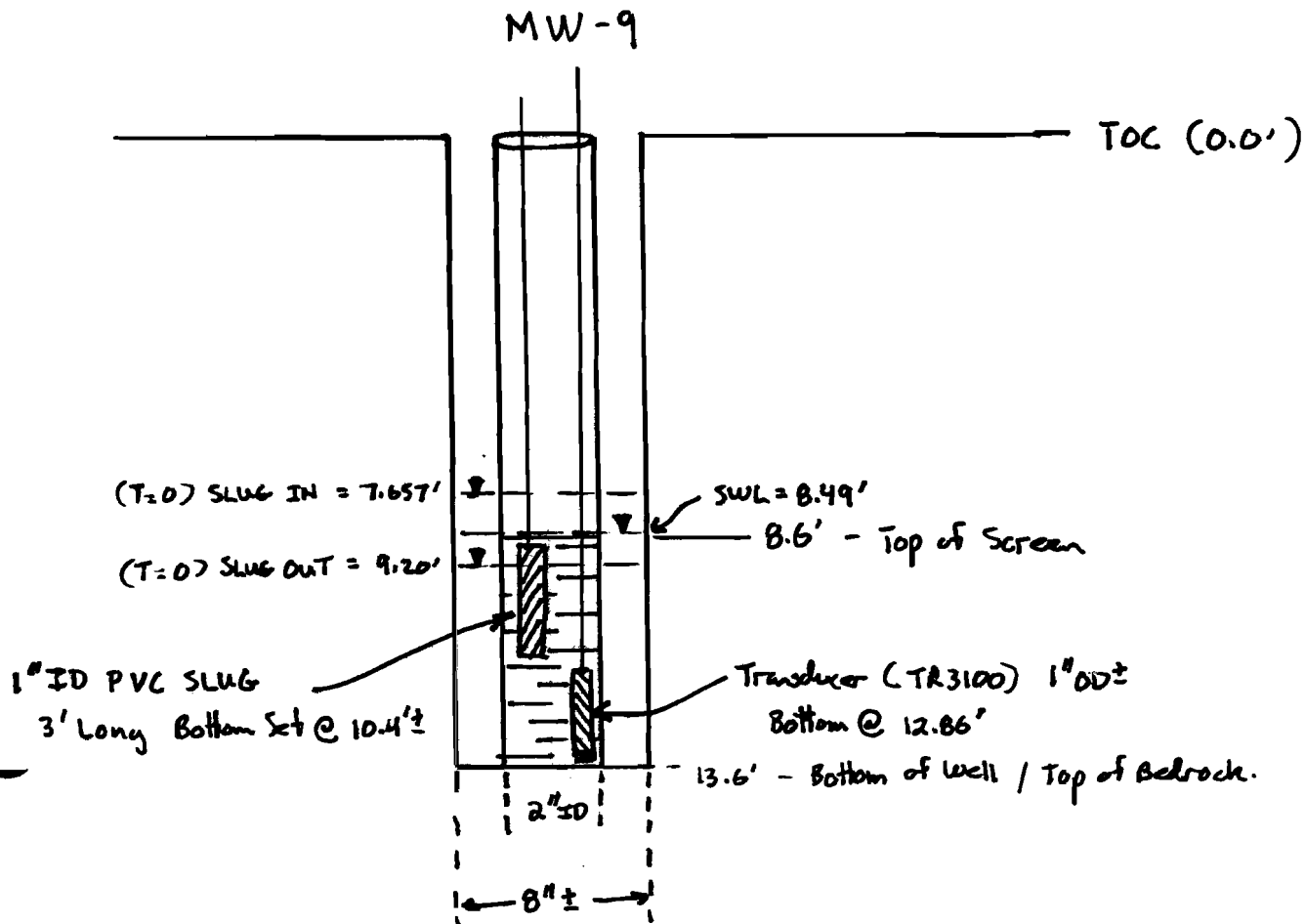
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DESCRIPTION: MW-4 well diagram - K-TEST

MW-7



Vertical Scale: 1" = 8'  
K-Test performed 11/5/99



Vertical Scale : 1" = 4'  
K-Test Performed 11/8/99

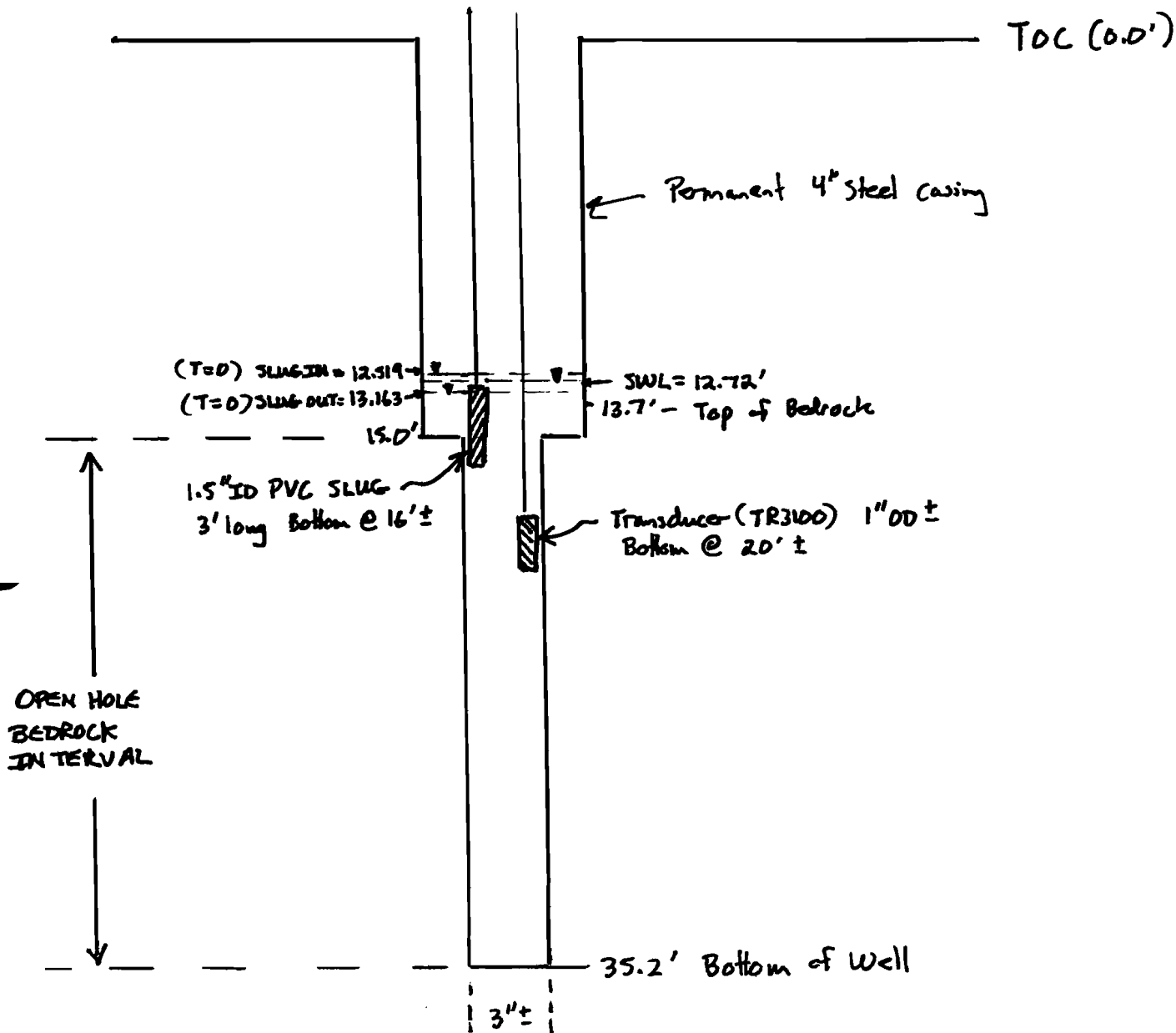
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PROJECT NO.: 1506R-97 / NYDEC 828085

CHKD BY: \_\_\_\_\_ DATE: \_\_\_\_\_

DESCRIPTION: MW-9 well diagram - K-TEST

MW-16

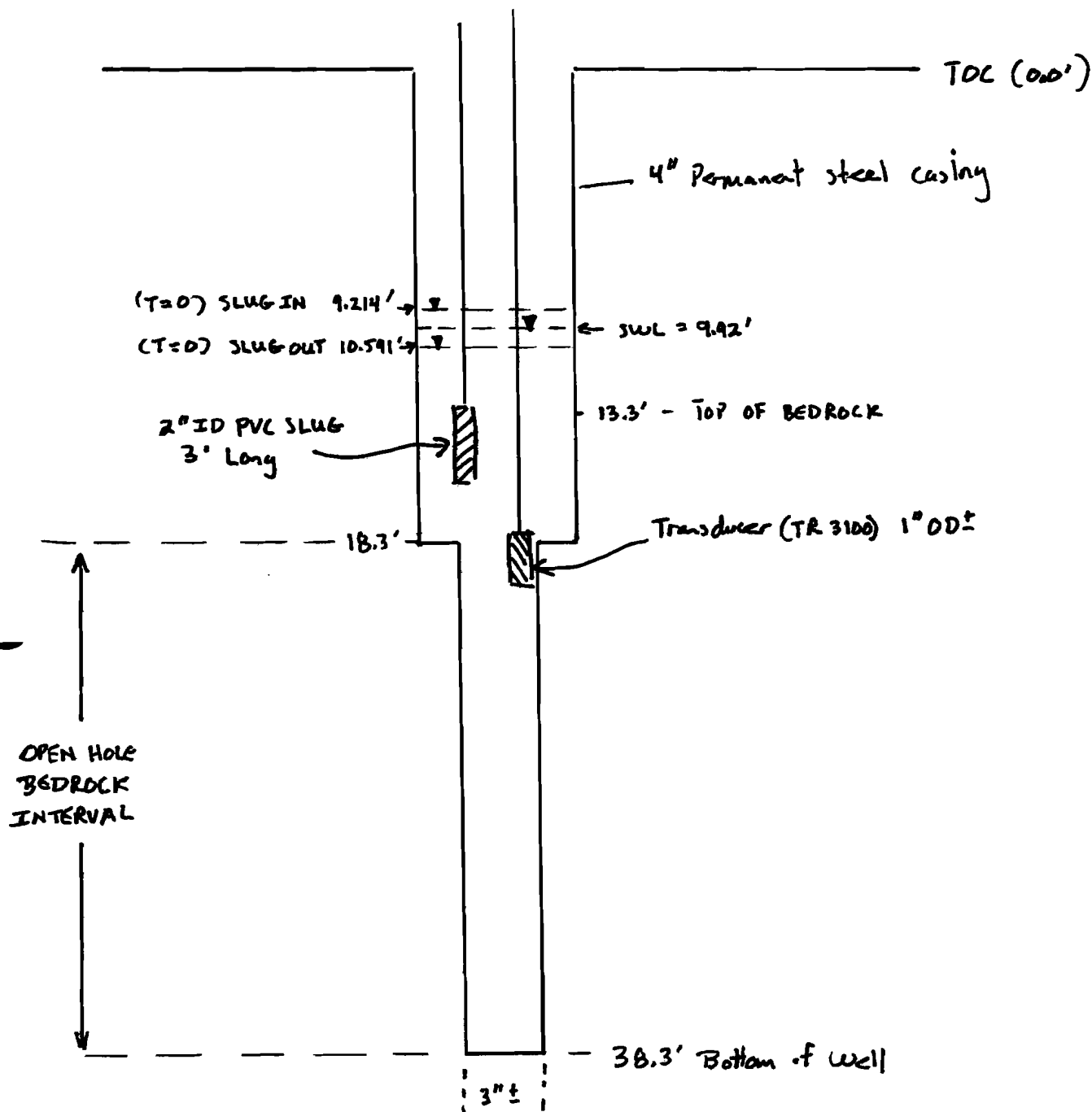


Vertical Scale : 1" = 6'  
K-Test performed 11/5/99

CALC. BY: JAD DATE: 11/23/99 PROJECT NO.: 1506R-97 / NYSDEC 828085

CH'KD BY: \_\_\_\_\_ DATE: \_\_\_\_\_ DESCRIPTION: MW-16 well diagram - K-TEST

MW - 17



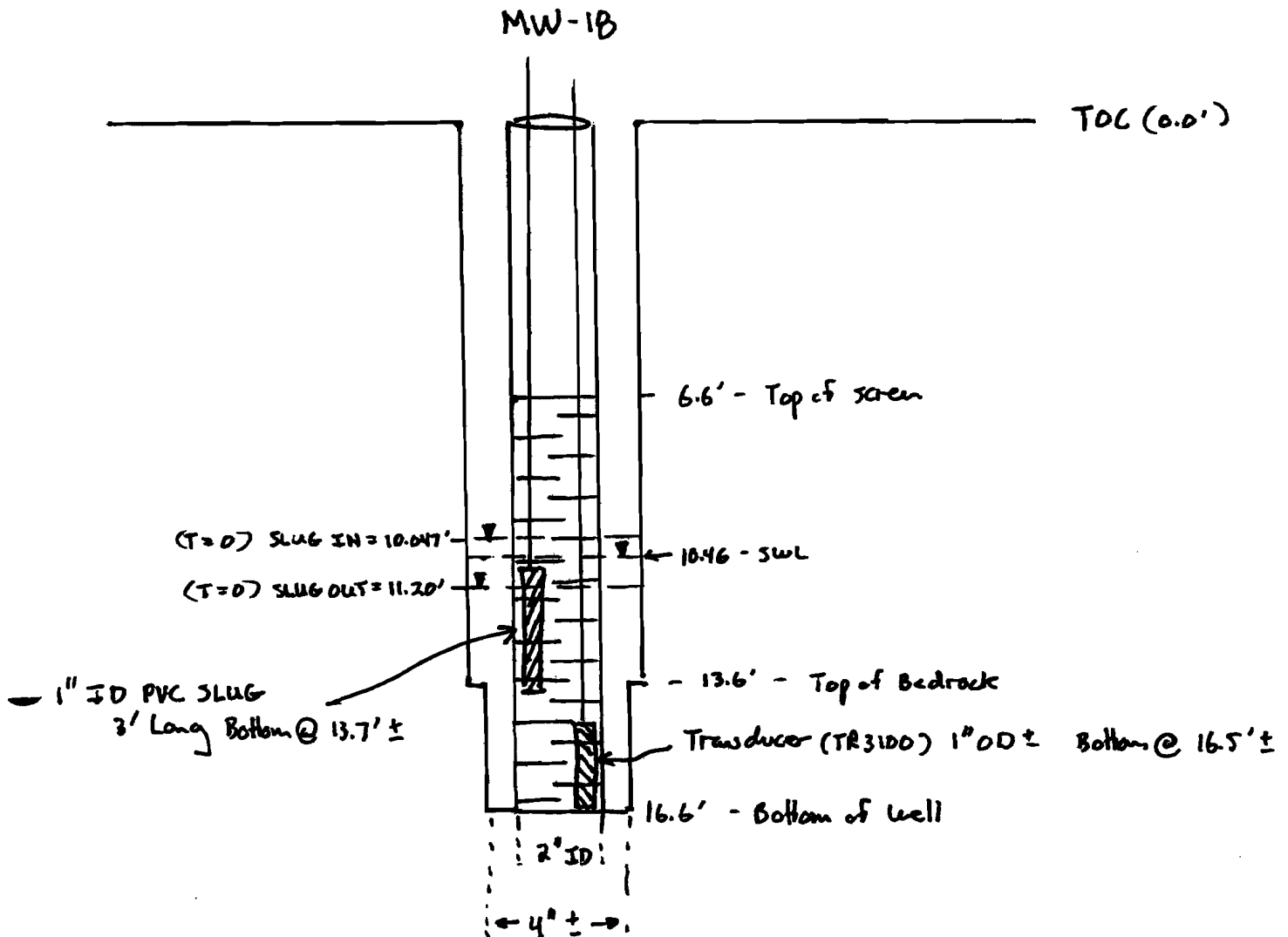
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PROJECT NO: 1506R-97 / NYSDOC B28085

CHKD BY: DATE:

DESCRIPTION: MW-17 well diagram K-TEST



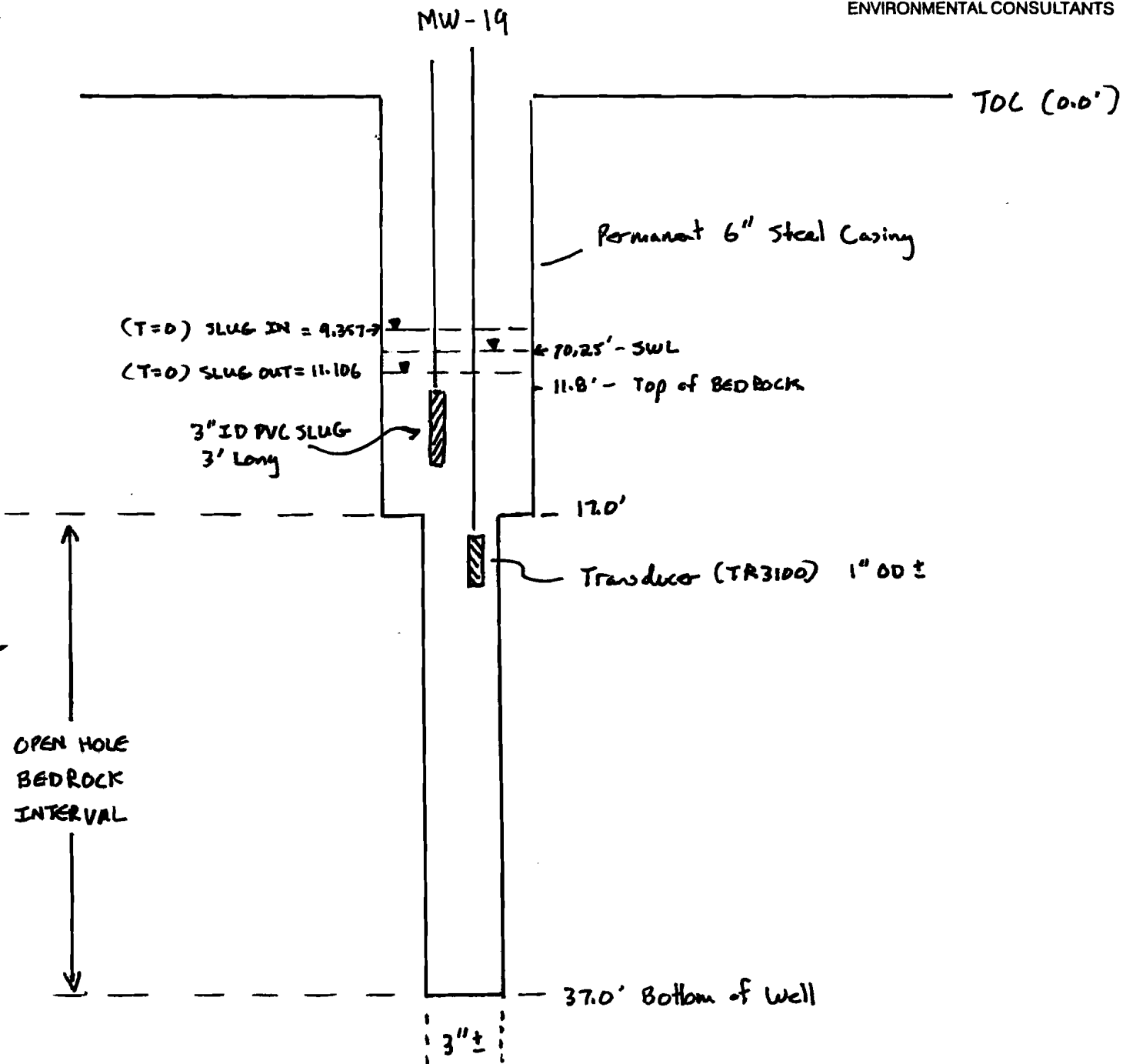
Vertical Scale: 1" = 4'  
K-Test Performed 11/8/99

CALC. BY: JAD DATE: 11/23/99

PROJECT NO: 1506R-97 / NYSDEC 828085

CHK'D BY: DATE:

DESCRIPTION: MW-1B well diagram K-TEST



Vertical Scale: 1" = 6'