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

770 Rock Beach Road 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

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

770 Rock Beach Road 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

2nd Revised Date: February 2001

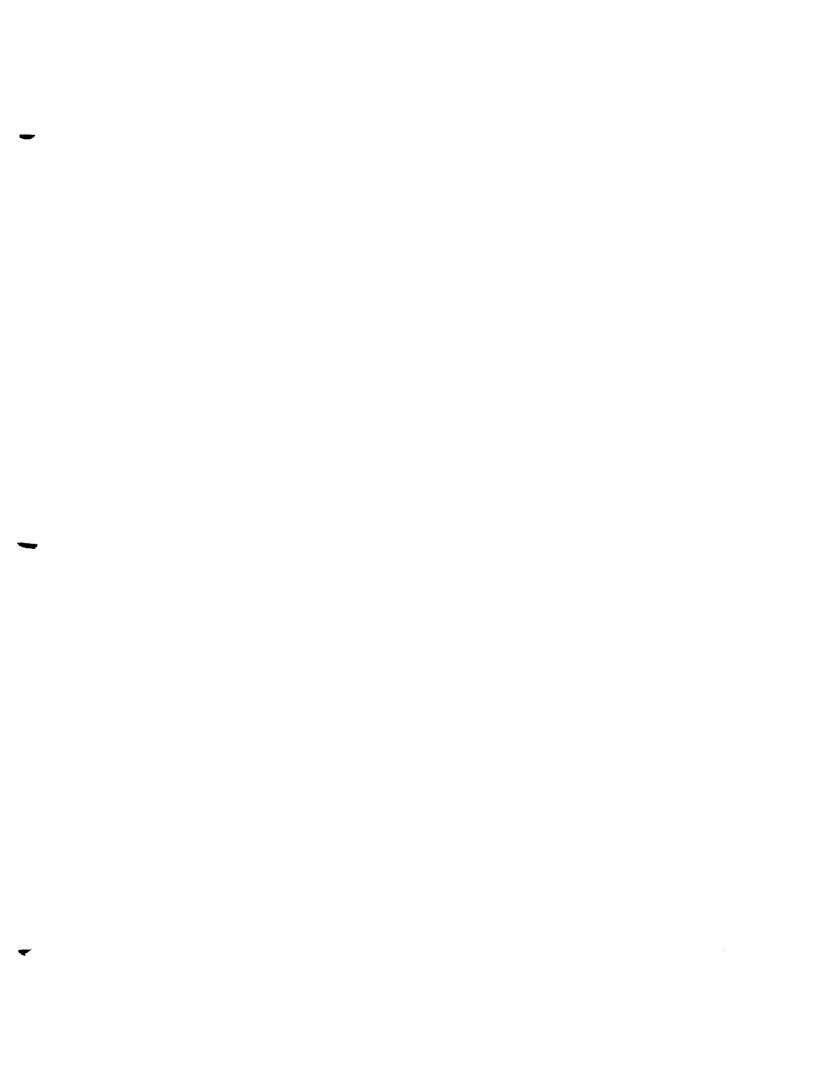


TABLE OF CONTENTS

EXE	CUTIV	E SUMMARY	i	
1.0	INTI	RODUCTION	1	
	1.1	Site Improvements	1	
	1.2	Site History		
	1.3	Previous Environmental Studies and Remedial Measures	1	
	1.4	RI/FS Objectives		
2.0	FIELD STUDIES 2.1 Overburden Test Borings			
	2.1	Overburden Test Borings		
		2.1.1 Test Boring Installation and Sampling Techniques	6	
		2.1.2 Laboratory Analysis of Soil Samples	7	
	2.2	Monitoring Well Installation	8	
		2.2.1 Shallow Overburden/Bedrock Interface well	ð	
		2.2.2 Deep Bedrock Wells	9	
		2.2.3 Well Development	11	
	2.3	Groundwater Sampling and Analysis	12	
		2.3.1 Sampling Protocol	12	
		2.3.2 NAPL Sampling	14	
		2.3.3 Laboratory Analysis	14	
	2.4	Basement Sump Evaluation	15	
	2.5	Groundwater Potentiometric Maps	16	
	2.6	Quality Assurance/Quality Control (QA/QC) and Reporting		
	2.7	Hydraulic Conductivity Testing		
	2.8	Groundwater Sampling Using Double Packer	19	
	2.9	Soil Sampling for Chromium Analysis on Adjoining Property		
3.0	REMEDIAL INVESTIGATION FINDINGS			
	3.1	Environmental Monitoring Observations	22	
	3.2	Geology 3.2.1 Site Specific Coology Information	23	
		3.2.1 Site-Specific Geology Information	23	
		3.2.2 Off-Site/Regional Geology Information		
	3.3	Hydrogeology	24	
		3.3.1 Site-Specific Hydrogeology Information	24	
		3.3.2 Off-Site/Regional Hydrogeology Information	28	
	3.4	Analytical Test Results		
		3.4.1 Soil Samples		
		3.4.2 Groundwater Samples	77.7	
		3.4.3 Evaluation of Cumulative VOC and Chromium Groundwater		

4.0	CONCLUSIONS					
	4.1 N	ature and E	extent of COCs	42		
	4.2 P	otential Sou	rces of COCs	44		
	4.3 F	ate and Tra	nsport of COCs	45		
	4.4 C	Contaminant	s Attributable to Off-Site Sources	46		
	4.5 Hydrogeologic Conditions and Evaluation of Current Remedial System					
5.0	RECOMMENDATIONS					
REF	ERENCES			49		
ACR	ONYM LI	ST		.50		
APP	PENDICE	E <u>S</u>				
APP	ENDIX A	Drawings				
		RI-1	Project Locus Map			
		RI-2	Site Plan			
		RI-3	Site Plan with Monitoring Well and Test Boring Locations			
		RI-3.1	Site Plan with Peak PID/FID Readings on Soil at Test Locations	3		
		RI-4	Site Plan with Peak Total VOCs Detected in Soil Samples			
		RI-5	Site Plan with Peak Chromium Detected in Soil Samples			
		RI-6	Site Plan with Peak Total VOCs Detected in Groundwater Samp	oles		
		RI-7	Site Plan with Peak Chromium Detected in Groundwater Sampl	es		
		RI-8	Groundwater Elevations for January 6, 1999			
		RI-8A	Overburden and/or Shallow Bedrock Monitoring Wells (1/6/99)	t		
		RI-8B	Deep Bedrock Monitoring Wells (1/6/99)			
		RI-9	Groundwater Elevations for April 5, 1999			
		RI-9A	Overburden and/or Shallow Bedrock Monitoring Wells (4/5/99))		
		RI-9B	Deep Bedrock Monitoring Wells (4/5/99)			
		RI-10	Groundwater Elevations for December 17, 1998			
		RI-11	Groundwater Elevations for December 21, 1998			
		RI-12A	Geologic Cross Section A-A' (4/5/99)			
		RI-12B RI-OS1	Geologic Cross Section B-B' (4/5/99) Off-Site Locations with Peak Chromium Detected in Soil Samp	les		
APPENDIX B Test Boring Logs and Well Logs						
APP	ENDIX C	Tables				
		Table 1	Soil Sample Log			
		Table 2	Groundwater Sample Log			
		Table 3	Sump Test SWL Data (2/19/99)			

DAY ENVIRONMENTAL, INC.

Table 4	Sump Test SWL Data (4/5/99 & 4/6/99)		
Table 5	Static Water Level Measurements (1/6/99)		
Table 6	Static Water Level Measurements (4/5/99)		
Table 7	Non-Aqueous Phase Liquid (NAPL) Monitoring and Static Water		
	Level Measurements (12/17/98)		
Table 8	Static Water Level Measurements (12/21/98)		
Table 9	Peak PID/FID Readings on Headspace Air Above Soil or Bedrock		
	Samples		
Table 10A	Volatile Organic Compound Test Results - Soil Samples		
	Volatile Organic Compound Test Results - Soil Samples		
Table 11	Chromium Test Results - Soil Samples		
Table 12	Target Analyte List Metal Test Results - Soil Samples		
Table 13	Semi-Volatile Organic Compound Test Results - Soil Samples		
Table 14	Polychlorinated Biphenyls/Pesticide Test Results - Soil Samples		
Table 15	Volatile Organic Compound Test Results - December, 1998		
	Groundwater Samples		
Table 16	Chromium Test Results - December, 1998 Groundwater Samples		
Table 17	Target Analyte List Metal Test Results - December, 1998		
	Groundwater Samples		
Table 18	Semi-Volatile Organic Compound Test Results - December, 1998		
	Groundwater Samples		
Table 19	Polychlorinated Biphenyls/Pesticide Test Results - December,		
	1998 Groundwater Samples		
Table 20	Cumulative VOC Test Results - Groundwater Samples		
Table 21	Cumulative Chromium Test Results - Groundwater Samples		
Table 22	Hydraulic Conductivity Test Results		
Table 23	Volatile Organic Compound Test Results - December 1999		
	Groundwater Samples from Packered Zones (MW-17 & MW-21)		
Table 24	Total and Selected Volatile Organic Compound Test Results -		

October 2000 Groundwater Samples from Passive Diffusion

APPENDIX D Well Development Logs, Well Sampling Logs, and Groundwater Packer Sampling Purge Logs

Samplers Placed In Well MW-22

- APPENDIX E Data Usability Summary Report (DUSR)
- APPENDIX F Pertinent Portions of Analytical Laboratory Reports
- APPENDIX G Hydraulic Conductivity Test Data

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 onsite 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 though 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 included alconox (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 precleaned 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 dryncss. 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 fourhour 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 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, 3rd 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_c) entered in the model was based on the following equation as recommended by the NYSDEC: $r_c = [r^2(1-n) + nR^2]^{1/2}$; 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'), 1506-21(28-33'), 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., Lightnin 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 deposits.

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 (3.39x10⁻⁴ cm/sec) and 0.24 feet/day (8.61x10⁻⁵ cm/sec), respectively.
- The hydraulic conductivity for the overburden/bedrock well MW-18 was 23.0 feet/day (8.11x10⁻³ cm/sec).
- The hydraulic conductivities for bedrock wells MW-7, MW-16, MW-17, and MW-19 were 0.75 feet/day (2.63x10⁻⁴ cm/sec), 59.0 feet/day (2.08x10⁻² cm/sec), 0.42 feet/day (1.48x10⁻⁴ cm/sec), and 4.61 feet/day (1.63x10⁻³ 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 ≤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

JD3745 / 1506R-97

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 openhole 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

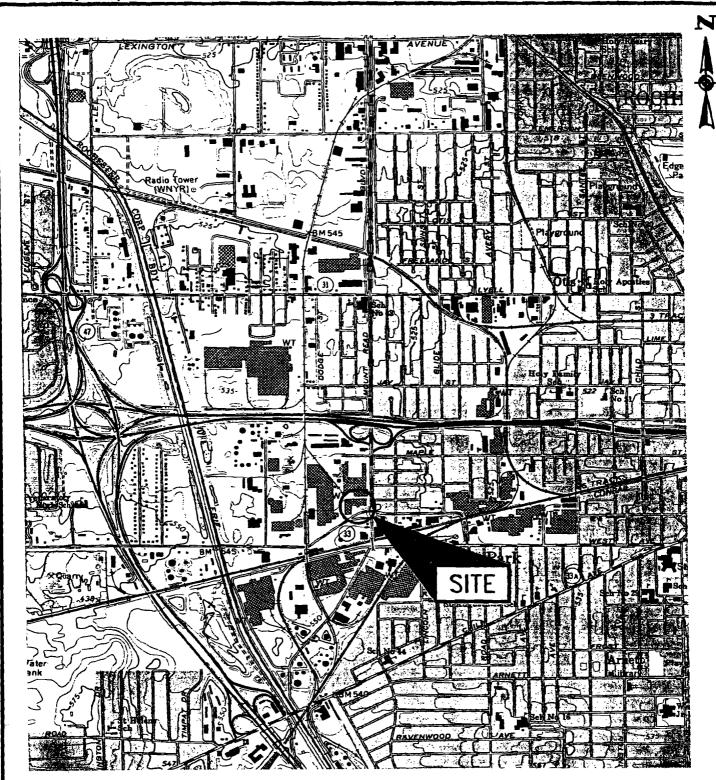
VOC Volatile Organic Compound

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

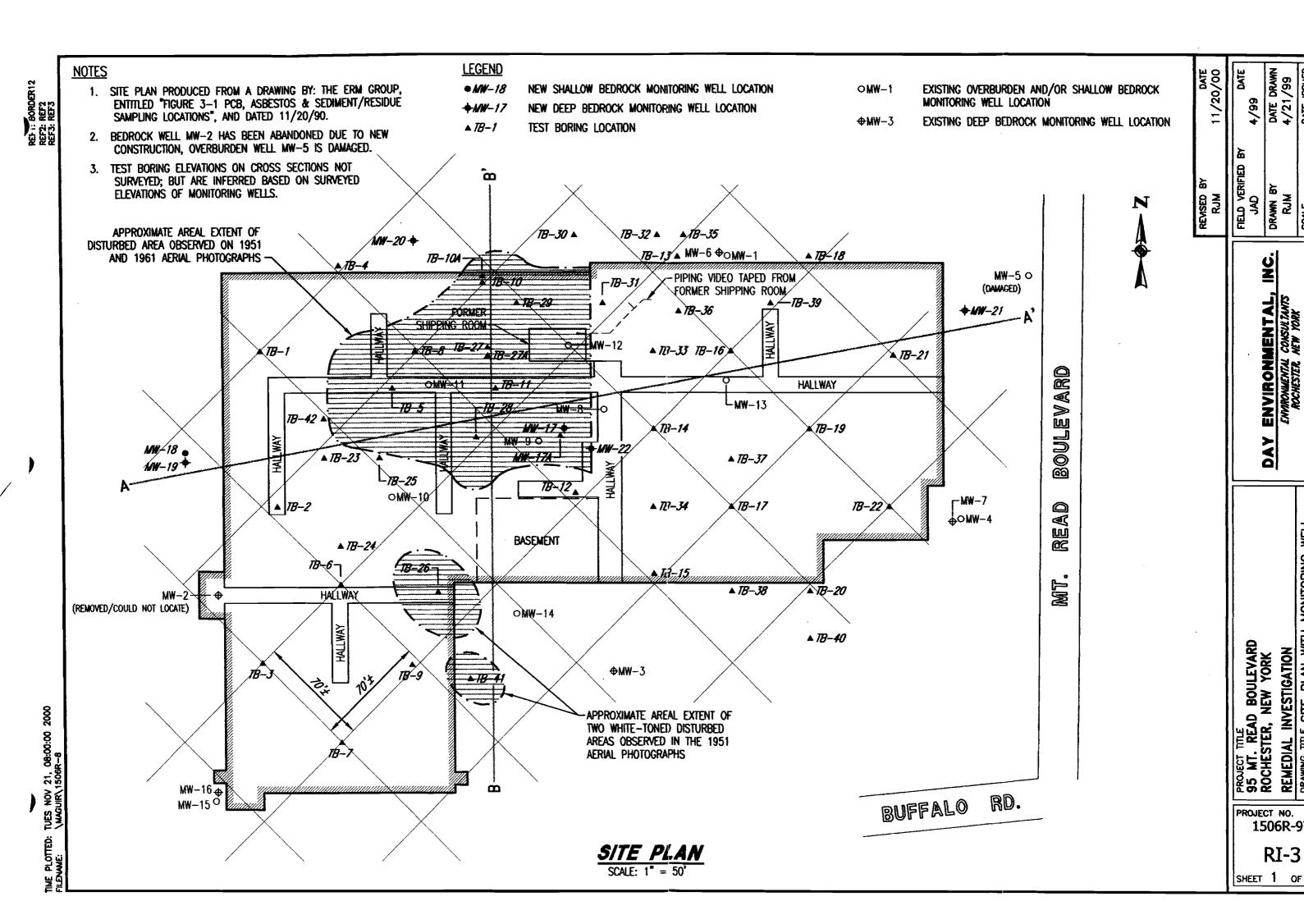
PROJECT LOCUS MAP

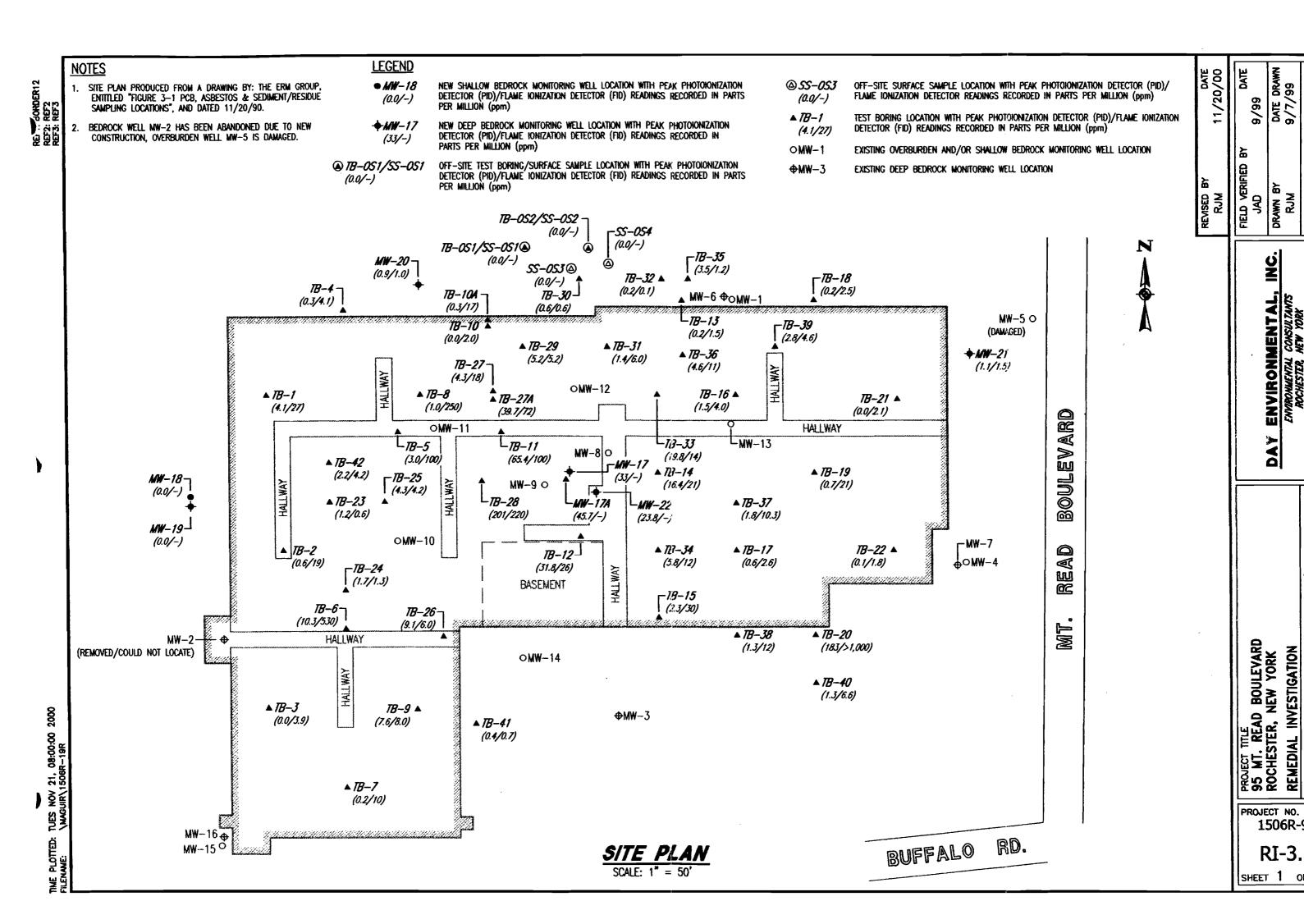
DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK DATE 4/21/99

DRAWN BY

SCALE 1" = 2000



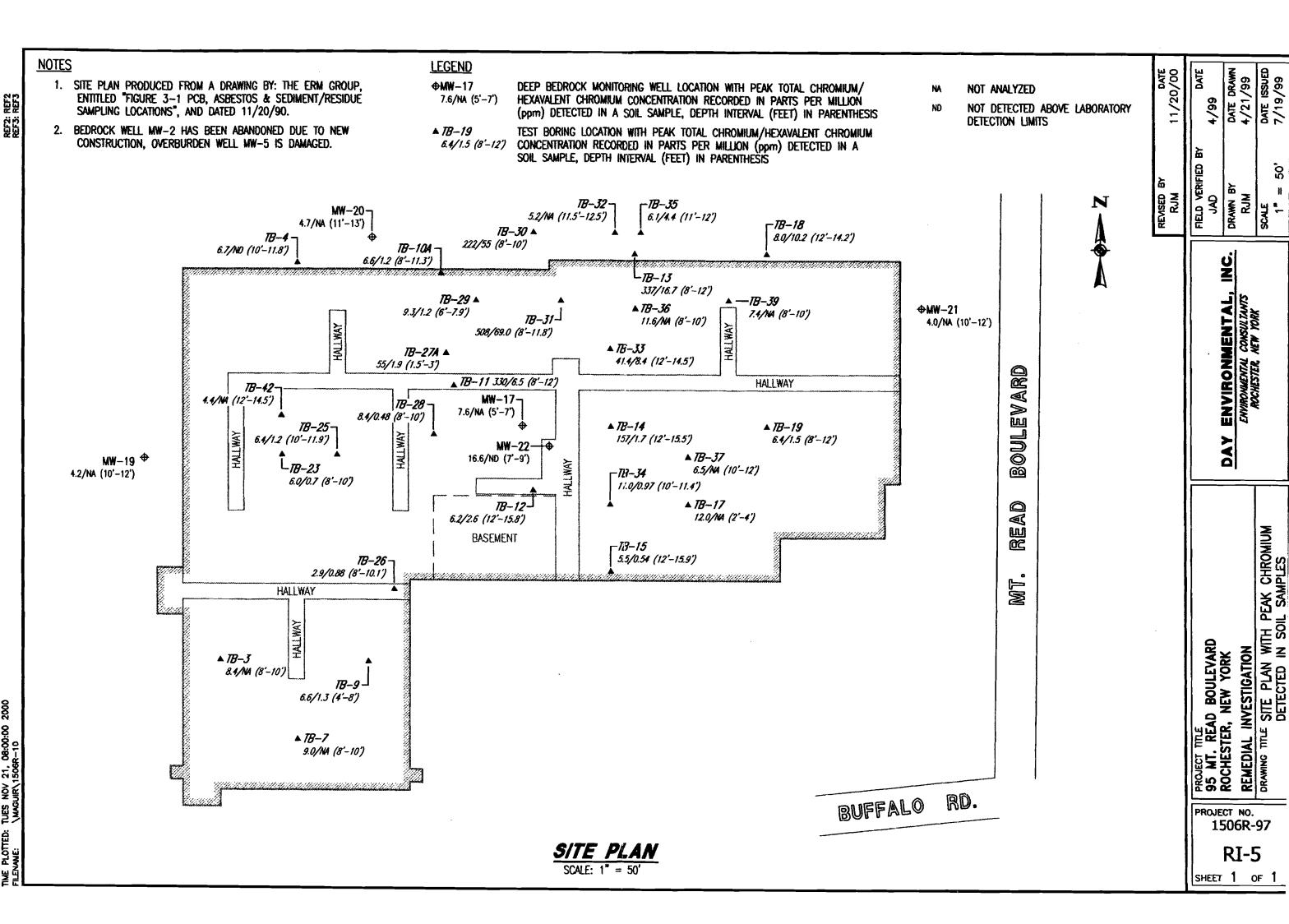


NOTES LEGEND 1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATIONS", AND DATED 11/20/90. DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL VOC'S RECORDED IN PARTS PER BILLION (ppb) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS **⊕MW**-17 881 (11'-13') 2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW *▲ 18-38* TEST BORING LOCATION WITH PEAK TOTAL VOC'S RECORDED IN PARTS CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED. 40 (8'-12') PER BILLION (ppb) DETECTED IN A SOIL SAMPLE, DEPTH INTERVAL (FEET) IN PARENTHESIS FIELD VERIFII --*TB-39* 50 (10'-12') *▲ 18-8* 3 (12'-15') BOULEVARD ▲ TB-11 1,052 (12'-14.5') HALLWAY *18-5* -MW-17-8 (8'-12') 881 (11'-13') **▲ 727-14** DAY 14 (8'-12') MW-17A-*▲ 1B-37* HALLWAY 26 (5'-7') 50 (8'-10') READ BASEMENT TB-6-3 (8'-9.3') TB-26-68 (4'-8') *▲ TB-38* **▲ TB-20** HALLWAY 40 (8'-12') 50,866 (8'-10') PROJECT THE
95 MT. READ BOULEVARD
ROCHESTER, NEW YORK
REMEDIAL INVESTIGATION *▲ 1B-40* 32 (8'-11.5') 21, 08:00:00 2000 1506R-9 Buffalo SCALE: 1" = 50'

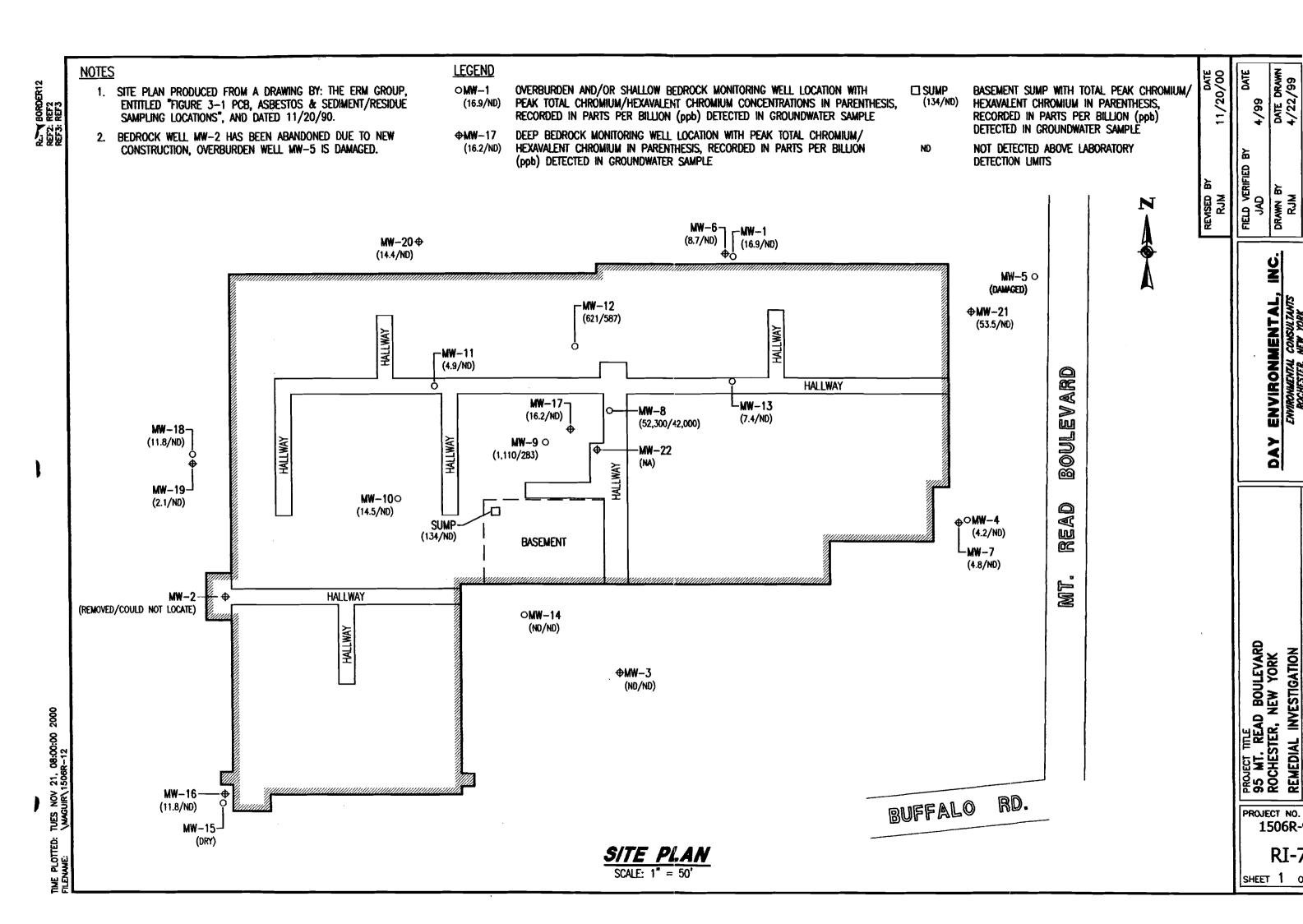
PROJECT NO.

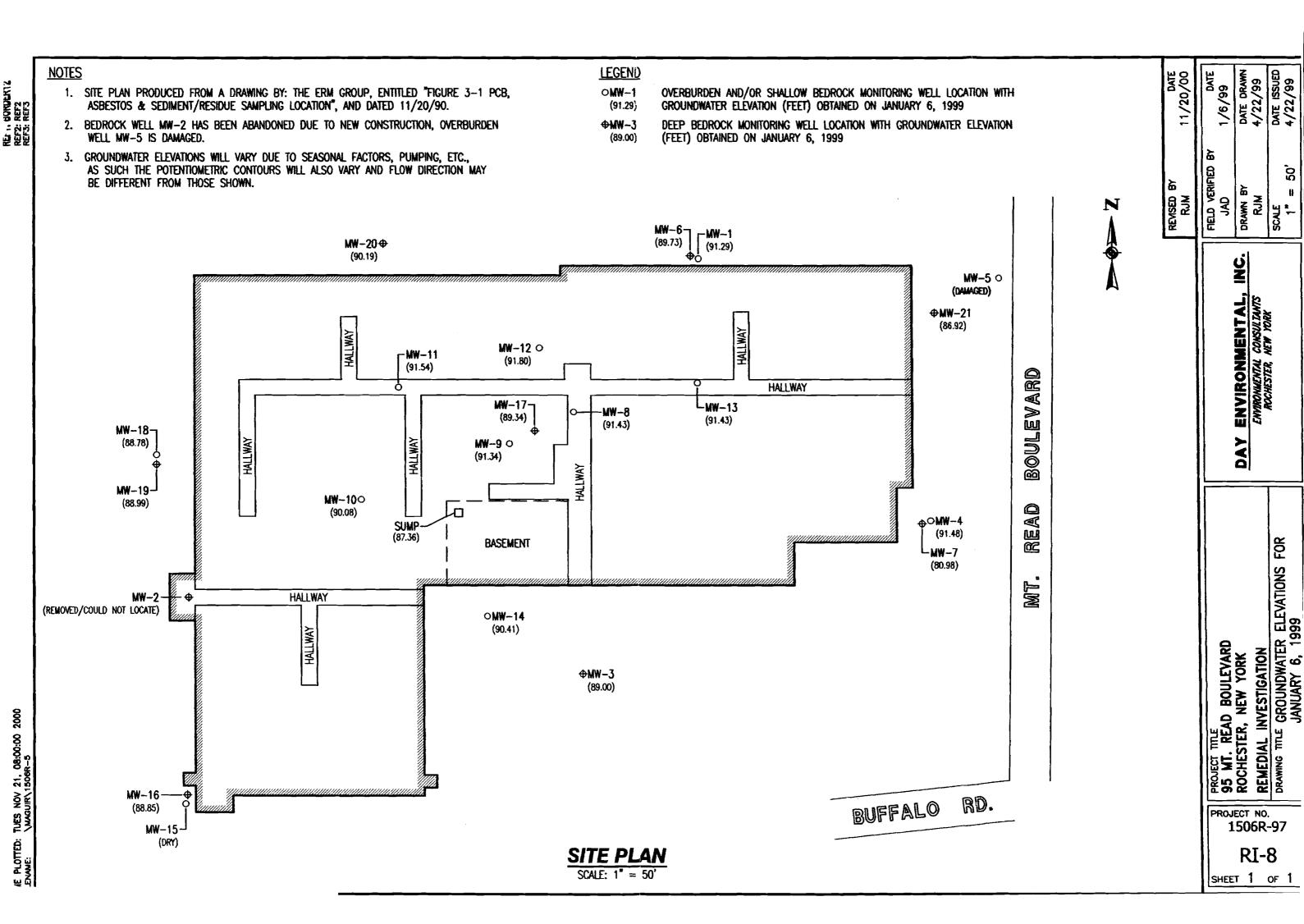
1506R-9

SHEET 1 OF



LEGEND NOTES DATE 11/20/00 DATE DRAWN 4/21/99 OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL VOC'S IN PARENTHESIS, RECORDED IN PARTS PER BILLION (ppb) ☐ SUMP OMW-14 BASEMENT SUMP WITH TOTAL VOC'S 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. IN PARENTHESIS, RECORDED IN PARTS (10,750)(47) DETECTED IN GROUNDWATER SAMPLE PER BILLION (ppb) DETECTED IN GROUNDWATER SAMPLE **⊕MW**-17 DEEP BEDROCK MONITORING WELL LOCATION WITH PEAK TOTAL VOC'S IN 2. BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW PARENTHESIS, RECORDED IN PARTS PER BILLION (pob) DETECTED IN CONSTRUCTION, OVERBURDEN WELL MW-5 IS DAMAGED. NOT DETECTED (9,070) (ND) GROUNDWATER SAMPLE MW-20 ⊕ (14) INC. MW-5 0 (DAMAGED) ENVIRONMENTAL, ENVIRONMENTAL, ENVIRONMENTAL CONSULTANTS -MW-12 **⊕MW-21** (4,880)(144) -MW-11 (209)HALLWAY MW-17--MW-13 BOULEV NW-8 (9,070) (131) (2,140)MW-18-DAY HALLWAY MW-9 0 (130)-MW-22 (155,969) (NA) MW-19-MW-100 (ND) READ (20,340) ⊕OMW-4 SUMP-(10,750) (14) BASEMENT -MW-7 (12) HALLWAY MW-2 (REMOVED/COULD NOT LOCATE) OMW-14 (45) PROJECT TITLE
95 MT. READ BOULEVARD
ROCHESTER, NEW YORK
REMEDIAL INVESTIGATION **⊕MW-3** (8) 08:00:00 2000 MW-16 S S RD. BUFFALO (42)PROJECT NO. 1506R-MW-15-(DRY) **SCALE:** 1" = 50' SHEET 1 C



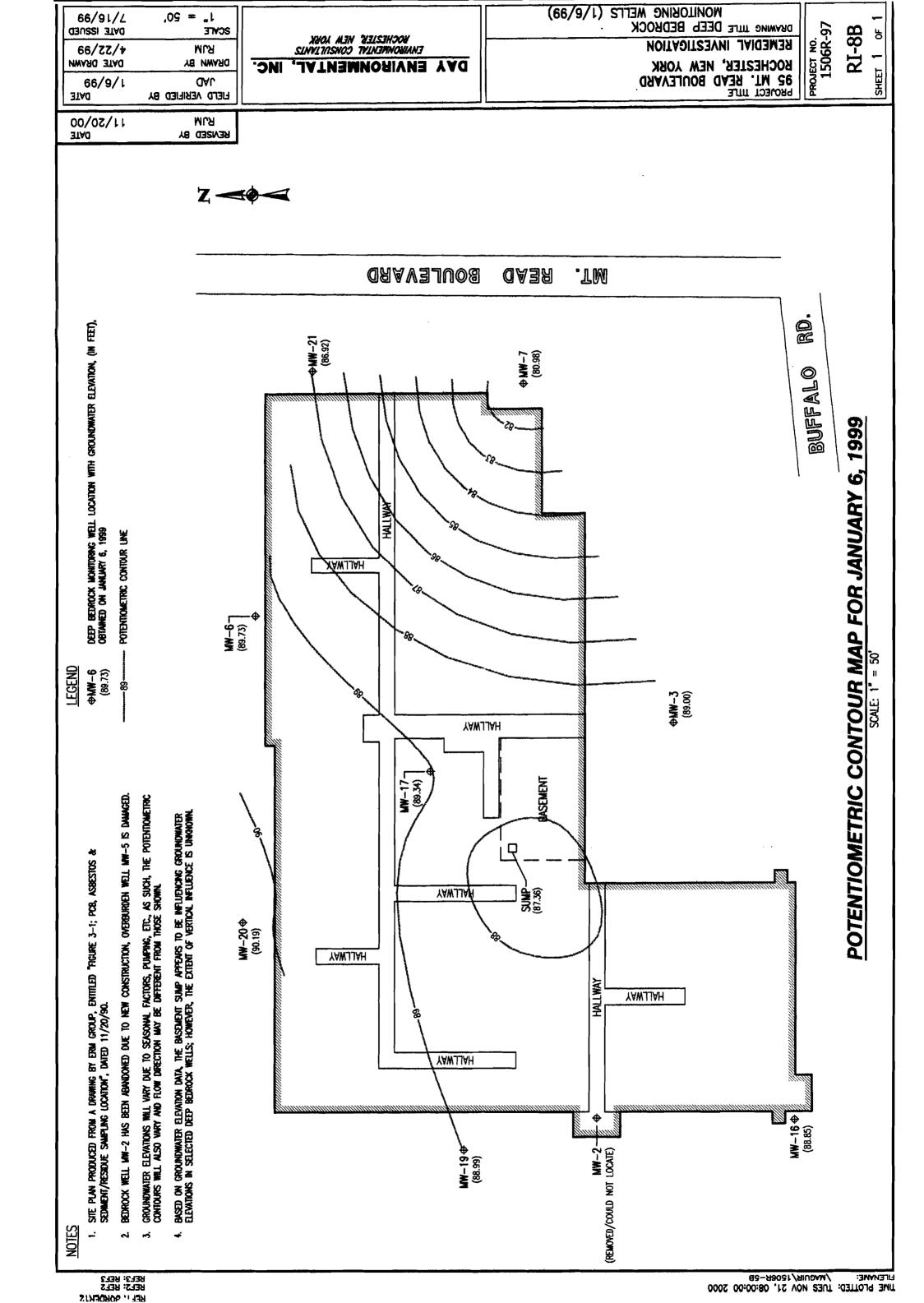


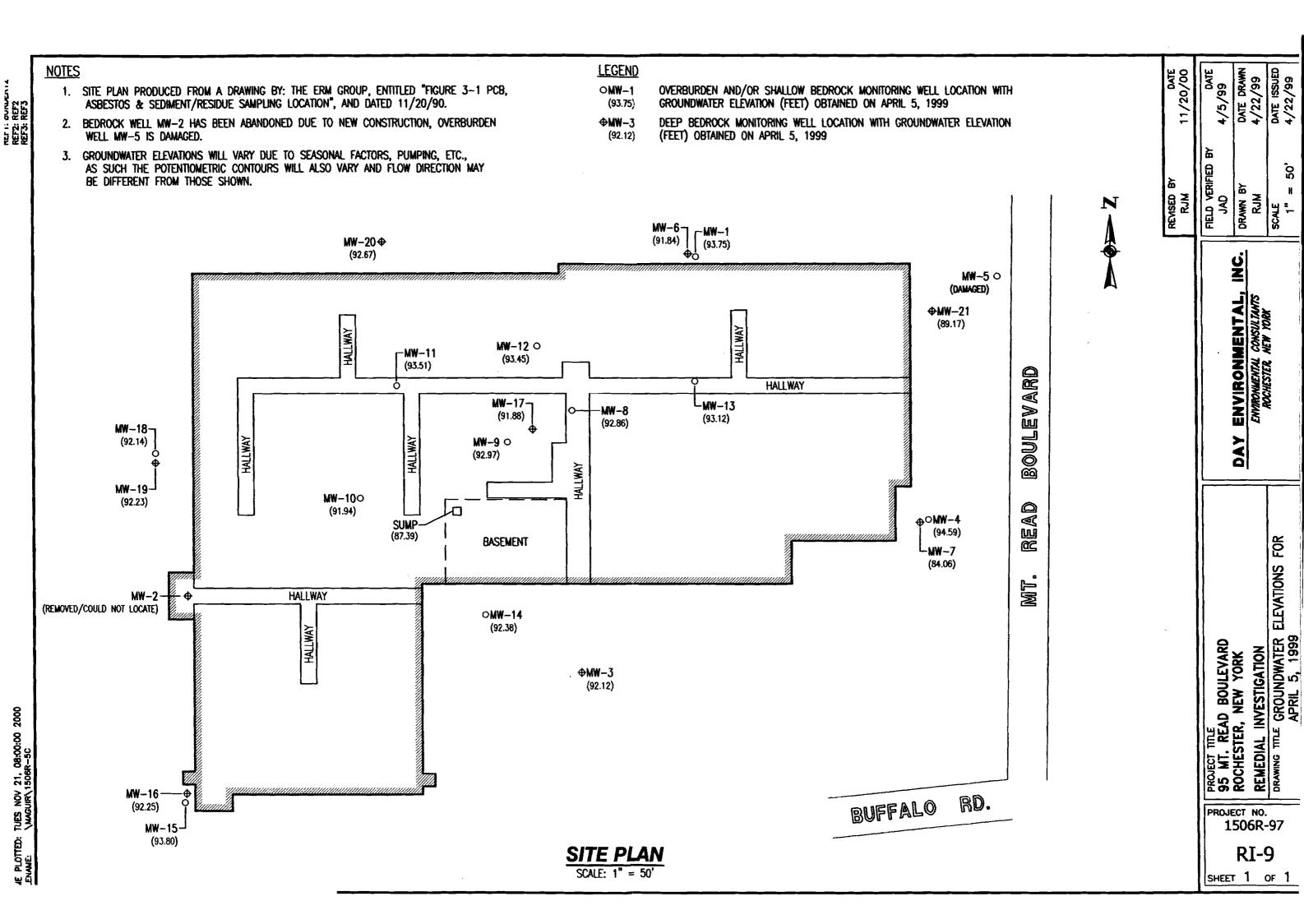
NOTES **LEGEND** DATE 1/6/99 DATE DRAWN 4/22/99
DATE ISSUED 7/16/99 DATE 11/20/00 1. SITE PLAN PRODUCED FROM A DRAWING BY: THE ERM GROUP, ENTITLED "FIGURE 3-1 PCB, ASBESTOS & SEDIMENT/RESIDUE SAMPLING LOCATION", AND DATED 11/20/90. OVERBURDEN AND/OR SHALLOW BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JANUARY 6, 1999 OMW-1 (91.29) BEDROCK WELL MW-2 HAS BEEN ABANDONED DUE TO NEW CONSTRUCTION, OVERBURDEN POTENTIOMETRIC CONTOUR LINE 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. FIELD VERIFI REMSED RJM DRAWN E -**MW-1** (91.29) MW-5 ○ (DAMAGED) ENVIRONMENTAL MW-12 0 -WW-11 (91.80) (91.54) ARD HALLWAY -MW-13 MW-8 BOULEV -WW-9 (91.43) (91.43) (91.34) DAY MW-180 (88.78) HALLWAY REMEDIAL INVESTIGATION

DRAWING TITLE OVERBURDEN AND/OR SHALLOW

BEDROCK MONITORING WELLS (1/6/99) READ OMW-4 (91.48)(90.08)BASEMENT HALLWAY OMW-14 (90.41) PROJECT TITLE 95 MT. READ BOULEVARD ROCHESTER, NEW YORK TIME PLOTTED: TUES NOV 21, 08:00:00 2000 PILENAME: \MAGUIR\1508R-5A RD. Buffalo MW-150 PROJECT NO. (DRY) 1506R-97 POTENTIOMETRIC CONTOUR MAP FOR JANUARY 6, 1999

SCALE: 1" = 50' RI-8A SHEET 1 OF 1





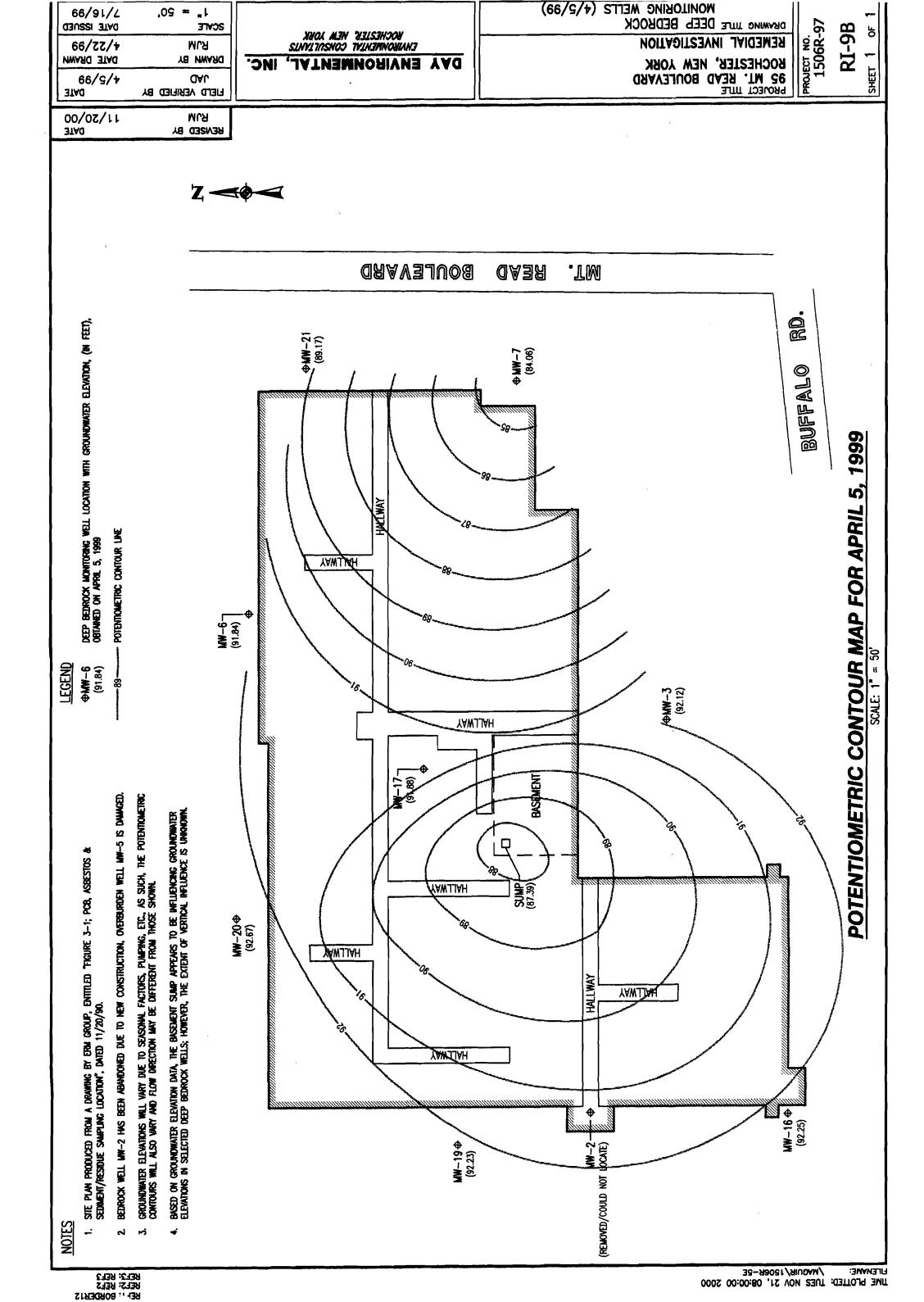
4.OTTED: TUES NOV 21, 08:00:00 2000 WE: \MAGUIR\1508R-5D

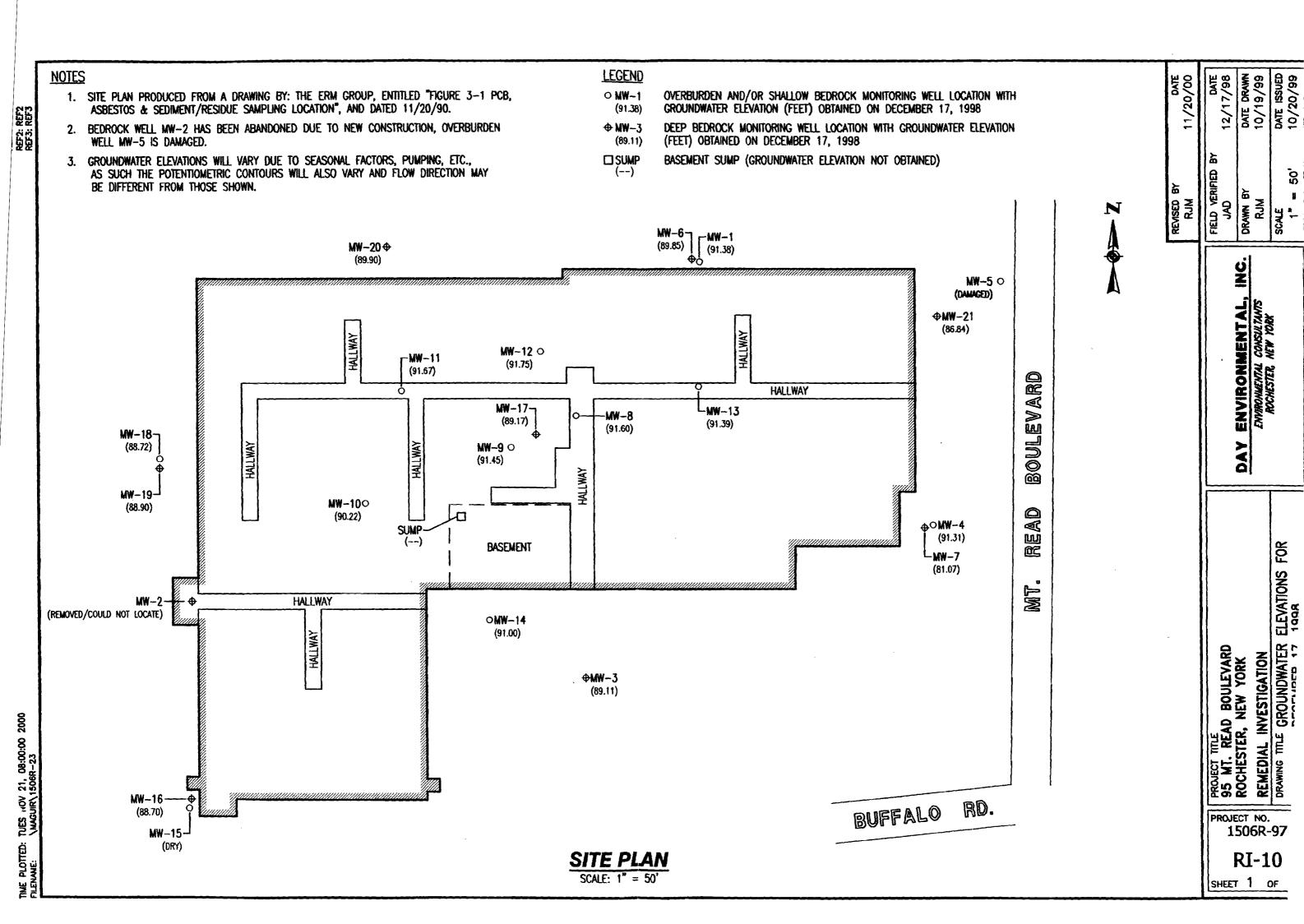
SHEET 1 OF

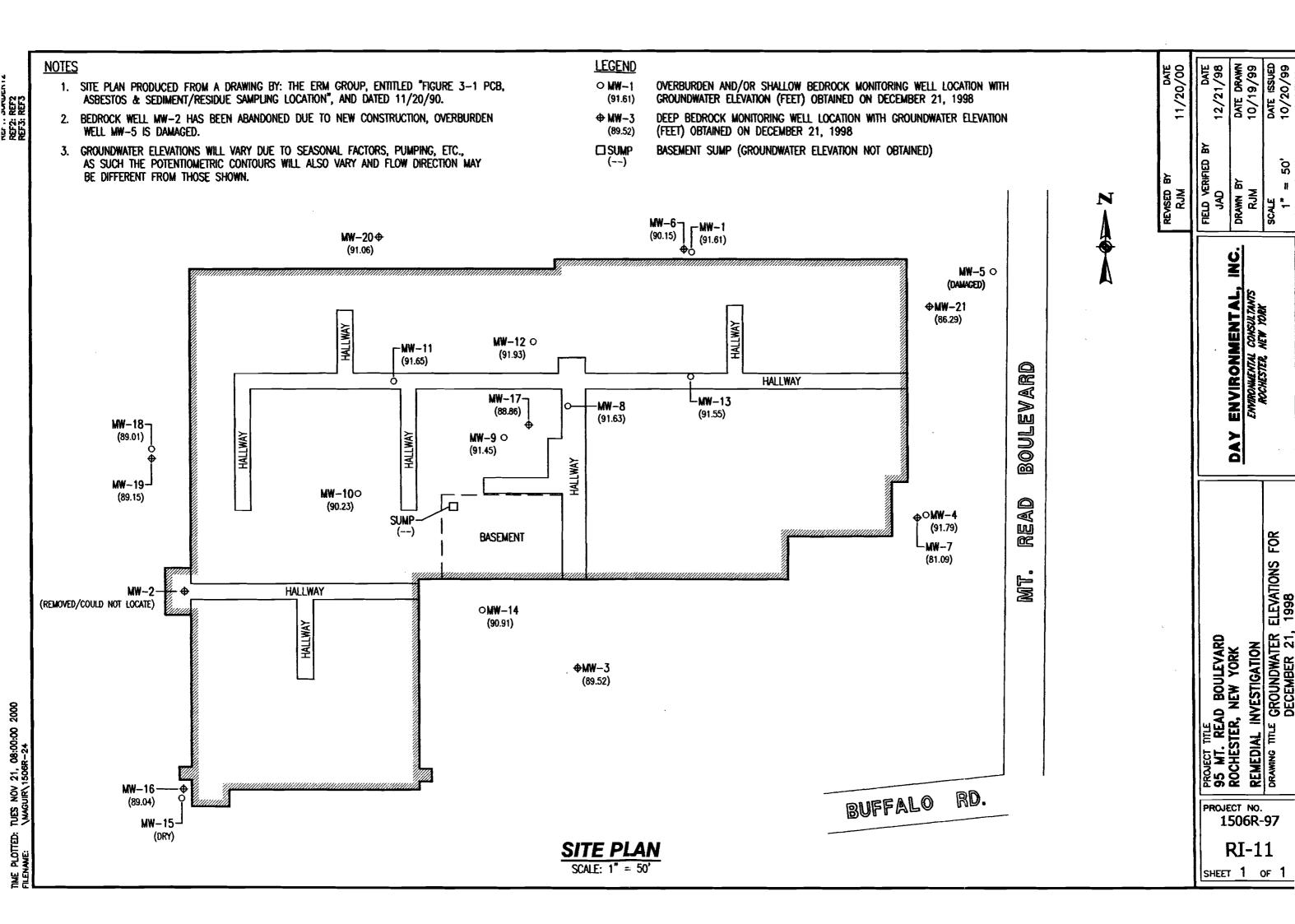
PRAWING THE OVERBURDEN AND/OR SHALLOW

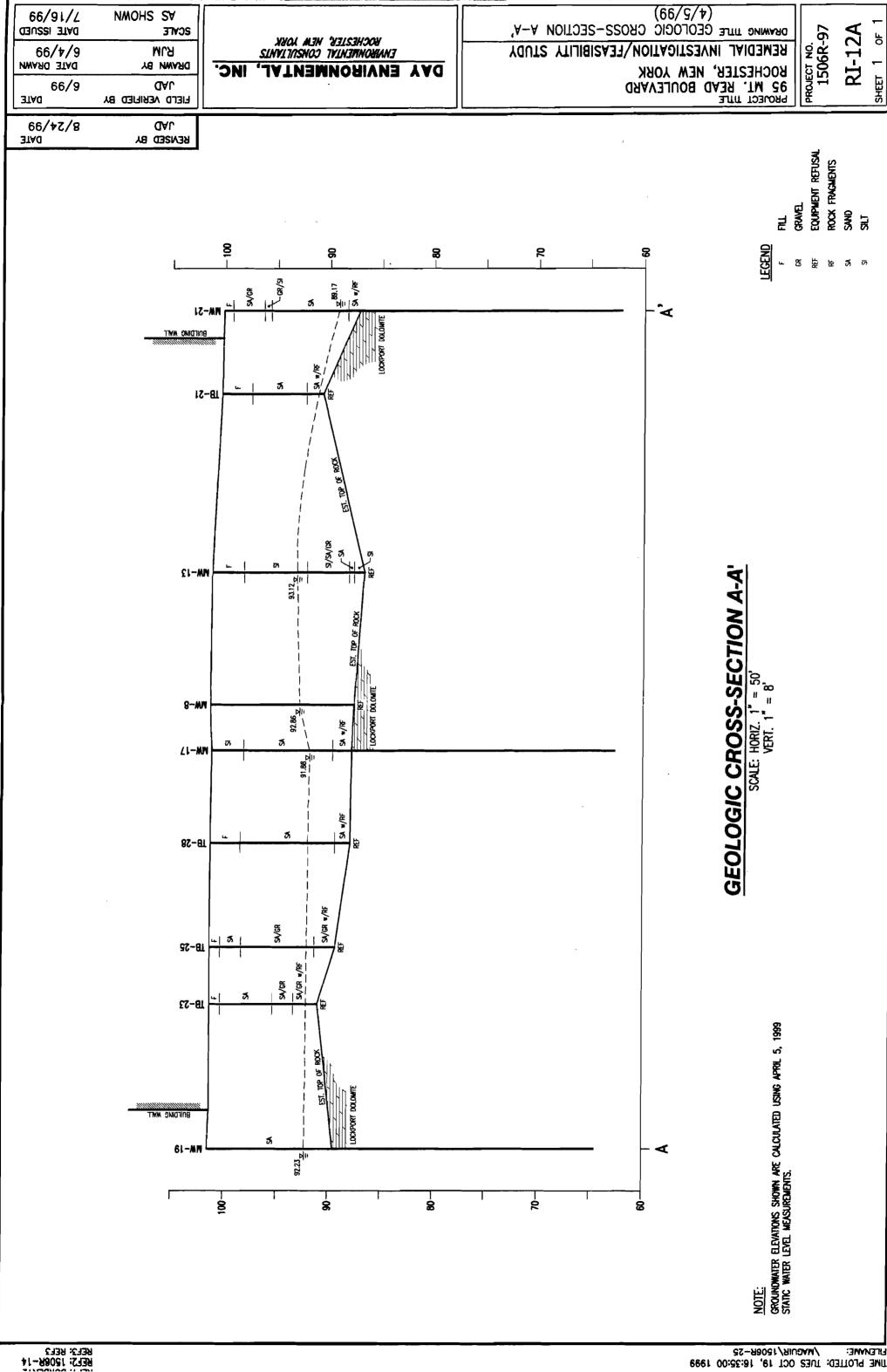
DRAWING THE OVERBURDEN AND/OR SHALLOW

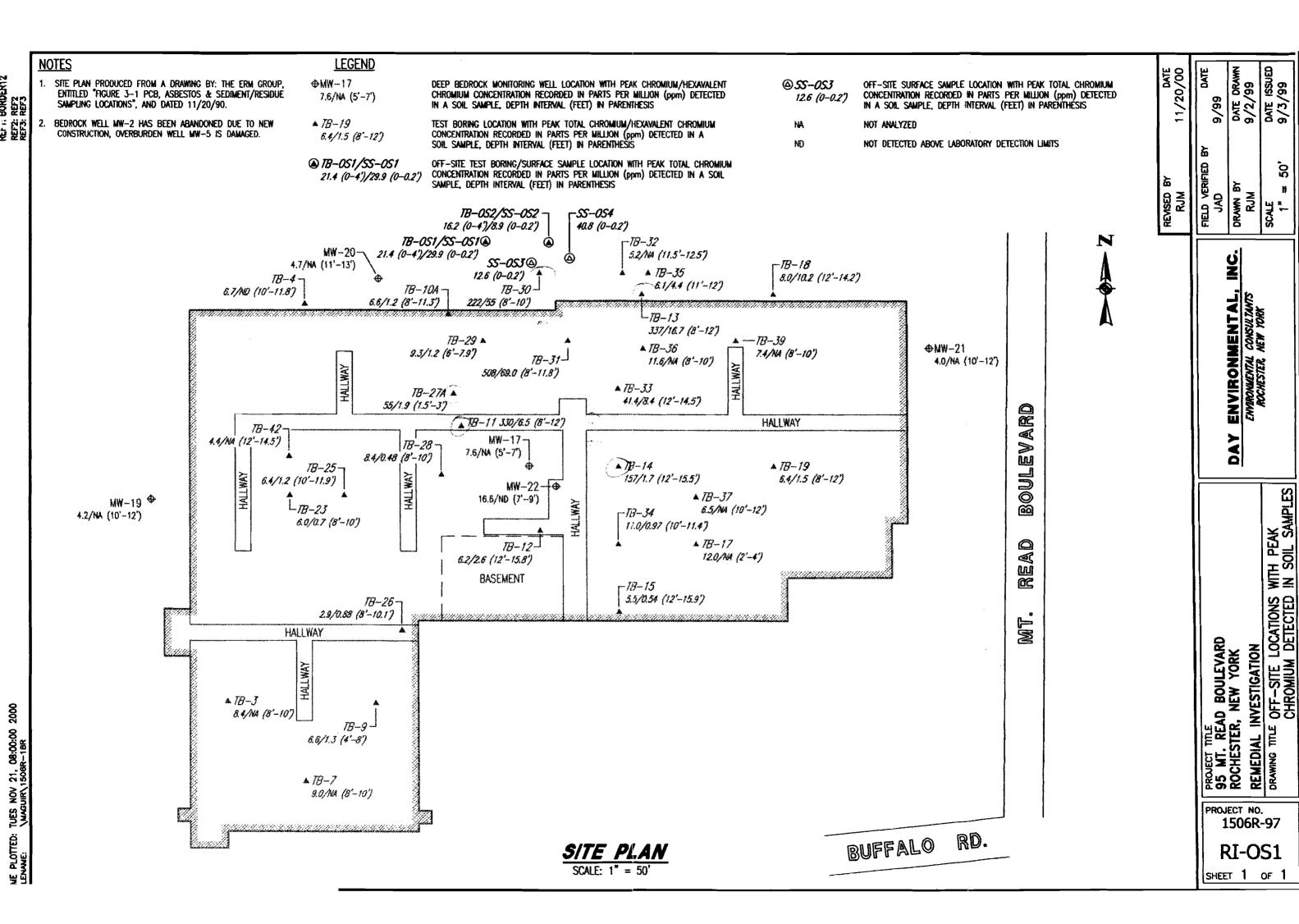
OF THE OVERBURDEN AND/OR SHALLOW











APPENDIX B

Test Boring Logs and Well Logs

FILE NO.: <u>1506R-97</u> 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'

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

TOTAL I	ОЕРТН О	F HOLE:	14	1.5'		WEATHER : NA						
ДЕРТН (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS			
		NA	NA					Concrete floor.	<u> </u>			
-I-							-1-	Concrete and Gravel. Dry.				
-2-	SS-1			5	4.1	27	-2-					
-3-							-3-					
-4-	Γ				-		-4-	Gray brown SILT and SAND, some Gravel and Rock				
-5-	l						-5-	fragments. Moist.				
-6-	SS-2			60	0.7	4	-6-					
-7-							-7-					
-8-							-8-	Wet at 7.5'.				
-9-							-9-	Gray Silty fine to medium SAND, some gray Rock fragments. Wet.				
-10-	SS-3			70	0.8	10	-10-					
-11-							-11-					
-12-							-12-	Rock fragment content increases with depth.				
-13-	İ		-				-13-					
-14-	SS-4		_	40	0.7	13	-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

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'

TOP OF ROCK ELEVATION: NA

BOTTOM OF HOLE ELEVATION: $\ \underline{NA}$

TOTAL DEPTH OF HOLE: 15.0' WEATHER : NA

TOTAL	DEFIN	F HOLE.					W	/EATHER: NA	
ре р тн (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-	00.1			40			-1-	Light brown, tan SILT and SAND, trace Gravel. Damp.	
-2-	SS-1			50	0.4	2	-2-		
-3-							-3-		
-4-						-	-4-	Moist.	
-5-							-5-		
-6-	SS-2			60	0.6	19	-6-	Broken layered ROCK. Dry. Brown Silty SAND, some Gravel. Moist.	
)					}	-0-	Brown Ging States, Some Graver. Moist.	
-7-					{	1	-7-		
-8-							-8-	Gray brown. Wet.	
-9-							-9-		
-10-	SS-3			95	0.4	6	-10-	Gray SAND and ROCK fragments. Wet.	
-I 1-	ı						-11-		
-12-						-	-12-		
-13-					}		-13-		
-14-	SS-4			75	0.2	2.5	-14-		
-15-							-15-		
		*	\					Equipment refusal at 15.0'.	ı
MISCE	LLANE	OUS NO	TES: F	PPM =	parts per	million	PID = Ph	otoionization detector FID = Flame Ionization Detector NC = No	t Collected

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

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

AUGERS: NA

TYPE OF DRILL RIG: Hand-operated Geoprobe

SAMPLING METHOD: 1" large bore

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'

TOP OF ROCK ELEVATION: $\underline{N}\underline{A}$

BOTTOM OF HOLE ELEVATION: NA

TOTAL DEPTH OF HOLE: 11.2' WEATHER : NA

БЕРТН (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	-		95	0.0	0.1	-1-	Dark brown Gravel, Sand, Asphalt, Cinders (FILL). Damp.	
								Brown tan Silty SAND, some Gravel. Damp.	
-2-							-2-		
-3-	SS-2			50	0.0	3.9	-3-	Rock fragments. Moist.	
-4-							-4-		
-5-	SS-3			60	0.0	0.3	-5-		
-5-		-					-5-		
-6-	_				_		-6-		
-7-	SS-4			60	0.0	2.2	-7-		
			1					Grades to Gray color. Wet.	
-8-							-8-		
- 9-	SS-5			70	0.0	2.8	-9-		
						-			
-10-							-10-	Weathered Rock.	
-11-	SS-6			60	0.0	2.1	-11-		
]	Equipment refusal at 11.2'.	
-12-							-12-		1
-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

FILE NO.: 1506R-97 BORING NO.: TB-4 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: North of Building

DATE STARTED: 5/13/98

DATE FINISHED: 5/13/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 11.8

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 11.8'

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

WEATHER: Sunny, light breeze, ~70°F

L									
DEPTH (FT)	SAMPLE NO,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	БЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Asphalt pavement and concrete.	
-1-	SS-1			75	0.3	2.8	-1-	Dark brown Silt, Sand, Brick, Gravel, Organics (FILL). Damp.	
-2-		_				-	-2-		
-3-	SS-2			90	0.0	4.1	-3-	Red brown Silty SAND, some Gravel. Damp to moist.	
-4-				l			-4-		
-5-	SS-3			70	0.0	2.3	-5-		
								Ded become SU T and SAND some Count. Maint	
-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.	
1,0]]				-10-		
-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-		

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'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE:

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)	БЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-							-1-	Tan light brown SILT, little fine Sand, trace Gravel. Damp.	Hit refusal three times at 2' BGS.
	SS-I			65	0.4	0.5			Moved test boring
-2-							-2-		into hallway.
-3-							-3-		
-4-							-4-		
] -4-		
-5 -						}	-5-		
-6-	SS-2			75	3	10	-6-		
						}			
-7-							-7-	Gary fine sandy SILT, some Gravel, little Rock fragments. Moist.	
-8-							-8-		
-9-							-9-		
-10-	SS-3			50	1.5	100	-10-		
					(Some Rock fragments. Moist to wet.	
-I1-							-11-		
-12-			-				-12-		
							Ì	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'.	1
	I ANTE	▼ Jus No	TEC T	D. C	parts per i	.,,,		otoionization detector FID = Flame Ionization Detector NC = N	

FILE NO.: <u>1506R-97</u>

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: $\underline{\textbf{NA}}$

BOTTOM OF HOLE ELEVATION: NA WEATHER: NA

ОЕРТН (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEP ТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1- -2-	SS-1			60	5.2	3.5	-1-	Brown and tan reworked Sand, Clay, and Gravel (FILL). Damp.	
-3-							-3-	Red brown fine to medium SAND, some Gravel and Silt	
-4-							-4-	nodules Color changes to tan olive.	Chemical odor.
-5-	00.3				10.7		-5-	Ton alive first a medium CANID some Cité Donn	
-6-	SS-3			70	10.3	23	-6-	Tan olive fine to medium SAND, some Silt. Damp.	
-7-							-7-	Gray fine to medium SAND, some Gravel and Rock fragments. Moist.	Chemical odor.
-8-							-8-		
-9-	SS-3			50	6.1	530	-9-	Wet at 8.5'.	Chemical odor.
-10-	-						-10-	Equipment refusal at 9.3'.	
-10-									Ĭ
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-							-14-		
-15-		•					-15-		

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'

DEPTH DRILLED INTO ROCK: 0

TOTAL DEPTH OF HOLE:

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

WEATHER: NA

ДЕРТН (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Ceramic tile and concrete floor.	
-1-							-1-	Tan light brown SILT and SAND, some Gravel. Damp.	
	SS-1	r - 		35	0.0	0.5			
-2-	55-1			33	0.0	0.5	-2-		
		-				}			
-3-							-3-		
-4-							-4-		
•								Light brown Silty SAND, some Gravel. Moist.	
-5-				 			-5-		
	SS-2			50	0.2	10			
-6 -	 			ļ			-6-		
- 7-	}						-7-		
- /-							-/-	Moist to wet.	
-8-				ļ 	<u>_</u>		-8-	Most to wet.	
	}								
- 9-	SS-3			50	0.0	6	-9-		
		-	1					Gray Silty SAND, some Gravel and Rock fragments. Wet.	
-10-							-10-	Equipment refusal at 10.0'.	į
-11-	ŀ			ļ	Į		-11-		
	}					}			
-12-		-					-12-		
		-		ĺ		1			
-13-						-	-13-		
-14-	-						-14-		Į
• '									
-15-			┧ 📗				-15-		
MISCE	LIANE	OUS NO	\ TES:	PPM =	parts per	million	PID = PI	notoionization detector FID = Flame Ionization Detector NC = N	ot Collected

FILE NO.: <u>1506R-97</u>

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: <u>Track-Mounted Geoprobe</u>

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'

TOP OF ROCK ELEVATION: \underline{NA}

BOTTOM OF HOLE ELEVATION: NA

	,	0.5		>-	U.				
рертн (ғт)	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-							-1-	Brown SILT, some fine Sand, trace Gravel. Damp to moist.	
-2-	SS-1			70	0.3	0.2	-2-		
-3-							-3-		
- 4-							-4-	Little Sand, some Gravel in layers. Moist.	
-5 -	66.3			0.0	0.5	}	-5-		
-6-	SS-2			90	0.5	5.5	-6-		
-7-					ı	!	-7-		
-8-				<u> </u>			-8-	Light brown SILT and fine SAND, some Gravel. Moist to wet.	
-9-	SS-3			90	0.4	25	-9-		
-10-	33-3) 	0.4	35	-10-		
-11-							-11-		
-12-							-12-	Gray brown SAND and GRAVEL, some Silt and Clay layers.	
-13-	SS-4			50	1	250	-13-	Wet.	Possible Chemical odor.
-14-	30-4			30		230	-14-		
-15-		•	•			-	-15-	Equipment refusal at 15.0'	

FILE NO.: <u>1506R-97</u> BORING NO.: TB-9

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: __9.5'_

DEPTH DRILLED INTO ROCK: 0' TOTAL DEPTH OF HOLE:

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

WEATHER: NA

ДЕРТН (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-							-1-	Brown fine Sandy SILT, some Gravel. Damp.	
-2-	SS-1			65	7.6	6	-2-		
-3-				l			-3-		
-4-				r			-4-		
-5-							-5-	Tan brown SILT and SAND, trace Gravel. Moist.	
-6-	SS-2			60	3.7	5.5	-6-		
-7-							-7-		
-8-							-8-		
-9-	SS-3			35	4.6	8	-9-	Gray SILT and SAND, some Gravel. Wet.	
-10-							-10-	Equipment refusal at 9.5'.	
-11-							-11-		
-12-							-12-		
-13-							-13-		
-14-			1	1			-14-		
-15-		•	\				-15-		

NA = Not Applicable

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

FILE NO.: <u>1506R-97</u>

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: \underline{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-	{				}	}	-1-	Gravel.	
-2-	SS-1			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-			_			<u> </u>	-4-	Padhama Cu Tanda Canib	
-5 -	SS-2			-	0.0	1	-5-	Red brown SILT and fine SAND, some Gravel. Moist.	
-6-				1			-6-	Equipment refusal at 5.5'.	
-7-							-7-		
-8-							-8-		
-9-	i I					 	-9-		
-10-					 	1	-10-		
-11-							-11-		
-12-						}	-12-		
-13-						}	-13-		
-14-	l					}	-14-		
-15-		•	V		parts per i		-15-	otoionization detector FID = Flame Ionization Detector NC = No	

FILE NO.: <u>1506R-97</u> BOF

BORING NO.: TB- 10A

PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK

NIVODEG OTTE HOOOGE

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'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: __11.3'

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)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-							-1-	Gravel and Styrofoam.	
-2-	SS-I			30	0.1	1	-2-	Black brown reworked Silt, some Sand, Coal, Brick, and Slag (FILL). Damp to moist.	
-3-							-3-		
-4-				ļ 		Γ	-4-		
	ļ							Tan brown fine Sandy SILT, little Gravel. Moist.	
-5-	SS-2			70	0.2	1.7	-5-		
-6-	55-2			70	0.3	17	-6-		
-7-							-7-	Gray fine Sandy SILT, some Gravel. Moist.	
-8-					ļ		-8-		
-9-						}	-9-	Gray SILT and fine SAND, some weathered Gravel and Rock fragments. Moist.	
-10-	SS-3			80	0.0	4	10	Wet.	
-10-							-10-		
-11-							-11-	Sand content increases.	
-12-							-12-	Equipment refusal at 11.3'.	
-13-	1					}	-13-		
-14-							-14-		
-15-	LANFO	₩ OUS NO	▼ TES: P	PM =	parts per i	nillion	-15-	otoionization detector FID = Flame Ionization Detector NC = No	• Call and

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:

TOP OF ROCK ELEVATION: NA

BOTTOM OF HOLE ELEVATION: NA

WEATHER : NA

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

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: I" 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'

TOP OF ROCK ELEVATION: NA

BOTTOM OF HOLE ELEVATION: NA

TOTAL	DEPTH C	F HOLE:	_15	.8'		, , , , , , , ,	W	/EATHER : NA	
ДЕРТН (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	БЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	100000000000000000000000000000000000000
-1-		<u> </u>				}	-1-	Brown reworked Sand, Silt, and Gravel (FILL). Damp.	
	SS-1	_		30	4.9	3			
-2-						,	-2-		
-3-							-3-		
-3-							-3-		
-4-			_				-4-		
								Brown SAND, some Silt and Gravel. Moist.	
-5 <i>-</i>							-5-		
-6 -	SS-2			40	31.8	12	-6-		
-7-						ı	-7-		
-8-							-8-		
-									
-9-							-9-	Wet at 9.0'.	
-10-	SS-3			50	19.8	26	-10-		
-10-					(-10-		
-11-	[ĺ	1	-11-	Red gray SAND, GRAVEL, and ROCK fragments. Wet.	
								į	
-12-							-12-		
-13 -	(İ	[-13-	Brown fine to medium SAND and GRAVEL, trace Silt. Wet.	
	SS-4			40	5.2	16		,	
-14-	}			{			-14-		
-15-							-15-		
		•	•				1.5-		
-16-		V		 		 	-16-	Equipment refusal at 15.8'.	
	LLANE	OVS NO	TES; F	 PPM =	parts per	million		otoionization detector FID = Flame Ionization Detector NC = No	t Collected

(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'

DEPTH DRILLED INTO ROCK: 0' TOTAL DEPTH OF HOLE: 12.7' TOP OF ROCK ELEVATION: NA

BOTTOM OF HOLE ELEVATION: NA

WEATHER: Mostly sunny, light wind, 60°F

Comments Solid And Rock Description Comments	101712	DEITHO	THOUSE.						EATHER Mostly sulmy, ngnt wind, 60 F	
-1233456789101112131413141414141516171810111111111111	ОЕРТН (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ОЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
2-			NA	ŅΑ					Asphalt pavement and Gravel.	
-234567891011121314141414141414	-1-							-1-	Gray Gravel and Sand (FILL). Damp.	
-4-	-2-	SS-1			5	0.0	1.5	-2-		
-56789101112131414141555555567778899101111111111-	-3-							-3-		
-678910111213146777778899101111111111-	-4-							-4-	Orange red brown medium SAND. Wet.	
-6789101112131414667878789991011111111	-5-	SS-2			55	0.2	1.1	-5-		
-8910111213148Trace Silt and Clay. Wet. -8Trace Silt and Clay. Wet. -91011121314141518181818181818	-6-							-6-		
-910111213141415161718181818181818										
-1011121314- SS-3 85 0.0 1.5 -1011- Gray orange brown, red SAND, some Gravel, little Clay and Silt. Wet. -121314- Equipment refusal at 12.7'.								}	Trace Silt and Clay. Wet.	
-101112131410101111111111	-9-			İ	ļ	1	}	-9-		
-12- SS-4	-10-	SS-3			85	0.0	1.5	-10-		
-1314- Equipment refusal at 12.7'.	-11-							-11-	Gray orange brown, red SAND, some Gravel, little Clay and Silt. Wet.	
-14-	-12-	SS-4			0	-	-	-12-	Wet (no soil recovery).	
	-13-							-13-	Equipment refusal at 12.7'.	
	-14-							-14-		
-15- MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected	-15-	I I ANIE	₩ NIG NIG	TEC. T	DM =	nortá nos		-15-		

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

FILE NO.: 1506R-97 BORING NO.: TB-14

PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY

95 MT. READ BLVD, ROCHESTER, NEW YORK

NYSDEC SITE #828085

TYPE O SAMPLI AUGER	F DRILL ING MET S: <u>Direct</u>	ZEBRA RIG: Tra HOD: 1" Push OVERBU	macro	unted Ge			TO	SURFACE ELEV.: NA DATUM: NA LOCATION: Inside Building DATE STARTED: 4/14/98 DAY REPRESENTATIVE: Jeffrey A. Danzinger P OF ROCK ELEVATION: NA	_		
DEPTH	DRILLEI	O INTO R OF HOLE:	OCK:	0'	<u>, </u>		ВО	OF HOLE ELEVATION: NA WEATHER: NA			
DEPTH (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	БЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS		
-1- -2-	SS-1	NA	NA	50	0.2	1.4	-1- -2-	Wood and Concrete floor. Dark brown SILT, some Sand, trace Gravel. Damp.			
-3- -4- -5-	SS-2			65	4.8	3	-5-	Moist to wet.			
-7- -8-							-7-	Olive brown Sandy SILT, little Clay, trace Gravel. Wet.			
-9- -10-	SS-3		1	55	16.4	21	-9-	Gray SAND and GRAVEL, some Silt, little Clay. Wet.	Chemical odor.		
-11-							-11-	Gray SAND, some Gravel and Silt, little Rock fragments. Wet.			
-13- -14-	SS-4		-	60	14.2	15	-13-				
-15- -16-	I I AND	₩ W	¥ YTES:	DDN4.	parts per	million	-15- -16-	Equipment refusal at 15.5'. otoionization detector FID = Flame Ionization Detector NC = N	ot Collacted		

FILE NO.: <u>1506R-97</u>

BORING NO.: TB-15

PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY

95 MT. READ BLVD, ROCHESTER, NEW YORK

NYSDEC SITE #828085

CONTR	ACTOR:	ZEBRA	Environ	mental	·			SURFACE ELEV.: NA DATUM: NA		
TYPEO	F DRILL	RIG: Tra	ack-Mou	inted Ge	oprobe			LOCATION: Inside Building		
SAMPLI	NG MET	HOD: <u>1"</u>	macro	соге				DATE STARTED: 4/13/98 DATE FINISHED: 4/13/98		
AUGER	S: <u>Direct</u>	Push						DAY REPRESENTATIVE: J Joseph Dorety		
		OVERBU	RDEN:	15.9)'		TO	DP OF ROCK ELEVATION: NA		
1		INTO R						OTTOM OF HOLE ELEVATION: NA		
		F HOLE:		_				EATHER: NA		
	T				-					
ДЕРТН (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS	
		NA	NA	$\overline{}$				Concrete floor.		
					}		1			
-1-		<u> </u>)		•	-1-	Pad brown ton blook removed Send Sile Consul Australia		
								Red, brown, tan, black reworked Sand, Silt, Gravel, Asphalt		
-2-	SS-1			60	1.5	5.5	1 ,	(FILL). Damp.		
-2-				(ļ		-2-			
	1									
-3-				ŀ			-3-			
					ĺ					
-4-		-					-4-			
						Į	1			
_							_	Pod brown fine to medium SAND		
-5-					l	J	-5-	Red brown fine to medium SAND, some Gravel, trace Silt.		
	SS-2			80	2.3	24	İ i	Damp.		
-6-							-6-			
		r - 								
-7-				l			-7-	Grades to gray color. Moist.		
		LL.			ĺ					
-8-	-						-8-			
				}	1		ļ			
-9-		 			}		-9-			
	SS-3			75	0.4	18	ĺ		Chemical odor.	
-10-	55 5			'	0.4	''	-10-	Gray SAND and GRAVEL, some Silt. Moist to wet.		
							1			
-11-				1			-11-			
-11-							711-			
				1				Wet at 12.0'.	Chemical odor.	
-12-						 	-12-			
							1			
-13-		<u> </u>			}		-13-		<u> </u>	
	ac .									
-14-	SS-4			60	0.6	30	-14-			
-14-	 						-14-			
[)					
-15-					1		-15-			
		<u> </u>								
-16-		 •		-			-16-	Equipment refusal at 15.9'.	Į.	
 						<u> </u>				
MISCEI NA = N	ot Appli	OUS NO	TES: F	PM =	parts per	million	PID = Pho	otoionization detector $FID = Flame Ionization Detector NC = N$	ot Collected	
1477 - 14	or whhi	Caule								

FILE NO.: <u>1506R-97</u> BORING NO.: TB-16 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: 15.2'

DEPTH DRILLED INTO ROCK: 0'

TOP OF ROCK ELEVATION: NA

BOTTOM OF HOLE ELEVATION: NA

TOTAL	ОЕРТН О	F HOLE:	1:	5.2'			w	TEATHER: NA	
DEPTH (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-							-1-	Tan brown SILT, little Clay and Gravel. Damp.	
-2-	SS-1			55	0.1	3	-2-	Black gray color.	
-3-							-3-	Olive brown gray color. Damp.	
-4-		_					-4-	Moist.	
-5-							-5-		
-6-	SS-2			70	0.4	3	-6-		
-7-							-7-	Gray fine SAND and SILT, little Gravel. Wet.	
-8-			_				-8-	Orange brown gray color. Wet.	
-9-							-9-		
-10-	SS-3]	95	1.2	1	-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-	33-4			'3	1.5		-14-		
-15-]				-15-	Gray SAND and fractured ROCK. Wet.]
		*	Ť		parts per			Equipment refusal at 15.2'. notoionization detector FID = Flame Ionization Detector NC = N	

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

FILE NO.: 1506R-97

BORING NO.: TB-17

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: 5/12/98

DATE FINISHED: 5/12/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 11.1

DEPTH DRILLED INTO ROCK: 0'
TOTAL DEPTH OF HOLE: 11.1'

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

WEATHER : NA

ДЕРТН (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.	
-I-	SS-1			60	0.1	2.1	-1-	Brown reworked Sand, Silt, Gravel, Cinders, Asphalt (FILL). Damp.	
-2-		-				_	-2-		
-3-	SS-2			90	0.2	2.6	-3-	4" seam of asphalt-like material.	Chemical odor.
-4-							-4-		
	SS-3			75	0.6	1.9			
-5-	00 5			,,,	0.0	1.5	-5-		
-6-						_	-6-	Red brown Silty SAND and GRAVEL. Damp to moist.	
-7-	SS-4			30	-	-	-7-		
-8-							-8-		
-9-	SS-5			85	0.0	1.2	-9-		
								Wet at 9.5'.	
-10-							-10-		
-11-	SS-6			70	0.1	1.3	-11-		
								Equipment refusal at 11.1'.	
-12-							-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

FILE NO.: 1506R-97 BORING NO.: TB-18

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: 14.2'
DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 14.2'

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

WEATHER: Partly cloudy, light wind 55-60 °F PID READING (PPM) FID READING (PPM) 8 % RECOVERY DEPTH (FT) SOIL AND ROCK DESCRIPTION COMMENTS SAMPLE BLOWS | ŅΑ Asphalt pavement and Gravel. Black gray reworked Gravel, Sand, and Silt (FILL). Damp. -1--1-SS-1 60 0.0 0.3 -2--2-Brown, red, tan, and gray fine Sandy SILT, trace Gravel. Moist. -3--3--4--4-Tan light brown SILT and fine to medium SAND, some -5-Gravel. Moist. -5-SS-2 100 0.1 2.5 -6--6-... Wet at 6.5'. -7--7--8--8-Tan brown Silty fine SAND, little Gravel. Wet. -9--9-SS-3 75 0.2 2 -10--10--11--11--12--12-Gray brown SAND and GRAVEL, some Rock fragments, Clay, and Silt. Wet. -13--13-SS-4 40 0.0 2.2 -14--14-Equipment refusal at 14.2'. -15--15-MISCELLANEOUS NOTES: PPM = parts per million PID = Photoionization detector FID = Flame Ionization Detector NC = Not Collected

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

TYPE OF DRIL			_	probe			SURFACE ELEV.: NA DATUM: NA LOCATION: Inside Building		
SAMPLING M				ргоос			DATE STARTED: 4/13/98 DATE FINISHED: 4/13.		
AUGERS: Dire							DAY REPRESENTATIVE: J Joseph Dorety	776	
THICKNESS O	FOVERBU	RDEN:	15.5			ŤO	P OF ROCK ELEVATION: NA	·	
DEPTH DRILL	ED INTO R	OCK:	0,	_			OTTOM OF HOLE ELEVATION: NA		
TOTAL DEPTH	OF HOLE:	15	.5'			W	EATHER: NA		
	0.5								
(F. No.	PER 0	_w	% RECOVERY	PID READING (PPM)	FID READING (PPM)	E	SOIL AND ROCK DESCRIPTION	COMMENTS	
DEPTH (FT)	BLOWS PER (FOOT	N-VALUE	ECO	YEAN	REAJ	DEPTH (FT)	COM AND ROCK PERCHA TION	COMMENTS	
SAN	3. B.C.O	ż	%	019	E E	DEP			
	NA	NA		Ì			Wood and Concrete floor.		
	-					-			
-1-	i i					-1-	Tan brown black reworked Sand, Silt, Gravel, Cinders, Slag,	Possible chemical	
SS-1			80	0.6	0.2		and Ash (FILL). Damp.	odor.	
-2-	<u> </u>					-2-			
	-				1	}			
-3-	-	}				-3-			
4	-		 			-4-			
	 						Red Brown fine to medium SAND, some Silt and Gravel.		
- 5-					ł	-5-	Damp.		
SS-2			100	0.4	3.0	}			
-6-			100	0.4	3.0	-6-			
			l]	}			
-7-						-7-			
							Tan SAND and GRAVEL, trace to some Silt. Damp to moist.		
-8-						-8-	·		
						-0-			
-9-					}	-9-			
						-9-	Rock fragments at 9.5'.	1	
-10- SS-3			65	0.7	5.6	1,0			
-10-			ļ)	-10-			
] ,] ,	Brown gray color. Moist to wet.]	
-11-						-11-			
		1							
-12-						-12-	Wet at 12.3'.		
1			}		}				
-13-	-					-13-			
SS-4			90	0.7	21		Gray in color.		
-14-	-					-14-	•		
	1						Gray weathered Rock.	Possible chemical	
-15-	-					-15-	•	odor.	
 	+	-	 		 	1		1	
-16-	<u> </u>	, ,			1	-16-	Equipment refusal at 15.5'.	1	
							• •		
MISCELLAN	LOUS NO	TES: F	PPM = n	arts per	million	PID = Pho	otoionization detector FID = Flame Ionization Detector NC = N	ot Collected	
NA = Not App	licable						THE PART OF THE PA		

FILE NO.: 1506R-97

BORING NO.: TB-20

PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK

NYSDEC SITE #828085

CONTRAC	CTOR:	ZEBRA	Environn	nental

TYPE OF DRILL RIG: Track-Mounted Geoprobe

SAMPLING METHOD: 1" macro core

AUGERS: Direct Push

SURFACE ELEV.: NA

DATUM: NA

LOCATION: South of Building

DATE STARTED: 4/13/98

DATE FINISHED: 4/13/98

DAY REPRESENTATIVE: J Joseph Dorety

THICKNESS OF OVERBURDEN: 17.0'

DEPTH DRILLED INTO ROCK: 0. TOTAL DEPTH OF HOLE: _____17.0'

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

WEATHER : -

									
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
j	Ī	NA	ÑΑ		 		-	Asphalt pavement.	
-1- -2-	SS-1			60	0.6	1.4	-1-	Gray black brown Sand, Silt, Asphalt, Gravel, Cinders, Ash Brick, and Slag (FILL). Damp.	
-25	55 .			00	0.0	1.7	-2-	2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	,
-3-						-	-3-		
-4-									
-5-							-4-	Red brown fine to medium SAND, some Gravel, trace Silt.	
	1				{		-5-	Damp.	
-6-	SS-2			80	183	>1,000			
] 55 2			"	105	- 1,000	-6-		
]	ļ			
-7-							_	Gray color. Moist.	Petroleum-like odor.
							-7-	Stay volot. Motat.	retroieum-like odor.
-8-		-							[
	ļ		_			-	-8-		
-9-								Wet between 8.5' and 10.0'.	Sheen on water,
-9-					ĺ		-9-		petroleum-like odor.
}					1	}			
-10-	SS-3			90	126	>1,000			
					Į		-10-	Rock fragments. Moist.	ł
-11-									į į
1	1						-11-)
-12-	}								
-12-			<u> </u>				-12-		ű
						}	} ~~		
-13-									1
r i						ĺ	-13-		
-14-	SS-4			95	38.9	31	}		1
,				[}		-14-		(
]	,		Į.
-15-							-15-		
				}			-13-		
-16-									
	SS-5			25	23.1	300	-16-		
-17-								Gray fine SAND and GRAVEL, some Silt. Wet.	Sheen on water,
1			-	<u> </u>	 -	 	-17-	Equipment refusal at 17.0'.	petroleum-like odor.
10000	1 1 1 1 1 1	V 10 3 1 2				<u> </u>		equipment retusal at 17.0.	
MISCE	LLANE	HIE MO	TITE. T	4 (11		:H: b	ID DI	TIP DI	

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

JD3066 / 1506R-97

10/20/99

FILE NO.: 1506R-97 BORING NO.: TB-21 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: 9.3'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 9

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)	БЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA			_		Concrete floor.	
-1-	SS-1			90	0.0	0.0	-1-	Tan brown black reworked Sand, Silt, Gravel, Brick, Cinders, Slag, and Ash (FILL). Damp.	
-2-							-2-		
-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-		
-6-						ļ-	6-	Wet a 5.8'.	
-7-	SS-4			50	0.0	0.2	-7-	Some Rock fragments.	
-8-					-		-8-		Possible chemical odor.
-9-	SS-5			20	0.0	2.1	-9-	Gray with some weathered Rock.	
-10-						 	-10-	Equipment refusal at 9.3'.	
-11-							-11-		
-12-			1				-12-		
-13-							-13-		
-14-							-14-		
-15-		•	 				-15-		

JD3066 / 1506R-97

FILE NO.: 1506R-97 BORING NO.: TB-22

PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY

OF MT. READ BLVD. ROCHESTER, NEW YORK

95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085

CONTRACTOR: NA

TYPE OF DRILL RIG: Hand-operated Geoprobe

SAMPLINGMETHOD: 1" large bore

AUGERS: NA

SURFACE ELEV.: NA

DATUM: NA

LOCATION: <u>Inside Building</u>
DATE STARTED: <u>5/12/98</u>

__

DATE FINISHED: 5/12/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 10.2'

DEPTH DRILLED INTO ROCK: 0'
TOTAL DEPTH OF HOLE: 10.2'

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)	рертн (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	ŇΑ	80	0.1	1.6	-1-	Concrete. Gray black brown reworked Sand, Gravel, Silt, Rock, Cinders, Ash, and Brick (FILL). Damp.	
-2-							-2-		
- 3-	SS-2			95	0.0	1.8	-3-	Tan brown Silty SAND, some Gravel. Damp to moist.	
-4-							-4-	·	
-5-	SS-3			60	0.1	3	-5-	Wet at 5.3'.	
-6-							-6-		
-7-	SS-4			65	0.1	0.8	-7-	With Rock fragments.	
-8-					-	1	-8-		
-9-	SS-5			70	0.1	0.5	-9-		
-10-	SS-6			0		-	-10-	Gray SAND, GRAVEL, and ROCK fragments. Wet.	
-11-]		_		-11-	Equipment refusal at 10.2'.	
-12-							-12-		
-13-			-				-13-		
-14-							-14-		
-15-] \				-15-		

FILE NO.: $\underline{1506R-97}$ BORING NO.: $\underline{TB-23}$ 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: <u>Inside Building</u>

DATE STARTED: 9/28/98

DATE FINISHED: 9/28/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 10.2'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 10.2

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

WEATHER : NA

TOTAL	DEPTH O	F HOLE:	10.	.2'		WEATHER: NA						
ДЕРТН (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	-	-	-1-	Gray Gravel, Sand and Silt (FILL). Damp.				
					l			Tan fine to medium SAND, some Silt and Gravel. Damp to				
-2-	SS-2			75	<u> </u>		-2-	moist.				
	33-2			/3	<u>-</u>	-						
-3-	SS-3			80	1.0	0.6	-3-					
-4-							-4-					
-5-	SS-4			70	0.8	0.1	-5-					
-3-							-5-					
-6-			_				-6-					
	SS-5			75	0.7	0.0		Gray brown fine to medium SAND and GRAVEL, trace to some Silt. Moist to wet.				
-7-							- 7-	Wet at 7.5'.				
									•			
-8-							-8-	Rock fragments.				
- 9-	SS-6			80	1.2	0.2	-9-					
		<u> </u>	1					Moist to wet.	Possible chemical			
-10-	SS-7			0	_	-	-10-		odor.			
		-					1	Equipment refusal at 10.2'.				
-11-							-11-					
			1				-12-					
-12-							-12-					
-13-							-13-					
1												
-14-							-14-					
}			1									
-15-		V	•				-15-					
LAUGGE	TIANIT	OUG NO	TEC	DDM (norts nor		DID DI	ectaionization detector FID - Flame Ionization Detector MC - N	Callertal			

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

FILE NO.: 1506R-97

BORING NO.: TB-24

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: 9/24/98

DATE FINISHED: 9/24/98

DAY REPRESENTATIVE: 1. Joseph Dorety

THICKNESS OF OVERBURDEN: 10.0'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE:

TOP OF ROCK ELEVATION: NA

BOTTOM OF HOLE ELEVATION: NA

WEATHER: NA

TOTAL DEPTH OF HOLE: 10.0' WEATHER: NA									
ДЕРТН (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	ŊĀ	80	1.7	0.2	-1-	Clay tile and Concrete Floor. Brown Gravel, Sand, Silt, Concrete (FILL). Damp. Tan reworked Sand, Silt, Gravel (FILL). Damp to moist	
-3-							-3-	Tan brown SILT and SAND, some Gravel. Damp to moist.	
-4- -5-	SS-2			75	1.5	0.6	-4-		Some yellowish discoloration at 5.5'.
-6-							-6- -7-	Gray fine to medium SAND, some Gravel, trace Silt. Moist to wet.	
-8-	SS-3			50	0.9	1.3	-8-	Wet at 8.5'.	Chemical odor.
-10-							-10-	Gray fine to medium SAND and GRAVEL, trace Silt. Wet. Equipment refusal at 10.0'.	
-11-							-11-		
-13-							-13-		
-14-		V	*************************************		norte per		-15-	etain instign detector. FID - Flore Indication Detector NG - N	

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

JD3066 / 1506R-97

FILE NO.: <u>1506R-97</u>

BORING NO.: TB-25

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: 9/29/98

DATE FINISHED: 9/29/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 11.9'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE:

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)	рертн (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Clay tile and Concrete Floor.	
-1-	SS-I	 		90	1.6	0.1	-1-	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-		
-3-							-3-	Tan brown fine to medium SAND and GRAVEL, some Silt.	
-4-							-4-	Damp to moist.	
	SS-3			50	1.5	0.8			
- 5-							-5-	Moist to wet at 5.5'.	
-6-							-6-		
	SS-4			50	4.3	4.2			
-7 -]	-7-	Wet at 7.0'.	
-8-							-8-		
	SS-5			65	0.9	0.3	}	Gray, trace Silt and Rock fragments. Moist to wet.	
-9-					9,5		- 9-		
10							10		
-10-	SS-6			70	1.6	0.8	-10-	Some large Rock fragments. Moist to wet.	
-11-	33-0			70	1.6	0.8	-11-		i
-12-							-12-	Equipment refusal at 11.9'.	
-13-							-13-		9
	(1
-14-]				-14-		ļ
-15-							-15-		

FILE NO.: 1506R-97 BORING NO.: TB-26

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: 10.1'

DEPTH DRILLED INTO ROCK: 0'
TOTAL DEPTH OF HOLE: 10.1'

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

WEATHER: NA

TOTAL	DEI III C	or node.					**	EATHER: IVA	
ОЕРТН (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- -2- -3-	SS-1	NA	NA	85	9.1	6.0	-1- -2- -3-	Clay tile and Concrete Floor. Gray Sand and Gravel, trace Silt (FILL). Damp. Red yellow Sandy SILT, some Gravel. Damp. Tan brown Silty SAND, some Gravel. Damp.	
-4- -5- -6-	SS-2			75	2.6	3.9	-4- -5- -6-	Gray fine to medium SAND and GRAVEL, some Silt. Damp to moist.	Chemical odor.
-8- -9- -10-	SS-3			80	3.9	4.8	-9- -10-	Wet at 8.0' Dark gray seam with Rock fragments.	Yellow orange discoloration.
-11- -12-							-11-	Equipment refusal at 10.1'.	
-13- -14- -15-		V	•				-13- -14- -15-		

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

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
		NA	NA					Clay tile and Concrete Floor.	
-1-							-I-	Tan gray Sand and Gravel (FILL). Damp.	
-2-	SS-1			90	4.3	18	-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			95	1.9	10	-4-		
-5-							-5-	Equipment refusal at 5.0'.	
-6-			***************************************				-6-		
-7-							-7-		
-8-							-8-		
- 9-							- 9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-13-				l			-13-		
-14-							-14-		
-15-		₩	\		parts per i		-15-		

FILE NO.: 1506R-97 BORING NO.: TB-27A

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, 3' south of TB-27

DATE STARTED: 9/22/98

DATE FINISHED: 9/22/98

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

DEP TH (FT)	SAMPLE NO,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ОЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Concrete floor.	
-1-							-1-	Tan gray Sand and Gravel (FILL). Damp.	
-2-	SS-1			55	-	-	-2-	Black Clay, fine to medium Sand, Gravel, Wood, Organics (FILL). Damp to moist.	Chemical odor.
-3-							-3-	Tan brown fine to medium SAND, some Silt and Gravel. Damp.	
-4-							-4-	Danip.	
-5-			***				-5-	Some Clay, Roots and seam of Rock Fragments.	
-6-	SS-2			100	0.4	18	-6-		Possible
-7-							-7-	Yellow orange fine to medium SAND, some Gravel, little Silt. Moist to wet.	discoloration.
-8-		***************************************					-8-	Gray tan fine to medium SAND and GRAVEL, some Silt and Rock fragments. Moist.	Chemical odor.
-9-						_	-9-	Gray brown. Wet.	
-10-	SS-3			100	4.1	32	-10-		
-11-							-11-		
-12-							-12-	Gray brown SAND, some Gravel and Rock fragments, trace	
-13-	SS-4			100	39.7	72	-13-	Silt. Wet.	Possible chemical odor.
-14-							-14-	Moist.	
-15-			•				-15-	Equipment refusal at 14.5'.	

FILE NO.: 1506R-97 BORING NO.: TB-28

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

NA = Not Applicable

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: 13.1'

DEPTH DRILLED INTO ROCK: 0'
TOTAL DEPTH OF HOLE: 13.1'

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

WEATHER : NA

ДЕРТН (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-							-1-	Brown tan Silt, Sand, Gravel, trace Clay (FILL). Damp.	
-2-	SS-1			75	0.0	1.4	-2-		
-3-							-3-	Red brown Silty SAND, some Gravel. Damp.	
-4-							-4-		
-5-							-5-	Moist.	
-6-	SS-2			90	7.1	12	-6-		
-7-							-7-	Gray. Moist to wet.	
- 8-							-8-		
-9-							-9-		
-10-	SS-3			50	27.1	72	-10-	Some Rock fragments. Wet.	
-11-							-11-		
-12-	SS-4			25	201	220	-12-		Possible chemical odor.
-13-							-13-		
-14-							-14-	Equipment refusal at 13.1'.	
-15-		•	•				-15-		

JD3066 / 1506R-97 10/20/99

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

FILE NO.: 1506R-97 BORING NO.: TB-29 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: 9/29/98

DATE FINISHED: 9/29/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 7.9'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 7.

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

WEATHER: NA

Secondary Sec										
SS-1	DEPTH (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	DEP TH (FT)		COMMENTS
SS-1			NA	NA					Ceramic tile and concrete floor.	
SS-2	-1-	SS-1			80	5.2	I.4	-1-	Tan SAND and SILT, some Gravel, trace Clay. Moist	
SS-2	-2-							-2-		
SS-3		SS-2			75	1.3	0.7			
-5-	-4-							-4-		
-6-	-5-	SS-3			75	1.4	3.6	-5-		
SS-4	- 6-							-6-	wet at 5.8°.	
-89101112131415- -8- -8- -8- -8- Equipment refusal at 7.9'. Equipment refusal at 7.9'. Figure SAND and GRAVEL, trace Silt and Rock fragments. Wet. Equipment refusal at 7.9'. Figure 1 - 10- -101112131415- -15- -15- -8- Equipment refusal at 7.9'. Figure 1 - 10101010101111		SS-4			65	4.9	5.2			
-9101112131415- Value Value Value Value Equipment refusal at 7.9'. Equipment refusal at 7.9'. Equipment refusal at 7.9'. Equipment refusal at 7.9'. Equipment refusal at 7.9'. Figure									Gray fine SAND and GRAVEL, trace Silt and Rock fragments. Wet.	l l
-101112131415- -15-	-8-	_						-8-	Equipment refusal at 7.9'.	odor.
-1112131415- -15-	- 9-							-9-		
-12- -13- -14- -15-	-10-							-10-		
-13- -14- -15-	-11-							-11-		
-14-	-12-							-12-		
-15-	-13-			-				-13-		
-15-	-14-							-14-		
			*							

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

JD3066 / 1506R-97 10/20/99

FILE NO.: <u>1506R-97</u>

BORING NO.: TB-30

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

DATE STARTED: 9/24/98

DATUM: NA

LOCATION: North of Building in Driveway

DATE FINISHED: 9/24/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 10.0'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 10.0'

TOP OF ROCK ELEVATION: \underline{NA}

BOTTOM OF HOLE ELEVATION: $\ \underline{\text{NA}}$

WEATHER : Cloudy, Breezy, ~55°F

DEPTH (FT)	SAMPLE NO.	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1-	SS-1	NA	NA.	85	0.0	0.0	-1-	Asphalt pavement. Gray black Gravel, Sand, Cinders, Ash, Asphalt (FILL). Damp. Black Silt, fine Sand, Ash, Glass, Organics, and Brick (FILL). Damp to moist.	
-3-							-3-	Brown Silty SAND, some Gravel. Damp to moist.	
-5- -6-	SS-2			90	0.2	0.0	-5- -6-	Red brown fine to medium SAND and GRAVEL, trace to some Silt. Moist to wet. Wet at 6.5'.	
-7- -8- -9-	SS-3			70	0.6	0.6	-7- -8- -9-	Moist. Some Rock fragments.	Possible yellow discoloration and
-10-					_		-10-	Equipment refusal at 10.0'.	chemical odor.
-12-							-12-		
-13-							-13-		
-15-	TIANE	OUS NO	\ ▼	PPM =	parts per	million	-15-	otojonization detector FID = Flame Ionization Detector NC = N	at Collected

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

FILE NO.: 1506R-97 BORING NO.: TB-31

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: 14.0'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 14.0'

TOP OF ROCK ELEVATION: \underline{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)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Wood floor over concrete floor.	
-1-		 					-1-	Gray Gravel, Sand, Silt, Cinders (FILL). Damp.	
	SS-1			50	0.8	0.3		Brown tan Sandy SILT, some Gravel. Damp.	
-2-							-2-		
-3-							-3-		
-4-							-4-	Brown Silty SAND, some Gravel. Damp to moist.	
-5-	li .		***************************************		}		-5-		
-6-	SS-2			70	1.2	5.0	-6-		
-7-							-7-		
-8-					_		-8-		
- 9-							-9-	Wet at 8.5'.	
-10-	SS-3			80	1.4	6.0	-10-		
-11-							-11-		
-12-							-12-	Gray brown fine SAND and GRAVEL, trace Silt.	
-13-	SS-4			<u>-</u>	1.2	2.0	-13-	Moist at 12.8'.	
-14-							-14-		
-15-		¥	•		parts per i		-15-	Equipment refusal at 14.0'. Disconsistation detector FID = Flame Ionization Detector NC = N	

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

FILE NO.: 1506R-97

BORING NO.: TB-32

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: North of Building in Driveway

DATE STARTED: 9/24/98

DATE FINISHED: 9/24/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 12.0'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 12.0'

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

WEATHER: Cloudy, Breezy, ~55°F

ДЕРТН (FT)	SAMPLE NO,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
-1- -2-	SS-1	NA	NA	80	0.0	0.0	-1-	Asphalt pavement. Black brown Sand, Silt, Gravel, Cinders, Ash, Slag, Glass (FILL). Damp to moist.	Possible petroleum- like odor.
-3-							-3-	Tan fine to medium SAND, some Gravel, trace Silt. Damp to moist.	
-5-	SS-2			75	0.2	0.1	-5-	3" seam of black SAND. Moist 3" seam of brown coarse SAND, some Gravel. Moist to Wet Brown fine SAND, some Gravel, trace Silt. Wet.	
-6- -7-	l			l.			-7-	Brown time source, some Graver, trace sinc. Wet.	
-8 - -9-	SS-3			70	0.0	0.1	-8-	In many in Court and and	Possible yellow discoloration at 9.0'
-10-							-10-	Gray fine SAND and GRAVEL, trace Silt and Rock fragments.	to 9.5'.
-12-	SS-4			50	0.0	0.1	-12-	Moist to wet. Equipment refusal at 12.0'.	
-13-							-13-		
-15-							-15-		

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

ДЕРТН (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-						ĺ	-1-	Gray black Gravel, Sand, Cinders, Silt (FILL). Damp.	
	SS-1			80	0.4	0.7		Brown tan Silt, Sand, Gravel, and Roots (FILL). Damp.	
-2-						ł	-2-		
-3-							-3-		
-4-							-4-	Tan Sandy SILT, some Gravel. Damp to moist.	
		_				}			
-5-	SS-2			75	1.2	1.1	-5-		
-6-	33-2			'3	1.2		-6-	Tan fine to medium SAND, some Gravel and Silt. Moist.	
-7-							-7-	Wet at 7.5'.	
							-8-	Wet at 7.5.	
-8-	_] -8-		
-9-							-9-		
-10-	SS-3			80	19.8	14	-10-		
-11-							-11-		
-11-							-11-	Brown fine to medium SAND and GRAVEL, trace to some Silt. Wet.	
-12-		 	 				-12-	Sit. Wet.	
-13-	SS-4			50	6	8.6	-13-		
,,]			3.5	14	Gray brown fine SAND, some Gravel, trace Silt. Moist.	
-14-			-				-14-		
-15-		•	-				-15-	Equipment refusal at 14.5'.	

FILE NO.: 1506R-97 BORING NO.: TB-34 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.: \underline{NA} DATUM: \underline{NA}

LOCATION: Inside Building

DATE STARTED: 9/22/98

DATE FINISHED: 9/22/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 11.4'
DEPTH DRILLED INTO ROCK: 0'

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

TOTAL DEPTH OF HOLE: 11.4' WEATHER: NA

TOTAL	DEPTH O	F HOLE:	11	<u>.4'</u>		WEATHER: NA						
ОЕРТН (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-							-1-	Tan brown Sand, Gravel, Silt, and Concrete (FILL). Damp.				
	SS-1			75	0.1	1.0]	Brown Sand, Silt, Gravel and Rock fragments (FILL). Damp.				
-2-							-2-					
-3-							-3-		Possible petroleum-			
								Black Cinders, Slag, Sand, Silt and Asphalt (FILL).	like odor.			
-4-							-4-					
-5-							-5-	Red brown Silty fine to medium SAND, some Gravel, trace				
	SS-2			90-	0.9	1.5		Clay. Damp to moist.				
-6-	33-2				0.5	1.5	-6-					
-7-							-7-					
-/-							-/-	Wet at 7.8'.				
-8-	SS-3			70	1.8	3.2	-8-					
							9					
-9-	SS-4			75	5.7	2.4	-9-	Some Rock fragments. Wet.				
-10-							-10-	,	Dec 11.1			
	SS-5			75	5.8	12		Gray brown SAND and SILT, some Gravel and Rock fragments. Moist.	Possible chemical odor.			
-11-							-11-					
-12-							-12-	Equipment refusal at 11.4'.				
-13-		I I					-13-					
-14-		İ					-14-					
-15-		V	•				-15-					
									·			

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

JD3066 / 1506R-97

FILE NO.: 1506R-97 BORING NO.: TB-35 PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY 95 MT. READ BLVD, ROCHESTER, NEW YORK NYSDEC SITE #828085

CONTRACTOR: ZEBRA Environmental

TYPE OF DRILL RIC: ATV Mounted Geograph

TYPE OF DRILL RIG: <u>ATV-Mounted Geoprobe</u>
SAMPLING METHOD: <u>1" macro core</u>

AUGERS: Direct Push

SURFACE ELEV.: NA

DATUM: NA

LOCATION: North of Building in Driveway

DATE STARTED: 9/24/98

DATE FINISHED: 9/24/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 12.0 DEPTH DRILLED INTO ROCK: 0

TOTAL DEPTH OF HOLE: 12.0'

TOP OF ROCK ELEVATION: NA
BOTTOM OF HOLE ELEVATION: NA
WEATHER : Cloudy, Breezy, ~55°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- -2- -3-	SS-1	NA	NA	85	0.5	0.5	-1- -2- -3-	Asphalt pavement. Gray Gravel, Sand, Asphalt, Silt (FILL). Damp. Tan orange SILT, some Sand, trace Gravel. Moist. Tan fine to medium SAND, some Gravel and Silt. Moist.	
-4- -5- -6-	SS-2			80	3.5	1.2	-4- -5- -6- -7-	I" seam of black SAND and GRAVEL Wet at 5.0'.	
-8- -9- -10-	SS-3			50	2.0	0.6	-8- -9- -10-	Red gray fine SAND and GRAVEL, trace Silt. Moist to wet. Some Rock fragments. Moist to wet.	
-11-	SS-4			75	2.4	1.2	-11-	Equipment refusal at 12.0'.	Possible yellow discoloration and chemical odor.
-14-							-14-		

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

JD3066 / 1506R-97 10/20/99

FILE NO.: 1506R-97 BORING NO.: TB-36 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: 9/24/98

DATE FINISHED: 9/24/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: __10.2'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 10.2'

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

WEATHER: NA

Solitand register Soli										
SS-1	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
-123345568810101011112131414141414141515			NA	NA					Wood floor over concrete floor.	, , , , , , , , , , , , , , , , , , , ,
2-	-1-	SS-1			55	3.0	0.3	-1-		
SS-2 60									Brown Silty SAND, some Gravel, trace Clay. Damp to moist.	
-34567891011121314556777777777	-2-				-			-2-		
-567891011111213145666766766766	-3-	SS-2			60	4.6	0.1	-3-		
-56789101111121314899141414156666766766										n
-567891011121314141415666666666	-4-							-4-		
-7- SS-4	-5-	SS-3			60	3.2	1.2	-5-		
-7- SS-4										
-7- Brown fine to medium SAND and GRAVEL, some Silt. Moist Wet at 7.5' Some Rock fragments. Wet. -910- SS-6 0	-6-							-6-		
-8- SS-5 -910- SS-6 -11121314141415- SS-5 -70 -88 Some Rock fragments. Wet. -9 Moist to wet. Equipment refusal at 10.2'.	-7-	SS-4			40	1.9	3.6	-7-	Brown fine to medium SAND and GRAVEL, some Silt. Moist.	
-910111213141415161718181818181818									Wet at 7.5'.	
-9- SS-5 70 3.9 11 -9 Moist to wet. -10- SS-6 0 0	-8-			-				-8-	Some Rock fragments. Wet.	
-10- SS-6		SS-5			70	3.9	11		<u> </u>	
-10- SS-6 0 Equipment refusal at 10.2'. -1112131414-	-9-							-9-		
-11121314- Equipment refusal at 10.2'.	-10-							-10-	Moist to wet.	
-12- -13- -14-	-10-	SS-6	<u> </u>	$oxed{igspace}$	0	-	-	"	Equipment refusal at 10.2'.	
-13-	-11-			-				-11-		
-13-										
-14-	-12-			+		1		-12-		
-14-	12							12		
	-13-							-13-		
-15-	-14-			-				-14-		
	-15-							-15-		
MICCELL ANDOUG NOTES, DDM - next non-million. DID - Photoiogization detector. FID - Flame Jorganian Detector NC - Next Callacted			₩	V						

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

JD3066 / 1506R-97 10/20/99

FILE NO.: 1506R-97 BORING NO.: TB-37 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: 9/28/98

DATE FINISHED: 9/28/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 12.0'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE: 12.0'

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			50	1.3	0.3	-1-	Black Slag, Cinders, Ash, Gravel, Sand, Silt (FILL). Damp.	
-1-							-,-	Brown Silt, Sand, Grave and Brick (FILL). Damp.	
-2-		<u> </u>					-2-		
	SS-2	<u> </u>		70	1.6	1.3		D	
-3-	33-2	-		/0	1.0	1.5	-3-	Brown tan Silty SAND, some Gravel. Damp.	
-4-							-4-		
	SS-3		1	60	1.3	0.0	_	D. C. I. GAND LOUT. G. I.D.	
-5-			1				-5-	Brown fine to medium SAND and SILT, some Gravel. Damp to moist.	
-6-							-6-		
	SS-4			75	1.6	2.8			
-7-	33-4]	/3	1.0	2.0	-7-		
			-					Brown fine SAND and GRAVEL, trace to some Silt. Moist to	
-8-							-8-	wet.	Possible chemical
	SS-5		1	35	1.8	0.1			odor.
-9-						,	-9-		0.2017
-10-							-10-	Wet at 10.0'.	
-10-	SS-6			85	1.8	10.3	10	Some Rock fragments.	
-11-	33-0	-	-	83	1.0	10.3	-11-		
-12-							-12-	Equipment refusal at 12.0'.	
			1					Equipment retusal at 12.0.	
-13-							-13-		
-14-							-14-		
-15-							-15-		
		\ \ \	♥	<u> </u>					

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

FILE NO.: 1506R-97 BORING NO.: TB-38

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: Southeast parking lot.

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: 1

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

WEATHER : Sunny, light breeze ~50°F

DEPTH (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	рертн (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NA					Asphalt pavement.	
-1-							-1-	Brown black Gravel, Sand, Cinders, and Ash (FILL). Damp to moist.	
-2-	SS-1			90	1.3	11	-2-	Red brown SILT, some fine Sand and Gravel. Moist.	
-3-							-3-		
-4-							-4-	Brown Silty fine to medium SAND, some Gravel. Moist.	
-5-							-5-		
-6-	SS-2			70	0.4	2.0	-6-	Brown Silty fine to medium SAND and GRAVEL.	
-7-							-7-	Wet at 7.0'.	
-8-							-8-		
-9-							-9-	Red gray.	
-10-	SS-3			70	0.7	4.6	-10-	red gidy.	
-11-							-11-		Possible chemical
-12-							-12-		odor.
-13-	SS-4			50	0.9	12	-13-		
-14-							-14-	Moist 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

JD3066 / 1506R-97

FILE NO.: 1506R-97 BORING NO.: TB-39 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

THICKNESS OF OVERBURDEN: 11.8'

DEPTH DRILLED INTO ROCK: 0'

SURFACE ELEV.: NA

LOCATION: Inside Building

DATE STARTED: 9/28/98

DATE FINISHED: 9/28/98

DATUM: NA

DAY REPRESENTATIVE: J. Joseph Dorety

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)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS				
		NA	NA					Ceramic tile and concrete floor.					
-1- S	SS-1			85	I.5	0.7	-1-	Black Slag, Cinders, Gravel, Sand, and Ash (FILL). Damp. Brown Silt, Sand, Gravel, and Clay (FILL). Moist.					
-2-							-2-	Black Sand, Cinders, Gravel (FILL). Damp to moist.					
-3-	SS-2	_	***************************************	70	0.6	0.0	-3-	Brown Sandy SILT, some Gravel. Moist.					
-4-					_		-4-						
-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-						
	SS-5			85	1.3	0.2	-9-						
-10-							-10-	Brown fine SAND and GRAVEL, trace to some Silt. Wet to	Į				
	SS-6			80	2.8	3.6	-11-	moist.	Possible chemical odor.				
-12-							-12-	Equipment refusal at 11.8'.					
-13-							-13-	Z-prism location at 11.0.					
-14-						I	-14-						
-15-		•					-15-						

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

JD3066 / 1506R-97 10/20/99

FILE NO.: 1506R-97

BORING NO.: TB-40

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: East side of south parking lot.

DATE STARTED: 9/23/98

DATE FINISHED: 9/23/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 17.5'

TOP OF ROCK ELEVATION: NA 17.5'

DEPTH DRILLED INTO ROCK: 0'

BOTTOM OF HOLE ELEVATION: NA

TOTAL DEPTH OF HOLE:

WEATHER: Sunny, light breeze ~50°F

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-							-1-	Gray brown Sand, Gravel, Silt and Cinders (FILL). Damp.	
•							•		
-2-	SS-1			65	0.7	1.8	-2-		
-3-							-3-		
								Brown Silt, Sand, Ash, Cinders and Roots (FILL). Damp to moist.	
-4-							-4-	Brown tan Silty SAND, some Gravel. Moist.	
-5-							-5-	·	
	SS-2			90	0.6	1.6			
-6-	33-2			90	0.0	1.0	-6-	Brown tan SILT and SAND, some Gravel.	
								Brown (an SIL1 and SAND, some Grave).	
-7-							-7-		
-8-							-8-	Wet.	
-0-							-0-		
-9-							-9-		
	SS-3			75	0.8	2.4			
-10-							-10-		
-11-							-11-	Tan fine SAND and GRAVEL, trace Silt. Moist.	
-11-				_			-11-		
-12-							-12-		
-13-	SS-4			80	0.8	1.6	-13-	Brown.	
1.4									
-14-							-14-	Some Rock fragments.	
-15-							-15-		
-16-	SS-5			40	1.3	6.6	-16-		
						0.0			
-17-							-17-		
	ļ						1	Equipment refusal at 17.5'.	

FILE NO.: 1506R-97 BORING NO.: TB-41

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: West side of South parking lot

DATE STARTED: 9/24/98

DATE FINISHED: 9/24/98

DAY REPRESENTATIVE: J. Joseph Dorety

THICKNESS OF OVERBURDEN: 11.5'

DEPTH DRILLED INTO ROCK: 0'
TOTAL DEPTH OF HOLE: 11.5'

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

WEATHER : partly sunny, breezy, ~50°F

IOIALI	DEFINO	F HOLE:		1.3			w	EATHER: partly sunny, breezy, ~50°F	
ДЕРТН (FT)	SAMPLE NO,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	COMMENTS
		NA	NΑ					Asphalt pavement.	
-1- -2-	SS-1			85	0.3	0.0	-1- -2-	Rlack Gravel, Sand and Silt (FILL). Damp. Brown Sand, Silt, some Gravel (FILL). Damp.	Possible petroleum- like odor.
-3-							-3-	Red brown SILT, some Sand and Gravel. Damp to moist.	
-4-							-4-	Tan brown fine to medium SAND and GRAVEL, some Silt.	
-5-	SS-2			90	0.2	0.6	-5-	Moist to wet.	
-6- -7-							-7-		
-8-							8-	Wet at 7.5'.	
-9-	SS-3			90	0.4	0.7	-9-		
-10-	33-3			90	0.4	0.7	-10-	Red gray fine SAND and GRAVEL, trace Silt. Moist.	Possible yellow
-11-							-11-	Some Rock fragments.	discoloration
-12-							-12-	Equipment refusal at 11.5'.	
-13-							-13-		
-14-							-14-		
MICCE	LLANE	OUE NO		DDM -	narts ner	million	DID - Dh	otoionization detector $FID = Flame Ionization Detector NC = N$	

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

JD3066 / 1506R-97 10/20/99

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

AUGERS: Direct Push

NA = Not Applicable

SAMPLING METHOD: 1" macro core

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:

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-							-1-	Gray Gravel, Sand, Silt and Concrete (FILL). Damp.	
	SS-1			90	0.8	1.7		Seam of brick.	
-2-					0.0		-2-	Tan Silt, Sand, Gravel and Roots (FILL). Damp.	
-3-							-3-	Red brown SILT and SAND, some Gravel. Damp.	
-4-							-4-	Brown Silty SAND, some Gravel. Damp.	
-5-							-5-	Blown Sitty State, some Graver. Damp.	
-6-	SS-2			75	2.2	4.2	-6-	Brown Silty SAND and GRAVEL. Damp to moist.	
-7-							-7-		
-8-							-8-	Gray fine to medium SAND, some Silt and Gravel. Moist.	
-9-							-9-		
-10-	SS-3			70	0.7	3.6	-10-	Gray red fine SAND and GRAVEL, some Rock fragments, trace Silt. Wet.	
-11-							-11-		
-12-							-12-		
-13-	SS-4			60	0.8	3.0	-13-	Damp to moist.	
-14-							-14-		
-15-		\	•				-15-	Equipment refusal at 14.5'.	1

JD3066 / 1506R-97 10/20/99

FILE NO.: 1506R-97 BORING NO.: MW-17A

PROJECT: REMEDIAL INVESTIGATION/FEASIBILITY STUDY

95 MT. READ BLVD, ROCHESTER, NEW YORK

NYSDEC SITE #828085

		~	~~	
CONT	IKA	CI	OR:	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: 2/19/99

DATE FINISHED: 2/19/99

DAY REPRESENTATIVE: J. Kirk Hampton

THICKNESS OF OVERBURDEN: NA

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE:

TOP OF ROCK ELEVATION: $\underline{\text{NA}}$ BOTTOM OF HOLE ELEVATION: $\underline{\text{NA}}$

WEATHER: NA

ДЕРТН (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- -6-	SS-1			<u>-</u>	45.7	NC	-5- -6-	Yellow brown SAND, little Gravel.	
-7-							-7-		
-8-						-	-8-	Test boring terminated at 7.0'	
-9-							- 9-		
-10-							-10-		
-11-							-11-		
-12-							-12-		
-14-							-14-		
-15-		•	•				-15-		

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

JD3066 / 1506R-97

FILE NO.: 1506R-97 BORING NO.: TB-OS1

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: 13.0'

DEPTH DRILLED INTO ROCK: 0'

TOTAL DEPTH OF HOLE:

NA = Not Applicable

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-		NA	NA	7			-1-	Brown reworked Silty Sand, Gravel, Roots (FILL). Damp.	
-2-	SS-1			85	0.0		-2-	Brown reworked Sand, Silt, Gravel, trace Clay (FILL). Damp.	
-3-							-3-		
-4-							-4-	Gray brown Sandy SILT, Some Gravel, trace Clay. Damp.	
-5- -6-	SS-2			90	0.0		-5- -6-		
-7-							-7-		
-8-							-8-		
-9-	SS-3			75	0.0		-9-	Moist to wet.	
-10-	33-3			/3	0.0		-10-	Grades to red gray color.	
-11-							-11- -12-	W 4 4 12 0)	
-13-	SS-4			20	0.0		-12-	Wet at 12.0'.	
-14-							-14-	Equipment refusal at 13.0'.	
-15-		V	•		parts per		-15-		

(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 <i>-</i> -2-	SS-1	NA	N.	60	0.0		-1- -2-	Brown Sand, Silt, Gravel, Roots (TOPSOIL). Damp. Brown SAND and SILT, some Gravel, trace Clay.	
-4- -5-	SS-2			40	0.0		-4- -5-		
-6- -7-	33-2	****	***************************************	40			-6-	Brown Silty SAND, some Gravel, trace Clay. Moist to wet.	
-8-							-8- -9-	Equipment refusal at 7.0°.	
-10-							-10- -11-		
-12-			***************************************				-12-		
-13-	· 		***************************************				-13-		
-15-	LLANE	▼ OUS NO	▼ TES: P	PPM =	parts per i	million	-15- PID = Pho	otoionization detector FID = Flame Ionization Detector NC = No	t Collected

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

FILE NO.: 1506R-97

WELL NO .: MW-17

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'

TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:

TOTAL DEPTH OF HOLE: 38,3'

ДЕРТН (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-1-		-	-					-1-	8" Concrete Floor underlain by coarse Gravel.	Flush Mount Steel Curb Box
-2-	SS-1	8 10 15	25	30	-	0.3	<u>-</u>	-2-	Dark brown SILT.	← 6-inch Steel Temporary Casing
-3-	SS-2	19 8 12	32	40	_	11.1	_	-3-	Yellow brown very fine SAND and SILT.	— Annulus Filled with Cement and Bentonite Grout
-4-		20						-4- -5-	Moist.	Siou.
-6-	SS-3	38 64	102	40	_	17.3	-	-6-	Yellow brown very fine SAND, little Gravel.	
-7-	SS-4	38	90	40		6.3		-7-		
-8-	33-4	48	30	40		0.5		-8-	Gray fine SAND, trace Gravel. Moist	
-9- -10-	SS-5	5 8 13	21	10	_	2.4	-	-10-		
-11-	00.6	12				20.0		-11-	Light brown fine to medium SAND. Wet.	
-12-	SS-6	15 20 21	35	75	-	33.0	-	-12-	Some Rock fragments at 12.5'.	
-13-	SS-7	22	_	25	-	7.3	-	-13-	Auger refusal at 13.3'.	4-Inch Steel — Permanent Casing
14-		OUG NG						14-	Install 6"temporary casing to 13.3'.	

MISCELLANEOUS NOTES:

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

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

WELL NO. MW-17

SHEET 1 OF 3

FILE NO.: 1506R-97

WELL NO.: <u>MW-17</u>

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW

YORK

								_	TORK
DEPTH (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD%	PID READING (PPM)	FID READING (PPM)	рертн (ғт)	SOIL AND ROCK DESCRIPTION WELL CONSTRUCTION
-15-								-15-	Light gray massive Dolomite, hard. (LOCKPORT FORMATION)
-16-	C-I HQ	-	-	86.7	46.7	0.0	-	-16-	Permanent Casing
-17-								-17-	— Annulus Filled with Cement and Bentonite Grout
-18-								-18-	
-19-						0.5	-	-19-	NX Core Open Hole
-20-	}							-20-	
-21-						0.3	-	-21-	
-22-						0.2	(-	-22-	
-23-	C-2 NX	-	-	98.3	91.7			-23-	
-24-	I NA					0.4	-	-24-	
-25-						0.3		-25-	
-26-		ŀ					-	-26-	
-27-						0.4	-	-27-	U 6284
-28-								-28-	1/4" vug at 29'.
-29-								-29-	1/4" vug at 29'.
-30-								-30-	
-31-	I I ANTE							-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. FILE NO.: 1506R-97 WELL NO.: MW-17 2144 BRIGHTON-HENRIETTA TOWN LINE ROAD **ROCHESTER, NEW YORK 14623** NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW (716) 292-1090 YORK BLOWS PER 0.5 FOOT FID READING (PPM) SAMPLE NO. SOIL AND ROCK DESCRIPTION WELL CONSTRUCTION RQD % -32--33-C-3 96.7 77.5 NX Core Open Hole NX -34--35-... I" vug at 35.3'. -36--37--38-Bottom of Well Bottom of Well at 38.3'. -39--40-Core block encountered at 16.1' and 17.0'. Temporary 6" steel casing installed to 13.3'. -41-Rock reamed to 18.3' with 5-5/8" roller bit. Permanent 4" steel casing set to 18.3'. -42-Open NX core to 38.3'. -43-

MISCELLANEOUS NOTES:

DEPTH (FT)

-32-

-33-

-34-

-35-

-36-

-37-

-38-

-39-

-40-

-41-

-42-

-43-

-44-

-45-

-46-

-47-

-48-

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

-44-

-45-

-46-

-47-

-48-

SHEET 3 OF 3

FILE NO.: 1506R-97

WELL NO.: MW-18

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 CO	NSTRUCTION
									Asphalt pavement underlain by Gravel. Dry.		Flush Mount Steel Curb
-1-			ļ					-1-			Вох
-2-								-2-	No samples collected. See MW-19 well log.		Cement Grout
-3-	l							-3-	Use 4-1/4" augers to advance boring to refusal.		2"-dia. — Sch. 40
-4-								-4-			PVC riser Bentonite
-5-								-5-			Pellets
-6-								-6-			
-7-								-7-			Sand Pack (Size 00)
-8-								-8-			i !
-9-				ľ		 		-9-			} ! !
-10-								-10-		1 7	2"-dia. Sch. 40 10-slot PVC screen
-11-			ļ					-11-			
-12-								-12-			
-13-								-13-			
-14- MISCEI								-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

FILE NO.: <u>1506R-97</u>

WELL NO.: MW-18

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK

ДЕРТН (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- -16-	Light gray massive Dolomite, hard. Upper one foot has vertical to horizontal fractures. Slightly weathered at partings. (LOCKPORT FORMATION).	HQ Core Sand Pack (Size 00) 2"-dia. Sch. 40 10-slot PVC screen Bottom of Well
-17-								-17-	Bottom of well at 16.6'.	Bottom of West
-18-		,						-18-	Temporary 8" steel casing installed to 13.6'.	
-19-								-19-		
-20-		(l			-20-		
-21-								-21-		
-22-				1)				-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

(716) 292-1090

FILE NO.: 1506R-97

WELL NO.: MW-19

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'

LOCATION: West of Building

DATE STARTED: 11/2/98

DATE FINISHED: 11/3/98

DATUM: 100.00'

DAY REPRESENTATIVE: Dennis Peck

THICKNESS OF OVERBURDEN: 12.0'

DEPTH DRILLED INTO ROCK: 25.0'

TOP OF ROCK ELEVATION:

BOTTOM OF HOLE ELEVATION:

TOTAL DEPTH OF HOLE: 37.0'

		· · · · · · · · · · · · · · · · · · ·							<u> </u>	
DEPTH (FT)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	DEP TH (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
		-							6" Asphalt pavement.	Flush Mount Steel Curb
-1-	SS-1	10	14	40	_	0.0	•	-1-	Light brown fine SAND, trace fine Gravel. Dry.	Box 4 8-inch Steel Temporary
-2-		16						-2-	Diy.	Casing
-3-	SS-2	6	19	60	-	0.0	-	-3-	Moist.	— Annulus Filled with Cement and Bentonite
-4-		20	i _			 		-4-		Grout
-5-	SS-3	3 10 13	23	50	-	0.0	-	-5-	Some Gravel. Moist.	
-6-		15								
-0-		6						-6-		
-7-	SS-4	29	41	60	-	0.0	-	_		
-/-		12	1					-7-	Gray medium SAND, little Gravel	
1		18							Oray incumin SAND, fittle Graver	
-8-		13			_		-	-8-		
-9-	SS-5	20 18	38	75	-	0.0	-	-9-		
-10-								-10-		
		41				1				
-11-	SS-6	30	52	30	-	0.0	-	-11-		
-12-		100/2"						-12-		
-13-								-13-	Auger refusal at 11.8'.	6-Inch Steel
-14-								-14-	Install 8"temporary casing to 12.0'.	Permanent Casing

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

FILE NO.: 1506R-97

WELL NO.: MW-19

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK

									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	NC
-15- -16- -17-	C-1 HQ	-	-	70	30	-	-	-15- -16- -17-	Light gray massive Dolomite, hard. (LOCKPORT FORMATION)	ent lus with t and
-18-								-18-	Bentoni Grout Vugs at 19.3'. NX Co Open F	
-20-								-20-		
-22-								-22-		
-23- -24-	C-2 NX	-	-	100	84	0.0	-	-23- -24-		
-25-								-25-		
-26-								-26-		
-27-	_							-27-		
-29-								-29-		
-30-								-30-		
-31-		OUS NO	TEC.					-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

FILE NO.: 1506R-97

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
-3233343536373839404142434445464748-	C-3 NX	-	-	98	86	0.0	-	-3233343536373839404142434445464748-	2.5-inch vugs. Muddy at core breaks Bottom of Well at 37.0'. Temporary 8" steel casing installed to 12.0'. Core block encountered at 13'. Rock reamed to 17' with 7-7/8" roller bit. Permanent 6" steel casing set to 17'. Open NX core to 37'.	NX Core Open Hole Bottom of Well

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

(716) 292-1090

FILE NO.: 1506R-97

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'

TOP OF ROCK ELEVATION:

BOTTOM OF HOLE ELEVATION:

TOTAL DEPTH OF HOLE: 38.0'

TOTAL		r noce.	30.0				···			
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
	-	-	-	-	-	-			Asphalt pavement underlain by Gravel. Dry.	Flush Mount Steel Curb
-1-		5						-1-	Brown SILT and fine SAND.	Box ♣ 8-inch Steel
-2-	SS-1	3	6	10	-	0.7	1.0	-2-		Temporary Casing
-3-		3						-3-		Annulus Filled with
-4-	SS-2	3 2	5	30	-	0.3	0.5	-4-	Moist.	Cement and Bentonite Grout
-5-		3						- 5-		
-6-	SS-3	11	26	50	•	0.6	0.5	-6-	Brown fine SAND, trace Gravel. Moist.	
-7-		26						-7-		
-8-	SS-4	9	27	60	-	0.5	0.5	-8-	Little Gravel.	
		18		 						
-9-	SS-5	2	35	75	_	0.5	0.5	-9-		
-10-	33-3	21] 33	,,,		0.5	0.3	-10-	Moist.	
-11-		28						-11-	Gray, some angular Rock fragments. Wet.	
-12-	SS-6	18	-	-	-	0.5	0.3	-12-		
-13-								-13-	Auger refusal at 13.0'.	
-14-						0.3	0.0	-14-	Install 8"temporary casing to 13.0'. Void from 13.5' to 14.0'.	6-Inch Steel — Permanent Casing

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

FILE NO.: 1506R-97

WELL NO.: MW-20

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK

									1 7.41	
ОЕРТН (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- -16- -17-	C-1 HQ	•	-	90	85	0.9	-	-15- -16- -17-	Light gray massive Dolomite, hard. (LOCKPORT FORMATION) Some dark gray shale partings, slightly weathered.	— 6-Inch Steel Permanent Casing — Annulus Filled with Cement and Bentonite Grout
-18- -19-						0.3		-18- -19-	Some slightly weather shale partings between	NX Core Open Hole
-20- -21-						0.0		-20- -21-	18.0' and 29.0'.	
-22-						0.0		-22-		
-23-	C-2 NX	-	-	100	88	0.0	-	-23- -24-		
-25-						0.0		-25-		
-26- -27-						0.0		-26- -27-		
-28-						0.0		-28-		
-29- -30-						0.2		-29-	Highly fractured, slightly weathered between 29.4' and 30.0'.	
-31-						0.4		-31-	Some small vugs.	

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

FILE NO.: <u>1506R-97</u>

WELL NO.: MW-20

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK

									INEW TORK	
БЕРТН (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-						0.3		-32-		◆ NX Core Open Hole
-33-	C-3	_	-	100	75	0.5	_	-33-		◆ NX Core Open Hole
-34-	NX					0.4		-34-	1/2-inch shale seam at 34.5'.	Open Hole
-35-								-35-		
-36-		ı				0.4		-36-		
-37-						0.3		-37-	Shale seams at 37.7' and 38.0'.	
-38-			_			0.3		38	Bottom of Well at 38.0'.	Bottom of Well
-39-								-39-		
-40-								-40-	Temporary 8" steel casing installed to 13.0'. Rock reamed to 18' with 7-7/8" roller bit.	
-41-								-41-	Permanent 6" steel casing set to 18'. Open NX core to 38'.	
-42-								-42-		
-43-								-43-		
-44-								-44-		
-45-								-45-		
-46-								-46-		
-47-								-47-		
-48-		NIC NO						-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

(716) 292-1090

FILE NO.: 1506R-97

WELL NO.: MW-21

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

DATE STARTED: 10/28/98

DATUM: 100,00'

DATE FINISHED: 10/30/98

DAY REPRESENTATIVE: Dennis Peck

THICKNESS OF OVERBURDEN: 13.0' DEPTH DRILLED INTO ROCK: 25.0'

TOP OF ROCK ELEVATION: BOTTOM OF HOLE ELEVATION:

SURFACE ELEV.: 99.75'

LOCATION: East of Building

TOTAL DEPTH OF HOLE: 38.0'

				_					, 	
БЕРТН (ҒТ)	SAMPLE NO.,	BLOWS PER 0.5 FOOT	N-VALUE	% RECOVERY	RQD %	PID READING (PPM)	FID READING (PPM)	ДЕРТН (FT)	SOIL AND ROCK DESCRIPTION	WELL CONSTRUCTION
-]-	SS-1	3	6	25	<u>-</u>	0.0	0.0	-1-	Asphalt pavement underlain by Gravel. Dry. Yellow brown SILT, some Gravel.	Flush Mount Steel Curb Box
-2-		3						-2-	Dark brown fine SAND and GRAVEL. Dry.	◆ 8-inch Steel Temporary Casing
-3-	SS-2	5 6 7	11	40	-	0.0	0.0	-3-	Yellow brown medium SAND.	— Annulus Filled with Cement and Bentonite Grout
-4- -5-	SS-3	6 9	20	90	-	0.0	0.4	-5-	Yellow SILT and GRAVEL, trace Clay. Tan fine SAND, little Gravel. Moist to wet.	
-6-		11 15 7					-	6-		
-7-	SS-4	20 15 10	35	80	-	0.0	0.5	-7-		
-8-	SS-5	3	22	80	-	0.0	1.0	-8-	Gray medium SAND. Wet.	
-9- -10-		11						-9- 10-	Little Gravel.	
- 1-	SS-6	13	30	80	-	0.0	1.5	-11-		
-12-	SS-7	30 15	<u> </u>	10	_	0.0	1.5	-12-	Gray SAND and ROCK (dolomite) fragments.	
-13-						0.8	-	-13-	Auger refusal at 13.0'. Void at 13.0' to 13.5'.	6-Inch Steel — Permanent Casing
-14-		OLIC NO			<u> </u>	<u></u>	<u> </u>	-14-	Y Old at 13.0 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-21

SHEET 1 OF 3

FILE NO.: 1506R-97

WELL NO.: MW-21

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW

YORK

									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- -16- -17-	C-1 HQ	-	•	100	83	0.8 1.0 1.1	-	-15- -16- -17-	Light gray massive Dolomite, hard. Slightly weathered at partings. (LOCKPORT FORMATION).	— 6-Inch Steel Permanent Casing — Annulus Filled with Cement and Bentonite Grout
-19-						0.0		-19-		NX Core Open Hole
-21- -22-						0.0		-21-		
-23-	C-2 NX	-	-	96	89	0.0	-	-23-		
-25- -26-						0.0		-25- -26-		
-27- -28-						0.0		-27-	1/4-inch vug.	
-29- -30-								-29-		
-30- -31-								-30-		

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 2 OF 3

FILE NO.: <u>1506R-97</u>

WELL NO.: MW-21

NYSDEC SITE #828085, 95 MT. READ BLVD, ROCHESTER, NEW YORK

			((716) 29:	2-1090				NYSDEC SITE #828085, 95 MT. READ BI	LVD, ROCHESTER,
ДЕРТН (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
-3233343536373839404142434445464748- MISCE	C-3 NX	OUS NO	TES:	100	82	0.0		-32333435363738404142434445464748-	Slightly weathered Shale seams. 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'.	NX Core Open Hole Bottom of Well
PPM =	LLANE parts per hollow s	million	PID =			determin		3GS = below	tion Detector NC = Not Collected ground surface 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

Project No: 1506R-97

Boring Location: Inside building

Borehole Diameter: 4 inch

Ground Surface Elevation: 101.02'

Start Date: 8/28/00

Datum: 100.00'

Completion Date: 9/10/00

Borehole Depth: 80 feet

									32 feet TOC (10/6/00)
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
		0-1							3" Wood Floor 5" Concrete Floor underlain by black Sand and Slag (FILL).
		1-2				-	-		1'-2' - no sample.
. 8 . 11	SS-1	2-3	0.8		19	4.9	-		Light tan/brown StLT, little Clay, Firm, moist.
33 172-5"	\$S-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°.
	SS-3	5-7	1.5		57	8.9			Olive brown SILT, some fine Sand, trace gray Gravel. Very moist.
46 47 74	SS-4	7-9	2.0		121	23.8			Little Gravel (weathered). Very moist to wet.
200-5"	SS-5	9-9.5	0.5			7.5			Light brown SILT, little Sand, Some gray Dolomite Rock fragments.
		9.5-10					1		auger refusal at 9.6', ream with 5 7/8" roller bit to 10.0'.
	C-1	10-13.9	0.2		0	 			Gray DOLOMITE, hard, trace vug.
	C-2	13.9-16	0.83	0.67	31.9	j			Little mineralized vugs, horizontal fractures.
	C-3	16-20	4.17	4.0	100	0.3			slight to moderately weathered fractures - primarily horizontal along bedding planes - no apparent vugs.
	8 11 13 33 172-5" 19 33 24 26 47 74 129 200-5"	8 11 SS-1 19 33 SS-2 19 324 26 SS-3 26 C-1 C-2	1-2 1-2	. 0-1 . 1-2 8 11	. 0-1 . 1-2 8 11 SS-1 2-3 0.8 172-5" SS-2 3-5 1.7 19 33 24 26 SS-3 5-7 1.5 46 47 74 129 200-5" SS-5 9-9.5 0.5 9.5-10 C-1 10-13.9 0.2 C-2 13.9-16 0.83 0.67	1-2 1-2 1-2	1-2 1-2 1-2	1-2	1-2

File: 1506R-97.log

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

Borehole Diameter: 4 inch

Ground Surface Elevation: 101.02'

Start Date: 8/28/00

Datum: 100.00'

Completion Date: 9/10/00

Borehole Depth: 80 feet

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

Com	pletion Me	thod: (Open Hole				٧	Vater L	evel: 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
		C-4	20-21	0.83	0.67	83	3.0			One mechanical fracture.
21	!				!					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			
25					1		· 			horizontal and 5 degree angle fractures.
26		C-6	25-29.8	4.92	4.5	93.8	0.2			
29			i		·					Two mineralized vugs.
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 - 35 - 35 - 35 - 35 - 35 -										
36										horizontal fractures, no vugs.
38 -		C-8	35-40	5.08	4.67	93.4	1.3			
39 -		+	ļ !		ļ	:	<u> </u> 			

File: 1506R-97.log

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

Project No: 1506R-97

Boring Location: Inside building

Ground Surface Elevation: 101.02'

Start Date: 8/28/00

Borehole Diameter: 4 inch

Datum: 100.00'

Completion Date: 9/10/00

Borehole Depth: 80 feet

Com	pletion Me	thod:	Open Hole				V	Vater L	evel: 13.8	22 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 - 42 - 43 - 44 - 44 - 44 - 44 - 44 - 44		C-9	40-45	4.75	4.13	82.6	0.1			DOLOMITE, horizontal to 5 degree angle fractures, one vertical "hairline" fracture, no vugs.
46 -		C-10	45-46.6	2.08	1.88	117	0.1			honzontal fractures and one vertical "hairline" fracture.
47 - 48 -		C-11	46.6-48.2	0.71	0.42	26.3	0.1			horizontal fractures,
49 -		C-12	48.2-50	1.96	1.31	72.8	. 0.3			honzontal fractures.
51 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		C-13	50-55	4.79	3.65	73.0	0.0			End of inner casing. horizontal to 30 degree angle fractures.
53 -		 							≒	One mineralized vug. Diffusion sample DS-1 @ 53.40'
55										horizontal to 5 degree angle fractures.
58 -		C-14	55-60	5.0	4.92	98.4	0.7			Diffusion sample DS-2 @ 57.30'
60		1				i 	ļ 	i i		

File: 1506R-97.log

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.Noil

Drilling Contractor: Nothnagle Drilling

Drilling Rig: Dietrich D-25

File: 1506R-97.log

Sampling Method: 2-inch Split Spoons, HQ Core

Project No: 1506R-97

Boring Location: Inside building

Ground Surface Elevation: 101.02'

Start Date: 8/28/00

Borehole Diameter: 4 inch

Datum: 100.00'

Completion Date: 9/10/00

Borehole Depth: 80 feet

Com	pletion M	ethod: (Dpen Hole				٧	Vater L	evel: 13.8	2 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
61		C-15	60-65	5.0	4.67	93.4				Diffusion sample DS-3 @ 60.85° horizontal fractures, two near vertical fractures.
65 66 66								!		horizontal fractures.
67 - 68 - 69 - 70 - 70		C-16	65-70	5.0	4.73	94.6	0.0			Diffusion sample DS-5 @ 67.85'
71 –			_							horizontal fractures.
72 73 74 75 75 75		C-17	70-75	5.0	4.71	94.2	0.0			Diffusion sample DS-5 @ 72.05'
76		C-18	75-80	5.0	4.27	85.4	0.0			horizontal fractures. Diffusion sample DS-6 @ 77.35'
79 -	506D 07			*						

APPENDIX C

Tables

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*
1300-3-38	2/19/99	IVI W -1 / A	3-1	run ICL*

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

SU	MP	M	W-1	M	W-3	M	W-4	M	W-6	M	W-7	M	W-8	M	W-9	M	W-10	M	W-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	12-19-99															
11:32	3.48		1	11:36	10.93		-		1		1		;	11:32	7.98	11:34	9.32		-:
11:37	3.45			11:41	10.93		-		-					11:35	7.96	11:38	9.27		1
11:42	3.40		-	11:45	10.93		1			1	1	1		11:39	7.98	11:41	9.29	1	-
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
		<u> </u>				<u> </u>	Ī	ш		,						_1			
ΔSWL	+1.35	1	+0.01		-0.10	T^{-}	+0.05		+0.04		+0.12	1	0.00		+0.02		+0.06]	+0.03

MV	V-12	M	W-13	M	W-14	M	W-15	M	W-16	M	W-17	M	W-18	M	W-19	M	W-20	M	W-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		<u> </u>													
_	1		1	11:34	9.53	$\overline{1}$	1]	;	11.32	9.66		:		1	-	;		;
		1	 	11:39	9.55					11:36	9.46						1	1	,
	 	 	†	11:44	9.54		-	<u> </u>		11:40	9.70		 		-	1	 		
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
	 -						·											B	
ΔSWL	+0.03	1	+0.02	1	+0.07	1	+0.01		+0.07	<u>T </u>	+0.27	-	+0.02	1	-0.02	1	+0.12	1	+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

SU	MP	M	W-1	M	W-3	M	W-4	M	W-6	N	W-7	M	W-8	M	W-9	M	W-10	M	W-11
TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL
4/5/99			-	 		†		1		1				_				1	
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 1	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
∆SWL	+1.65	Ι .	0.00		+0.17		+0.08	<u> </u>	+0.03	T	+0.04		+0.10		+0.07	T	+0.08		+0.01
SUMP	TURNED	ON AT I	7:06 ON 4	-5-99						•				ч .					
4/6/99	:		;		1		1		į.	1	!		;			1	:		1
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
ΔSWL	-1.81		+0.04		+0.10	T	-0.04	1	+0.29	1	+0.07		+0.02	T	+0.10	1	+0.14		+0.06

M	W-12	M	W-13	M	W-14	M	W-15	M	W-16	M	W-17	M	W-18	M	W-19	M	W-20	M	W-21
TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	SWL	TIME	; SWL	TIME	SWL	TIME	SWL	TIME	SWL
4/5/99	-	1	-		-		1		-	<u> </u>	1	1	1	1	:	i	1	1	1
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	701	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
∆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 1	7:06 ON 4	-5-99															
4/6/99	:						-		;						-				
9.02	691	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
_																		_	
∆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

Well ID	Top of Inner	Static Water	Thickness of	Groundwater
	Casing (feet)*	Level (feet)	DNAPL (feet)*	Elevation
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

Well ID	Top of Inner	Static Water	Depth to	Groundwater
	Casing (feet)	Level (feet)	DNAPL (feet)	Elevation
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.

JD3251 / 1506R-97

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

95 Mt. Read Blvd. Rochester, New York

Well ID	Depth to	Static Water	Depth to	Depth of	NAPL	Top of	Groundwater
	LNAPL	Level (feet)	DNAPL	Well (feet)*	thickness	Inner	Elevation
	(feet)1		(feet) ¹		(feet)	casing (feet)	
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	100.55	91.45
1					(DNAPL)		
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

Well ID	Top of Inner	Static Water	Depth to	Groundwater
	Casing (feet)	Level (feet)	DNAPL (feet)	Elevation
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.

JD3333 / 1506R-97

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

LOCATION	PEAK PID F (PPM) WITI INTER	H DEPTH	PTH (PPM) WITH DEPTH INTERVAL		LOCATION	PEAK PID R (PPM) WITI INTER	H DEPTH	PEAK FID (PPM) WIT INTER	H DEPTH
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'
ТВ-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	ТВ-36	4.6	2-4'	11	8-10'
TB-13	0.2	4-8	1.5	8-12'	ТВ-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'
ТВ-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	-
ГВ-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	-			1		1

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			NYSDEC TAGM 4046 RECOMMENDED	USEPA HEAST							
COMPOUNDS	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')	TB-11(8-12')	1506-S-17 TB-11(8-12')	SOIL CLEANUP OBJECTIVE (PPB)	VALUE (PPB)
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

= Indicates an estimate value.

 Identifies compounds identified in an analysis at a secondary dilution factor.
 Indicates presumptive evidence of tentatively identified compounds.
 Not detected above reported laboratory detection limit value. D

N

ND

= Not available. NA

TABLE 10B

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

SOIL SAMPLES

DETECTED VOLATILE						SAI	MPLE AND	LOCAT	ION	T-1					NYSDEC TAGM 4046 RECOMMENDED	USEPA HEAST	
COMPOUNDS	1506-\$ TB-26(4		1506-S TB-38(8	1 1 2 1 2 2	1506-S-48 TB-40(8-11.5')		THE PARTY OF THE P	1506-S-49 TB-37(8-10')		50 12')	1506-S-58 M ¹ 17A(5-7')	4 14 170	1506-S-56 MW-17(11-13')		SOIL CLEANUP OBJECTIVE	VALUE	
Acetone	ND	:	ND	:	ND		ND	!	ND		ND		ND	:	200	8,000,000	
Carbon Disulfide	2	J	ND	;	ND		ND	-	ND	1	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	1	ND	;	ND	;	ND	;	ND		ND	1	200	8.000,000	
1.1-Dichloroethene	ND		ND		ND		ND		ND	-	ND		ND		400	12,000	
Total 1.2-Dichloroethene	ND	- ;	ND	1	ND		ND		ND	1	ND ;	$\neg \neg$	ND	1	300	2.000,000	
Trichloroethene	14	J	ND		ND		ND	i	ND	:	9	J	120	DJ	700	64,000	
Tetrachloroethene	ND		ND	;	ND	-	ND	1	12	1	ND :		720	; DJ	1,400	14,000	
Ethylbenzene	ND		ND	:	ND		ND	-	ND	1	ND		ND	:	5,500	8,000,000	
Total Xylenes	ND	1	ND		ND		ND		ND	;	ND ;		ND	1	1,200	200.000,000	
Methylene chloride	ND		ND		ND	-;	ND		ND		ND		1	-J	100	93,000	
TENTATIVELY IDENTIFIED COMPOUNDS										1				i i i i		(1) (1) (2) (3) (4) (4) (5) (7)	
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	1	9		841	1	≤ 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 com-

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

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

CHROMIUM TEST RESULTS IN PARTS PER MILLION (PPM)

SOIL SAMPLES

SAMPLE NUMBER	LOCATION AND DEPTH	TOTAL CHR (PPM		HEXAVALEN CHROMIUM (P	
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	<u>. </u>
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 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	<u> </u>	NA	
1506-S-43	TB-29 (6-7.9')	9.3	1	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	!
CLEANUP OBJ	RECOMMENDED SOIL IECTIVE (PPM)	10 or SB	(50) ^r	(50)	
17 CYGAGG A 2 CYGAGG A 3 CYGAGG A	1 4046 TYPICAL RANGES (PPM)	1.5 - 4	10	NA	
	VALUE (PPM)	80,00	0	400	and the second
	<u> 1988 - 1988 - E. C. C. C. C. C. C. C. C. C. C. C. C. C.</u>	I was the same of	many of the contract	Maria Tiller Cara Service	

= Indicates a value estimated or not reported due to the presence of interference = Indicates spike sample recovery is not within the control limits

N J

= Estimated value as recommended in the Data Usability Summary Report = Not detected above reported laboratory detection limit value = Not analyzed for this specific constituent

ND

NA

= Indicates duplicate analysis was not within the control limits

SB= Site background

= 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 R CLEANUP OBJ		10 or SB (50) ¹	(50) ¹
NYSDEC TAGM BACKGROUND		1.5 - 40	NA 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.

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

SOIL SAMPLES

DETECTED					SAM	PLE A	ND LOCAT	TON					NYSDEC TAGM 4046	NYSDEC TAGM 4046
ANALYTES	1506-S TB-18(12		1506-5 TB-10A(5		1506-S- TB-10A(8-		1506- TB-27A(6 191 20 1	1506-5 TB-30(1506-S-5 MW-17(5-		TYPICAL BACKGROUND RANGES (PPM)	RECOMMENDED SOIL CLEANUP OBJECTIVE (PPM)
Aluminum	3,210		3,600		3,420		22,900	*	4,990	*	4,510		33,000	SB
Antimony	ND	<u> </u>	_ND		ND	<u> </u>	1.9	BNJ	ND	N	ND	NJ	NA	SB
Arsenic	1.2	В	1.3	В	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	1.6	NJ	1.1	N	0.34	В	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) ¹
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) ²
Cobalt	2.8	В	3.3	В	3.3	В	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	T	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	В	6.1	В	6.3	В	19.3	NJ	14.0	_ N	8.5		0.5-25	13 or SB
Potassium	840	_ B _	805	В	758	В	1,980	Е	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	В	984	В	1,540		851	В	272	В	6,000-8,000	SB
Thallium	ND		ND		ND	:	2.0	В	ND		ND		NA	SB
Vanadium	8.0	В	9.7	В	7.8	В	25.8		11.0	В	14.3		1-300	150 or SB
Zinc	16.5	EJ	23.3	EJ	19.3	Е	2,770	NJ	61.7	N	27.8		9-50	20 or SB
Molybdenum	0.55		ND		ND		23.1		0.86	В	NA		NA	NA

⁼ Indicates duplicate analysis is not within the control limits.

2

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.

⁼ Estimated value as recommended in the Data Usability Summary Report.

ND = Not detected above reported laboratory detection limit value.

NA = Not available.

^{= 1995} TAGM 4046 "proposed" recommended soil cleanup objective for cadmium of 10 ppm

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

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

SOIL SAMPLE

DETECTED SVOCS	SAMPLE DESIGNATION LOCATION	N AND	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 NA
Unknown Ketone	110	J	NA NA	NA

= Indicates an estimate value.

= Indicates presumptive evidence of tentatively identified compounds.

NA = Not available.

J

N

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

SOIL SAMPLES

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

ND - Not detected above reported laboratory detection limit value.

NR = Not Required.

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

DECEMBER 1998 GROUNDWATER SAMPLES

SAMPLE NUMBER	LOCATION				Anna San	DI	TECTED	VOLA	TILE COM	POUN	DS					
		TOTAL VOCs	PC	E	TCE		1,2-D0	CE.	1,2-D€	À	VC		1,1-D(Œ	1,1-D	CA
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	1	ND	1	ND	1	ND	1
1506-W-MW4	MW-4	14	ND	BJ	ND	:	ND	:	ND	:	ND	: -	ND	Ţ	ND	:
1506-W-MW6	MW-6	105	ND	1	ND	:	100	1	3	; J	2	; J	ND	 	ND	-
1506-W-MW7	MW-7	12	ND	;	ND	:	ND		ND	:	ND	1	ND	-	ND	:
1506-W-MW8	MW-8	2,140	1,600		540	-	ND	1	ND	1	ND	† —	ND	1	ND	
B21608	MW-8	1,886	1,300 1,400	E DJ	460 480	DJ	6 ND	J -	ND	1	ND		ND		ND	
1506-W-MW9	MW-9	155,969	19,000 95,000	E BDJ	9,800 59,000	E DJ	2,000 1,400	E DJ	ND ND	DJ	ND ND	DJ	17 ND	DJ	23 ND	D1 1
1506-W-MW10	MW-10	20,340	ND ND	DJ	17,000 18,000	E DJ	2,100 2,000	- DJ	ND ND	- DJ	260 230	J DJ	120 110	DJ	ND ND	DJ
1506-W-MWI1	MW-11	209	120	В	37	;	22	:	ND		ND	1	10	1	10	1
1506-W-MW12	MW-12	4,880	6,700 4,500	BE BDJ	550 380	DJ	ND ND	DJ	ND ND	DJ	ND ND	DJ	ND ND	DJ	ND ND	DJ
1506-W-MW13	MW-13	131	10	В	30	;	71	!	ND		ND	7	ND		ND	Ţ
1506-W-MW14	MW-14	45	ND	BJ	ND	:	ND	 	ND		ND	;	ND	: 	ND	+
1506-W-MW16	MW-16	42	ND	BJ	11	:		J	ND	: 7	ND	<u> </u>	ND	:	ND	7
1506-W-MW17	MW-17	9,070	5,800	В	3,000	4	270	; J	ND	1	ND	 -	ND	†	ND	-
B21617	MW-17	5,930	3,700		2,000		230	J	ND	:	ND	:	ND	1	ND	:
1506-W-MW18	MW-18	129	ND	BJ	14		81	;	ND	-	24	:	- 8	; J	2	;]
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	\equiv	ND		ND		ND	· ·
1506-W-MW21	MW-21	144	ND		ND		140	1	ND	:	4	; J	ND	1	ND	
1506-W-SUMP	SUMP	10,750	2,400	В	4,900	:	3,200	:	ND		110	J	140	1	ND	\Box
1506-N-MW-9 (pre-purge)	MW-9	119,000	66,000	В	51,000		2,000	J	ND		ND		ND		ND	
NYSDEC TOGS 1.1.1 GRO STANDARD/GUIDANCE		NA	5		5		5		0.6		2		5	,	5	

= This flag is used when the analyte is found in the associated blank as well as in the sample. В

= This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. Е

= Indicates an estimate value.

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

= Indicates presumptive evidence of tentatively identified compounds. = Not detected above reported laboratory detection limit value.

ND

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	WELL					DE	TECTED VOL	ATILE COM	POUNDS				
NUMBER	LOCATION	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-I	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	ND
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 1	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
NYSDEC TO GROUNDV STANDARD/G VALUE (VATER UIDANCE	5	50	NA	7	1	NA.	5		,	_	NA	NA

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

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

CHROMIUM TEST RESULTS IN PARTS PER BILLION (PPB)

DECEMBER 1998 GROUNDWATER SAMPLES

SAMPLE NUMBER	LOCATION	TOTAL CHROM (PPB)	IUM	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	В	ND
1506-W-MW6	1506-W-MW6 MW-6		В	ND
1506-W-MW7	1506-W-MW7 MW-7		В	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	В	ND
1506-W-MW12	MW-12	621		587
1506-W-MW13	MW-13	7.4	В	ND
1506-W-MW14	MW-14	ND		ND
1506-W-MW16	MW-16	11.8		ND
B21616	MW-16	1.4	В	NA
1506-W-MW17	MW-17	16.2		ND
1506-W-MW18	MW-18	11.8		ND
1506-W-MW19	MW-19	2.1	В	ND
1506-W-MW20	MW-20	4.2	В	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
	I GROUNDWATER NCE VALUES (PPB)	50		50

ND = Not detected above reported laboratory detection limit value

NA = Not available

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

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

DECEMBER 1998 GROUNDWATER SAMPLES

DETECTED			700 S		S	AMPLE A	ND LOCATIO	N					NYSDEC TOGS 1.1.1	
ANALYTES	1506-W from N	Contract to the second	1506-W-N from MN	SOUTH SECTION AND ADDRESS OF THE PROPERTY OF T	1506-W- from M		B21616 From	MW-16	B21620 From	i MW-20	B21608 Fr	om MW-8	GROUNDWATER STANDARDS/GUIDANCE VALUES (PPB)	
Aluminum	9270	EN*J	456	EN*J	4,090	EN*J	167	В	3,260		721		NA NA	
Antimony	19.8	В	20.6	В	ND		ND		ND	1	780		3	
Arsenic	ND		ND		ND		ND	N	ND	N	24.7	N	25	
Barium	104	В	147	В	173	В	102	В	121	В	26.9	В	1,000	
Beryllium	ND		1.2	В	ND		2.8	В	2	В	0.35	В	3	
Cadmium	10		10		4.4	В	3.6	В	2.2	В	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	В	14.4		52,300		50	
Cobalt	17.2	В	19.9	В	2	В	ND		ND		4.3	В	NA	
Copper	273		233		14.8	В	ND		28		10.1	В	200	
Iron	14,400		13,400		7,340	 	18,200		11,200	<u> </u>	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	<u> </u>	151,000		35,000	
Manganese	643	EJ	230	EJ	145	EJ	270		186		123		300	
Mercury	ND		ND		ND		ND		ND		ND	1	0.7	
Nickel	309		30.9	В	12	В	2.5	В	9	В	16.3	В	100	
Potassium	10,200	*J	25,800	*1	8,900	*3	5,260	1	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	В	ND		2.3	В	3.1	В	3.7	В	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	В	8.1	В	ND	N	8.6	BN	ND	N	NA NA	
Zinc	117		218		64.6		30.1		37.2		9.3	В	2,000	
Cyanide	ND		ND		ND		NA	1	NA NA	<u> </u>	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.
 - = Indicates a value greater than or equal to the instrument detection limit, but less than the contract required detection limit.
- В = Indicates spike sample recovery is not within the control limits. Ν
 - = Estimated value as recommended in the Data Usability Summary Report.
 - = 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.

W

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

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

DECEMBER 1998 GROUNDWATER SAMPLES

DETECTED SVOCS	SA	MPLE D	ESIGNATIO	ON AND	LOCATION	1	NYSDEC TOGS 1.1.1 GROUNDWATER			
	1506-W-MW9 From MW-9		1506-W-MW16 From MW-16		1506-W-MW17 From MW-17		STANDARD/GUIDANCE VALUE (PPB)			
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 NA			
Sulfur	20	JN	ND		360	JN	NA			
Oxygenated compound	ND		8	J	ND		NA NA			
1,4-Oxathiane	ND		37	JN	ND		NA NA			
Chloropyridine isomer	ND		52	JN	ND		NA			
Dichtoropyridine isomer	ND		10	J	ND		NA NA			
Caprolactum	ND		5	JN	ND		NA			

= This flag is used when the analyte is found in the associated blank as well as in the sample. В

= Indicates an estimate value. J

 Indicates presumptive evidence of tentatively identified compounds.
 Not detected above reported laboratory detection limit value. N

NA = Not available.

ND

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

ND = Not detected above reported laboratory detection limit value.

NR = Not Required.

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	DETECTED VOLATILE COMPOUNDS											
	SAMPLED	TOTAL VOCs	PCE	TCE	1,2-DCE	1,2-DCA	vc	1,1-DCE	1,1-DCA	Acetone			
MW-1	8/90	19						Ī		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		***************************************		DETECTED	VOLATILE C	OMPOUNDS		S 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	SAMPLED	TOTAL	PCE	TCE	1,2-DCE	1,2-DCA	VC	1,1-DCE	1,1-DCA	Acetone
		VOCs		L						
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						
N1W-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.

95 MT. READ BOULEVARD ROCHESTER, NEW YORK

CUMULATIVE CHROMIUM TEST RESULTS IN PARTS PER BILLION (PPB)

GROUNDWATER SAMPLES

LOCATION	DATE SAMPLED	TOTAL CHROMIUM	HEXAVALENT
		(PPB)	CHROMIUM (PPB)
MW-1	4/95		
MW-1	10/95	10.6	
- MW-i	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	
MW20	12/98	14.4	NA
MW-21	12/98	53.5	NA
	10/95		
SUMP SUMP	10/95	4.5	

⁼ Not detected above reported laboratory detection limit value

f

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

JD3394-revised / 1506R-97

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	LOCATION		DETECTED VOLATILE COMPOUNDS										
NUMBER		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 E	2.600	360	ND	ND	ND	ND	ND	29 J	ND	ND
1506-17 (23-28')	MW-17	5,562	2,900 D	2,100 D	460	2 1	18	5 1	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 1	i 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 , 1	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 TO GROUNDW STANDARD/G VALUE (VATER UIDANCE	NA	5	5	5	2	5	5	50	NA	5	5	.

J = Indicates an estimate value.

 Identifies compounds identified in an analysis at a secondary dilution factor.
 Not detected above reported laboratory detection limit value. D

ND

NA = Not available.

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	LOCATION			DETECTED V	OLATILE CO	MPOUNDS		
NUMBER		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	NĎ	ND	ND	11.0	7.9
DS-6	MW-22 (77.35')	13.6	ND	ND	ND	ND	6.8	6.8
	1.1.1 GROUNDWATER IIDANCE 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-<u>17</u>

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

JOB#: 1506R-97

DATE/	12/2/98							
TIME	9:37	9:52	10:10	10:29	10:53	11:41	11:54	12:22
EVACUATION METHOD	Centrifugal				46	۲,	٠,	
METHOD	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 (OF)	60.7	65.5	66.7	67.1	67.7	69.2	67.9	69.3
рН	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 DEVELL. MENT DATA MW- 17 cont.

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

JOB#: 1506R-97

DATE/	12/2/98						
TIME	12:40	13:05	13:25	13:56	14:00		
EVACUATION	Centrifugal		"		"		
METHOD	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		
рН	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

WELL DEVELO: MENT DATA MW- 18

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

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

LEGEND:

NC = Not Collected

ND = Not Detected

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

JOB#: 1506R-97

WELL DEVELORMENT 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	"	"	"		cc .	"	66
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	37.0	66	"	66			"	"
STATIC WATER LEVEL (SWL) FT	11.62	-	<u> </u>	-	-		-	-
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
pН	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

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	66	66			"		"
PID/FID (PPM)	NC	-	-	-		-	-	<u> </u>
DEPTH OF WELL (FT)	37.0	-		-		-	-	-
STATIC WATER LEVEL (SWL) FT	-		-	-	<u>-</u>	-	-	
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
pН	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

WELL DEVELORMENT 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	и	"	"		"		cc
PID/FID (PPM)	NC	-	-	-	-	-	-	-
DEPTH OF WELL (FT)	38.0			66	- ci	"	çç	66
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 (OF)	58.3	59.5	60.5	60.6	58.9	58.4	57.6	57.2
рН	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

WELL DEVELU. MENT 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	i.c			"	"	· ·	
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 (OF)	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

WELL DEVELOPMENT DATA MW- 20 cont

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

JOB#:_1506R-97

DATE/	12/3/98	11:48	11:50	11:52	11:55		
TIME	11:46			11.52			
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 (OF)	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

WELL DEVELOR MENT 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	"	,,,	4.0			"	"
PID/FID (PPM)	NC	-	-	-	-	-	·	
DEPTH OF WELL (FT)	38.0	-		-	-	-	-	-
STATIC WATER LEVEL (SWL) FT	12.28	-	-	† <u>-</u>	-			-
VOLUME EVACUATED (GAL)	5	5	5	5	5	5	5	5
TOTAL VOLUME EVACUATED (GAL)	5	10	15	20	25	30	35	40
TEMPERATURE (OF)	58.5	57.3	57.4	58.1 (Dry)	57.9	58.7 (Dry)	60.8	60.0 (Dry)
pН	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

WELL DEVELOR MENT 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	"	··	<i>،</i> ،			···	u
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 (OF)	61.3	59.5	57.5	57.5	57.2	57.4	57.4	57.5
рН	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

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

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
рН	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

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
рН	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

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
рН	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

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

JOB#:	1506R.	.07
JUD#.	1 DOOK:	.71

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
pН	7.07	7.06	7.05	7.06	7.06	7.09	6.97	7.08
Eh	-	-	<u>-</u>	-	-	-	-	-
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

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
pН	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

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
рН	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

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

JOB#: 1506R-97

Day Environmental, Inc.

Rochester, New York 14623

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
pН	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

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
рН	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

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		
рН	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

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): <u>JAD/JKH/JSB/DMP</u>

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 $ m H_2O$ PER WELL CASING [GAL]:	<u>. 67</u>
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS	
" (0.1667) 0.1632023 VOL. OF H_2O IN CASING = DEPTH OF WA	TER COLUMN X WELL CONSTANT
CALCULATED PURGE VOLUME [GAL]: 2.02 (3.1)	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

SWL (FT)	TEMP (°C)	рН	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)

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 H2O PER WELL CASING [G	AL]:24.64
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS	
" (0.3333) 0.6528 VOL. OF H_2O 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	1
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

SWL (FT)	TEMP (°C)	Hq	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)

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 H2O PER WELL CASI	NG [GAL]:1.24	
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT(GAL/FT) CALCULATIONS		
" (0.1667) 0.1632 VOL. OF H₂O II	CASING = DEPTH OF WATER CO	DLUMN X WELL CONSTANT
CALCULATED PURGE VOLUME [GAL]:	3.72 (3 TIMES	CASING VOLUME)
ACTUAL VOLUME PURGED [GAL]:	4.5	
PURGE METHOD: _Centrifugal Pump_ PUR	GE 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

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
	8.15	9.4	7.39	0.6	-	Clear	0.1ppm (12/21/98)
II							0.8ppm (12/22/98)

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 H2O PER WELL CASING [GAL]:	23.41
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS	
' (0.3333) 0.6528 VOL. OF H_2O IN CASING = DEPTH OF WA	ATER COLUMN X WELL CONSTANT
CALCULATED PURGE VOLUME [GAL]:	(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

	SWL (FT)	TE M P (°C)	Hq	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
	9.34	11.8	7.27	1.0	_	Clear	0.0ppm (12/21/98)
ĮI.					1		0.4ppm (12/22/98)

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 H2O PER WELL C	ASING [GAL]:23.17
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATI	<u>cons</u>
i" (0.3333) 0.6528 VOL. OF F	120 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

SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
18.03	11.0	7.38	1.3	-	Slightly	0.1ppm (12/21/98)
					cloudy	0.0ppm (12/22/98)

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, $40-45^{\circ}F$; 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	3 (MEASURED FROM T.O.C.)					
DEPTH OF WATER COLUMN [FT]: 4.4	1 (DEPTH OF WELL - SWL)					
CALCULATED VOL. OF H2O PER WELL CASING [GA	L]: 72					
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) 2" (0.1667) 0.1632 VOL. OF H ₂ 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 (Ory)					
PURGE METHOD: Bailer PURGE ST	ART: 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	3' Bailer	VOAs, Total Cr, Hex Cr	Yellow

9.13 18.4 7.46 2.5 - Yellow	110ppm (12/21/98) 17.4ppm (12/22/98)

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): <u>JAD/JKH/JSB</u>

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 H2O PER WELL CASING [GAL]: 0.61
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS
" (0.1667) 0.1632 VOL. OF H_2O 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 Pump 13:00		VOAs, Total Cr, Hex Cr	Cloudy	

SWL (FT)	TEMP (°C)	На	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)

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 H2O PER WELL CA	ASING [GAL]: <u>.66</u>
ALCULATIONS: CASING DIA. (FT) WELL CONSTANT(GAL/FT) CALCULATIO	<u>IONS</u>
$2''$ (0.1667) 0.1632 VOL. OF H_2	${ m H}_{2}{ m O}$ 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: <u>15:20</u> END: <u>15:35</u>

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

SWL (FT)	TEMP (°C)	Hq	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
10.53	16.6	7.55	3.6		Slightly	984ppm (12/21/98)
				_	cloudy	55ppm (12/22/98)

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 H2O PER WELL	CASING [GAL]: .77
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS	ATIONS .
(0.1667) 0.1632 VOL. O	F H_2O 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

SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.83	16.0	7.13		Slightly	9.2ppm (12/21/98)	
ļ					cloudy	0.9ppm (12/22/98)

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 H2O PER WELL CASING [GAL]:82							
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS							
" (0.1667) 0.1632 VOL. OF H_2O IN CASING = DE	EPTH OF WATER COLUMN X WELL CONSTANT						
CALCULATED PURGE VOLUME [GAL]: 2.46	(3 TIMES CASING VOLUME)						
ACTUAL VOLUME PURGED [GAL]:2.0 (Dry	<u>')</u>						
PURGE METHOD: 3' Bailer PURGE STAR	RT: 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

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
	8.83	15.6	7.24	1.1	-	Cloudy	149ppm (12/21/98)
H				_ •			12.3ppm (12/22/98)

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): <u>JAD/JKH/JSB</u>

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 H2O PER WELL CASING [GAL]:78							
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) " (0.1667) 0.1632 VOL. OF H ₂ 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 PURG	GE 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

SWL (FT)	TEMP (°C)	рН	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)

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 ₂ O PER WELL CASING [GAL]:85						
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS						
." (0.1667) 0.1632 VOL. OF H_2O 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

SWL (FT)	TEMP (°C)	Нq	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
11.31	_	-	_	-	Slightly cloudy	1.5ppm (12/21/98)
					Ciday	0.3ppm (12/22/98)

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): <u>JAD/JKH/JSB</u>

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 H2O PER WELL CASING [GAL]:							
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS CALCULATIONS							
$^{\prime}$ (0.1667) 0.1632 VOL. OF H ₂ 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
_	-	-	-	-

SWL (FT)	TEMP (°C)	Нф	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
_	_	-	-	-	-	1.0ppm (12/21/98)

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]: (DEPTH OF WELL - SWL)						
CALCULATED VOL. OF H ₂ 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 ₂ 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

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
ı	14.75	9.5	7.77	3.7	-	Slightly cloudy	2.4ppm (12/21/98)
						Cloudy	0.3ppm (12/22/98)

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 H2O 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_2O 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

	SWL (FT)	TEMP (°C)	рН	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)

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 1	POP 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 H2O PER WELL CASI	NG [GAL]: 0.65						
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT(GAL/FT) CALCULATIONS							
" (0.1667) 0.1632 VOL. OF H ₂ O I	N CASING = DEPTH OF WATER CO	DLUMN X WELL CONSTANT					
CALCULATED PURGE VOLUME [GAL]:	1.95 (3 TIMES	CASING VOLUME)					
ACTUAL VOLUME PURGED [GAL]:2.5							
PURGE METHOD: Centrifugal Pump PUR	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

SWL (FT)	TEMP	Нд	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
12.06	12.8	7.26	1.7	-	Slightly Cloudy	1.1ppm (12/21/98)
					Cloudy	0.0ppm (12/22/98)

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 FF	ROM 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 H2O 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 ₂ 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

	SWL (FT)	TEMP (°C)	На	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
	11.81	12.2	7.43	2.0	-	Slightly	0.7ppm (12/21/98)
٦						Cloudy	0.0ppm (12/22/98)

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 ₂ 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 H2O 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

	EMP °C)	Hq	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
9.29 10	0.7	8.24	1.2	-	Slightly Cloudy	0.5ppm (12/21/98) 0.0ppm (12/22/98)

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 FRO	M 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 H2O PER WELL CASING [GAL]: 15.42	1
CALCULATIONS: CASING DIA. (FT) WELL CONSTANT (GAL/FT) CALCULATIONS 6" (0.5000) 1.4688 (0-18' BGS) VOL. OF H ₂ O IN CASING = DEPTH OF WATER 3" (0.250) 0.380 (18-38' BGS)	COLUMN X WELL CONSTANT
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

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY ms/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
ſ	12.49	10.6	7.72	1.0	-	Cloudy	0.2ppm (12/22/98)

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

SWL (FT)	TEMP (°C)	рН	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	<u></u>	
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

Date	Time Interval	Sample Interval (feet)	Cumulative Amount Purged (gallons)	WL Inside Packer (feet)	WL Above Packer (feet)
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.

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]:	
PACKERED INTERVAL BEING SAMPLE	O [FT]: 33' to 37.5' (4.5'column)
CALCULATED VOL. OF H ₂ O PER WELL T.O.C. = Top of inner casing. CALCULATIONS:	CASING [GAL]:
CASING DIA. (FT) WELL CONSTANT (GAL/FT)	CALCULATIONS
4" (0.3333) 0.6528 (0 - 18.3' BGS)	VOL. OF H2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250) 0.380 (18.3 - 38.3' BGS)
CALCULATED PURGE VOLUME [GAL]:	
ACTUAL VOLUME PURGED [GAL]:	BEING SAMPLED) 4.5 (air in purge tubing)
PURGE METHOD: foot valve and	tubing PURGE START: 1311 END: 1422

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME /	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-17(33-37.5')	1630/ 12-29-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL	PID READING
T	14.75	17.9	6.99	256	600	Cloudy	

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_2O PER WELL T.O.C. = Top of inner casing.	CASING [GAL]:
ALCULATIONS:	
CASING DIA. (FT) WELL CONSTANT (GAL/FT)	CALCULATIONS
4" (0.3333) 0.6528 (0 - 18.3' BGS)	VOL. OF H_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250) 0.380 (18.3 - 38.3' BGS)	
CALCULATED PURGE VOLUME [GAL]:	
ACTUAL VOLUME PURGED [GAL]:	,
PURGE METHOD: foot valve and t	ubing PURGE START: 759 END: 829

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME /	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-17(28-33')	920/ 12-30-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy

SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY	TURBIDITY (NTU)	VISUAL	PID READING
10.95	19.0	6.65	1029	500	Cloudy	

_____ 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 ₂ O PER WELL T.O.C. = Top of inner casing. CALCULATIONS:	CASING [GAL]:
CASING DIA. (FT) WELL CONSTANT (GAL/FT)	CALCULATIONS
	VOL. OF H2O 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 t	ubing PURGE START: 938 END: 1005

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME /	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-17(23-28')	1100/ 12-30-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy, sulfur odor.

SWL (FT)	TEMP (°C)	Нф	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL	PID READING
11.80	19.1	7.88	988	>1,100	Cloudy	

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 ₂ O PER WELL T.O.C. = Top of inner casing.	CASING [GAL]:
CALCULATIONS:	
CASING DIA. (FT) WELL CONSTANT (GAL/FT)	CALCULATIONS
4" (0.3333) 0.6528 (0 - 18.3' BGS)	VOL. OF H_2O 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,
ACTUAL VOLUME PURGED [GAL]:	1 LESS VOLUME OF PACKER EQUIPMENT)
PURGE METHOD: foot valve and to	ubing PURGE START: 1142 END: 1205

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME /	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-17(18.3-23')	1256/ 12-30-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL	PID READING
T	11.75	18.9	6.88	1045	120	Cloudy	

____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): <u>JAD</u>

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 ₂ 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 H2O IN CASING = DEPTH OF WATER COLUMN X W	ELL CONSTANT
3" (0.250) 0.380 (18 - 38' BGS)	
CALCULATED PURGE VOLUME [GAL]: 4.56 (3 TIMES CASING VOLUME OR BEING SAMPLED)	F INTERVAL
ACTUAL VOLUME PURGED [GAL]: 4.0 (dry)	
PURGE METHOD: foot valve and tubing PURGE START: 1025 END: 10	55

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME/	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-21(33-37')	1255/ 12-28-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Black/gray, sulfur odor.

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL	PID READING
Ī	16.02	11.6	7.13	26.2	850	dark gray	

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): <u>JAD</u>

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 ₂ O PER WELL T.O.C. = Top of inner casing. CALCULATIONS:	CASING [GAL]:
ASING DIA. (FT) WELL CONSTANT (GAL/FT)	CALCULATIONS
6" (0.5000) 1.4688 (0 - 18' BGS)	VOL. OF $H_2\text{O}$ IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
3" (0.250) 0.380 (18 - 38' BGS)	
	5.7 (3 TIMES CASING VOLUME OF INTERVAL BEING SAMPLED)
ACTUAL VOLUME PURGED [GAL]:	6.0
PURGE METHOD: _foot valve and to	ubing PURGE START: 1347 END: 1413

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME /	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-21(28-33')	1445/ 12-28-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy gray, sulfur odor.

	SWL (FT)	TEMP (°C)	рН	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL	PID READING
T	12.65	11.2	7.3	613	170	Cloudy gray	

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 FR	OM 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 ₂ O PER WELL T.O.C. = Top of inner casing. CALCULATIONS:	CASING [GAL]:	
CASING DIA. (FT) WELL CONSTANT (GAL/FT) 6" (0.5000) 1.4688 (0 - 18' BGS) 3" (0.250) 0.380 (18 - 38' BGS)		DEPTH OF WATER COLUMN X WELL CONSTANT
CALCULATED PURGE VOLUME [GAL]:		_ (3 TIMES CASING VOLUME OF INTERVAL BEING SAMPLED)
ACTUAL VOLUME PURGED [GAL]:	3.25 (dry)	
PURGE METHOD: _foot valve and t	ubing PURGE START:	1517 END: 1532

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME /	SAMPLING	ANALYTICAL	SAMPLE	
	DATE	METHOD	SCAN(S)	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)	рН	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL	PID READING
12.32	12.7	6.87	790	200	Light gray cloudy	

DAY ENVIRONMENTAL, INC.

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 ₂ 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 ₂ 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 /	SAMPLING	ANALYTICAL	SAMPLE
	DATE	METHOD	SCAN(S)	APPEARANCE
1506-21(18-23')	1045/ 12-29-99	1/2"ID 2'long steel bailer	ASP 95-1 (VOCs)	Cloudy gray

SWL (FT)	TEMP (°C)	рН	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 (ΟF	WELL	[FT]:	<u>79</u> .75	(MEASURED	FROM T	OP 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 signficantly 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 are 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")
- -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-S58 (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 >+_2XCRDL)). 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 antinomy (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 a concentrations exceeding fifteen hundred times the reported detection limit, and well above the project sample concentrations.

AQUEOUS SAMPLES

VOA Analyses

Analyte values which are 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 (<=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: PbCrO₄, analytical reagent grade. The insoluble matrix spike is prepared by adding 10-20 mg of PbCrO₄ to a separate sample aliquot. Store under dry conditions at 20-25 °C in a tightly sealed container.

162920425

- 5.7 Digestion solution: Dissolve 20.0 \pm 0.05 g NaOH and 30.0 \pm 0.05 g Na $_2$ 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, $K_2Cr_2O_7$, spiking solution (1000 mg/L Cr(VI)): Dissolve 2.829 g of stilled (105°C) $K_2Cr_2O_7$ 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 $K_2Cr_2O_7$ spiking solution (Section 5.8) to a 100 mL volumetric flask and fillute 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 Symples should be collected using devices and placed in containers that do not come stainless steel (e.g., plastic or glass).
 - ê.3 Samples should be stored field-moist at 4 ± 2°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.

70 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 ± 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.

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 $m_{\rm p}$ 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

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-04

1506-S-05 1506-S-06 1506-S-07 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 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

Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



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	ı	•	-		ASP95	-	
1506-S-05	A8126102	-	-		-	ASP95	•	
1506-S-06	A8126103	-	•	•	-	ASP95	u	
1506-S-07	A8126104	-	-	-	-	ASP25	-	
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	-	-	-	A SP95	,	
1506-T-19	A8128912	-	-	-	-	ASP95	-	

NYSDEC-1



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.



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

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-24 1506-S-25 1506-S-25 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.



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

Date



This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE 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	<u>-</u>	
1506-S-43	A8414702	•	•	-	-	ASP95	ASP95	
1506-S-44	A8414703	<u>-</u>	_	•	_	ASP95	ASP95	
76-S-45	A8414704	_	-	-	-	ASP95	ASP95	
1506-S-46	A8417701	ASP95	-	1	_	-	•	
1506 ₈ 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





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-53 1506-S-54 1506-S-55 1506-S-55 MD 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.



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

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	LABORATORY	ANALYTICAL REQUIREMENTS						
SAMPLE ID	SAMPLE ID	VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY	
1 506-S-52	A8508201	-	-	-	-	ASP95	-	
1 506-S-53	A8508202	-	-	-	-	ASP95		
1 506-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.

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 Severn Trent, Inc.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: STL BUFFALO

CUSTOMER LABORATORY		ANALYTICAL REQUIREMENTS						
SAMPLE ID	MPLE ID SAMPLE ID	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-MW11 1506-W-MW12 1506-W-MW13 1506-W-MW14 1506-W-MW16 1506-W-MW17 1506-W-MW17 MI

1506-W-MW17 MD 1506-W-MW17 MS 1506-W-MW17 MSD

1506-W-MW18 1506-W-MW19 1506-W-MW20 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 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 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.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER	LABORATORY		MENTS	ENTS			
SAMPLE ID	SAMPLE ID	VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-N-MW9	A8616901	ASP95	-	<u>-</u>	-	ASP95	<u>-</u>
1506-W-MW1	A8618601	ASP95				ASP95	-
1 506 - W-MW10	A8618608	ASP95	<u>-</u>	-		ASP95	-
1506-W-MW11	A8618609	ASP95	-	-		ASP95	
1 506 W-MW12	A8618610	ASP95	-			ASP95	-
506-W-MW13	A8618611	ASP95	-	-		ASP95	-
1 506-W-MW14	A8618612	ASP95	<u>-</u>	-		ASP95	-
1 506-W-MW16	A8618613	ASP95	ASP95	_	ASP95	ASP95	-
1 506-W-MW17	A8618614	ASP95	ASP95	-	ASP95	ASP95	<u>-</u>
1 506-W-MW18	A8618615	ASP95				ASP95	-
1506-W-MW19	A8618616	ASP95	-	-	-	ASP95	
1506-W-MW20	A8618617	ASP95	_	ı	-	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		-	T	ASP95	_

NYSDEC-1



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.



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.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER	LABORATORY		AN	ALYTICAL	REQUIRE	MENTS	
SAMPLE ID	SAMPLE ID	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 A

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

X Hardcopy not to follow

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.

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-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.

716-292-1090 FAX 716-292-0425

APPENDIX F

Pertinent Portions of Analytical Laboratory Reports



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 L.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

1/51/ 1

Kenneth E. Kasperek Laboratory Manager

CLF/KEK/ltb Enclosure

I.D. #A98-1237 #NY8A7861

This report contains 238 pages which are individually numbered.

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

Data

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

abime: RECRA_LABNET_INC	Contract: NY97	- 209
ab Code: RECNY_ Case No.: 7861_	SAS No.:	SDG No.:150602
rotocol Version: ASP95		
NYSDEC Sample No1506S11506S21506S3BLKSPK1BLKSPK2	Lab Sample ID _AD804959AD804960AD804961AD804984AD804985	
Were ICP interelement corrections appl	ied ?	 Yes/No YES
Were ICP background corrections applied If yes - were raw data generated application of background correct	before	Yes/No YES
Comments:	.ions :	Yes/No NO_
certify that this data package is in conditions of the Protocol, both technother than the conditions detailed about this hardcopy data package and in ton diskette has been authorized by the designee, as verified by the following signature:	nically and for ove. Release of the computer-read Laboratory Manager Signature.	completeness, for f the data contained adable data submitted
Date: 5/11/98	Title: Labo	ratory_Director
	COVER PAGE - TI	N

1 INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

ab Name: RECRA	A_LABNET_INC		Contract: NY	297-2 09		1506S1	
Lab Code: RECN	i_ Cas	se No.: 786	SAS No.:		SI	OG No.: 150602	
Matrix (soil/wa	-		Lab Samp	le 1	ID: AD804959		
Level (low/med)	: LOW_	-		Date Rece	eive	ed: 04/14/98	
Solids:	_91.0)					
Concentration Units (ug/L or mg/kg dry weight): MG/KG							
	CAS No.	Analyte	Concentration	C Q	М		

1					
CAS No.	Analyte	Concentration	С	Q	м
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		Ι-		NR
7440~50-8	Copper_		Ι_		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		_	l	NR
7440-02-0	Nickel				NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium		1		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		1		NR
			-		}
	· ————				1 —

olor Before:	GRAY	Clarity Before	:	Texture:	MEDIUM
olor After:	YELLOW	Clarity After:	CLEAR_	Artifacts:	:
	E_ID:_A8123701- MPLE_ID:_1506-S				

NYSDEC ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
11 1 0 0 0 0 0		110

ab Name: RECRA	A LABNET INC	2.	Contract: N	797 –	209	1506S2	
			SAS No.:			SDG No.: 1	.50602
atr i x (soil/wa	ater): SOIL	_		Lab	Sample	e ID: AD804	960
evel (low/med)): LOW	_		Dat	e Rece	ived: 04/14	/98
Solids:	_82.0	0					
Coi	ncentration	Units (ug,	/L or mg/kg dry	y we	eight):	MG/KG	
	CAS No.	Analyte	Concentration	С	Q	м	
	7429-90-5	Aluminum	[- -		NR	
		Antimony		<u> - -</u>		NR	
	7440-38-2	Arsenic		- -		NR	
		Barium _		<u> </u>		NR	
	7440-41-7					NR	
	7440-43-9					NR	
	7440-70-2	Calcium_		_		NR	
		Chromium_	5.5	1_1_		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	
		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	
		Sodium		.]_[NR	
	7440-28-0	Thallium		1_1_		NR	
	7440-62-2	Vanadium_		.		NR	
	7440-66-6	Zinc _				NR	
		Cyanide		[[_[NR	
				121			
color Before:	GRAY	Clari	ty Before:			Texture:	MEDIUM
olor After:	YELLOW	Clari	ty After: CLE	AR_		Artifacts:	
client_sample_	ID:_A812370 LE_ID:_1506	2-STA00242 -S-02					

NYSDEC ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	ИО
--------	--------	----

ab Name: RECRA_LABNI	ET_INC Coi	ntract: NY97-209	1506S3
ab Code: RECNY_	Case No.: 7861_	SAS No.:	SDG No.: 150602
<pre>[atrix (soil/water):</pre>	soil_	Lab Sampl	e ID: AD804961
<pre>_evel (low/med):</pre>	LOW	Date Rece	ived: 04/14/98
Solids:	_91.2		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

			т т		I
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		[-[\overline{NR}
7440-36-0	Antimony -		-		NR
7440-38-2	Arsenic				NR
7440-39-3	Barium_		\ <u>_</u>		NR
7440-41-7	Beryllium		<u>ا _</u> ا		NR
7440-43-9	Cadmium		l_[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		1-1		NR
7439-92-1	Lead		1		NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese		1_!		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			ļ <u> </u>	NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium		1	l	NR
7440-66-6	Zinc				NR
	Cyanide				NR
	· 				

Color Before:	GRAY	Clarity	Before:		Texture:	MEDIUM
Color After:	YELLOW	Clarity	After:	CLEAR_	Artifacts:	
	ID:_A8123703-STA LE_ID:_1506-S-0					

Soluble Metais Analysis

Laboratory:

Recra LabNet

Lab Job No: Lab Sample ID: A8123701 Client Sample ID: 1506-S-01

A98-1237

SDG No:

150602

RECNY

Matrix:

Soil

Sample Date:

04/13/98

Dilution Factor:

% Dry Weight:

1 90.48

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	2.6	

Soluble Metals Analysis

Laboratory: Lab Job No: Recra LabNet

A98-1237

Lab Sample ID: A8123702 Client Sample ID: 1506-S-02

SDG No: 150602

RECNY

Matrix:

Soil

1

Sample Date:

04/13/98

81.68

Dilution Factor:

% Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	0.54	

Soluble Metals Analysis

Laboratory: Lab Job No:

Recra LabNet

A98-1237

Lab Sample ID: A8123703 Client Sample ID: 1506-S-03

SDG No:

150602

RECNY

Matrix:

Soil

1

Sample Date:

04/13/98

Dilution Factor:

% Dry Weight:

92.14

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.5	

RECRA LABNET, a division of Recra Environmental, Inc.

CHAIN OF CUSTODY RECORD

AMPLER TATION	SISIG	NATUR	wou	GAAB	Rocheste	95 Mt. Read BIVA.	NO OF CON- TAINERS	2/1	18/18/19/19/19/19/19/19/19/19/19/19/19/19/19/	10 / CA & C	/		<u> </u>	REMARKS
001	¥/13/48	1600		×	1506 -		1	X	×					TB-12 (12-15.8')
202	13/40	1500		X	1506-5		1	X	X					TB-15 (12-15.9')
203	4/13/18	1135		×	1506-		1	×	X					TB-19 (B-12')
							-						_	
						.					_		-	
													_	
	_		_								_		_	
]					
	_													
LWQUI:	aneo e				DATE/TIME	RECEIVED BY (SIGNATU	RE)	RELIN	lQUIS	HED E	IY (SI	GNATU	JRE)	DATE/TIME RECEIVED BY (SIGNATURE)
yinay!				(E)	DATE TIME	RECEIVED BY (SIGNATUR	RE)	RELIN	QUIS	HED E	(SI	GNATU	JRE)	DATE/TIME RECEIVED BY (SIGNATURE)
LINQUI	SHED E	SY (SIG				RECEIVED FOR LABORAT	ala	4/14/			1	MARKS		54°C
)—		Distribut	tion: Origin	nal accompanies	shipment copy to cooldina	tor field files	<u> </u>	-				\rangle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	



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:

Ouote #: 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. andace Litex

Candace L. Fox Program Manager

Laboratory Manager

CLF/KEK/ltb Enclosure

I.D. #A98-1261, 1289 #NY8A7861

This report contains 865 pages which are individually numbered.

nonnn1

SAMPLE DATA SUMMARY PACKAGE



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-10 1506-S-11 1506-S-12 1506-S-13 1506-S-14 1506-S-15 1506-S-16

1506-S-17 MATRIX DUPLICATE

1506-S-17 MATRIX SPIKE

1506-S-17 MATRIX SPIKE DUPLICATE

1506-T-19

1506-S-17

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

Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: RECRA LABNET, INC.

CUSTOMER	LABORATORY		AN.	ALYTICAL	REQUIRE	MENTS	
SAMPLE ID	SAMPLE ID	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	-	-	-	-	-
D6-S-10	A8128903	ASP95	-	-	-	_	•
1506-S-11	A8128904	ASP95	-	•		-	_
1506-S-12	A8128905	ASP95	-	-	-	-	_
1506-S-13	A8128906	ASP95	-	-	<u>-</u>	ASP95	-
1506-S-14	A8128907	ASP95	-		-	-	-
1506-S-15	A8128908	-	_		-	ASP95	-
1506-S-16	A8128909	ASP95	-	-	-	ASP95	-
1506-S-17	A8128910	ASP95	<u>.</u> .	-	_	ASP95	-
1506-T-19	A8128912	-	-		-	ASP95	-



nonnne

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



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
1 5 06-S-06	SOIL	ME	04/15/98	04/23 & 24/98	04/22 - 28/98
1 50 6-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	МЕ	04/16/98	04/23 & 24/98	04/24 & 28/98



Burnon

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	<u>-</u>	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
1 5 06-S-16	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1506-S-17	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED



บบบบบอ

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-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



GCMS TENTATIVELY IDENTIFIED ALKANES

INST. I.D. <u>150H</u>	MATRIX <u>Soil</u>
JOB_ A98-1289	SDG/CASE 150601
FILE_H6351	LAB ID <u>A8128901</u>
DATE 04/21/98	CLIENT 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



GCMS TENTATIVELY IDENTIFIED ALKANES

INST. I.D. <u>150H</u>	MATRIX <u>Soil</u>
JOB_A98-1289	SDG/CASE_150601
FILE_H6377	LAB ID <u>A8128901DL</u>
DATE 04/22/98	CLIENT ID 1506-S-08

RT	COMPOUND	CAS NUMBER	ESTIMATED CONC.(μg/kg)
21.42	TYPE 3		90
23.10	TYPE 2		100
L	<u></u>		<u> </u>

•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.
- 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.



			• •	
			1506-S-08	
Lab Name:	Recra LabNet	Contract:		

000014 Client No.

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) <u>LOW</u> Date Samp/Recv: <u>04/13/98</u> <u>04/16/98</u>

% 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 UNI		
CAS NO.	COMPOUND	(ug/L or ug/Kg)	<u>UG/KG</u>	Q
74-87-3	Chloromethane		11	U
	Bromomethane		11	[ប
75-01-4	Vinyl chloride		11	ט
75-00-3	Chloroethane		11	Jυ
75-09-2	Methylene chloride		11	ប
67-64-1			11	\U
	Carbon Disulfide		11	υ
75-35-4	1,1-Dichloroethene		11	ט
75-34-3	1,1-Dichloroethane		11	ט
540-59-0	1,2-Dichloroethene (Total)		11	ט
	Chloroform		11	ט
107-06-2	1,2-Dichloroethane		11	שן
	2-Butanone		11	שן
71-55-6	1,1,1-Trichloroethane		11	ไซ
	Carbon Tetrachloride		11	ט
75-27-4	Bromodichloromethane		11	ט
78-87-5	1,2-Dichloropropane		11	ט
10061-01-5-	cis-1,3-Dichloropropene		11	ט
	Trichloroethene		11	ט
124-48-1	Dibromochloromethane		11	ไซ
79-00-5	1,1,2-Trichloroethane		11	lυ
71-43-2			11	ט
10061-02-6-	trans-1,3-Dichloropropene		11	ไซ
	Bromoform		11	บ
108-10-1	4-Methyl-2-pentanone		11	โบ
	2-Hexanone		11	บ
	Tetrachloroethene		11	Ū
108-88-3			11	โบ
	1,1,2,2-Tetrachloroethane		11	lΰ
	Chlorobenzene		11	Ιŭ
	Ethylbenzene		18	١
100-42-5			11	T
	Total Xylenes		18	ľ
1330 20 7				

000015

Client No.

1506-S-	-08	
---------	-----	--

L 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) <u>LOW</u> Date Samp/Recv: <u>04/13/98</u> <u>04/16/98</u>

% 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)

CONCENTRATION UNITS:

Number TICs found: 10 (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

Client No. 000016 1506-S-08 DL Contract: ____ Lab Name: Recra LabNet 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 Aliquot Volume: _____ (uL) Soil Extract Volume: ____ (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 0 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 IJ 67-64-1-----Acetone 98 TT 75-15-0-----Carbon Disulfide 98 II. 75-35-4-----1,1-Dichloroethene_____ 98 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

98

98

U

100-42-5----Styrene

1330-20-7----Total Xylenes

Client No.

1506-S-08	DL	

Law 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) <u>LOW</u> Date Samp/Recv: <u>04/13/98</u> <u>04/16/98</u>

% 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)

CONCENTRATION UNITS:

Number TICs found: 10 (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

000018

Lab Name: <u>Recra LabNet</u>	Contract:	1506	5- S -09	
Lab Code: RECNY Case No.:	SAS No.:	SDG No	o.: <u>150601</u>	<u>-</u>
Matrix: (soil/water) <u>SOIL</u>	Lab S	Sample ID:	A8128902	
Sample wt/vol: 5.10 (g/mL)	<u>G</u> Lab E	File ID:	<u>H6370.RR</u>	
Level: (low/med) <u>LOW</u>	Date	Samp/Recv:	04/13/98	04/16/98
% Moisture: not dec. 9.5 Heated	Purge: Y Date	Analyzed:	04/22/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (m	m) Dilut	ion Factor:	1.00	
Soil Extract Volume: (uL)	Soil	Aliquot Vol	ume:	(uL)
CAS NO. COMPOUND		ration unit or ug/kg)	-	Q
75-09-2Methylene chloride 67-64-1Acetone 75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethene 540-59-01,2-Dichloroethene (67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-3	Total)eeeeethane		11 11 11 11 11 11 11 11 11 11 11 11 11	ם מממממממממממממממממממממממממממממממממממ

La Name: Recra Lab	Net Co	ntract:		1506-S-09	
Name. Recta bar	<u> </u>	ilcracc			
Lab Code: RECNY	Case No.:	SAS No.:	sr	OG No.: 15060	<u>)1</u>
Matrix: (soil/water	c) <u>SOIL</u>	Lab	Sample II	D: <u>A8128902</u>	2
Sample wt/vol:	5.10 (g/mL) <u>G</u>	Lab	File ID:	H6370.RI	R
Level: (low/med)	LOW	Dat	e Samp/Red	cv: <u>04/13/9</u> 8	<u>04/16/98</u>
% Moisture: not dec	c. <u>9.5</u>	Dat	e Analyze	d: <u>04/22/9</u>	<u>3</u>
GC Column: DB-624	ID: <u>0,53</u> (mm	n) Dil	ution Fact	tor:1.0	<u>0</u>
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		NTRATION V	UNITS: g) <u>UG/KG</u>	
CAS NO.	Compound	Name	RT	Est. Conc	. Q

იიიე20

	-		
ah Nama. Dagwa IahNot Contract.		1506-S-10	
Lab Name: Recra LabNet Contract:			
Lab Code: RECNY Case No.: SAS No.	: SD	G No.: 15060	<u>1</u>
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID	: <u>A8128903</u>	_
Sample wt/vol: $\underline{5.02}$ (g/mL) \underline{G}	Lab File ID:	<u> H6371.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Rec	v: <u>04/14/98</u>	04/16/98
Moisture: not dec. 9.1 Heated Purge: Y	Date Analyzed	1: <u>04/22/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or:1.00	_
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION U	NITS:	
	(ug/L or ug/Kg		Q
74-87-3Chloromethane		11	บ
74-83-9Bromomethane		11	ϋ
75-01-4Vinyl chloride		11	ប
		11	บั
75-09-2Methylene chloride		11	ϋ
67-64-1Acetone		11	Ū_
67-64-1Acetone 75-15-0Carbon Disulfide		11	บ
75-35-41,1-Dichloroethene		3	J
75-34-31.1-Dichloroethane	1	11	ַט
540-59-01,2-Dichloroethene (Total)		11	ប
67-66-3Chloroform	i i	11	ប
107-06-21,2-Dichloroethane		11	ប
78-93-32-Butanone		11	ט
71-55-61,1,1-Trichloroethane	_ i	11	υ
56-23-5Carbon Tetrachloride		11	U
75-27-4Bromodichloromethane		11	ט
78-8 7- 51,2-Dichloropropane		11	U
10061-01-5cis-1,3-Dichloropropene		11	ט
79-01-6Trichloroethene		11	שׁ
124-48-1Dibromochloromethane		11	ū
79-00-51,1,2-Trichloroethane		11	ŭ
71-43-2Benzene		11	Ü
10061-02-6trans-1,3-Dichloropropene		11	ប្
75-25-2Bromoform		11	ប្រ
108-10-14-Methyl-2-pentanone		11	Ü
591-78-62-Hexanone		11	ĺΩ
127-18-4Tetrachloroethene		11	ប
108-88-3Toluene		11	U
79-34-51,1,2,2-Tetrachloroethane		11	U
108-90-7Chlorobenzene		11	U
100-41-4Ethylbenzene 100-42-5Styrene		11	U
		11 11	[,
1330-20-7Total Xylenes		ΤŢ	1 \

Name: Recra Lab	Not Co	ntract.		1506-S-10	
Name: Recta har	<u>Net</u>	ncrace.			
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	SI	DG No.: 15060	<u>1</u>
Matrix: (soil/water	c) <u>SOIL</u>	Lab	Sample II	D: <u>A8128903</u>	<u> </u>
Sample wt/vol:	<u>5.02</u> (g/mL) <u>G</u>	<u>Lab</u>	File ID:	H6371.RF	
Level: (low/med)	LOW	Dat	ce Samp/Re	cv: <u>04/14/98</u>	04/16/98
% Moisture: not dec	c. <u>9.1</u>	Dat	e Analyze	d: <u>04/22/98</u>	<u>3</u>
GC Column: DB-624	ID: <u>0.53</u> (mm	n) Dil	lution Fac	tor:1.00	<u>)</u>
Soil Extract Volume	e: (uL)	Soi	il Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION /L or ug/K	UNITS: g) <u>UG/KG</u>	
CAS NO.	Compound	Name	RT	Est. Conc	. Q

000022

			
Carteria	· · · · · · · · · · · · · · · · · · ·	506-S-11	
Lab Name: Recra LabNet Contract:			
Lab Code: RECNY Case No.: SAS No.	: SDG	No.: 150601	<u>.</u>
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	<u> A8128904</u>	_
Sample wt/vol: $\underline{5.03}$ (g/mL) \underline{G}	Lab File ID:	<u>H6372.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Recv	': <u>04/15/98</u>	04/16/98
Moisture: not dec. 9.5 Heated Purge: Y	Date Analyzed:	04/22/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Facto	or:1.00	
Soil Extract Volume: (uL)	Soil Aliquot V	volume:	(uL)
	CONCENTRATION UN	IITS:	
	(ug/L or ug/Kg)		Q
74-87-3Chloromethane		11	U
174-83-9Bromomethane		11	ַ
1/5·01 4		11	U
75-00-3Chloroethane		11	ט
75-00-3Methylene chloride		11	ט
67-64-1Acetone		11	U
67-64-1Acetone 75-15-0Carbon Disulfide		11	ט —
75-35-41,1-Dichloroethene		11	ט
175-34-31 1-Dichloroethane		11	ט
540-59-01,2-Dichloroethene (Total)		11	1
167-66-3Chloroform		11	บ
[107-06-21,2-Dichloroethane		11	ט
178-93-32-Butanone	ļ	11	}บ
71-55-61,1,1-Trichloroethane		11	ט
156-23-5Carbon Tetrachloride	l l	11	ับ
75-27-4Bromodichloromethane		11	ט
78-87-51,2-Dichloropropane		11	ש
10061-01-5cis-1,3-Dichloropropene		11	שַ
79-01-6Trichloroethene		3	J
124-48-1Dibromochloromethane		11	ט
79-00-51,1,2-Trichloroethane		11	ש
71-43-2Benzene		11	ש
10061-02-6trans-1,3-Dichloropropene		11	ט
75-25-2Bromoform		11	ט
108-10-14-Methyl-2-pentanone		11	ប
591-78-62-Hexanone		11	ប
127-18-4Tetrachloroethene		11	ŭ
108-88-3Toluene		11	ប
79-34-51,1,2,2-Tetrachloroethane		11	ŭ
108-90-7Chlorobenzene		11	\ <u>u</u>
100-41-4Ethylbenzene		11	U
100-42-5Styrene		11	12
		7 7	1 T

				1506-S-11	
Las Name: <u>Recra Lab</u>	<u>Net</u> Con	tract:			
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	sd	G No.: 15060	<u>1</u>
Matrix: (soil/water	c) <u>SOIL</u>	Lab	Sample ID): <u>A8128904</u>	
Sample wt/vol:	5.03 (g/mL) <u>G</u>	_ Lab	File ID:	<u> H6372.RR</u>	
Level: (low/med)	LOW	Dat	e Samp/Rec	cv: <u>04/15/98</u>	04/16/98
% Moisture: not dec	2. <u>9.5</u>	Dat	e Analyzed	1: <u>04/22/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	or: <u>1.00</u>	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION U	UNITS: 3) <u>UG/KG</u>	
CAS NO.	Compound 1	Name	RT	Est. Conc.	Q
					

000024

Lab Name: <u>Recra LabN</u>	et	Contract:		1506-	S-12	
				77 N-	. 150601	— ,
Lab Code: <u>RECNY</u> C	ase No.:	SAS NO.	: SI	NO.	: T2000T	
Matrix: (soil/water)	SOIL		Lab Sample II	D: <u>A</u>	8128905	_
Sample wt/vol:	5.12 (g/mL)	<u>G</u>	Lab File ID:	E	16355.RR	
Level: (low/med)	LOW		Date Samp/Red	cv: <u>(</u>	4/15/98	04/16/98
% Moisture: not dec.	<u> 10.1</u> Heate	d Purge: Y	Date Analyze	d: <u>(</u>	04/21/98	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dilution Fac	tor: _	1.00	
Soil Extract Volume:	(uL)		Soil Aliquot	Volum	ne:	(uL)
			ONCENTRATION	. פידיותוז	•	
CAS NO. COMPO	UND	-	(ug/L or ug/K			Q
74-87-3Chlor	omethane				11	υ
74-83-9Bromo	methane				11	ט
75-01-4Vinyl	chloride				11	ט
1 75 -00-3Chlor	oethane		l l		11	U
75-09-2Methy	lene chloride_				11	ט
67-64-1Aceto	one	_			5	J
75-15-0Carbo	on Disulfide				11	ט –
75-35-41,1-D	oichloroethene_	······································			11	ן שַ
75-34-31,1-D	oichloroethane_				2	J
540-59-01,2-D	Dichloroethene	(Total)			15	1
67-66-3Chlor 107-06-21,2-D	cotorm				11	ជ្ជ
107-06-21,2-1	ochioroethane_				11	Ŭ
78-93-32-But	anone				11	ប
71-55-61,1,1	-Trichioroetha	ine	- 		11	ប
56-23-5Carbo	on Tetrachioric	.e			11	Ü
75-27-4Bromc	odichioromethan	le			11	Ü
78-87-51,2-E	orchroropropane	;			11	U U
10061-01-5cis-1	l,3-Dichiolopic	bene	<u> </u>		11	10
79-01-6Trich					120 11	ט
79-00-51,1,2					11	ט
71-43-2Benze	2-111CHIOLOGCHG	e			11	ָ ט
10061-02-6trans		ronene			11	ט
75-25-2Bromo		probeue			11	ט
108-10-14-Met				ì	11	บ็
591-78-62-Hex				ŀ	11	υ
127-18-4Tetra		<u> </u>			910	E
108-88-3Tolue				1	11	บ็
79-34-51,1,2		nethane		1	11	บ็
108-90-7Chlor	rohenzene			[11	บ็
100-41-4Ethy	lbenzene				11	โซ้
100-42-5Styre				ļ	11	Ţ'
1330-20-7Total					11	lì
1-224 , 2004.	<i>-</i>			1		1 -

000025

				1506-S-12	
Las Name: <u>Recra Lar</u>	<u>oNet</u> Cont	ract:			
Lab Code: RECNY	Case No.:	SAS No.:	SD	G No.: <u>150601</u>	<u>.</u>
Matrix: (soil/water	c) <u>SOIL</u>	Lab	Sample ID	: <u>A8128905</u>	
Sample wt/vol:		Lab	File ID:	<u> H6355.RR</u>	
Level: (low/med)	LOW	Date	e Samp/Rec	ev: <u>04/15/98</u>	04/16/98
% Moisture: not dec	c. <u>10.1</u>	Date	e Analyzed	1: <u>04/21/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	or:1.00	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		NTRATION (L or ug/Kg	NITS: J) <u>UG/KG</u>	
CAS NO.	Compound Na	me	RT	Est. Conc.	Q

000026

Client No.

1506-S-12 DL

Lab Name: Recra LabNet Contract:

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>150601</u>

Matrix: (soil/water) SOIL Lab Sample ID: A8128905DL

Sample wt/vol: 4.18 (g/mL) G Lab File ID: H6410.RR

Level: (low/med) <u>MED</u> Date Samp/Recv: <u>04/15/98</u> <u>04/16/98</u>

% 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)	TS: UG/KG	Q
74-87-3	Chloromethane		1300	U
174-83-9	Bromomethane		1300	שׁ
75-01-4	Vinyl chloride		1300	ט
			1300	ט
75-09-2	Methylene chloride		1300	្រប
167-64-1	Acetone		1300	\U
75-15-0	Carbon Digulfide		1300	ן ט 🦳
75-35-4	1,1-Dichloroethene		1300	שׁ
75-34-3	1,1-Dichloroethane		1300	ט
540-59-0	1,2-Dichloroethene (Total)		1300	ט
67-66-3	Chloroform		1300	טן
107-06-2	1,2-Dichloroethane		1300	טן
78-93-3	2-Butanone		1300	ט
71-55-6	1,1,1-Trichloroethane		1300	ប
156-23-5	Carbon Tetrachloride	3	1300	ן ט
75-27-4	Bromodichloromethane		1300	ט
178-87-5	1,2-Dichloropropane	1	1300	ט
10061-01-5	cis-1,3-Dichloropropene		1300	ប
79-01-6	Trichloroethene		1300	טן
124-48-1	Dibromochloromethane	ì	1300	ט
79-00-5	1,1,2-Trichloroethane		1300	ש
171-43-2	Benzene	}	1300	ט)
10061-02-6	trans-1,3-Dichloropropene		1300	ט
75-25-2	Bromoform		1300	ט
108-10-1	4-Methyl-2-pentanone		1300	ט
591-78-6	2-Hexanone		1300	טן
127-18-4	Tetrachloroethene		3200	lo
108-88-3	Toluene		1300	ט
79-34-5	1.1.2.2-Tetrachloroethane		1300	ប
108-90-7	Chlorobenzene		1300	ט
100-41-4-	Ethylbenzene		1300	Ū
100-42-5-	Styrene		1300	77
1330-20-7	Total Xylenes		1300	l t

000027

Client No.

		1506	S-S-12 DL
Law Name: <u>Recra LabNet</u>	Contract:		
Lab Code: RECNY Case No.:	_ SAS No.:	SDG No	o.: <u>150601</u>
Matrix: (soil/water) <u>SOIL</u>	Lab S	ample ID:	A8128905DL
Sample wt/vol: 4.18 (g/mL) <u>G</u> Lab F	ile 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: <u>DB-624</u> ID: <u>0.53</u>	(mm) Dilut	ion Factor:	1.00
Soil Extract Volume: 10000 (uL)	Soil	Aliquot Volu	me: <u>100.00</u> (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO. Compound Name RT Est. Conc. Q

Number TICs found: __0

000028

Client No.

1506-S-13	
1506-S-13	
1300 0 13	

12

12

2

12

12

12

12

12

12

U

U

J

U

U

U

U

	1506-S-13	
Lab Name: Recra LabNet Contract:	L	
Lab Code: RECNY Case No.: SAS No.:	: SDG No.: <u>150601</u>	
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: A8128906	
Sample wt/vol: $\underline{5.07}$ (g/mL) \underline{G}	Lab File ID: <u>H6373.RR</u>	 _
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/15/98 04	4/16/98
% Moisture: not dec. <u>20.5</u> Heated Purge: <u>Y</u>	Date Analyzed: 04/22/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Factor:1.00	
Soil Extract Volume: (uL)	Soil Aliquot Volume:	(uL)
	ONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
540-59-01,2-Dichloroethene (Total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane	12 12 12 12 12 12 12 11 12 12 12 12 12 1	ממממממממממממ מממ מטמטט

108-10-1----4-Methyl-2-pentanone

79-34-5----1,1,2,2-Tetrachloroethane___

108-90-7-----Chlorobenzene

127-18-4----Tetrachloroethene

591-78-6----2-Hexanone

100-41-4----Ethylbenzene_

1330-20-7----Total Xylenes

108-88-3----Toluene_

100-42-5----Styrene_

000029 ASP 95 - VOLATILES

TENTATIVELY IDENTIFIED COMPOUNDS

	Client No.
Lab Name: Recra LabNet Contract	:
Lab Code: RECNY Case No.: SAS	No.: SDG No.: <u>150601</u>
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID: A8128906
Sample wt/vol: 5.07 (g/mL) G	Lab File ID: H6373.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 04/15/98 04/16/98
% Moisture: not dec. <u>20.5</u>	Date Analyzed: 04/22/98
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Factor:1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Number TICs found: <u>0</u>	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>

RT

Est. Conc.

Q

Compound Name

CAS NO.

000030

Lab Name: Recra LabNet Contract:	1	506-S-14 	
Lab Code: RECNY Case No.: SAS No.	: SDG	No.: <u>150601</u>	<u>.</u>
Matrix: (soil/water) <u>SOIL</u>	Lab Sample ID:	<u> A8128907</u>	_
Sample wt/vol: 5.16 (g/mL) G	Lab File ID:	<u>H6374.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Recv	7: <u>04/15/98</u>	04/16/98
% Moisture: not dec. <u>10.5</u> Heated Purge: Y	Date Analyzed:	04/22/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Facto	or:1.00	
Soil Extract Volume: (uL)	Soil Aliquot V	Volume:	(uL)
	ONCENTRATION UN		Q
74-87-3		11 11 11 11 11 11 11 11 11 11 11 11 11	מממממממממממממממממממממממ

Client No.

			T T		
1 Name Boars Ish	Not	Contract		1506-S-14	
Name: Recra Lab	MEr ,	contract:			
Lab Code: RECNY	Case No.:	SAS No.:	SI	OG No.: 150601	
Matrix: (soil/water) SOIL	Lab	Sample II	A8128907	
Sample wt/vol:	5.16 (g/mL)	G Lab	File ID:	<u> H6374.RR</u>	
Level: (low/med)	<u>LOW</u>	Dat	e Samp/Red	cv: <u>04/15/98</u> <u>0</u>	4/16/98
% Moisture: not dec	. 10.5	Dat	e Analyze	d: <u>04/22/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm) Dil	ution Fact	tor: <u>1.00</u>	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION V	UNITS: g) <u>UG/KG</u>	
CAS NO.	Compoun	d Name	RT	Est. Conc.	Q

000032

Client No.

		· · · · · · · · · · · · · · · · · · ·	
			1506-S-16
Lab Name:	<u>Recra LabNet</u>	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) <u>LOW</u> Date Samp/Recv: <u>04/15/98</u> <u>04/16/98</u>

% 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)

CAS NO.	COMPOUND	CONCENTRATION UNI (ug/L or ug/Kg)	TS: UG/KG	Q
CAS NO.		(dg/h or dg/kg/		
74-87-3	Chloromethane		11	ט
74-83-9	Bromomethane		11	טן
75-01-4	Vinyl chloride		11	ט
75-00-3	Chloroethane		11	ט
75-09-2	Methylene chloride		11	ט
67-64-1	Acetone		11	U ~
75-15-0	Carbon Disulfide		11	ט
75-35-4	1,1-Dichloroethene		11	ט
75-34-3	1,1-Dichloroethane		11	ט
	1,2-Dichloroethene (Total)		3	J
	Chloroform		11	ט
107-06-2	1,2-Dichloroethane		11	ប
	2-Butanone		11	ט
71-55-6	1,1,1-Trichloroethane		11	ប
	Carbon Tetrachloride		11	ប
75-27-4	Bromodichloromethane		11	טו
78-87-5	1,2-Dichloropropane		11	ប
	cis-1,3-Dichloropropene		11	Ū
	Trichloroethene		12	ł i
	Dibromochloromethane		11	ט
	1,1,2-Trichloroethane		11	ט
	Benzene		11	ט
	trans-1,3-Dichloropropene		11	ט
	Bromoform		11	ט
	4-Methyl-2-pentanone		11	บ
	2-Hexanone		11	Ü
	Tetrachloroethene		40	١
	Toluene		11	ט
	1,1,2,2-Tetrachloroethane		11	ט
	Chlorobenzene		11	บี
	Ethylbenzene		11	177
	Styrene		11	
	Total Xylenes		11	l u
1330-20-7-	Total Ayrenes		TT	١٥

Lab Name: Recra Lab	<u>oNet</u> Con	tract:		1506-S-16 	
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	SD	G No.: 150601	L
Matrix: (soil/water	s) <u>SOIL</u>	Lab	Sample ID): <u>A8128909</u>	
Sample wt/vol:		Lab	File ID:	<u> H6375.RR</u>	
Level: (low/med)	<u>LOW</u>	Date	e Samp/Rec	cv: <u>04/15/98</u>	04/16/98
% Moisture: not dec	c. <u>12.5</u>	Dat	e Analyzed	d: <u>04/22/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	or:1.00	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		NTRATION U L or ug/Kg	JNITS: J) <u>UG/KG</u>	
CAS NO.	Compound N	ame	RT	Est. Conc.	Q

000034 Client No.

Lab Name: <u>Recra LabNet</u>	Contract:		
Lab Code: <u>RECNY</u> Case No.	.: SAS No.:	SDG No	.: <u>150601</u>
Matrix: (soil/water) <u>SOIL</u>	Lab	Sample ID:	A8128910
Sample wt/vol: 5.18	8 (g/mL) <u>G</u> Lab	File ID:	H6359.RR
Level: (low/med) <u>LOW</u>	Dat	e Samp/Recv:	04/15/98 04/16/98
% Moisture: not dec. 12.8	Heated Purge: Y Dat	e 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:

74-87-3	CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
75-01-4				11	U
75-09-3				11	ט
75-09-3	75-01-4	Vinyl chloride		11	ַ ט
11	175-00-3	Chloroethane	l l	11	ប
75-15-0	75-09-2	Methylene chloride		11	ប
75-35-41,1-Dichloroethane 11	67-64-1	Acetone		11	U-
75-35-41,1-Dichloroethane 11	75-15-0	Carbon Disulfide		2	J
75-34-31, 2-Dichloroethane 5 540-59-01, 2-Dichloroethene (Total) 12 12 12 13 14 14 15 15 15 15 15 15	75-35-4	1,1-Dichloroethene		11	ប
67-66-3Chloroform 11 U 107-06-21, 2-Dichloroethane 11 U 78-93-32-Butanone 11 U 71-55-61, 1, 1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51, 2-Dichloropropane 11 U 10061-01-5cis-1, 3-Dichloropropene 11 U 79-01-6Trichloroethene 21 U 124-48-1Dibromochloromethane 11 U 79-00-51, 1, 2-Trichloroethane 11 U 10061-02-6trans-1, 3-Dichloropropene 11 U 108-10-1Bromoform 11 U 108-10Bromoform 11	75-34-3	1,1-Dichloroethane	j	5	J
107-06-21, 2-Dichloroethane 11 U 78-93-32-Butanone 11 U 71-55-61, 1, 1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51, 2-Dichloropropane 11 U 10061-01-5cis-1, 3-Dichloropropene 11 U 79-01-6Trichloroethane 21 U 124-48-1Dibromochloromethane 11 U 79-00-51, 1, 2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1, 3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethane 11 U 108-88-3Toluene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5				12	l,
78-93-32-Butanone 11 U 71-55-61,1,1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51,2-Dichloropropane 11 U 10061-01-5cis-1,3-Dichloropropene 11 U 79-01-6Trichloroethane 21 U 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Totluene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5				11	U
78-93-32-Butanone 11 U 71-55-61,1,1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51,2-Dichloropropane 11 U 10061-01-5cis-1,3-Dichloropropene 11 U 79-01-6Trichloroethane 21 U 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Totluene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5	107-06-2	1,2-Dichloroethane		11	U
S6-23-5Carbon Tetrachloride	P 0 0 2 2	2 Post-		11	U
S6-23-5Carbon Tetrachloride	71-55-6	1,1,1-Trichloroethane		11	U
75-27-4Bromodichloromethane 11 U 78-87-51,2-Dichloropropane 11 U 10061-01-5cis-1,3-Dichloropropene 11 U 79-01-6Trichloroethene 21 U 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 108-88-3Toluene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	156-23-5	Carbon Tetrachloride	İ	11	ן ט
78-87-51, 2-Dichloropropane 11 U 10061-01-5cis-1, 3-Dichloropropene 11 U 79-01-6Trichloroethene 21 U 124-48-1Dibromochloromethane 11 U 79-00-51, 1, 2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1, 3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-5Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	17 5-27-4	Bromodichloromethane		11	U
10061-01-5cis-1,3-Dichloropropene	78-87-5	1,2-Dichloropropane		11	שׁן
79-01-6Trichloroethene 21 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-5Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	(10061-01-5	cis-1,3-Dichloropropene		11	U
124-48-1	79-01-6	Trichloroethene		21	1
79-00-51,1,2-Trichloroethane	124-48-1	Dibromochioromethane	Į.	11	U
71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-5Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	79-00-5	1,1,2-Trichloroethane		11	ט
75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	71-43-2	Benzene	ì	11	ប
75-25-2Bromoform 11 U 108-10-14-Methyl-2-pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	10061-02-6	trans-1,3-Dichloropropene		11	ן ט
591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-5Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	 75-25-2	Bromoform		11	Ū
591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 84 U 108-88-3Toluene 11 U 79-34-5Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5Styrene 11 U	108-10-1	4-Methyl-2-pentanone		11	υ
127-18-4Tetrachloroethene 84 108-88-3Toluene 11 79-34-51,1,2,2-Tetrachloroethane 11 108-90-7Chlorobenzene 11 100-41-4Ethylbenzene 11 100-42-5Styrene 11	1591-78-6	2-Hexanone	ì	11	ט
108-88-3Toluene	127-18-4	Tetrachloroethene		84	1
108-90-7Chlorobenzene	1108-88-3	Toluene		11	ט
108-90-7Chlorobenzene	79-34-5	1,1,2,2-Tetrachloroethane		11	ט
11 U 100-41-4Styrene 11	108-90-7	Chlorobenzene		11	ไซ
100-42-5Styrene	1100-41-4	Ethylbenzene	i		Ū
1330-20-7Total Xylenes	100-42-5	Styrene			
	1330-20-7	Total Xylenes			Ն

	- XX - 4:	A		1506-S-17	
Las Name: Recra Lab	<u>onet</u> Con	tract:			
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	si	OG No.: 15060	<u>L</u>
Matrix: (soil/water	s) <u>SOIL</u>	Lab	Sample II): <u>A8128910</u>	
Sample wt/vol:		Lab	File ID:	<u> H6359.RR</u>	
Level: (low/med)	LOW	Dat	e Samp/Red	cv: <u>04/15/98</u>	04/16/98
% Moisture: not dec	c. <u>12.8</u>	Dat	e Analyze	d: <u>04/22/98</u>	
GC Column: DB-624	ID:_ <u>0.53</u> (mm)	Dil	ution Fact	tor:1.00	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION W	UNITS: g) <u>UG/KG</u>	
CAS NO.	Compound 1	Vame	RT	Est. Conc.	Q

Client No. **UUUU36** 1506-T-18 Lab Name: Recra LabNet Contract: _____ Lab Code: <u>RECNY</u> Case No.: _____ SDG No.: <u>150601</u> Matrix: (soil/water) WATER Lab Sample ID: <u>A8128911</u> Sample wt/vol: $\underline{5.00}$ (q/mL) \underline{ML} Lab File ID: <u>H6350.RR</u> 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: UG/L_ CAS NO. (ug/L or ug/Kg) COMPOUND 0 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 10 U 67-64-1-----Acetone 75-15-0-----Carbon Disulfide 10 U 75-35-4----1,1-Dichloroethene_____ 10 U U 75-34-3----1,1-Dichloroethane 10 540-59-0----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 U 10 10061-01-5---cis-1,3-Dichloropropene_____ 10 U 79-01-6----Trichloroethene IJ 10 124-48-1----Dibromochloromethane_____ 10 U U 79-00-5----1,1,2-Trichloroethane 10 U 71-43-2----Benzene 10 10061-02-6----trans-1,3-Dichloropropene U 10 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 IJ 108-90-7----Chlorobenzene_____ 10 U 100-41-4----Ethylbenzene Ų 10 100-42-5-----Styrene 10 1330-20-7----Total Xylenes 10

_			\$ 0 6-T-18	ŀ
Lab Name: Recra Lab	<u>Net</u> Contract	::		
Lab Code: <u>RECNY</u>	Case No.: SAS	No.: SDG	No.: <u>150601</u>	
Matrix: (soil/water) WATER	Lab Sample ID:	A8128911	-
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	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: <u>0.53</u> (mm)	Dilution Facto	r: <u>1.00</u>	
Soil Extract Volume	e: (uL)	Soil Aliquot V	olume:	(uL)
Number TICs found:	0	CONCENTRATION UN (ug/L or ug/Kg)		
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.:SI	OG No.:150601
Version: ASP95		
NYSDEC Sample NoS04S05S06S07S13S15S16S17S17DS17BT19T19DT19DT19S	Lab Sample ID _AD804962 _AD804963 _AD804964 _AD804965 _AD804975 _AD804977 _AD804977 _AD804979 _AD804979 _AD804981 _AD804983 _AD804983	
Were ICP interelement corrections app	lied ?	Yes/No YES
Were ICP background corrections applied of yes - were raw data generated		Yes/No YES
application of background correc	tions ?	Yes/No NO_
Comments:		
I certify that this data package is i conditions of the contract, both tech other than the conditions detailed ab in this hardcopy data package and in on floppy diskette has been authorize Manager's designee, as verified by the Signature: Date: Solution Solu	nically and for complet ove. Release of the da the computer-readable d d by the Laboratory Man	eness, for ta contained ata submitted ager or the
0/0//	COVER PAGE - IN	10/95

NYSDEC-ASP

000039

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

			S04
Lab Name: RECRA_LABNET	r_inc	Contract: NY97-209_	
Lab Code: RECNY	Case No.: 7861	_ SAS No.:	SDG No.: 150601
Matrix (soil/water): S	SOIL		mple ID: AD804962
Level (low/med): I	LOW	Date Re	eceived: 04/15/98
Solids:	_90 .7		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

			T		I
CAS No.	Analyte	Concentration	С	Q	М
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		1-	\ 	NR
7440-23-5	Sodium		-	ļ 	NR
7440-28-0	Thallium	[-	\ 	NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc		-		NR
, 110 00 0			-		NR
1333-82-0	HexaChrom		-	\ 	NR
	MOLYBDENU		-		NR
	11021222110		·		-
			-		-
			- -	·	-
			- -	· 	-
			- -	·	-
	\ 	·	- -		-
	.	. l	_	.	_

Before: After:	GRAY YELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUN
SAMPLE_	ID:_A8126101- LE_ID:_1506-S				
 		FORI	<u> </u>		

NYSDEC-ASP

1 INORGANIC ANALYSES DATA SHEET

በባበባፈበ)	
ONO AU NYSDEC	SAMPLE	NO

									S05	
Lab	Name:	RECRA	LABNET	INC.			Contract: NY97-209_	_		
Lab	Code:	RECNY		Case	No.:	78 61	SAS No.:	SDO	G No.:	150601

Matrix (soil/water): SOIL_ Level (low/med): LOW_ % Solids: __84.4 Lab Sample ID: AD804963 Date Received: 04/15/98

_04.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	М
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		1-1		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		\ _ i		NR
7439-97-6	Mercury				NR
7440-02-0	Nickel		\ _ \		NR
7440-09-7	Potassium		<u> </u> -		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		-		NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium	-	1-		NR
7440-62-2	Vanadium_		1-		NR
7440-66-6	Zinc				NR
			1-	l	- NR
1333-82-0	HexaChrom		1-		- NR
	MOLYBDENU		-		NR
			- -		-
			- -		-
	· 		-		~
			-		- -
			- -		-
<u> </u>	· 		- -		- -

	Before: After:	BROWN	Clarity Clarity		Texture: Artifacts:	MEDIUM
Commer LAF CLl	B SAMPLE	ID:_A8126102- LE_ID:_1506-S	STA00242 -05		 	
 -			FOR	<u> </u>	 	

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
1110000		

	S06
Lab Name: RECRA_LABNET_INC Contract: NY97-209	
Lab Code: RECNY Case No.: 7861 SAS No.:	SDG No.: 150601
	e ID: AD804964
Level (low/med): LOW Date Rece	ived: 04/15/98
% Solids: _85.1	

) -					I
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony	1.2	ีบิ		P
7440-38-2	Arsenic	1.2	В		P_
7440-39-3	Barium —		ŀ		NR
7440-41-7	Beryllium	0.23	ប៊		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		ΙĪ		NR
7440-50-8	Copper	8.2	[P_
7439-89-6	Iron		Ι_		NR
7439-92-1	Lead	4.0		*	P_
7439-95-4	Magnesium		_	<u> </u>	NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury	0.11	ਹੋ		CV
7440-02-0	Nickel	4.7	В		P_
7440-09-7	Potassium	840	В		P_
7782-49-2	Selenium	1.2	บ		P_
7440-22-4	Silver	0.26	Ų	-	P_
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.4	ប		P
7440-62-2	Vanadium_				NR
7440-66-6	Zinc	16.5	-	E	[P_
			-	\	NR
1333-82-0	HexaChrom		-		NR
_	MOLYBDENU	0.55	_		P
	}		-		
			-		
			-		
			-		
			- -		
· 	1	·	- '	· · ———	—

	Before: After:	BROWN YELLOW		Before: After:	Texture: Artifacts:	MEDIUM
CL I	B SAMPLE	ID:_A8126103-CG LE_ID:_1506-S-0	A01029			
			דַרַ דַּרַ	W T - TN	 	

240000

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

		S07
Lab Name: RECRA_LABNET_1	INC Contract: NY97-209	
Lab Code: RECNY (Case No.: 7861 SAS No.:	SDG No.: 150601
Matrix (soil/water): SOI	Lab Sample	e ID: AD804965
Level (low/med): LOW	Date Rece	ived: 04/15/98
% Solids: _88	3.5	

		•			
CAS No.	Analyte	Concentration	C	Q	М
7429-90-5	Aluminum		-		\overline{NR}
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium		-		NR
7440-41-7	Beryllium		-	<u> </u>	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		1-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium -				NR
7440-66-6	Zinc		-	1	NR
		•	-		NR
1333-82-0	HexaChrom		-		NR
_	MOLYBDENU	•	-		NR
			-		1
			-		1
			- -		1
			- -		
			- -		1
			- -	·	1
l	I ————	I	- 1	. !	. ।

Before: After:	BROWNYELLOW		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
SAMPLE_	ID:_A8126104-S3 LE ID: 1506-S-0					
 		FOR	M T - TN			

บบบบุงง

INORGANIC ANALYSES DATA SHEET

			S13
Lab Name: RECRA_LABNE		Contract: NY97-209	ł
Lab Code: RECNY_	Case No.: 7861		SDG No.: 150601
Matrix (soil/water):	SOIL_		e ID: AD804975
Level (low/med):	LOW	Date Rece	ived: 04/16/98
% Solids:	_83.8		

_					,
CAS No.	Analyte	Concentration	С	Q	М
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	1-1	*	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		1-1		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		1-		NR
7440-66-6	Zinc		1-		NR
		ļ 		·	NR
1333-82-0	HexaChrom	-	-		NR
	MOLYBDENU		- -		NR
	110D1DDBNO		- -		- ***
. ———		·	-1-	·	-
			- -	l ———	-
			- -		-1
	-		-1-		-
			- -	ļ	-
	. I		_ _	l	_

	Before: After:	BROWN		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
LAI		ID:_A8128906-S: LE_ID:_1506-S-1				 	<u> </u>
-			FORI	MI-IN			

000044

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO.	4

			S15
lab Name: RECRA_LABN	ET_INC	Contract: NY97-20	9
ab Code: RECNY_	Case No.: 78	861_ SAS No.:	SDG No.: 150601
fatrix (soil/water):	SOIL_		ample ID: AD804976
Level (low/med):	LOW	Date :	Received: 04/16/98
Colide:	89 3		

	·		\neg		Γ
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				NR
7440-36-0	Antimony	1.2	ប៊		P
7440-38-2	Arsenic	1.3	В		P
7440-39-3	Barium —				NR
7440-41-7	Beryllium	0.22	ਹ		P
7440-43-9	Cadmium	0.11	ប	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		-	J —	NR
7439-96-5	Manganese		-	1	NR
7439-97-6	Mercury	0.11	ีบิ		CV
7440-02-0	Nickel	6.1	В		P
7440-09-7	Potassium	805	В		P .
7782-49-2	Selenium	1.1	U		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium		1		NR
7440-28-0	Thallium	1.3	Ū		P
7440-62-2	Vanadium_				NR
7440-66-6	Zinc	23.3	-	E	P
ļ			-		NR
1333-82-0	HexaChrom		-		NR
_	MOLYBDENU	0.47	ี่ ซิ		P
				[-
			-		1
			-		-
			_		-
			-1-		-
	-		-		-
· ————	l	·	. I —	' ———	-

olor B olor A	BROWN	Clarity Clarity		CLEAR_	Texture: Artifacts:	MEDIUM
omment LAB	D: A8128908-CG	A01029				_
	E_ID:_1506-S-1					
		EODI	M T - TN			

000045

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

	[-	1 - 1
CAS No.	Analyte	Concentration	С	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		Ι_		NR
7440-43-9	Cadmium		I_		NR
7440-70-2	Calcium		Ι_		NR
7440-47-3	Chromium	330	Ι.	*	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		1		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		-		NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		1-	1	NR
7440-62-2	Vanadium		-	1	NR
7440-66-6	Zinc		- -	-	NR
		•	-	·	NR
1333-82-0	HexaChrom		-	1	NR
	MOLYBDENU		-1-	·	- NR
			- -	·	-
	\ <u> </u>		- -		-
			- -		-
\ -			-	.	-1
	-	·	- -		-
	-	-	- -	-	-
l	. l <u></u>	. I	_ _		_ I

	Before: After:	GRAYYELOW	Clarity Clarity		Texture: Artifacts:	MEDIUM
Commer LAI CL:	B SAMPLE	ID:_A8128909-S LE_ID:_1506-S-	STA00242			
			FORM	 		

000046

INORGANIC ANALYSES DATA SHEET

,		 ,
	0.5	
	S17	

NYSDEC SAMPLE NO.

Lab	Name:	RECRA	LABNET	INC.			Contract: NY97-209	1	
Lab	Code:	RECNY	-	Case	No.:	7861	SAS No.:	SDG No.:	150601

Lab Code: RECNY_ Case No.: 7861_ SAS No.: _____ SDG No.: 15060

Matrix (soil/water): SOIL_ Lab Sample ID: AD804978

Level (low/med): LOW_ Date Received: 04/16/98

% Solids: _88.5

	1		$\overline{}$		 ı
CAS No.	Analyte	Concentration	С	Q	м
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	1	-		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		1-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc		1-		NR
					NR
1333-82-0	HexaChrom		1-		NR
	MOLYBDENU				NR
			1-	-	-
			-1-		1—
		-	-	-	-1
			- -		-
			-1-		-
			- -		-
	. I	1	- 1	1	<u> </u>

Before: After:	GRAYYELLOW	Clarity Clarity		CLEAR_	Texture: Artifacts:	MEDIUM
S_SAMPLE_	ID:_A8128910-9 LE_ID:_1506-S					
	·	FORM	1 I - IN			

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: RECRA_LABNET_INC. Contract: NY97-209
Lab Code: RECNY_ Case No.: 7861_ SAS No.: SDG No.: 150601

Lab Sample ID: AD804981 Matrix (soil/water): SOIL_ Level (low/med): LOW

Date Received: 04/16/98

_89.4 % Solids:

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				NR
7440-36-0	Antimony	1.2	ับิ		P
7440-38-2	Arsenic -	1.8	В		P_
7440-39-3	Barium				NR
7440-41-7	Beryllium	0.22	บิ		P_
7440-43-9	Cadmium	0.11	ט	<u> </u>	P_
7440-70-2	Calcium				NR
7440-47-3	Chromium	6.6	1	*	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			l — —	NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury	0.11	ប		CV
7440-02-0	Nickel	6.3	В		P_
7440-09-7	Potassium	758	B		P_
7782-49-2	Selenium	1.1	ט		P
7440-22-4	Silver	0.25	IJ		P
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.3	ี่ ซี		P
7440-62-2	Vanadium				NR
7440-66-6	Zinc	19.3	-	E	P
			_		NR
1333-82-0	HexaChrom		-		NR
	MOLYBDENU		ี่ ซิ		P
					-
]			-	.	
			-		
			-		
			- -		1-
			- -		1—
l	l	.	. I	. 1	.

Before: After:	BROWN YELLOW	Clarity Clarity		CLEAR_	Texture: Artifacts:	MEDIUM
B_SAMPLE_	ID:_A8128912-0 LE_ID:_1506-T-					
 		FODA	и т ₋ ты			

RECNY

Laboratory:

Recra LabNet

Matrix: Soil

Lab Job No:

A98-1261

Sample Date: 04/14/98

Lab Sample ID: A8126101 Client Sample ID: 1506-S-04 SDG No: 150601

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	

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:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	16.7	

Laboratory: Lab Job No:

Recra LabNet

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:

% Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	10.2	

Laboratory:

Recra LabNet

Lab Job No:

A98-1261

Lab Sample ID: A8126104 Client Sample ID: 1506-S-07

SDG No:

150601

RECNY

Matrix:

Soil

Sample Date:

04/14/98

Dilution Factor:

% Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.3	

Laboratory:

Recra LabNet

RECNY

Soil

Lab Job No:

A98-1289

04/15/98

Dilution Factor:

Matrix:

Sample Date:

Lab Sample ID: A8128906 Client Sample ID: 1506-S-13 SDG No:

150601

1 % Dry Weight: 79.46

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	0.40	ט

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:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	1.2	

aboratory: ab Job No: Recra LabNet

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:

% Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	6.5	

Laboratory:

Recra LabNet

Lab Job No:

A98-1289

Lab Sample ID:

A8128910

SDG No:

Client Sample ID: 1506-S-17

150601

RECNY

Matrix:

Soil

Sample Date:

04/15/98

Dilution Factor:

: 1

% Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	04/22/98	2.5	

RECRA LABNET, a division of Recra Environmental, Inc.

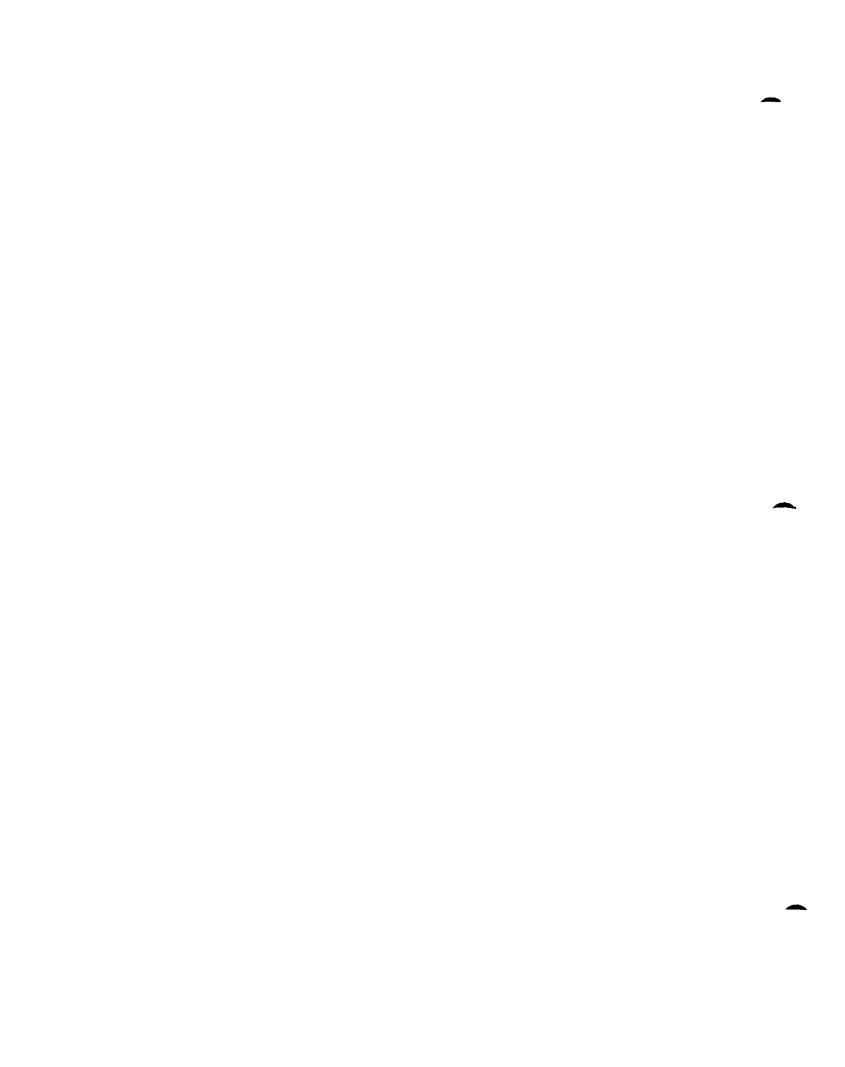
CHAIN OF CUSTODY RECORD

PROJECT	NO	1500	5 R-9	7	SITE NAME 95 Mt. Read Blud Rochester N.Y.		P3/		/,	, / .	5/	7	
SAMPLER	IS (SIG	NATUR	IE)	_		NO OF CON TAINERS	P//			W / W / W / W / W / W / W / W / W / W /		/	REMARKS
STATION NO	DATE			GRAB	STATION LOCATION		/ 4	7 3	<u> </u>	<u>v</u>		<u>/_</u>	
001	4/14/98	1525		×	1506-5-04		×	×					TB-14 (12 - 15.5')
002	119/98	948		*	1506 - 3 - 05	1	×	×					TB-13 (8- 12')
003	4/14/98	920		X	1506 - \$ - 06	1		X	Х				TB-18(12-14.2)
004	1/14/98	1105		X	1506 - \$- 07	1	×	×					TB-9(4-8')
						ļ							
				_							_		
-													
					-		1/4	18					
						1/19							
							·						
					M								
		_											
							į						
RELINQUI	//	7		4/1	DATE TIME RECEIVED BY (SIGNATU 4/98 /730 foscy Kacalo	J	1	,	HED	3Y (SI	GNATI	JAEI	DATE/TIME RECEIVED BY (SIGNATURE)
#ECINQUI	SHED B	Y (\$1G	NATUR	E)	DATE TIME RECEIVED BY ISIGNATU		RELIN	iouis	HE D E	Y (SIC	GNATU	JRE)	DATE/TIME RECEIVED BY ISIGNATURE
RELINQUI	SHED B	Y (SIG	NATUR	E)	DATE/TIME RECEIVED FOR LABORA	TORY BY	0	ATE/	TIME	REM	IARKS		
		上	Distribut	ion: Origir	nal accompanies shipment copy to coordina	tor field files				1	<u>C</u>	<u> 20</u>	ler AT 1000

RECRA LABNET, a division of Recra Environmental, Inc.

Recraft ny 8A7861 CHAIN OF CUSTODY RECORD

PROJECT	NO I	506	R-97		SITE NAME Rocheste	95 Mt. Read Blvd.		3/	$\overline{\mathcal{I}}$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	٨	5/5/	
SAMPLER	- <i>199</i>	NATUR	E).			- ,	NO OF CON TAINERS	I ' '	/& /		O W		REMARKS
STATION	DATE	TIME		GRAB	STA	TION LOCATION	TAILVENS	14	0 / J	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7/ F	<u> </u>	/
001	4/13/98	1345		Χ	1506 - 5	- 08	1				X		TB-20 (B-10')
002	713/9B	1720		*	1506-5-	09	ı				X		TB-6(8-9.31)
003	4/14/98	1420			1506- S	10					X		TB-8(12-15')
004	4/14/98	151B		×	1506-\$	- []					X		TB-14 (8-12')
005				X	1506- \$	-12					X		TB-11 (12-14.5')
006	1/15/1B	1235		_ x	1506-3	- 13	マ	X	X		X		TB-11 (0-4')
007	4/15/18	1055	_	×	1206- 2	- 14	1				×		TB-5(8-12')
800	1/15/18	1415		×	1506-5	- 15	1		X	X			TB=10A(B-11.3')
009			•	X	1506-5	5-16	1	X	X		Χ		TB-11 (6-121)
010	4/15/4B	245		×	1506-5	- 17	2	X	×		×		TB-11 (B-12') MS/MSD or MS/MD
011	4/2/18	AN		X	1506 - T	-18	a				×		TRIP BLANK
012	1/15/98	415	_	×	1506-5	19	_1			X			TB-10A(B-11.3') MS/MD
													3
													3
RELINOUIS	SHED B	Y ISIG	NATUR		DATELTIME	RECEIVED BY (SIGNATUR	(E)	RELIN	IQUIS	HED	BY (SI	GNATURE	DATE/TIME RECEIVED BY (SIGNATURE)
RELINQUIS	SHED B	Y (SIG	NATUR	E)	DATE/TIME	RECEIVED BY ISIGNATUR	E)	AELIN	ouis	HEDI	BY (SI	GNATURE	DATE/TIME RECEIVED BY (SIGNATURE)
RELINQUIS	HED 8	Y (SIGI	NATURE	1	DATE/TIME	RECEIVED FOR LABORATE	次为	4/10	ATE/	TIME	REN	MARKS	
			Distributi	on: Origin	al accompanies	shipment copy to coordinate	or field files	1/14	17t) <u> </u>	-, -,/,	1		





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

weren were the time

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 Program Manager

Kenneth E. Kasperek

Laboratory Director

CLF/KEK/ltb Enclosure

I.D. #A98-1770 #NY8A7861

This report contains 204 pages which are individually numbered.

SAMPLE DATA SUMMARY PACKAGE



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.



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

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

Name: RECRA_LABNET_INC	Contract: NY97-209	
Lab Code: RECNY_ Case No.: 7861_	SAS No.: SDG No.:150621	
Protocol Version: ASP95		
NYSDEC Sample No1506S21506S22506S22D506S22S	Lab Sample IDAD806267AD806268 AD806269/MDAD806270/MS	
Were ICP interelement corrections app	olied ? Yes/No YES	
Were ICP background corrections appli		
If yes - were raw data generated application of background correct		
Comments:		
		_
	nnically and for completeness, for bove. Release of the data contained the computer-readable data submitted he Laboratory Manager or the Manager's	;
Date: (Title: Laboratory_Director	
_	COVER PAGE - IN	

NYSDEC ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO 🚄

Lalo Name: RECRA LABNI	TY TNC	Contract: NY97-209	1506S21
name: Rieldi_habit			l ————————————————————————————————————
Lalb Code: RECNY_	Case No.: 7861_	SAS No.:	SDG No.: 150621
Matrix (soil/water):	SOIL_	Lab Sampl	e ID: AD806267
Level (low/med):	LOW	Date Rece	ived: 05/14/98
% Solids:	_90.9		

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-		\overline{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		Ι_		NR
7439-97-6	Mercury				NR
7440-02-0	Nickel		Ľ		NR
7440-09-7	Potassium				NR
7782-49-2	Selenium_				NR
7440-22-4	Silver		_		NR
7440-23-5	Sodium		l_		NR
7440-28-0	Thallium_		<u> </u>		NR
7440-62-2	Vanadium_		1_		NR
7440-66-6	Zinc				NR
	Cyanide				NR
					

Color	Before:	BROWN	Clarity	Before:		Texture:	FINE
Color	After:	YELLOW	Clarity	After:	CLEAR_	Artifacts:	
	SAMPLE_	ID:_A8177001-STA LE_ID:_1506-S-21					

NYSDEC ASP

1 TNORGANIC ANALYSES DATA SHEET

NYSDEC S	SAMPLE	MO

		INORGANIC A	MALYSES DATA S	SHE	ET		
_						506S22	Ĭ
Lab Name: RECR	A LABNET INC	2.	Contract: NY	797	-209	300322	
Lab Code: RECN	Y_ Cas	se No.: 786	SAS No.:	: _		SDG No.:	150621
Matrix (soil/wa	ater): SOIL	_		La	b Samp	le ID: AD8	06268
Level (low/med): LOW	_		Da	te Rec	eived: 05/	14/98
% Solids:	_90.4	4					
Co	ncentration	Units (ug,	/L or mg/kg dry	y w	eight)	: MG/KG	
				- 		 ı	
	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			-		NR	
	7440-41-7		ļ 	-		NR	
	7440-43-9		\	-		NR	
	7440-70-2			-		NR	
	7440-47-3		5.4	1-1		P	
	7440-48-4					NR	
_	7440-50-8	Copper		1-1		NR	
	7439-89-6	Iron		1-1		NR	
	7439-92-1	Lead		-		NR	
	7439-95-4			-		NR	
	7439-96-5	Manganese		1-1		NR	
	7439-97-6			-		NR	
	7440-02-0			-		NR	
		Potassium		-		NR	
		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		1-		- NR	
				_		1_	
Color Before:	BROWN	Clari	ty Before:		_	Texture:	FINE_
Color After:	YELLOW	Clari	ty After: CLE	EAR		Artifacts	s:
Comments:							
	TD. 2817700	ነጋ - ይሞልበበጋ4 ን					
CITEMA CYMI	PLE ID: 1506	2 SIAUU242 3-9-99					
CUTEMI _ SAME	. n.e n : - r 200						

Laboratory: Lab Job No:

Recra LabNet

A98-1770

Lab Sample ID: A8177001 Client Sample ID: 1506-S-21

SDG No: 150621 RECNY

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

Laboratory:

Recra LabNet

Lab Job No:

A98-1770

Lab Sample ID: Client Sample ID: 1506-S-22

A8177002

SDG No:

150621

RECNY

Matrix:

Soil

1

Sample Date:

05/13/98

Dilution Factor:

% Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	05/22/98	0.40	υ

DAY Environmental, Inc. (716) 292-1090

RECRA LABNET, a division of Recra Environmental, Inc. (#NY8A7861)

CHAIN OF CUSTODY RECORD

ROJECT	,		R-97		SITE NAME O	95 mt. Read Blud , N.Y.	mt. Read Blud		NO PILL X					
AMPLER	IS (SIG)	NATUR	IE).	72			NO OF CON	OF / V/ L/ / / REMAR						REMARKS
	ME				<u> </u>		TAINERS	/	*/ 	žŽ				
TAXION	DATE	TIME	COMP.	GRAB	STA	TION LOCATION	<u> </u>	1 1	<u>%</u>	<u> </u>	<u> </u>		_	<i></i>
001	5/13/ 198	1355		X	1506 - ;	5 - 21	1	x	×					TB-4 (10-11.8')
002	5/15/98	1355		×	1506-3	3- 22	1	×	×					T8-4(10-11.8') inorganic ms/mD
								_						
					-									
													_	
			_											
LINGUI	ret f	1		5/	14/98 11:00		h' I					GNAT		DATE/TIME RECEIVED BY (SIGNATURE)
Cinqui	SHED B	Y (SIG	NATUR	E)	DATE/TIME	RECEIVED BY ISIGNATUR	RE)	RELIN	IQUIS	HED 6	SY (SI	GNAT	URE)	DATE/TIME RECEIVED BY (SIGNATURE)
LINQUI	SHED B	Y ISIG	NATUR	E)	DATE/TIME	RECEIVED FOR LABORAT (SIGNATURE)	ORY BY	0	ATE/	TIME	-1	MARKS		(
		<i>j</i>	Distribut	ion: Origin	nal accompanies	shipment copy to coordinat	or field files				1 .	41/1	15	IENT



Chemical and Environmental Measurement Information

Mr. Jeff Danzinger Day Environmental 2144 Brighton-Henrietta Town Line Road Rochester, NY 14623 December 1, 1998

カガラロミドラ

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.

Program Managar

Program Manager

Kenneth E. Kasperek

Laboratory Director

CLF/KEK/ltb Enclosure

I.D. #A98-4147, 4177 #NY8A7861

This report contains 301 pages which are individually numbered.

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-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

Date

This data report shall not be reproduced, except in full, without the written authorization of Recra LabNet.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: RECRA LABNET, INC.

CUSTOMER	LABORATORY	ANALYTICAL REQUIREMENTS								
SAMPLE ID	SAMPLE ID	VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY			
1506-S-42	A8414701	<u>-</u>	-	•	-	ASP95				
1 506 -S- 4 3	A8414702	-	-	-		ASP95	ASP95			
1506-S-44	A8414703	•		4	<u>-</u>	ASP95	ASP95			
1506-S-45	A8414704	<u>-</u>	-	-	_	ASP95	ASP95			
1506-S-46	A8417701	ASP95	-		_	_	•			
1506-S-47	A8417702	ASP95	-	•	_	_	-			
1506-S-48	A8417703	ASP95	_	•		<u>.</u>				
1506-S-49	A8417704	ASP95	-	•	- ·	_	<u>-</u>			
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
15O6-S-51	WATER	09/23/98	10/01/98		10/09/98
15O6-S-46	SOIL	09/23/98	10/01/98	-	10/09/98
15O6-S-47	SOIL	09/23/98	10/01/98	-	10/09/98
15O6-S-48	SOIL	09/23/98	10/01/98		10/09/98
15O6-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





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



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
15O6-S-51	WATER	ASP95	-	AS REQUIRED	AS REQUIRED
15O6-S-46	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
15O6-S-47	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
15O6-S-48	SOIL	ASP95	•	AS REQUIRED	AS REQUIRED
1506-8-49	SOIL	ASP95	-	AS REQUIRED	AS REQUIRED
1576-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.
- 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.

L Name: <u>Recra LabNet</u> Contract:		1506-S-46	
Lab Code: RECNY Case No.: SAS No	.: SI	JG No.: <u>S42</u>	
Matrix: (soil/water) <u>SOIL</u>	Lab Sample II	D: <u>A8417701</u>	
Sample wt/vol: 5.17 (g/mL) G	Lab File ID:	<u> H9272.RR</u>	
Level: (low/med) <u>LÖW</u>	Date Samp/Red	ev: <u>09/23/98</u>	10/01/98
% Moisture: not dec. <u>10.3</u> Heated Purge: \underline{Y}	Date Analyze	d: <u>10/09/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	tor:1.00	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION (UNITS:	
CAS NO. COMPOUND	(ug/L or ug/K	g) <u>UG/KG</u>	Q
74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl chloride 75-00-3Chloroethane 75-09-2Methylene chloride 67-64-1		11 11 11 2 11 11 11 11 11 11 11 11 11 11	מממממממממ ממממממממממממממ
100-42-5Styrene		11 11	U
			10

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000012

Client No.

					1506-S-4	6	
Lab	Name:	Recra	LabNet	Contract:	L		

Lab Code: RECNY Case No.: ____ SAS No.: ___ SDG No.: <u>S42</u>

Matrix: (soil/water) SOIL Lab Sample ID: A8417701

Sample wt/vol: $\underline{5.17}$ (g/mL) \underline{G} Lab File ID: $\underline{H9272.RR}$

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>09/23/98</u> <u>10/01/98</u>

% Moisture: not dec. 10.3 Date Analyzed: 10/09/98

GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm) Dilution Factor: ____1.00

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/KG

CAS NO	O. Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE UNKNOWN SILICONE CMPD	5.62	18	JN
2.		21.28	31	J

ASP 95 - VOLATILES ANALYSIS DATA SHEET

000013

Client No.

- W D			1506-S-47	
Name: <u>Recra LabNet</u>	Contract:			
Lab Code: <u>RECNY</u> Cas	e No.: SAS No.	: SI	G No.: <u>S42</u>	_
Matrix: (soil/water) <u>S</u>	OIL	Lab Sample II): <u>A8417702</u>	
Sample wt/vol: _	<u>5.14</u> (g/mL) <u>G</u>	Lab File ID:	<u> H9275.RR</u>	
Level: (low/med) \underline{L}	<u>OW</u>	Date Samp/Rec	v: <u>09/23/98</u>	10/01/98
% Moisture: not dec	8.5 Heated Purge: Y	Date Analyzed	l: <u>10/09/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dilution Fact	or:1.00	
Soil Extract Volume: _	(uL)	Soil Aliquot	Volume:	(uL)
CAS NO. COMPOUN		ONCENTRATION (ug/L or ug/Kg		0
			<u> </u>	Q
74-87-3Chlorom	ethane		11	U
74-83-9Bromome	thane	i i	11	ן ט
75-01-4Vinyl c	hloride		11	ט
75-00-3Chioroe	thane	· ·	11	ן ט
75-09-2Methyle	ne chloride		3	J
67-64-1Acetone	Disulfide		11	<u>"</u>
7-15-0Carbon	Disulfide		11	<u>"</u>
-35-41,1-Dic	hloroethene		11	<u>ט</u>
75-34-31,1-Dic	nioroetnane		11	U
540-59-01,2-D1C	hloroethene (Total)		11	U
67-66-3Chlorof			11	U
10/-06-21,2-D1C	hloroethane		11	ŭ
78-93-32-Butan	one		11	ש
/1-55-61,1,1-1	richloroethane		11	ŭ
56-23-5Carbon	Tetrachloride		11	U
75-27-4BIOMOGI	chloromethane		11	<u>u</u>
78-87-51,2-Dic	-Dichloropropene		11 11	ט
79-01-6Trichlo			11	U U
124-48-1Dibromo			11	ן ט
79-00-51,1,2-T			11	Ü
71-43-2Benzene			11	ן ט
10061-02-6trans-1			11	l ü
75-25-2Bromofo			11	Ü
108-10-14-Methy			11	lŭ l
591-78-62-Hexan			11	υ
127-18-4Tetrach			11	บั
108-88-3Toluene			1	J
79-34-51,1,2,2			11	บี
108-90-7Chlorob			11	บี
100-41-4Ethylbe			11	บี
100-42-5Styrene			11	บ
330-20-7Total X			11	TI I

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000014

1506-S-47

Soil Aliquot Volume: _____ (uL)

Client No.

Lab Name: Recra LabNet	Contract: _		
Lab Code: RECNY Case No.:	_ SAS No.	: SDG N	o.: <u>S42</u>
Matrix: (soil/water) SOIL		Lab Sample ID:	<u>A8417702</u>
Sample wt/vol: 5.14 (g/mL) <u>G</u>	Lab File ID:	<u>H9275.RR</u>
Level: (low/med) LOW		Date Samp/Recv:	09/23/98 10/01/98
% Moisture: not dec. <u>8.5</u>		Date Analyzed:	10/09/98
GC Column: <u>DB-624</u> ID: <u>0.53</u>	(mm)	Dilution Factor:	1.00

Soil Extract Volume: ____ (uL)

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) <u>UG/KG</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
	TRCHLOROFLUOROMETHANE	5.60	14	JN
	UNKNOWN SILICON CMPD	21.27	22	J

ASP 95 - VOLATILES ANALYSIS DATA SHEET

000015

Client No.

1506-S-48 L___ Name: <u>Recra LabNet</u> Contract: _____

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: S42___

Matrix: (soil/water) SOIL Lab Sample ID: <u>A8417703</u>

Sample wt/vol: $\underline{5.02}$ (g/mL) \underline{G} Lab File ID: <u>H9276.RR</u>

Date Samp/Recv: 09/23/98 10/01/98 Level: (low/med) LOW

% Moisture: not dec. <u>9.5</u> Heated Purge: Y Date Analyzed: <u>10/09/98</u>

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
	Chloromethane		11	Ū
	Bromomethane		11	ַ ט
75-01-4	Vinyl chloride		11	U
175-00-3	Chloroethane		11	ט
75-09-2	Methylene chloride		3	J
167-64-1	Acetone		11	U
-15-0	Carbon Disulfide		11	ט
-35-4	1,1-Dichloroethene		11	ש
175-34-3	1.1-Dichloroethane		11	ប
540-59-0	1,2-Dichloroethene (Total)		11	ש
67-66-3	Chloroform		11	ש
107-06-2	1,2-Dichloroethane		11	ש
178-93-3	2-Butanone		11	ט
71-55-6	1,1,1-Trichloroethane		11	ប
56-23-5	Carbon Totrachlorido		11	ש
75-27-4	Promodiahloromothoro		11	ט
	1,2-Dichloropropane		11	ט
10061-01-5-	cis-1,3-Dichloropropene	<u> </u>	11	ט
79-01-6	Trichloroethene		11	ַ
	Dibromochloromethane		11	ט
79-00-5	1,1,2-Trichloroethane		11	ט
71-43-2	Benzene		11	U
10061-02-6-	trans-1,3-Dichloropropene		11	שׁ
75-25-2	Bromoform		11	ט
108-10-1	4-Methyl-2-pentanone		11	ט
591-78-6	2-Hexanone		11	ט
127-18-4	Tetrachloroethene		11	ប
108-88-3	Toluene		11	ט
79-34-5	1,1,2,2-Tetrachloroethane		11	U
108-90-7	Chlorobenzene		11	บ
100-41-4	Ethylbenzene		11	ט
190-42-5	Churono		11	บ
	Total Xylenes		11	บ
	· · · · · · · · · · · · · · · · · · ·			

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000016

Client No.

		1506-S-48	
Lab Name: <u>Recra LabNet</u>	Contract:		

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: <u>S42</u>

Matrix: (soil/water) SOIL

Lab Sample ID:

<u>A8417703</u>

Sample wt/vol:

<u>5.02</u> (g/mL) <u>G</u>

Lab File ID: <u>H9276.RR</u>

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: <u>DB-624</u> ID: <u>0.53</u> (mm)

Dilution Factor: 1.00

Soil Extract Volume: ____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

Number TICs found: 2

(ug/L or ug/Kg) <u>UG/KG</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 75-69-4	TRICHLOROFLUOROMETHANE UNKNOWN SILICON CMPD	5.60	6	JN
2.		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.: <u>S42</u> Matrix: (soil/water) SOIL Lab Sample ID: A8<u>417704</u> Sample wt/vol: $\underline{5.21}$ (g/mL) \underline{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: <u>DB-624</u> ID: <u>0.53</u> (mm) Dilution Factor: ____1.00 Soil Aliquot Volume: ____ (uL) Soil Extract Volume: ____ (uL) CONCENTRATION UNITS: UG/KG CAS NO. COMPOUND (ug/L or ug/Kg) 0 74-87-3-----Chloromethane 11 U 74-83-9-----Bromomethane 11 U 75-01-4-----Vinyl chloride ______ 11 IJ 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 -35-4----1,1-Dichloroethene 11 U 75-34-3----1,1-Dichloroethane 11 U 540-59-0----1,2-Dichloroethene (Total) U 11 67-66-3-----Chloroform 11 U 107-06-2----1, 2-Dichloroethane 11 U 78-93-3----2-Butanone 11 IJ 71-55-6----1,1,1-Trichloroethane _______ 11 IJ 56-23-5----Carbon Tetrachloride U 11 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 IJ 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 IJ 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 Ħ 108-90-7----Chlorobenzene_____ 11 U 100-41-4-----Ethylbenzene IJ 11 ¹ 90-42-5----Styrene 11 U 30-20-7----Total Xylenes____ U 11

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000018

Client No.

Lab Name: Recra LabNet	Contract:	1506	S-S-49 	
Lab Code: RECNY Case No.:	SAS No.:	SDG No	o.: <u>\$42</u>	
Matrix: (soil/water) <u>SOIL</u>	Lab Sample	ID:	A8417704	
Sample wt/vol: $\underline{5.21}$ (g/mL)	<u>G</u> Lab File I	D:	H9277.RR	
Level: (low/med) <u>LOW</u>	Date Samp/	Recv:	09/28/98	10/01/98
% Moisture: not dec. <u>12.1</u>	Date Analy	zed:	10/09/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm) Dilution F	actor:	1.00	
Soil Extract Volume: (uL)	Soil Aliqu	ot Volu	ıme:	(uL)
Number TICs found: 2	CONCENTRATIC (ug/L or ug			

CAS NO.	Compound Name	RT	Est. Conc.	Q
1	TRICHLOROFLUOROMETHANE	5.58	19	JN
	UNKNOWN SILICON CMPD	21.28	28	J

ASP 95 - VOLATILES ANALYSIS DATA SHEET

Client No.

I Name: Recra LabNet Contract:		1506-S-50	
Lalb Code: RECNY Case No.: SAS No	.: SI	OG No.: <u>S42</u>	_
Matrix: (soil/water) <u>SOIL</u>	Lab Sample II): <u>A8417705</u>	
Sample wt/vol: $\underline{5.34}$ (g/mL) \underline{G}	Lab File ID:	<u> H9278.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Red	ev: <u>09/28/98</u>	10/01/98
% M oisture: not dec. 11.0 Heated Purge: Y	Date Analyzed	d: <u>10/09/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION (UNITS:	
	(ug/L or ug/Kg		Q
74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl chloride 75-00-3Chloroethane 75-09-2Methylene chloride 67-64-1Carbon Disulfide		10 10 10 10 10 10 10 10 10 10 10 10 10 1	ממממממממממממממממ
124-48-1		10 10 10 10 10 10 10 10 10 10	מממממ מממממט

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000020

Client No.

Lab Name: <u>Recra LabNet</u>	Contract:	1506-8-50
Lab Code: RECNY Case No.:	SAS No.:	SDG No.: <u>S42</u>
Matrix: (soil/water) <u>SOIL</u>	Lab Sample	e ID: <u>A8417705</u>
Sample wt/vol: $\underline{5.34}$ (g/m)	L) <u>G</u> Lab File I	ID: <u>H9278.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/	Recv: <u>09/28/98</u> <u>10/01/98</u>
% Moisture: not dec. <u>11.0</u>	Date Analy	zed: <u>10/09/98</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u>	(mm) Dilution E	Factor:1.00
Soil Extract Volume: (uL)	Soil Aliqu	uot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) <u>UG/KG</u>

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

Number TICs found: 2

ASP 95 - VOLATILES ANALYSIS DATA SHEET

000021

Client No.

L Name: <u>Recra LabNet</u> Contract: _		1506-S-51	
Lab Code: <u>RECNY</u> Case No.: SAS No.:	: SI	OG No.: <u>S42</u>	-
Matrix: (soil/water) <u>WATER</u>	Lab Sample II): <u>A8417706</u>	
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	<u> H9270.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Rec	ev: <u>09/29/98</u>	10/01/98
% Moisture: not dec Heated Purge: Y	Date Analyzed	i: <u>10/09/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	ONCENTRATION ((ug/L or ug/Kg		Q
74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl chloride 75-00-3Chloroethane 75-09-2Methylene chloride 67-64-1Acetone15-0Carbon Disulfide35-41,1-Dichloroethane 540-59-01,2-Dichloroethane 107-06-21,2-Dichloroethane 78-93-3		10 10 10 10 10 10 10 10 10 10 10 10 10 1	. ממממממממממממממממממממממממממ

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000022

Client No.

Lab Name: <u>Recra LabNet</u>	Contract:		-S-51 ————	
Lab Code: <u>RECNY</u> Case No.:	SAS No.:	SDG No	.: <u>S4</u> 2	-
Matrix: (soil/water) <u>WATER</u>	Lab	Sample ID:	A8417706	_
Sample wt/vol: $5.00 (g/m)$	nL) <u>ML</u> Lab	File ID:	H9270.RR	<u>.</u>
Level: (low/med) <u>LOW</u>	Date	Samp/Recv:	09/29/98	10/01/98
% Moisture: not dec	Date	e Analyzed:	10/09/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u>	3 (mm) Dilu	ution Factor:	1.00	
Soil Extract Volume: (uL)	Soil	l Aliquot Volu	me:	(uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) <u>UG/L</u>

.

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 2.	UNKNOWN SILICON CMPD	17.32	6	J
	UNKNOWN SILICON CMPD	21.30	18	J

Number TICs found: 2

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA_I	LABNET_INC	Contract:	NY97-209_	_
Lab Code: RECNY_	Case No.: 7861_	SAS No.:		SDG No.:S42
Protocol Version	: ASP-95			
	SDEC Sample No. 42 43 44 45	Lab SampAD8128AD8128AD8128AD8128	335 336 337	
-				
Were ICP interel	ement corrections ap	pplied ?		Yes/No YES
If yes - we	und corrections appl re raw data generate of background corre	ed before		Yes/No YES Yes/No NO_
Comments:				
conditions of the other than the conditions of the conditions of the other than the conditions of the other than the conditions of the other than the conditions of the	his data package is the Protocol, both tector of the conditions detailed at data package and in the been authorized by the following the following the conditions of the condi	chnically and above. Release the compute the Laborato ing signature. Name:	d for comp ase of the er-readabl ry Manager e. Kenneth_E	leteness, for data contained e data submitted or the Manager's
Date:	19/3/18	•		y_Director
		COVER PAG	E - IN	

1 INORGANIC ANALYSES DATA SHEET

れてらしたへ	SAMPLE	NIO -
NIGDEC	OHULUG	140 —

Lab Name: RECRA_LABNE	ET_INC	_ Contract: N	¥97-209	42
Lab Code: RECNY_	Case No.: 78	861_ SAS No.	:	SDG No.: S42
Matrix (soil/water):	SOIL_		Lab Sample	ID: AD812835
Level (low/med):	LOW		Date Recei	ved: 09/30/98
% Solids:	_91.1			

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	 -				
CAS No.	Analyte	Concentration	С	Q	М
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		ΙΞ		NR
7439-89-6	Iron		Ι_		NR
7439-92-1	Lead				NR
7439-95-4	Magnesium		ſΞ		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		<u> </u> _		NR
7440-23-5	Sodium		l_		NR
7440-28-0	Thallium_		۱_	l	NR
7440-62-2	Vanadium_		1_		NR
7440-66-6	Zinc		. _		NR
	Cyanide		_		NR
			1_	l	.

Color Before:	BROWN	Clarity	Before:		Texture:	MEDIUM
Color After:	YELLOW	Clarity	After:	CLEAR_	Artifacts:	
	ID:_A8414701-ST LE_ID:_1506-S-4					<u> </u>

1 NYSDEC S INORGANIC ANALYSES DATA SHEET

NYSDEC	GAMDI.E	NTO
MIDDEC	SHIPLD	MO

	-	LITOROITHTE I	441D1020 211111 -			1	
						43	
Lab Name: RECR	A_LABNET_ING	C	Contract: NY	797	-209		
Lab Code: RECN	Y_	se No.: 786	SAS No.:	: <u> </u>		SDG No.: S	842
Matrix (soil/wa	ater): SOIL	_		La	b Samp	le ID: AD812	836
Level (low/med): LOW	_		Da	te Rec	eived: 09/30	/98
% Solids:	_88.3	2					
Co	ncentration	Units (ug,	/L or mg/kg dry	, M	eight)	: MG/KG	
	CAS No.	Analyte	Concentration	С		M	
		l		_			
	7429-90-5					NR	
	7440-36-0	Antimony_		1-1		NR	
	7440-38-2	Arsenic				NR	
	7440-39-3					NR	
	7440-41-7		-	-		NR	
	7440-43-9			-		NR NR	
	7440-70-2 7440-47-3		9.3	\-\			
	7440-47-3	_				P_ NR	
_	I I	Copper Copper		[-[NR NR	
		Iron		-		NR NR	
	I I	Lead				NR	
		Magnesium		1-1		NR	
	7439-96-5	Manganese		-		NR	
		Mercury_		-		NR	
	7440-02-0	Nickel		-		NR	
	I	Potassium		-		NR	
		Selenium		1-1		NR	
	7440-22-4			-		NR	
	7440-23-5	Sodium		1-1		NR	
	7440-28-0	Thallium		-		NR	
	7440-62-2	Vanadium_		1=1		NR	
	7440-66-6	Zinc		. _		NR	
		Cyanide	-	- -		NR	
Color Before:	BROWN	Clari	ty Before:	. ' — '		Texture:	MEDIUM
Color After:	YELLOW	Clari	ty After: CLE	AR_	_	Artifacts:	
				_			-
Comments:							
	ID:_A841470						
CLIENT_SAME	PLE_ID:_1506	5-S-43		_			
							

1 INORGANIC ANALYSES DATA SHEET

MYCDEC	SAMPLE	NO -
NISDEC	SAMPLE	NO.

Lab Name: RECRA_LABN	ET_INC	Contract: NY97-209	44
Lab Code: RECNY_	Case No.: 7861	SAS No.:	SDG No.: S42
Matrix (soil/water):	SOIL_	Lab Sampl	e ID: AD812837
Level (low/med):	LOW	Date Rece	eived: 09/30/98
% Solids:	_90.3		
Concentr	ation Units (ug/L	or ma/ka dry weight).	MG/KG

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		[-		\overline{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		1-		NR
	Cyanide		1-		NR
			1-]	

Color	Before:	BROWN	Clarity	Before:		Texture:	MEDIUM
Color	After:	YELLOW	Clarity	After:	CLEAR_	Artifacts:	
Commei LAI CL:	B SAMPLE	ID:_A8414703-STA LE_ID:_1506-S-44	100242 L				<u> </u>

1 TNORGANIC ANALYSES DATA SHEET

NYSDEC	תי	MADE TO	NTA.
NYSUEL.	SA	(4) - 1 - 1-	INU

	I	NORGANIC A	MALYSES DATA S	HEET		
_						
					45	
Lab Name: RECRA	A_LABNET_INC	:	Contract: NY	797-209		
					ana 31- (7.4.0
Lab Code: RECNY	Y_ Cas	se No.: 786	SAS No.:	·	SDG No.: S	542
Matrix (soil/wa	stor) . GOTI.			Lah Samo	le ID: AD812	2838
Macilia (Soll) We	acer,. born_	-		202 201.p.		
Level (low/med)): LOW	_	,	Date Rec	eived: 09/30	0/98
	0.7	_				
% Solids:	_91.	•				
Cor	ncentration	Units (ug/	L or mg/kg dry	v weight)	: MG/KG	
					<u> </u>	
					l., l	
	CAS No.	Analyte	Concentration	C Q	M	
	7429-90-5	Aluminum		-	$\left \frac{1}{NR} \right $	
		Antimony_		-	NR NR	
	7440-38-0	Arsenic	<u> </u>	-\ 	NR NR	
	I.	Barium		-	NR	
	7440-41-7			1-1	NR	
	7440-43-9				NR	
	7440-70-2	Calcium		-	NR	
	7440-47-3	Chromium	6.0	\ \	P_	
		Cobalt		1-1-	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	
		Potassium			NR	
		Selenium		-	NR	
	7440-22-4	Silver		` <u> </u>	NR	
	7440-23-5	Sodium			NR	
	7440-28-0	Thallium_			NR	
	7440-62-2	Vanadium_		<u> </u>	_ NR	
	7440-66-6	Zinc		. _	NR	
		Cyanide	.l <u></u>	. _	_ NR	
]	.		.	_	
Color Before:	BROWN	Clari	ty Before:		Texture:	MEDIUM
Color After:	YELLOW	Clari	ty After: CLE	AR_	Artifacts:	
_						
Comments:						
LAB_SAMPLE_	ID:_A841470	4-STA00242	<u> </u>			
CLIENT_SAME	,րը: Tp: Tp06	-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:

% Dry Weight:

88.19

1

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/29/98	1.2	

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

1

Sample Date:

09/29/98

Dilution Factor:

% Dry Weight: 90.31

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/29/98	1.2	

Soluble Metals Analysis

Laboratory:

Recra LabNet

Lab Job No:

A98-4147

Lab Sample ID:

A8414704 Client Sample ID: 1506-S-45

SDG No:

S42

RECNY

Matrix:

Soil

Sample Date:

09/29/98

Dilution Factor:

% Dry Weight:

91.50

1

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/29/98	0.70	

RECRA LABNET, a division of Recra Environmental, Inc. (716) 292-1098

CHAIN OF CUSTODY RECORD

	Ch	AL	ADI		, a division of Recra Enviro	onmental	, inc	<u>; (*)</u>	4Y.E	3A78	<u>861</u>	<u>) </u>	CHAIN O		COND
PROJECT SAMPLEI	506 F	/ De	rest		Rochester, HY	NO OF CONTAINERS	2	3/1		//	7	/		REMARKS	
NO NO	1		COMB.	GRAB	DATION LOCATION		1 1	' /	_	\leftarrow		_	(, ,)	Also do	
	723/4			4	1506-5-46		X	ļ _					TB-26(4-8)	•	
2_	12/18	10:5D		×	1506-5-47	11	×	<u> </u>					TB-38(8'-12		
3_	1/23/19 1/49	09:10		*	1506-5-48	1	x	<u> </u>					TB-40(8-11	.5')	
4		13:50		×	1506-5-49		X						TB-37(8'-)	o')	
5	929/g	15:25		×	1506-5-50	li	1						TB-39 (10'-	•	
6	9/29/gg	04:00		α	1506-5-51	2	X						Equipment	Rinsate	
	7 78												117		
						 									
						 			_						
					<u> </u>	_		-							
			\dashv					\vdash							
								-					· . · · · · · · · ·	 	
		_				_									
						<u> </u>									
لہ	A	لم		لہج							2012		1		
DINGUI	SHIP	Y I SIGI	VA TURI		DATE TIME RECEIVED BY ISIGNAT	URE)	RELI	NQUIS	HED I	BY (SIC	GNAT	UHE	DATE/TIME	RECEIVED BY (SIGN	ATURE)
y NOU	SHED E		VATURI		DATE/TIME RECEIVED BY ISIGNAT	URE)	RELIN	NQUIS	HED 6	S (S)(GNAT	URE)	DATE/TIME F	RECEIVED BY ISIGN	
LINQUI	SHED B	Y (SIGN	NATURE	E)	DATE TIME RECEIVED FOR LABOR	ATORY BY				REM	ARKS	<u> </u>			
			Distributi	on: Origin	nal accompanies shipment copy to coordin	nator field files	10/	193	094	2	-00	L-	5°C		

RECRA LABNET, a division of Recra Environmental, Inc. (*NYBA7861)

CHAIN OF CUSTODY RECORD

<u> </u>										:						
PROJECT	15 (\$\frac{1}{3}\)	NATUF 128p	Lit)où	the second	er, N	Ψ	Blud	NO OF CON TAINERS	\$27	THE COLUMN		, and		/,	REMARKS
STATION NO	PATE	TIME	COMP	GRAB	<u></u>	TATION L	CATION		, ,	/ /	19 :	¥			<u> </u>	
	128/	13:55		7	1506	-S-40	2			X						TB-37(10-12')
Z	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	15:15		*	1506	-5-4	(_		X						TB-39(8'-10')
3	925/98	18:45		У		5-42		(X						TB-36(8-10)
4	929/98	0830		*	1506	- 5-4	5			X	X					TB-29 (6'-7.9')
5	724/28	11:10		×	1506	-5.4	4			×	X					TB-25(10-11.91)
6	9/27/98	12:15		· +	1506	- 5-4 - 5-4	5	4		X	メ	+	-	2	= -	TB-23(8'-10')
						· · · · · · · · · · · · · · · · · · ·	.!		· · ·							
						 _										
																·
	j															· •
HELMOU				_	DATE/TIM		VED BY (SI	GNATUR)E)	RELIN	NQUIS	HED (BY (SI	GNATI	JRE)	DATE/TIME RECEIVED BY (SIGNATURE)
RELINDU					DATE/TIM		ED BY (SI	GNATUR	E)	RELIN	OUIS	HEDE	3Y (SI	GNATU	JRE)	DATE/TIME RECEIVED BY (SIGNATURE)
RELINQUI	SHED (Y (SIG			DATE/TIM	ISIGNA	TURE	ak	ORY BY					MARKS		5°C

00056



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

RE: Analytical Results

Dear Mr. Danzinger:

PECEIVED DEC 0 8 1998

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:

Ouote #: 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/ltb Enclosure

I.D. #A98-4049, 4067. 4076, 4146 #NY8A7861

This report contains <u>983</u> pages which are individually numbered.

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-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:

В	-	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.
- 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

La	RECRA_LAB	NET_INC		Contract:	NY97-209	_	
Lab Code:	RECNY_	Case No.:	7861_	SAS No.:		SDG No.:S	20
Version: A	ASP-95						
	_20232425262728303132333333353535		•	AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125 AD8125	83 84 85 86 87 88 89 92 93 93 94 95 99 00/MD 01/MS 99 99/MD 699/MD 600/MS 690/MS		
		nt correcti				Yes/No	YES
If y	es - were	correction raw data ge background	nerāted	before		Yes/No Yes/No	YES NO
Comments:		exaChrom re			Chromium.		
			_				
condition other tha in this hon floppy	s of the condardcopy dadiskette designee,	data packa contract, bo ditions deta ta package has been au as verifie	th tech iled ab and in thorize	nically and ove. Relead the computed by the Lage following Name:	d for complase of the er-readable aboratory Mg signature Kenneth_E.	eteness, f data conta data subm anager or _Kasperek_ _Director_	or ined itted the
_				COVER PAGE	E - IN	10/	9.5

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA_LABNET_INC	C	ontract:	NY97-209_	_	
Lab Code: RECNY_ Case No.:	: 7861_ S	AS No.:		SDG No.:S	20
Version: ASP-95					
NYSDEC Sample N36	- - - - - -	Lab SampAD8126AD8126AD8126AD8126AD8125A84076A84076AB4128AD8128AD8128AD8128	01 002 004/MD_ 005/MS_ 078 005D 005S 031 033/MS_		
Were ICP interelement correct	- cions appli	ed ?		Yes/No	YES
Were ICP background correction If yes - were raw data of				Yes/No	YES
application of background				Yes/No	NO_
Comments: HC and HexaChrom	represent H	exavalent	Chromium.		
			·		
I certify that this data pack conditions of the contract, other than the conditions defin this hardcopy data package on floppy diskette has been a Manager's designee, as veriful Signature:	both techni tailed abov e and in th authorized	cally and e. Release compute by the La following Name:	d for compl ase of the er-readable aboratory M	eteness, f data conta data subm anager or _Kasperek_	or ined itted
	C	OVER PAGE	E - IN	10/	95

NYSDEC-ASP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lalame: RECRA_LABNET_INC	Contract:	NY97-209
Lab Code: RECNY_ Case No.: 7861_	SAS No.:	SDG No.:S20
Version: ASP-95		
NYSDEC Sample No. 38	Lab SamplAD81260AD81260AD81260AD81257AD81283AD81283	3
We're ICP interelement corrections app	lied ?	Yes/No YES
Were ICP background corrections applie		Yes/No YES
If yes - were raw data generated application of background correct		Yes/No NO_
Comments:HC and HexaChrom represent	Hexavalent	Chromium
	<u>-</u> -	
		·
I certify that this data package is is conditions of the contract, both technother than the conditions detailed ab in this hardcopy data package and in on floppy diskette has been authorized Manager's designee, as verified by the Signature: Date:	nically and ove. Releas the computer d by the Lab e following	for completeness, for see of the data contained readable data submitted poratory Manager or the

COVER PAGE - IN 10/95

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

Date Received: 09/23/98

	23
Lab Name: RECRA LABNET INC. C	Contract: NY97-209
Lab Code: RECNY Case No.: 7861	SAS No.: SDG No.: S20
Matrix (soil/water): SOIL_	Lab Sample ID: AD812584

Concentration Units (ug/L or mg/kg dry weight): MG/KG

· — —			1 1		т 1
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{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	Molybdenu				NR
ļ	HexaChrom		_		NR
			l_	l	l
					I
				l	
			_		l

	Before: After:	BROWNYELLOW		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
	SAMPLE	ID:_A8404902-ST LE_ID:_1506-S-2					
_			FORI	<u> </u>			

NYSDEC-ASP

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO.
--------	--------	-----

•				24	
Lab Name: RECRA_LABNI	ET_INC	Contract: N	797-209		
Lab Code: RECNY_	Case No.: 7861	L_ SAS No.:	:	SDG No.: S	320
Matrix (soil/water):	SOIL	_	Lab Sample	ID: AD812	585
Level (low/med):	LO W		Date Recei	ved: 09/23	/98
% Solids:	_89.2				

Concentration Units (ug/L or mg/kg dry weight): MG/KG

	_				
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-		\overline{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
1 1 1 0 0 0	Cyanide		-		NR
7439-98-7	Molybdenu		-		NR
/ 435 50 /_	HexaChrom	· 	-	l	NR
	Inexaciii oiii		-		INK
_ 			-	<u> </u>	
-			-	l	
			-		I —
<u> </u>			-	<u> </u>	
			-		
	I	l	1_	l	I

Color Before: Color After:	GRAY_ YELLOW	Clarity Before: Clarity After:	CLEAR_	Texture: Artifacts:	MEDIUM
	ID:_A8404903- LE_ID:_1506-S				
		FORM I - IN		10,	 /95

10/95

NYSDEC-ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	CAMDLE	$NI \cap$
NISDEC	SAMPLE	INO

 Matrix (soil/water): SOIL
 Lab Sample ID: AD812586

 Level (low/med):
 LOW

 Best No.:
 SAS No.:

 Lab Sample ID: AD812586

 Date Received: 09/23/98

 Solids:
 90.6

	Analyte Aluminum	Concentration	c	Q	M
	Aluminum		l I	-	* *
			-		$\frac{1}{NR}$
7440-36-0 <i>1</i>	Antimony		[-]		NR
	Arsenic		- <u> </u>		NR
'	Barium		_		NR
	Beryllium		-		NR
	Cadmium				NR
	Calcium		-		NR
	Chromium	9.0		EN*	₽
	Cobalt		-		NR
	Copper		-		NR
	Iron ——		-	_	NR
	Lead		-		NR
	Magnesium		-		NR
	Manganese		-		NR
	Mercury		-		NR
	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	Molybdenu		-		NR
[-]:	HexaChrom		-		NR
			-		
			<u> </u>		
			-		_

Before: After:	BROWN	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM ———
S_SAMPLE_	ID:_A8404904-ST LE_ID:_1506-S-2					
 		FORI	M I - IN			

NYSDEC SAMPLE NO.

NYSDEC-ASP

	1		
INORGANIC	ANALYSES	DATA	SHEET

	INORGANIC ANA	ALYSES DATA SHEET	
Matrix (soil/water): Solution Level (low/med): Low	_INC	Contract: NY97-209 SAS No.: Lab Samp	26 SDG No.: S20 le ID: AD812587 eived: 09/23/98

CAS No.	Analyte	Concentration	С	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	$-\frac{8.4}{}$	-	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
, 110 00 0	Cyanide		-		NR
7439 - 98 - 7	Molybdenu		-		NR
	HexaChrom		-	\	NR
			-		
			1-		1-
			-		
-			-		
	— ——		-		
			1-	l — —	· —

 Before: After:	BROWNYELLOW	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
SAMPLE_	ID:_A8404905-STA LE_ID:_1506-S-26					
 		FORM	M I - IN			

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	N()

				27
Lab Name: RECRA LABNE	ET_INC	Contract: NY	97-209 _	
Lab Code: RECNY	Case No.: 786	1 SAS No.:	S	DG No.: S20
Matrix (soil/water):	SOIL	~	Lab Sample	ID: AD812588
Level (low/med):	LOW		Date Receiv	ed: 09/23/98
% Solids:	_85.8			

					I
CAS No.	Analyte	Concentration	C	Q	М
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		<u> </u>		NR
7440-70-2	Calcium		-		NR
7440-47-3	Chromium	11.0	—	EN*	P
7440-48-4	Cobalt				NR
7440-50-8	Copper		<u> </u>		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
1 7440 00 0	Cyanide		-		NR
7439-98-7	Molybdenu		-		NR
1,432,20 ,-	HexaChrom		-	[-	NR
\ 			-	l ———	141
	ļ 		-	[
l]	-		
			-	[———	
	\ 	·	-	ļ ———	
	<u> </u>	_ 	-		
·	l ————	l ————	١ —	1	' — i

Color Before Color After		Clarity Bef Clarity Aft	fore: ter: CLEAR_	Texture: Artifacts:	MEDIUM
	LE_ID:_A8404906- AMPLE_ID:_1506-S				
		FORM I	- IN		

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

28

Lab Name: RECRA_LABNET_INC.____ Contract: NY97-209_

SDG No.: S20

Matrix (soil/water): SOIL

Lab Code: RECNY Case No.: 7861 SAS No.:

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

ì					
CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum		-		$\left \frac{1}{NR} \right $
7440-36-0	Antimony	1.9	\overline{B}		P
7440-38-2	Arsenic	14.0	-		P
7440-39-3	Barium		_		NR
7440-41-7	Beryllium	1.6	-	\overline{N}	P
7440-43-9	Cadmium	9.9	_		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	$\overline{\mathtt{U}}$		CV
7440-02-0	Nickel	19.3		N	P_
7440-09-7	Potassium	1980		E	P
7782-49-2	Selenium_	12.1	Ū		P_
7440-22-4	Silver	0.71	В	N	P_
7440-23-5	Sodium		Ì_		NR
7440-28-0	Thallium_	2.0	$ \overline{B} $		P_
7440-62-2	Vanadium_				NR
7440-66-6	Zinc	2770		N	P_\
	Cyanide		_		NR
7439-98-7_	Molybdenu	23.1	_		P_{
	HexaChrom	 	_	l	NR
			l_	l	
			_	<u> </u>	\
			_		
			_		1
			_		<u> </u>
l		l	1_	l	iI

		Clarity Clarity	CLEAR_	Texture: Artifacts:	FINE_
Common	. .				

Comments:

AB_SAMPLE_ID:_A8404907-CGA01515____ LIENT_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

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	CAMDLE	NΟ
NIDDEC	SAMPHE	INO

			29
ab Name: RECRA_LABNI	ET_INC	Contract: NY97-2	209
ab Code: RECNY	Case No.:	7861_ SAS No.:	SDG No.: S20
Matrix (soil/water):	SOIL		Sample ID: AD812592
evel (low/med):	LOM _	Date	e Received: 09/24/98
Solids:	_91.1		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

% Solids:

					T
CAS No.	Analyte	Concentration	C	Q	M
			_		l l
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_		l <u> </u>		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	Molybdenu		-		NR
_	HexaChrom				NR
			-		
			-		
			-		
			_		
			-		
I	· ———	I —————	-	' ———	· —

	Before: After:	GRAY YELLOW		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
	S_SAMPLE_	ID:_A8406701-S LE_ID:_1506-S-2					
FORM I - IN							

INORGANIC ANALYSES DATA SHEET

יוא	VSDFC.	SAMPLE	N()

•					30	
ab Name: RECRA LABNI	ET INC.	Con	tract: NYS	97-209		
ab Code: RECNY	Case No.:	7861	SAS No.:		SDG No.: S20	
Matrix (soil/water):	SOIL	_			e ID: AD81259	
evel (low/med):	rom _		Ι	Date Rece	ived: 09/24/9	8
Solids:	81.5					

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 Molybdenu NR						ı
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 7440-47-3 Chromium 4.4 EN* 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7440-02-0 Nickel NR 7440-02-0 Nickel NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR 7439-98-7 Molybdenu NR	CAS No.	Analyte	Concentration	С	Q	М
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 7440-47-3 Chromium 4.4 EN* 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7440-02-0 Nickel NR 7440-02-0 Nickel NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR 7439-98-7 Molybdenu NR	7420 00 5	Aluminum		_		NTD
7440-38-2 Arsenic NR 7440-39-3 Barium NR 7440-41-7 Beryllium NR 7440-43-9 Cadmium NR 7440-47-3 Chromium 4.4 EN* 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR 7439-98-7 Molybdenu 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* 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7439-96-5 Marganese NR 7440-02-0 Nickel NR 7440-02-0 Nickel NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-66-6 Zinc NR 7439-98-7 Molybdenu 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 NR 7439-89-6 Iron NR NR 7439-95-4 Magnesium NR NR 7439-96-5 Manganese NR NR 7440-02-0 Nickel NR NR 7440-09-7 Potassium NR NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR 7439-98-7 Molybdenu NR				-		
7440-43-9 Cadmium NR 7440-70-2 Calcium NR 7440-47-3 Chromium 4.4 EN* 7440-48-4 Cobalt NR 7440-50-8 Copper NR 7439-89-6 Iron NR 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu NR	· ·			-		
7440-70-2 Calcium 4.4 EN* P 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead NR 7439-96-5 Magnesium NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-23-5 Sodium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR 7439-98-7 Molybdenu NR				-		
7440-47-3 Chromium 4.4 EN* P 7440-48-4 Cobalt NR 7439-89-6 Iron NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu NR					\ <u></u>	
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 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu 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 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu NR	_	_	4.4	-	-EN*	ı – — I
7439-89-6 Iron NR 7439-92-1 Lead NR 7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7440-02-0 Nickel NR 7440-09-7 Potassium NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-28-0 Thallium NR 7440-62-2 Vanadium NR 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu NR			\	_	<u> </u>	l I
7439-92-1 Lead NR 7439-95-4 Magnesium NR 7439-96-5 Manganese 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 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu NR				_		
7439-95-4 Magnesium NR 7439-96-5 Manganese NR 7439-97-6 Mercury NR 7440-02-0 Nickel NR 7782-49-2 Selenium NR 7440-22-4 Silver NR 7440-23-5 Sodium NR 7440-28-0 Thallium NR 7440-66-6 Zinc NR Cyanide NR 7439-98-7 Molybdenu NR				_	l ———	
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 Molybdenu 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 Molybdenu NR		-		\ <u> </u>		
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 Molybdenu 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 Molybdenu 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 Molybdenu NR				_	l	
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 Molybdenu NR		\$			l	
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 Molybdenu NR		-				NR
7440-28-0 Thallium			l ——————————	_		NR
7440-62-2 Vanadium				_		NR
7440-66-6 Zinc NR Cyanide NR NR NR NR NR	7440-28-0	Thallium_		l_		NR
Cyanide NR Molybdenu NR	7440-62-2	Vanadium_				NR
7439-98-7 Molybdenu NR	7440-66-6	Zinc		_		NR
		Cyanide		l_		NR
HexaChrom NR	7439-98-7	Molybdenu		_		NR
	l	HexaChrom				NR
				_		ļ _
				_		
				-		
				-		

Color Before: Color After:	BROWN YELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUM
Comments: AB_SAMPLE LIENT_SAME	ID:_A8406702 PLE_ID:_1506-	-STA00242 S-30			
		FORM	MI - IN	 	

10/95

1 INORGANIC ANALYSES DATA SHEET

NIPDEC	SHMEDE	MO

					31
Lab	Name:	RECRA LABNET	INC	Contract: NY97-209	
Lab	Code:	RECNY	Case No.: 7861	SAS No.:	SDG No.: S20

% Solids: __79.0

			Γ		Τ-(
CAS No.	Analyte	Concentration	C	Q	M
 _					<u></u>
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		l_,		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	<u> </u>	-		NR
7439-92-1	Lead		1-		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
7440-00-0	Cyanide	- 	-		NR
7439-98-7	Molybdenu		-]	NR
1439-90-1-	HexaChrom		-	l	NR
	nexaciii oiii	l — — — — — —	-]	MK
	Í ———-		-	l ———	
		l —————	1-		
	l ———	l	-	l	
l	<u> </u>		-	\	
		\	1_	Í———	
l	l	l	1_	l	1

Before: After:	BROWN YELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUM
SAMPLE_	ID:_A8406703-S LE_ID:_1506-S-			 	
 		FOR	M I - IN	 	

10/95

NYSDEC-ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO	

•				32
Lab Name: RECRA LABNE	T_INC	_ Contract: NY	(9 7- 209	
Lab Code: RECNY	Case No.: 78	861_ SAS No.:	<u> </u>	SDG No.: S20
Matrix (soil/water):	SOIL_	_		e ID: AD812595
Level (low/med):	LOW		Date Rece	ived: 09/24/98
% Solids:	_89.1			

				· -	г—— I
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		$ \overline{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		I		NR
7440-28-0	Thallium		_		NR
7440-62-2	Vanadium_				NR
7440-66-6	Zinc				NR
	Cyanide		_		NR
7439-98-7	Molybdenu		_		NR
	HexaChrom				NR
			\ <u></u>		

Before: After:	BROWN YELLOW		Before: After:	Texture: Artifacts:	MEDIU.
SAMPLE	ID:_A8406704-S7 LE_ID:_1506-S-3			 	
 		FORI	M I - IN	 	

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

			33
Lab Name: RECRA LABNE	ET INC.	Contract: NY97-209	l
Lab Code: RECNY_	Case No.: 7861	SAS No.:	SDG No.: S20
Matrix (soil/water):	SOIL	Lab Sample	e ID: AD812899
Level (low/med):	LOW	Date Rece:	ived: 09/24/98

Level (low/med): LOW______88.2

l 	1		ГП		Τ
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony		[-1		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		_ <u> </u>		NR
7440-09-7	Potassium		[_		NR
7782-49-2	Selenium_		1		NR
7440-22-4	Silver				NR
7440-23-5	Sodium		<u> </u>		NR
7440-28-0	Thallium_	<u> </u>	<u> </u>	\ \	NR
7440-62-2	Vanadium_		l_	 	NR
7440-66-6	Zinc	l	_	l	NR
 	Cyanide	ļ. <u> </u>	_	 	NR.
7439-98-7_	Molybdenu		<u> </u>	<u> </u>	NR
\	HexaChrom	\	_		NR
	l]	<u> </u>	l	
			_	l <u> </u>	
1	\		-	<u> </u>	
	ļ		_		
			_	\	\ <u> </u>
l	l		1_	l	l

Color After:	YELLOM	Clarity After:	CLEAR_	Artifacts:	————	
	ID:_A8406705-S LE_ID:_1506-S-					
		FORM I - IN		10,	/95	

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

10/95

_				34	ļ
ab Name: RECRA LABN	ET INC.	Con	tract: NY97-	209	
ab Code: RECNY	_Case_1	No.: 7861	SAS No.:	SDG No.	: S20
<pre>(atrix (soil/water):</pre>	SOIL_	_		Sample ID: AD	
evel (low/med):	LOW		Dat	e Received: 09	/24/98
Solids:	81.3				

ı———					
CAS No.	Analyte	Concentration	C	Q	М
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony_		<u> </u>		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 I
7440-09-7	Potassium		_		NR
7782-49-2	Selenium_		_		NR
7440-22-4	Silver		 		NR
7440-23-5	Sodium		_	<u> </u>	NR
7440-28-0	Thallium_		_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc		_	l	NR
	Cyanide		ا_ ا		NR
7439-98-7_	Molybdenu		_		NR
	HexaChrom	\ _ 			NR
ļ			_	 	<u> </u>
\		\	_ '		<u> </u>
			_	}	
			l		l
l	l	l	_	l	l

Before: After:	BROWNYELLOW		Before: After:	CLEAR	Texture: Artifacts:	MEDIUM
SAMPLE	ID:_A8406706-STA LE_ID:_1506-S-34					
 ·		FORI				

1 INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

						35
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

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum_		- -		NR
7440-36-0	Antimony_	1.3	ן שֿן	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	-		P
7439-89-6	Iron —				NR
7439-92-1	Lead	86.5	-		P
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		[-		NR
7439-97-6	Mercury	0.11	$\overline{\overline{U}}$		CV
7440-02-0	Nickel -	14.0		N	P
7440-09-7	Potassium	1730	-	E	P_
7782-49-2	Selenium	1.1	ปี		P_
7440-22-4	Silver	0.86	В		P P
7440-23-5	Sodium		 		NR
7440-28-0	Thallium	1.3	ไซิ		P
7440-62-2	Vanadium			ļ ————	NR
7440-66-6	Zinc	61.7	-		P
, 110 00 0	Cyanide	°	-	\	NR
7439-98-7	Molybdenu	0.86	B	l — -	P
/ 133 30	HexaChrom		-		NR
\			-		. ****
\ 			-		-
		\			-[
			-		-
	<u> </u>				-
			-]	
l ————	l———	1	' —	I ———	-

Color I	Before: After:	BROWN		Before: After:	CLEAR_	Texture: Artifacts:	FINE
	SAMPLE_	ID:_A8407601-CG LE_ID:_1506-S-3					
			FOR	M I - IN		10,	

INORGANIC ANALYSES DATA SHEET

	03350T =	3.7.0
NYSDEC	SAMPLE	NO.

					36	
ab Name: RECRA LABNI	ET INC.	Con	tract: NY97	-209 _		
ab Code: RECNY	Case No.:	7861_	SAS No.: _		DG No.:	
Matrix (soil/water):	SOIL			o Sample		
Level (low/med):	LOW		Dat	te Receiv	red: 09/2	25/98
Solids:	88.2					

					T 1
CAS No.	Analyte	Concentration	С	Q	М
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_			<u>-</u>	NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc		_	 	NR
\ _ 	Cyanide		_		NR
7439-98-7_	Molybdenu		_		. NR
	HexaChrom		_		NR
	.	<u> </u>	_		.
			_		
	.		_		.
	. [_		-\-
\	.		_	l ———	-
l	.	l	1_	l	-1

Before: After:	BROWN YELLOW	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	MEDIUN
S_SAMPLE_	ID:_A8407602-S LE_ID:_1506-S-					
 		FORI	M I - IN			

INORGANIC ANALYSES DATA SHEET

MVCDEC	SAMPLE	NIC
NIODEC	SAMPLE	INC

Lab Name: RECRA_LABNET_INC. Contract: NY97-209 SDG No.: S20

Matrix (soil/water): SOIL Lab Sample ID: AD812602
Level (low/med): LOW_____ Date Received: 09/25/98

% Solids: __90.7

CRC No	None last a	Gama-ation			M
CAS No.	Analyte	Concentration	C	Q	INI
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony -		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium —	<u> </u>	-		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		<u> </u>		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	Molybdenu		[NR
	HexaChrom				NR
	Ì		-		
					.

Before: After:	BROWN YELLOW		Before: After:	Texture: Artifacts:	MEDIUM
S_SAMPLE_	ID:_A8407603-S' LE_ID:_1506-S-			 	
 		FORI	<u> </u>	 	

INORGANIC ANALYSES DATA SHEET

MVCDEC	SAMPLE	$N \cap$

•				38
ab Name: RECRA LABNI	ET INC	Contra	act: NY97-209	·
ab Code: RECNY	Case No.:	7861SA	AS No.:	SDG No.: S20
fatrix (soil/water):	SOIL_			ample ID: AD812603
Level (low/med):	LOW		Date R	Received: 09/25/98
: Solids:	88.2			

1					T I
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	Molybdenu		-		NR
_	HexaChrom		-		NR
			-	(1
			-		
			-		.
			_		1-
			-		
		- 	-	<u> </u>	-
I ———	·———		١ —	· ———	٠١ ——

Before: After:	BROWN YELLOW	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
S_SAMPLE_	ID:_A8407604-STA LE_ID:_1506-S-38					
		FORM	MI - IN		10,	

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NΩ
NIBDEC	SERVICE	INO

			39
Lab Name: RECRA_LABNE	ET_INC	Contract: NY97-209	
Lab Code: RECNY_	Case No.: 7861	SAS No.:	SDG No.: S20
Matrix (soil/water):	WATER		e ID: AD812578
Level (low/med):	LOW	Date Rece	ived: 09/25/98
% Solids:	0.0		

					J - '
CAS No.	Analyte	Concentration	C	Q	М
	\		_		
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		_	l ————	NR
7440-70-2	Calcium			 	NR
7440-47-3	Chromium_	1.8	U	\	P_
7440-48-4	Cobalt		_		NR
7440-50-8	Copper	l	Í		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		-	l ———	NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc	<u> </u>	-]	NR
17440 00 0	Cyanide	·	-	\ 	NR
7439-98-7	Molybdenu				NR
1433-36-1-	HexaChrom	$-\frac{17.0}{}$	₽		A
l———	nexaciiioiii	\ ¹ /.0	١٣	ļ ———	\^_
	ļ				\ —
\ 			-	l ———	
— 	 		-		
	\ <u></u>			i ———	 —
	l	\ 	 –		
l	1	l	l	l	l

	Before: After:	COLORLESS COLORLESS	Clarity Clarity			Texture: Artifacts:	
Comments: LAB_SAMPLE_ID:_A8407605-STA00273 CLIENT_SAMPLE_ID:_1506-S-39							
FORM I - IN 10/95							

INORGANIC ANALYSES DATA SHEET

MYCDEC	SAMPLE	NO
MIDDEC	SAMPUL	INO.

─ Lab Name: RECRA LABN	ET INC.	Contract: NY97-209	40
Lab Code: RECNY_ Matrix (soil/water): Level (low/med):	Case No.: 7861 SOIL_ LOW_	Lab Sampl	SDG No.: S20 e ID: AD812831 ived: 09/30/98
% Solids:	_89.8		

CAS No.	Analyte	Concentration	С	Q	М
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	Molybdenu		-		NR
_	HexaChrom		-		NR
			-		1-
			-		\ -
			-		
			-	·	1-

Before: After:	BROWN YELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUN
SAMPLE_	ID:_A8414601-S LE_ID:_1506-S-				
 		FORM	MI - IN		

1 INORGANIC ANALYSES DATA SHEET

MVCDEC	SAMPLE	MO
NYSDEC	SAMPLE	NO

Date Received: 09/30/98

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

			П		
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				NR
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		1-1		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		_	l	NR
l	Cyanide_				NR
7439 - 98 - 7	Molybdenu			l	NR
\	HexaChrom		-	l	NR
			 _		١
			<u> </u>		
			_		
			1_	l	

Color Af		Clarity Before: Clarity After:	CLEAR_	Texture: Artifacts:	MEDIUN
	: AMPLE_ID:_A8414602-9 F SAMPLE ID: 1506-S				
		FORM I - IN		10	 /95

Soluble Meta - Analysis

Laboratory: Lab Job No:

Recra LabNet

RECNY A98-4049

Matrix: Soil

09/22/98 Sample Date:

Lab Sample ID: A8404905 Client Sample ID: 1506-S-26

SDG No: S20

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	

Soluble Metals Analysis

Laboratory: Lab Job No: Recra LabNet

A98-4049

Lab Sample ID: Client Sample ID: 1506-S-27

A8404906

SDG No:

S20

RECNY

Matrix:

Soil

Sample Date:

09/22/98

Dilution Factor:

1 85.84 % Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	0.97	

Soluble Meta . Analysis

Laboratory: Lab Job No: Recra LabNet

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	

Soluble Metals Analysis

Laboratory:

Recra LabNet

RECNY

Matrix: Soil

Lab Job No: A98-4067 Lab Sample ID: A8406701 Client Sample ID: 1506-S-29 Sample Date:

09/23/98

SDG No: S20 Dilution Factor:

% Dry Weight:

91.09

1

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	8.7	U

Soluble Meta... Analysis

Laboratory: Lab Job No:

Recra LabNet

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	ט

Soluble Metals Analysis

Laboratory: Lab Job No:

Recra LabNet

A98-4067

Lab Sample ID:

A8406706 Client Sample ID: 1506-S-34

SDG No:

S20

RECNY

Matrix:

Soil

Sample Date:

09/23/98

Dilution Factor:

% Dry Weight:

1 81.26

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	8.4	U

Soluble Meta ... Analysis

Laboratory:

Recra LabNet

RECNY

Soil

Lab Job No:

A98-4076

09/24/98 Sample Date:

Lab Sample ID: A8407602 Client Sample ID: 1506-S-36

Dilution Factor:

Matrix:

SDG No: S20

25 % Dry Weight: 88.22

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	54.0	

Soluble Metals Analysis

Laboratory:

Recra LabNet

RECNY

Matrix: Soil

Lab Job No:

A98-4076 A8407603 Sample Date: 09/24/98

Lab Sample ID: Client Sample ID: 1506-S-37

Dilution Factor:

SDG No: S20

1 90.72 % Dry Weight:

Parameter	Units	Method	Analysis Date	Result	Q
Hexavalent Chromium - Total	MG/KG	CLP-M	10/07/98	0.40	U

Soluble Meta Analysis

Laboratory: Lab Job No: Recra LabNet

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	

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	Ū

5A SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

	Concentr	ation Units (ug	/L	or mg/kg dry w	vei	ight): MG/KG			
Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	%R	Q	
luminum_ ntimony_ rsenic arium_ eryllium					1 1 1			_ _ _ _	
admium_ alcium_ hromium_ bhalt er		338.2880		371.4671		45.35	73.2	- - -	
ronead agnesium anganese			1 1 1 1		 - - -			- - -	
ercury lckel otassium elenium_ llver			 - - -		 - - -			- - -	
odium lallium_ lnadium_ .nc vanide			 - - -		- - -			 - - -	
olybdenu exaChrom			 		 - -			- - -	
			_ _ _		 - -			 - - -	

Tay Environmental, Inc. (716) 292-1090

RECRA LABNET, a division of Recra Environmental, Inc. (*NYBA'1861)

CHAIN OF CUSTODY RECORD

PROJECT SAMPLER	1506 is isigi	NATUR	RE)	l	Rochester	15 Mt. Read Blvd. , New York	NO OF	54/		3/3			-/	REMARKS
	M	<u> </u>	12	22	<u> </u>		CON	/_	REMARKS					
STATION NO				GRAB	STA	TION LOCATION		/ バ	% %	7/5	7	7		
001	5/12/9B	1230		X	1506 -	3-20	1	X						TB-17 (2-4')
002	17/19/48	1305		×	1506 - 5	-23		X						TB-17 (8-10')
003	13/98	liiD		×_	1506 - 5	· - 24	l I	X						TB-3 (8-10')
004	4/14/	8 1204		X	1506-	- 25	1	X						TB-7 (8-10')
005	1/22/48	1105		X	1506-\$	- 26	1	X	X					TB-28(B-10')
006	9/22/12	1400		Χ	1506-\$	- 27	1	X	X					TB-34 (10-11.4')
007	9/2/90	1655		X	1506-\$	20	1		X		X			TB-27A (1.5-3.D)
							ļ							
							<u> </u>							
			ļ				<u> </u>							
							ļ			ļ				
							<u> </u>			L				DATE TIME RECEIVED BY (SIGNATURE)
RELINGU	ISHED	,	\sim	1	198 1815	RECEIVED BY (SIGNATU	RE)	RELI	NQUIS	SHED	BY (S	IGNAT	URE)	DATE/TIME RECEIVED BY (SIGNATURE)
RELINQU						RECEIVED BY (SIGNATU	RE)	RELI	NOUIS	SHED	BY (S	IGNAT	URE	DATE TIME RECEIVED BY (SIGNATURE)
RELINQU	ISHF"	BY ISH	GNATU	RE)	DATE/TIME	RECEIVED FOR LABORA	JORX BY		DATE.	TIME	REI	MARK:)

RECRA LABNET, a division of Recra Environmental, Inc. (*16) 292-1090

CHAIN OF CUSTODY RECORD

PROJECT	, 1		2 ~ 9 ~	7 A	SITE NAME (e Now York	NO OF	438	130		er'		/		
	lose	كلهر	Vá	ily	<u> </u>		CON TAINERS		REMARKS						
STATION	DATE	TIME	СОМР	QPAB	STA	TION LOCATION	ļ	1/9	1 1/2	<u>/</u>	_	<u> </u>	<u> </u>	<u> </u>	
001	1/23/ 18	1250		X	1506	\$-29	1	X	şζ					TB-26(8.0-10.2	
002				X	1506 - ;	3- 30	1	X						TB-42 (12.0-14.51)	
003	2/2/98	1725	ļ	Х	1506-\$	5-31	1	X	X					TB-31 (8,0 -11.75")	
004	1/23/98	1720		X	1504-6	- 32	1	×						TB-31 (4-8')	
005	9/23/48	1740		X	1506=	- 33	1	X						TB 31 (11.75'- 14')	
006	1/23/98	1905		X	1506:5	5-34	1	7	У					T2.33 (1:1-14.5')	
											_				
لـم														0	
MECNOU	SINE O	1 -4		— —	DATE TIME	RECEIVED BY (SIGNATU	RE)	AELII	NQUIS	HED	BY (S	IGNAT	URE	DATE/TIME RECEIVED BY (SIGNATURE)	
ne Linaul	SHED	BY IS	NATUR	RE) 4		RECEIVED BY (SIGNATU	RE)	RELIA	VQUIS	HE D	BY (S	IGNAT	URE)	DATE/TIME RECEIVED BY (SIGNATORE)	
RELINQUI	SHED	BY (SIC	NATUR	RE)	DATE/TIME	RECEIVED FOR LABORAT (SIGNATURE)	TORY BY	9/24	1/4K		REI	MARK		la @ 5°C_	

DAY Environmental Inc. (716)292-1090

RE	CR	A L	AB	NET,	, a division of Recra Enviro	nmental,	, Inc	(#).:	NYB	A 78	361)	CHAIN OF CUSTODY RECORD
SAMPLE	s (SIG	NATUR	7	ait	SITE NAME 95 Mt. Read Blvd Rochester, NY	NO OF CON TAINERS	k3//	The state of the s		A STORY		REMARKS
STATION	- /	0):30	1	GRAB	STATION LOCATION	1	/ <i>F</i>	9 7	X \	/	/ /	TB-30 (0-4') Also do MS/MSD
		09:55		×	1506-8-36	ı	4	×				TB-30 (8'-10')
3	9/24/28	10:45	-	*	1506-5-37		X	*				TB-32(11,5'-12.5')
_4		u : 40	_	*	1506-5-36	1	X	*				TB-35 (11'-12') Also do MS/MSD
5	72.58	15:15		¥	1506-5-39 Trip Blank	4	X	X				Equipment Rinsate
					No-e:	J.	7	2	7		-	olers

PERMOUISHED	BY GIGNATURE	DATE/TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
Jorgen	Inetie	9/14/98 19:20				7
HELINOUISHED	BY (SIGNATURE)	DATE / TIME	RECEIVED BY (SIGNATURE)	RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
	\			<u> </u>		\
RELINQUISHE	(SIGNATURE)	DATE TIME	RECEIVED FOR LABORATORY BY	DATE TIME REMARKS		

DAY Environ stal Inc. (716)292-1090

RECRA LABNET, a division of Recra Environmental, Inc(#NY8A7861)

CHAIN OF CUSTODY RECURD

STATION DATE TIME COMP GR	Rochester, NY STATION LOCATION	NO OF CON TAINERS			REMARKS
1 128/ 13:55 Y	1506-S-40		X		TB-37(10'-12')
Z 1/2/ 15:15 X	1506-5-41		X		TB-39(8'-10')
3 75/28 18:45 X	1506-5-42		X		TB-36(8-10)
4 72% 0830 ×	1506-5-43		XX		TB-29 (6'-7.9')
5 /29/28 11:10 ×	1506-5-44	<u> </u>	XX		TB-25(10'-11.9')
6 23/00 12:15 4	1506-5-45		XX		TB-23(8'-10')
					
		 			
	+				
	+				
		 			
HELINQUISHED BY SIGNATURE	DATE TIME RECEIVED BY ISIGNATUR	RE)	RELINQUISHED	BY (SIGNATURE)	DATE/TIME RECEIVED BY (SIGNATURE)
RELINDUISHED BY ISIGNA TURE!	DATE TIME RECEIVED BY ISIGNATUR	REI	RELINQUISHED	BY (SIGNATURE)	DATE TIME RECEIVED BY (SIGNATURE)
RELINQUISHED BY (SIGNATURE)	DATE / TIME RECEIVED FOR LABORATION ISIGNATURE	ORV BY	DATE/TIME 9/30/98/0443	REMARKS	S oc

1 INORGANIC ANALYSES DATA SHEET

N	YSDEC (SAMPLE NO.	0
	20	

					20
Lab	Name:	RECRA LABNET	INC.	Contract: NY97-209	
Lah	Code.	PECNY -	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

CAS No. Analyte Concentration C Q 7429-90-5 Aluminum	М
7440-36-0 Antimony Arsenic Sarium Seryllium Cadmium 12.0 EN* 7440-47-3 Chromium 12.0 EN* 7440-48-4 Cobalt Copper 7439-92-1 Lead Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 742-49-2 Selenium 742-40-22-4 Silver	1.1
7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Marganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	$\overline{\rm NR}$
7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Marganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	NR
7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-02-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	NR
7440-41-7 Beryllium Cadmium Calcium Calcium 12.0 EN* 7440-47-3 Chromium 12.0 EN* 7440-48-4 Cobalt Copper 7439-89-6 Iron 12.0 Anguesium 7439-95-4 Magnesium 7439-96-5 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	NR
7440-43-9	NR
7440-70-2 Calcium 7440-47-3 Chromium 12.0 EN* 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	NR
7440-47-3 Chromium 12.0 EN* 7440-48-4 Cobalt Copper 7439-89-6 Iron 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 742-49-2 Selenium 7430-22-4 Silver	NR
7440-48-4 Cobalt Copper 7439-89-6 Iron 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	Ρ
7440-50-8 Copper	$N\overline{R}$
7439-89-6	NR
7439-92-1 Lead	NR
7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver	NR
7439-96-5 Manganese	NR
7439-97-6 Mercury	NR
7440-02-0 Nickel	NR
7782-49-2 Selenium	NR
7782-49-2 Selenium	NR
7440-22-4 Silver	NR
	NR
	NR
7440-28-0 Thallium	NR
7440-62-2 Vanadium - - -	NR
7440-66-6 Zinc	NR
Cyanide	NR
7439-98-7 Molybdenu	NR
HexaChrom	NR
	_

olor Before: olor After:	GRAY YELLOW	Clarity Clarity	CLEAR_	Texture: Artifacts:	FINE_
omments: LAB SAMPLE	ID: A8404901-	ST A 00242			
CLIENT_SAMP	LE_ID:_1506-S	-20	 		



January 26, 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, Inc. 2144 Brighton-Henrietta Town Line Road Rochester, NY 14623

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.

indace Z. Fox

Candace L. Fox Program Manager

Kenneth E. Kasperek

Laboratory Director

CLF/KEK/ltb 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:
- . Glen Cove, NY
- · Dallas, TX

• Mt. Laurel, NJ

- Sales Office Locations:
- · Cantonment, FL
- New Orleans, 1 A
- · Waterford, MI
- Blairstown, NJ
- · Schenectady, NY · Cleveland, OH

a part of

Sometimes of the second

SAMPLE DATA SUMMARY PACKAGE



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.



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

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent, Inc.



SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER	LABORATORY	<u> </u>					
SAMPLE ID	SAMPLE ID	VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	WATER QUALITY
1506-S-52	A8508201	-	-	-	-	ASP95	<u>-</u>
1506-S-53	A8508202	_	-	-	_	ASP95	-
1506-S-54	A8508203		•	-	_	ASP95	1
1506-S-55	A8508204	-	•	*	-	ASP95	<u>-</u>
1506-T-57	A8508206	ASP95	-	-	_	-	-
1506-S-56	A8508205	ASP95	-	<u>-</u>	-	-	•

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

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

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

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

ORGANIC DATA COMMENT PAGE

Laboratory Name: <u>SEVERN TRENT LABORATORIES INC.</u>

USEPA Defined Organic Data Qualifiers:

U	-	Indicates compound was analyzed for but not detected.	
---	---	---	--

- 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.
- 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

11

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: $\underline{5.21}$ (g/mL) \underline{G} Lab File ID: H1059.RR Level: (low/med) LOW Date Samp/Recv: <u>11/05/98</u> <u>11/06/98</u> % Moisture: not dec. <u>9.6</u> Heated Purge: Y Date Analyzed: 11/14/98 GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm) Dilution Factor: ____1.00 Soil Aliquot Volume: _____ (uL) Soil Extract Volume: ____ (uL) CONCENTRATION UNITS: UG/KG CAS NO. COMPOUND (uq/L or uq/Kq)0 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______ J 1 U_ 67-64-1-----Acetone 11 75-15-0-----Carbon Disulfide 11 U 75-35-4----1,1-Dichloroethene 11 U 75-34-3----1,1-Dichloroethane 11 U 5**4**0-59-0----1,2-Dichloroethene (Total) 11 IJ 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_____ U 11 56-23-5-----Carbon Tetrachloride_____ 11 IJ 75-27-4-----Bromodichloromethane_____ 11 U 78-87-5----1, 2-Dichloropropane 11 U 10061-01-5---cis-1,3-Dichloropropene U 11 79-01-6-----Trichloroethene_ 160 124-48-1----Dibromochloromethane 11 U 79-00-5----1,1,2-Trichloroethane______ 11 U 11 U 71-43-2----Benzene 10061-02-6---trans-1,3-Dichloropropene 11 U 75-25-2-----Bromoform 11 U 108-10-1----4-Methyl-2-pentanone 11 U U 591-78-6----2-Hexanone 11 Е 127-18-4----Tetrachloroethene 760 U 108-88-3----Toluene 11 U 79-34-5----1,1,2,2-Tetrachloroethane 11 108-90-7----Chlorobenzene_____ 11 U 100-41-4----Ethylbenzene 11 U U 100-42-5----Styrene 11

1330-20-7----Total Xylenes

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS 000011

			Ţ	1506-S-56	
Law Name: <u>Recra Lab</u>	<u>oNet</u> Con	tract:			
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	SI	OG No.: <u>1506S</u>	-
Matrix: (soil/water	s) <u>SOIL</u>	Lab	Sample II	A8508205	
Sample wt/vol:	<u>5.21</u> (g/mL) <u>G</u>	Lab	File ID:	<u>H1059.RR</u>	
Level: (low/med)	LOW	Dat	e Samp/Red	ev: <u>11/05/98</u>	11/06/98
% Moisture: not dec	c. <u>9.6</u>	Dat	e Analyzed	d: <u>11/14/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	tor: <u>1.00</u>	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		NTRATION (L or ug/Ko	JNITS: g) <u>UG/KG</u>	
CAS NO.	Compound N	ame	RT	Est. Conc.	Q

ASP 95 - VOLATILES ANALYSIS DATA SHEET

Lab Name: <u>Recra LabNet</u>	Contract:		1506-S-56DL	
Lab Code: <u>RECNY</u> Case No.: _	SAS No.	: SI	DG No.: <u>1506S</u>	_
Matrix: (soil/water) <u>SOIL</u>		Lab Sample II	D: <u>A8508205</u> I	<u>DL</u>
Sample wt/vol: 0.56 (g	/mL) <u>G</u>	Lab File ID:	<u>H1066.RR</u>	
Level: (low/med) <u>LOW</u>		Date Samp/Re	cv: <u>11/05/98</u>	11/06/98
Moisture: not dec. <u>9.6</u> H	leated Purge: <u>Y</u>	Date Analyze	d: <u>11/14/98</u>	
GC Column: DB-624 ID: 0.	<u>53</u> (mm)	Dilution Fac	tor:1.00	
Soil Extract Volume: (u	ıL)	Soil Aliquot	Volume:	(uL)
CAS NO. COMPOUND		ONCENTRATION (ug/L or ug/K		Q
74-87-3	ride		99 99 99 99 99 99 99 99 99 99 99 99 99	

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000013

L Name: <u>Recra LabNet</u>	Contract:	l l	1506-S-56DL 	
Lab Code: RECNY Case No.:			G No.: <u>1506S</u>	
Matrix: (soil/water) <u>SOIL</u>	Lal	Sample ID	: <u>A8508205D</u>	<u>)L</u>
Sample wt/vol: 0.56 (g/mL) <u>G</u> Lak	File ID:	H1066.RR	
Level: (low/med) <u>LOW</u>	Dat	e Samp/Rec	v: <u>11/05/98</u>	11/06/98
% Moisture: not dec. 9.6	Dat	e Analyzed	: 11/14/98	
GC Column: DB-624 ID: 0	.53 (mm) Dil	lution Facto	or: <u>1.00</u>	
Soil Extract Volume: (1	uL) So:	il Aliquot	Volume:	(uL)
Number TICs found:0		ENTRATION U	NITS:) <u>UG/KG</u>	
CAS NO. Cor	mpound Name	RT	Est. Conc.	Q

ASP 95 - VOLATILES ANALYSIS DATA SHEET

000014

Lab Name: Recra LabNet Contract:		506-T-57 	
Lab Code: RECNY Case No.: SAS No.	: SDG	No.: <u>15065</u>	-
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID:	A8508206	
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	H1057.RR	
Level: (low/med) <u>LOW</u>	Date Samp/Recv:	10/27/98	11/06/98
% Moisture: not dec Heated Purge: Y	Date Analyzed:	11/14/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Factor	: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot Vo	olume:	(uL)
	CONCENTRATION UNI		Q
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane		10 10 10 10 10 10 10 10 10 10 10 10 10 1	רק פממממממממממממממממממממממממממממממממממממ

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

000015

Lab Name: <u>Recra LabNet</u> Contra	ct:
Lab Code: RECNY Case No.: SA	S No.: SDG No.: <u>1506S</u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: A8508206
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: <u>H1057.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: <u>10/27/98</u> <u>11/06/98</u>
% Moisture: not dec	Date Analyzed: <u>11/14/98</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Factor:1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Number TICs found:0	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>
CAS NO. Compound Name	e RT Est. Conc. Q

RECRA LABNET, a division of Recra Environmental, Inc. (#NYBA7861)

CHAIN OF CUSTODY RECORD

SAMPLEI STATION	RS (SIG	NATUE	in	The	SITE NAME 95 Mt. Road Blv. Rochester, New York STATION LOCATION	NO OF CON TAINERS	\$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\			7/3/3/3/3/			REMARKS	
001	10/27/98	1020	COMP	X	1506-\$-52		X	7 ~			/	MW- 20 ((n - 13·)	
002	10/10/96	1430		×	1506-5-53	1	×					Mw-21 (
003	11/2/98	0810		X	1506-3-54	1	X					MW-19 (10-12')	
004	1/4/10			X	1506-3-55	3		×				MW-17 (5-7' Also do MS/MSD	
005	1/5/98	0855		*	1506-3-56	<u>a</u>			X			MW-17 (<i>-</i>	
006	10/27/48	_		X	1506-T- 57	2	<u> </u>		×			Trip Blank	۷	
					 		<u> </u>					•		
					 		<u> </u>	 						
							198							
					May	70				\dashv				
					1111		_			_				
							-				_			
IELINOUI	SHEDT	y (SIG	NATUR		DATE TIME RECEIVED BY (SIG	NATURE)	RELIN	iouis	HED E	3Y (SIC	NATURE	DATE/TIME	RECEIVED BY (SIGNATURE)	- (
<u> </u>		y (SIG		11/e	DATE TIME RECEIVED BY ISIG	NATURE)	RELIN	iauis	HED E	IY (SIG	NATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)	
ELINQUI	SHED 8	Y ISIG			DATE TIME RECEIVED FOR THE ISIGNATURE OF THE ISI	BORATORY BY	गार्	ATE	TIME OZY	REM	ARKS			

SUBCONTRACTED DATA

INORGANIC (METALS)
COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME:	Recra LabNet Philadelphia
CITY/STATE:	Lionville, PA
CASE/SDG NO.:	1506 506552
CLIENT NAME:	Day Enjaronmental
WORK ORDER NO.:	3999 - 999 - 999 - 999 9 - 99
METHOD BASED ON:	SW846/ CLP ILMO3.0/ CLP ILMO4.0/ MCAAWW (200 series)

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.)

		Pag	e Nos.	Check	(initials)	
REC	RA No.: 9811L519	From	To	Lab	Data	Client
. 0	Inventory Sheet (Do not number)		2	NA		! !
1	Cover Page (Lab Chron)	100	<i>0</i> 0A	20		1
2	Table of Contents	005	005	72		
3	Shipping, Receiving, and Custody Records Lab Chain of Custody/Work Request Client Custody Reports/Packing Lists Airbills		003	No	Ol	
4	Case Narrative	००५	013	un _	()	i
5	Inorganic Analysis Data Package (divider sheet)	OI4	014	M120 _		1
6	Cover Page with Lab Manager Signature	015	015	yns.		•
7	Inorganic Analysis Data Sheet (Form I-IN)	010	019	420		1
8	Initial & Continuing Calibration Verification (Form IIA-IN)	රූ	032	- T		
9	CRDL Standards for AA and ICP (Form IIB-IN)	023	023	uns		1
10	Blanks (Form III-IN)	024	025	Lys		
11	ICP Interference Check Sample (Form IV-IN)	026	024	Lyp		1
12	Spike Sample Recovery (Form VA-IN)	450	027	~n2		
13	Post Digest Spike Sample Recovery (Form VB-IN)	029	028	412		
14	Duplicates (Form VI-IN)	029	029	cup		
15	Laboratory Control Sample (Form VII-IN)	039	031	uno	THE STATE OF THE S	1
16	Standard Addition Results (Form VIII-IN)		-	MA		1
17	ICP Serial Dilutions (From IX-IN)	032	032	Lyp	1201.	
18	Instrument Detection Limits (Form X-IN)	033	034	lung	101	1

		Pag	e Nos.	Check		
P=C	RA No.: 98116519	From	То	Lab	Data	Client
₩9	ICP Interelement Correction (Form XIA-IN &XIB-IN)	035	037	um	Ql	i 1
20	ICP Linear Ranges (Form XII-IN)	'	038	upp	S	! !
21	Preparation Log (Form XIII-IN)	०३१	040	une	24	<u> </u>
22	Analysis Run Log (Form XIV-IN)	140	044	Line	26	<u> </u>
23	ICP Raw Data	045	207	Up	äl	<u> </u>
24	Furnace Raw Data		~ 	Chilips	Sh	<u> </u>
25	Mercury Raw Data	२०५	211	110		<u>i</u>
26	Cyanide Raw Data			NA		<u> </u>
27	Preparation Logs Raw Data, in order: ICP, AA Mercury, Cyanide-Distillation	212	215	upa		i ! !
28	Percent Solids Determination Log	216	عالا	um_	SK	1
29	Analysis Logbook Pages	217	2.8	ups] }
30	Standards Preparation Records, in order ICP, AA, Mercury, Cyanide	219	220	up_	oul	\$
31	Other/Miscellaneous				l 1	1
ı			! ! !		 	i t
			1		l 	
			l			1
	End of Package Page	231	156			

COMMENTS: _			_
			.1 .
Checked by: (Laboratory)	Signature Suph	Printed Name/Title Printed Name/Title Printed Name/Title Printed Name/Title Printed Name/Title	Date
Checked by: (Data Reporting)	Signature	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-52 001 S 98L1477 CHROMIUM, TOTAL 10/27/98 12/15/98 01/03/99 1506-S-53 002 S 98L1477 10/28/98 CHROMIUM, TOTAL 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-55 004 SILVER, TOTAL S 98L1477 11/04/98 12/15/98 01/03/99 S 98L1477 004 REP SILVER, TOTAL 11/04/98 12/15/98 01/03/99 004 MS S 98L1477 SILVER, TOTAL 11/04/98 12/15/98 01/03/99 004 ALUMINUM, TOTAL S 98L1477 11/04/98 12/15/98 01/03/99 ALUMINUM, TOTAL 004 REP S 98L1477 11/04/98 12/15/98 01/03/99 004 MS ALUMINUM, TOTAL S 98L1477 11/04/98 12/15/98 01/03/99 S 98L1477 ARSENIC, TOTAL 004 11/04/98 12/15/98 01/03/99 ARSENIC, TOTAL 004 REP S 98L1477 11/04/98 12/15/98 01/03/99 004 MS ARSENIC, TOTAL 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 S 98L1477 004 REP BARIUM, TOTAL 11/04/98 12/15/98 01/03/99 11/04/98 BARIUM, TOTAL 004 MS S 98L1477 12/15/98 01/03/99 004 S 98L1477 BERYLLIUM, TOTAL 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 S 98L1477 004 MS 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 S 98L1477 004 11/04/9B 12/15/98 01/03/99 004 REP CADMIUM, TOTAL 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 S 98L1477 COBALT, TOTAL 004 11/04/98 12/15/98 01/03/99 004 REP 12/15/98 COBALT, TOTAL S 98L1477 11/04/98 01/03/99

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 M		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 R		98L1477	11/04/98	12/15/98	01/03/99
CHROMIUM, TOTAL	004 M	-	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 R		98L1477	11/04/98	12/15/98	01/03/99
COPPER, TOTAL	004 M	is 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 R	EP S	98L1477	11/04/98	12/15/98	01/03/99
IRON, TOTAL	004 M	is 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 R	ep s	98C0551	11/04/98	12/01/98	12/02/98
MERCURY, TOTAL	004 M	is 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 R	ep s	98L1477	11/04/98	12/15/98	01/03/99
POTASSIUM, TOTAL	004 M	is s	98L1477	11/04/98	12/15/98	01/03/99
"AGNESIUM, TOTAL	004	S	98L1477	11/04/98	12/15/98	01/03/99
AGNESIUM, TOTAL	004 R	ep s	98L1477	11/04/98	12/15/98	01/03/99
MAGNESIUM, TOTAL	004 M	is 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 R	ep s	98L1477	11/04/98	12/15/98	01/03/99
MANGANESE, TOTAL	004 M	is 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 R	EP S	98L1477	11/04/98	12/15/98	01/03/99
SODIUM, TOTAL	004 M	is 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 R	REP S	98L1477	11/04/98	12/15/98	01/03/99
NICKEL, TOTAL	004 M	is 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 R	REP S	98L1477	11/04/98	12/15/98	01/03/99
LEAD, TOTAL	004 M	is 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 R	EP S	98L1477	11/04/98	12/15/98	01/03/99
ANTIMONY, TOTAL	004 M	is 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 R	EP S	98L1477	11/04/98	12/15/98	01/03/99
SELENIUM, TOTAL	004 M	is 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

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

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
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	9BL1477	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
ANADIUM, TOTAL	MB1	S	98L1477	N/A	12/15/98	01/03/99
INC 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

TABLE OF CONTENTS

		Page
	Lab (Chron
	Table	e of Contents
	Chai	n of Custody
	Case	Narrative
[.	lnorg	ganic Analysis Data Package
	A.	Cover Page
	В.	Inorganic Analysis Sheet (Form 1)
	C.	Initial & Continuing Calibration Verification (Form 2A)
	D.	CRDL Standard for AA & ICP (Form 2B)
	E.	Blanks (Form 3)
	F.	ICP Interference Check Sample (Form 4)
	G.	Spike Sample Recovery (Form 5A)
	H.	Post Digest Spike Sample Recovery (Form 5B)
	I.	Duplicates (Form 6)
	J.	Laboratory Control Samples (Form 7)
	K.	Standard Addition Results (Form 8)
	L.	ICP Serial Dilutions (Form 9)
	M. N.	Instrument Detection Limits (Quarterly)(Form 10) ICP Interelement Correction Factors (Quarterly)(Form 11)
	Ο.	ICP Linear Range (Quarterly)(Form 12)
	О. Р.	Preparation Log (Form 13)
	Q.	Analysis Run Log (Form 14)
II.	Raw	Data
	A.	Metals by ICP046
	B.	Mercury
ΙΙ	Dige	estion Log



Chain of Custody



98//C	. 51	9],	กับไรบไ48	FIELD F	PERSONN	IEL:	CCM	CLETE	ONLY	SHADEE	ARE	EAS_(1	met	als	8							Ĺ	_abl	let	
Cilent D	ay	da d	Envi	tronn	ental	:	<u>.</u> .	Refrige	erator#									افا	6	6						
Est. Final Pro	oj. Samp	oling Date				_ _		#/Type	Container	Liquid			<u>.</u>					•								
Project # 90	9999.	· 999 - 9º	99-999	9-99						Solid	┦	∔	 	ļ			_#	ઉંદ-	<u> </u>	اور			<u> </u>			
Project Conta				· - 				Volume	9	Liquid	┿-	—-	—-	<u> </u>	<u> </u>		_	- 2					ļ!	\longmapsto		
RECRA Proje	ct Mana	ager	5	0.0						Solid	-	<u> </u>	-		<u> </u>		4	12/2	<u> </u>	125	-	 	 -	\vdash		
ac_(lp_	<u> </u>	Del	<u>p</u>	AT 4/3	dai	}		Preser			╁	OBG	ANIC		 -		-	INO	RG.	-7		\vdash	 -	-	_	
	OC <u>Clp</u> Del <u>Clp</u> TAT <u>215 day</u> Date Rec'd 11/28/98 Date Due #11/30/98 HJ79/98 Account # 17					ANALY REQUE		-	VOA	BNA	Pest/ PCB	Herb			1	Meta		TOT. CR								
	<u> </u>		· <u>· · · · · · · · · · · · · · · · · · </u>			Ma	trix		T	Ι	+	٠.	<u> </u>	+		RECF			Use	<u>l</u> Only	<u> </u>	+		<u> </u>	\dashv	
MATRIX CODES: S - Soil SE - Sediment SO - Solid	Lab ID		Client ID/	Description		Cho	Sen	Matrix	Date Collected	Time Collected								MASCZO	200,	10670						
SL - Sludge W - Water	OOT	15	06-5	>52		III3	MISO	5	6-2798	1020	\vdash						-			, /	1				\dashv	
A - Air	10			53				1	6-28.98		1	<u> </u>					\exists			. /	1		\sqcap			
DS - Drum Solids	3		1	54		-		\top	11-2-98								7		• •	, /		.00				
DL - Drum Liquids	14		1	55		1	1	1	11-4-78									1		~~	10	488			\neg	
L - EP/TCLP Leachate										1.00		1					Ť		/~	1011					一	
WI - Wipe X - Other F - Fish			-							_	1										 				$\neg \neg$	
r- risn									1			1					寸				1					
													ļ .					-								
			· · · · · ·			_					1	1			1											
Ì																										
Special Instructi	ions:						DATE/	PEVISION	vs: . \\/	1	<u> </u>		/	o n	26			$\overline{\Gamma}$		REC	RA Lai	bNet Us	se Only		一	
Use,	NY	hole	l ti	mes			12/9	1/98	1 NY 2 CA	1 x0	A) MCE	- Led	pu	8 14 9 ŞÎ	TXC DR9	e BPM-1	77/	Hai	nd Del	were:		1) l Pa	Present	e was: it on Out	er N	0
$\mathcal{O}^{\mathbf{v}}$	Hg	4 C1	<i>l</i> .				 		3 4					·						or S	ula Med	ra	ckage	en on O O or It on Sar	N	0001
0									5									3) I	Receiv	ed in G	ood r N	•		Y or	D	160
700						-			-·	_								4) 1	.abels	Indicat	е		Unbrok mple \	en on Y or t	,	Ö
Relinquished		Received	Dat	e Time	Reli	nquisi by	hed	—	6 Received by		ate	Tim	10	Discr	epancie	es Betwee	on .	_		(1)	r N	CO	C Reco	ord Pres	sent c't	
ed Ex	> 1/-	len	911-78	99 1000										COC	Record	Persiand 17 Y or	Ø	Hol	ding T	et Will imes IV o	ıırı r N	Cor	oler	(Y) or	N	

Custody Transfer Record/Lab Work Request Page 1 of 1

RECRA LabNet Use Only

Sample Custody Transfer Record

	6	7811/219	Saii	ibie cu	Stouy	Hansı	er Record				
RFW BATCH #:		78112519 Day	_								Page of _
CLIENT:		viy	_		<u> </u>			LF # (ocked Re	trigerato	r
SAMPLE SIGN-OUT	<u></u>		,			SAMPLE	RETURN:				
ttern/Reason (e.g., "all VOA water," "001- 004, Extraction")	Total # /Matrix (e.g., 4 W)	1	_	Date	Time	Total # /Matrix (e.g., 4 W)	Relinquished By	Received By	Date	Time	Comments (e.g., "volume depleted, "kept #002")
the 004	15	Uf	Jeffen Chil	12/1/98	1450	15	J. Huy Well	wet lob	12/2/48	0945	for 2. ad. CN-
004 70501	19	الالك	V 3 10 - m	12.298	<u>,</u> व्यमट	15	000	L.F.	19-548	1230	,
001-003 90501	35	LF	780	12.2.98		35	Tm_		15598	نحمنا	
004 co.	13_	LE.		19.4-98		72	700	LF	120 4 45	أنوعن	
Mot. 1-4	45	LF	<u>a-</u>	12/14/98	1015				 _ -	1	
				-	<u>!</u>		 	- -	 	<u> </u>	
				 	<u>'</u>	 	 		 -	-	
	 				 	l	 		 	<u> </u>	
	 		<u> </u>		<u>. </u>	}			 	!	
					<u>-</u>	 			 	1	
					· -				 	:	
					; 	1	 			-	
				 		1			 	 	
					-					i	
					r	1				 	
					-					-	
					i					1	
					<u>' </u>					<u> </u>	
					<u> </u>	<u> </u>				1	
					<u> </u>	<u> </u>				<u>i</u>	
						<u> </u>			1	<u> </u>	9
						ļ			<u> </u>	<u>i </u>	
					<u>.</u>					1	<u> </u>
									_	<u>i </u>	0
				ļ	<u>.</u>		<u></u>			<u>i </u>	
				<u> </u>	i 	<u> </u>	ļ			<u>i </u>	
				<u></u>	<u> </u>	<u> </u>			<u></u>		
											D 4

0008

Case Narrative





Virtual Laboratories Everywhere

Recra LabNet Philadelphia Analytical Report

Client: DAY ENVIRONMENTAL

W.O.#: 99999-999-999-99

RFW#: 9811L519

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.
- 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 231 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

Philadelphia Analytical Laboratory

gmb/m12-519

-21-99

Date



METALS METHOD GLOSSARY

_	*	ds are used as reference	ce for the o	ligestion a	nd analysis of	samples cor	tained within this
		13101311131	2 _Other	r:			
	CLP MetalsDiges	tion and Analysis M	ethods: 🔽	_ILM03.0	_ILM04.0		
	Metals Digestion Met	thods:3005A301 Other:	10A301	3020. 	A3050A	30512	00.7 _SS17
		Me	etals Anal	veic Mot	hads		
		1410	tais Anai	ysis Meu	ious	EPA ⁻	
		SW846	EPA		STD MTD	OSWR	USATHAMA
	Aluminum	6010B	200.7		OID WILD	OBWK	99
	Antimony	6010B 7041 ⁵	200.7	204.2			- <u>-</u> 99
	Arsenic	6010B 7060A ⁵	200.7	206.2	3113B		
	Barium	6010B	200.7				<u></u>
	Beryllium	6010B	200.7				
	Bismuth	6010B ¹	200.7 1			1620	
	Boron	6010B	200.7			1020	- 99
	Cadmium	6010B 7131A ⁵	200.7	213.2			
	Calcium	6010B	200.7				
	Chromium	6010B 7191 ⁵		218.2		-	
_	Cobalt	6010B	200.7				
	Copper	6010B 7211 ⁵	200.7	220.2			<u> </u>
	Iron		200.7				- 99
	Lead	6010B 7421 ⁵	200.7	239.2	3113B		- 99
	Lithium	6010B7430 ⁺	200.7	_		1620	
	Magnesium	6010B	200.7				<u></u>
	Manganese	6010B	200.7				
	Mercury	7470A ³ 7471A ³	245.1 ²	245.5 ²			
	Molybdenum	6010B	200.7	-			99
	Nickel	6010 B	200.7				
	Potassium	6010B 7610 ⁴	200.7	258.1 4			
	Rare Earths	6010B ¹	200.7	_		1620	—
	Selenium	6010B7740 ⁵	200.7	270.2	3113B		<u></u>
	Silicon	6010B ¹	200.7			1620	 99
	Silica	6010B	200.7			1620	- 55
	Silver	6010B 7761 ⁵	200.7	272.2			<u></u>
	Sodium	6010B7770 ·	200.7	273.1 *			
	Strontium	6010B	200.7	-			
	Thallium	6010B 7841 ⁵	200.7	279.2 20	0.9		<u></u>
	Tin	6010B	200.7	_			
	Titanium	6010B	200.7				99 99
	Uranium	6010B ¹	200.7 1			1620	
	Vanadium	6010B	200.7			1020	99 99
	Zinc	6010B	200.7				
	Zirconium	6010B ¹	200.7 1			1620	99
						1020	99
	Other:	Method	<u>d:</u>				

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.
- Graphite Furnace A.A.
 RFW 21-21L-033/O-01/97

Inorganic Analysis Data Package



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 ILMO4.0 OPP	Lab Sample ID 9811L519-001 9811L519-002 9811L519-003 9811L519-004 9811L519-004S	- - - - -
Were ICP interelement corrections app		Yes/No YES
Were ICP background corrections appli If yes - were raw data generated application of background correc	ed ? before	Yes/No YES Yes/No NO_
Comments:		
I certify that this data package is i conditions of the contract, both tech other than the conditions detailed ab in this hardcopy data package and in on floppy diskette has been authorize Manager's designee, as verified by the Signature:	nically and for conove. Release of the computer-readal by the Laborator e following signat	mpleteness, for he data contained ble data submitted y Manager or the

COVER PAGE - IN

U.S. EPA - CLP

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

ab Name: PECD	A TARNET		Contract: 99	999	99	506S52	
						SDG No.: 506S	 '
Lab Code: RECRA	A_ Cas	se no.: 150)6 SAS NO.				
Matrix (soil/wa	ater): SOIL	_		L	ab Samp	le ID: 9811L519	-001
Level (low/med)): LOW_	_		Da	ate Rec	eived: 11/28/98	
solids:	_88.	4					
Cor	ncentration	Units (ug,	/L or mg/kg dry	y 1	weight)	: MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M	
	7429-90-5	Aluminum		-		NR	
	7440-36-0	Antimony_]_		NR	
	7440-38-2	Arsenic		I_		NR	
	7440-39-3	Barium	\	_	1	NR	
		Beryllium	<u>- </u>	_		NR	
	7440-43-9			_		NR	
	7440-70-2	Calcium_	\	۱_		NR	
		Chromium_	4.7	 		P NR	
	7440-48-4 7440-50-8	Copper	\- 	-	[———	NR NR	
	7440-30-8	Iron		-		NR	
	7439-03-0	Lead		-	\ 	NR	
_	7439-95-4	Magnesium		-		NR	
	7439-96-5	Manganese		_		NR	
	7439-97-6	Mercury		_		NR	
•	7440-02-0	Nickel		1=		NR	
	7440-09-7	Potassium		_		NR	
	7782-49-2			 _		NR	
	7440-22-4			-	·	NR	
	7440-23-5				.	NR	
	7440-28-0	Thallium_ Vanadium	\ 	-	\ 	NR NR	
	7440-62-2 7440-66-6	Zinc		-	·	- NR	
	/440-00-0	21110		-	- [———	- "	
		\- 		1_		<u> </u>	
Color Before:		Clari	ty Before:	_		Texture:	
Color After:		Clari	ty After:			Artifacts:	
Comments: 1506-S-52							_
							-
							-
		t	PORM T - TN			TIMO	- 14 0

0016

1

			INORGANIC ANA	l LYSES DATA SHEET	EPA SAMPLE NO.	-
Tab	Name:	RECRA_LABNET_		Contract: 99999	506853	
		RECRA_	Case No.: 1506	SAS No.:	SDG No.: 506S52	
Lab	code:	RECRA_	case No 1500_	_	550 NO.1 500552	

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

					I
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-		\overline{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	•	-		$N\overline{R}$
7440-50-8	Copper		-		NR
7439-89-6	Iron				NR
7439-92-1	Lead		-		NR
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		_	l ————	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
			-		
			-		
I ———	·I———	I	ı	I——	· —

Color Before:	 Clarity E	Before:		Texture:	
Color After:	 Clarity A	After:	<u></u>	Artifacts:	
Comments: 1506-S-53	 				
-					

FORM I - IN

1 INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO
-----	--------	----

Contract: 00000	
Lab Name: RECRA_LABNET Contract: 99999	<u> </u>
Lab Code: RECRA_ Case No.: 1506_ SAS No.: SDG No.: 5068	52
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 NR NR	
7440-70-2 Calcium	
7440-47-3 Chromium	
7440-48-4 CODATC	
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	
7440-66-6 Zinc NR	
Color Before: Clarity Before: Texture:	
Color After: Clarity After: Artifacts:	
Comments: 1506-S-54	_
	- -

FORM I - IN

U.S. EPA - CLP

000172

INORGANIC ANALYSES DATA SHEET

EPA	SAMPLE	NO.
-----	--------	-----

Lab Name: RECR	A_LABNET		Contract: 99	99	9	50	06S55	
Lab Code: RECR	A_ Cas	se No.: 150	O6 SAS No.:	: _		SDG 1	No.: !	506S52
Matrix (soil/w	ater): SOIL			La	b Sampl	e ID:	9811	L519-004
Level (low/med): LOW_	<u>_</u>		Da	te Rece	ived:	11/2	8/98
% Solids:	_90.:	1						
Co	ncentration	Units (ug,	/L or mg/kg dry	, r	weight):	MG/K	G	
	CAS No.	Analyte	Concentration	С	Q	M		
	7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-95-7 7782-49-2 7440-23-5 7440-28-0 7440-66-6	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	0.15 51600 7.6 4.3 12.3 10900 4.6 10500 353 0.03 8.5 830 0.76 0.11 272 0.59 14.3 27.8		* N	P P P P P P P P P P P P P P P P P P P		
Color Before:		Clari	ty Before:		-	Textu	re:	
Color After:		Clari	ty After:		_	Artif	acts:	
Comments: 1506-S-55								

FORM I - IN





Severn Trent Laboratories

10 Hazelwood Drive Amherst, NY 14228

Tel: (716) 691-2600 Fax: (716) 691-7991 www.stl-inc.com

February 12, 1999

Mr. Jeff Danzinger Day Environmental, Inc. 2144 Brighton-Henrietta Town Line Road Rochester, NY 14623

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:

Ouote #: 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.

andace L. Fox

Candace L. Fox Program Manager

Kenneth E. Klasperek Laboratory Director

CLF/KEK/dms Enclosure

I.D. #A98-6184 #NY8A7861

This report contains 205 pages which are individually numbered.

Service Center Locations:

• Mt. Laurel, NJ

· Glen Cove, NY

• Dallas, TX

Laboratory Locations:

- Monroe, CT
- Pensacola, FL
- University Park, IL
 Billerica, MA
 Westfield, MA
- Edison, NJ
- Whippany, NJ
- · Newburgh, NY
- Houston, TX • Colchester, VT

Sales Office Locations:

- · Cantonment, FL
- · New Orleans, LA • Waterford, MI
- Blairstown, NJ
- Schenectady, NY · Cleveland, OH

a part of

Se surfacer & Loc And



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.

Committed To Volucertify 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 Severn Trent, Inc.



SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: STL BUFFALO

CUSTOMER	LABORATORY								
SAMPLE ID	SAMPLE ID	VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	OTHER		
1506-N-MW9	A8619401	ASP95		-	<u>-</u>	ASP95			



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



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



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



SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

LAB NAME: STL BUFFALO

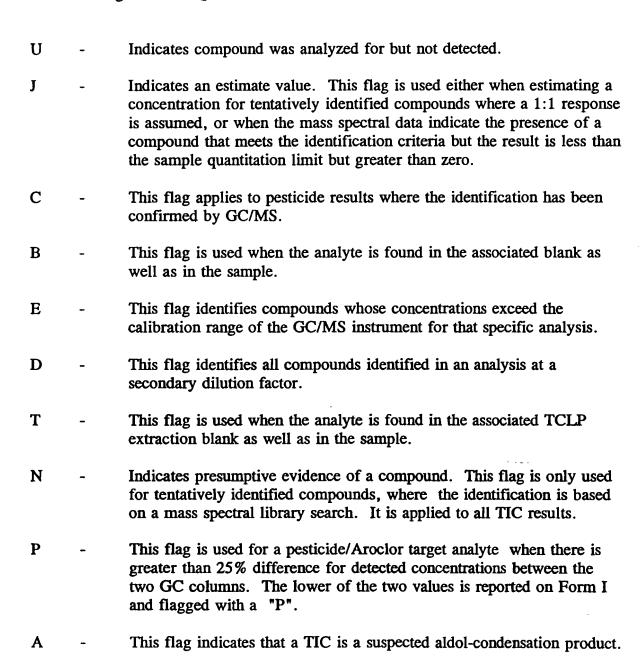
LABORATORY	MATRIX	ANALYTICAL	DIGESTION	MATRIX	DIL/CONC
SAMPLE CODE		PROTOCOL	PROCEDURE	MODIFIER	FACTOR
1506-N-MW9	WATER	ASP95	ASP95	AS REQUIRED	AS REQUIRED





Laboratory Name: SEVERN TRENT LABORATORIES INC.

USEPA Defined Organic Data Qualifiers:





INORGANIC DATA COMMENT PAGE

Laboratory Name: <u>SEVERN TRENT LABORATORIES, INC.</u>

USEPA Defined Inorganic Data Qualifiers:

В	-	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	
La Name: STL Buffalo Contract:			
Lab Code: RECNY Case No.: SAS No.	: SI	OG No.: 1506N	<u>M</u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	A8619401	<u> </u>
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	<u>J2188.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Red	cv: <u>12/21/98</u>	12/23/98
% Moisture: not dec Heated Purge: N	Date Analyze	d: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or: <u>500.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION O		0
CAS NO. COMPOUND	(ug/L or ug/K	3) <u>UG/L</u>	Q
74-87-3Chloromethane 74-83-9Bromomethane 75-01-4Vinyl chloride 75-00-3Chloroethane 75-09-2Methylene chloride 67-64-1Acetone 7-15-0Carbon Disulfide 35-41,1-Dichloroethane 75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethane 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1-Trichloroethane 75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene		5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 5000 6000	שממממממ ממממממממממממממ
108-88-3Toluene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene		5000 5000 5000 5000 5000	ם ט ט
30-20-7Total Xylenes		5000	Ü

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

Client No.

				1506-N-MW9	
Lab Name: <u>STL Buffal</u>	o Conti	ract:			
Lab Code: <u>RECNY</u> C	ase No.:	SAS No.:	SI	OG No.: <u>1506N</u>	1
Matrix: (soil/water)	WATER	Lab	Sample II	D: <u>A8619401</u>	
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab	File ID:	<u>J2188.RR</u>	
Level: (low/med)	LOW	Date	Samp/Red	cv: <u>12/21/98</u>	12/23/98
% Moisture: not dec.		Date	Analyze	d: <u>12/31/98</u>	
GC Column: DB-624	ID: <u>_0.53</u> (mm)	Dilu	tion Fact	tor: <u>500.00</u>	
Soil Extract Volume:	(uL)	Soil	Aliquot	Volume:	(uL)
Number TICs found: _	0	• • • • • • • • • • • • • • • • • • • •	TRATION (or ug/K	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound Na	me	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 IDAD818692	
		
Were ICP interelement corrections app	olied ?	Yes/No YES
Were ICP background corrections applied If yes - were raw data generated application of background corrections.	l before	Yes/No YES Yes/No NO
Comments:		· -
I certify that this data package is is conditions of the Protocol, both tech other than the conditions detailed at in this hardcopy data package and in on diskette has been authorized by the designee, as verified by the following	nnically and for comp bove. Release of the the computer-readable ne Laboratory Manager	leteness, for data contained e data submitted
Signature: Lagrest	Name: Kenneth_E	Kasperek
Date: 2/12/99	Title: Laborator	y_Director
	COVER PAGE - IN	

NYSDEC ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE N

Lab Name: RECR	A LABNET IN	3.	Contract: N	Y97-2	209	1506-N-
						SDG No.: 1506NM
Matrix (soil/w	ater): WATE	2		Lab	Sample	e ID: AD818692
Level (low/med): LOW_	_		Date	Rece	ived: 12/23/98
Solids:	0.	0				
Co	ncentration	Units (ug,	/L or mg/kg dr	y wei	ight):	UG/L_
	CAS No.	Analyte	Concentration	C	Q	 M
				<u>_</u> _		
	7429-90-5			- -		NR
	7440-36-0 7440-38-2	Antimony_ Arsenic	· 			NR ND
	7440-38-2	Barium		- -		NR NR
	7440-41-7			- -		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 NR
	7439-97-6	Mercury		- -		NR NR
	7440-02-0 7440-09-7	Nickel Potassium				NR NR
	7782-49-2	Selenium		- -		NR NR
	7440-22-4			-		NR NR
	7440-23-5			1-1-		NR
	7440-28-0	Thallium		- -		NR
	7440-62-2			-		NR
	7440-66-6	Zinc		- -		NR
		Cyanide		- -		NR
Color Before:	COLORLESS	Clari	ty Before: CLE	- - AR_		' Texture:
Color After:	COLORLESS	Clari	ty After: CLE	AR_		Artifacts:
Comments: LAB_SAMPLE_ CLIENT_SAMP	ID:_A861940 LE_ID:_1506	1-STA00273 -N-MW9				

6194

Cal 1

RECRA LABNET, a division of Recra Environmental, Inc(#NYEA 7561)

CHAIN OF CUSTODY RECORD

PROJECT	1		47		SITE NAME 9% Alt Read Fluid Kahasha New York	No	6/1	Į,	\$		Par la la la la la la la la la la la la la		
SAMPLER	S (SIG	NATU	3E):	2	· 4	OF CON- TAINERS						/	REMARKS
STATION	DATE	TIME	COMP	GRAB	STATION LOCATION		Es of	12	K	X	ÿ/	\angle	/
017	7-4			×	100-10-mily	14家	X			X			Here Co Collected and 17/64
:- <u> </u>	1 Jui	350		X	1906-10-MU16	L		X	×	×			•
217	73/12	1:43		×	1501-W-WWM	L		×	X.	X			Mex Co College A 17- *
J ()	427/12.			У	126-14-11- 11- 120	L		×	×	×			Hex Co reliented at 11 14
514	12/4	100		×	100 - 10 - may 71	4		×	X	×			Marco collected at 1
1	11/48			×	HOUL - W- Trip	2		X					
1_1	727/40			×	1 W - W .	4		×	×	X.			P - * / * - * * / / / / * *
7.25	1-1-92	(- /		,*	1-66-N-Mmg	3		×	X				
										_			
										-			
								i					
										200			
								1					
ELINQUI		BY (SIC	SNATUR		DATE TIME RECEIVED BY (SIGNAT	TURE)	RELIN	NQUIS	HED	BY (S	IGNAT	TURE	DATE/TIME RECEIVED BY (SIGNATURE)
ÉLINQUIS	SHEDI	SYISIC	NATUR	(E)	DATE/TIME RECEIVED BY (SIGNAT	TURE)	RELIN	QUIS	HED	BY (S	GNAT	URE	DATE/TIME RECEIVED BY (SIGNATURE)
ELINQUIS	SHED E	SY (SIG	NATUR	E)	DATE/TIME RECEIVED FOR LABOR	ATORY BY	2 33			_	MARK		oolen@110c



Mr. Jeff Danzinger Day Environmental, Inc. 2144 Brighton-Henrietta Town Line Road Rochester, NY 14623

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:

Ouote #: 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/ltb Enclosure

I.D. #A99-0954 #NY8A7861

This report contains 65 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, Mt
- · Blairstown, NJ
- · Schenectady, NY
- · Cleveland, OH

a part of

Severn Trent Laboratories

10 Hazelwood Drive Amherst, NY 14228

Tel: (716) 691-2600

Fax: (716) 691-7991

www.stl-inc.com

Severn Trent Services Inc.

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.



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.

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	-	-

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

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

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

SAMPLE PREPARATION AND ANALYSIS SUMMARY ORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

SAMPLE	MATRIX	ANALYTICAL	EXTRACTION	AUXILARY	DIL/CONC
IDENTIFICATION		PROTOCOL	METHOD	CLEAN UP	FACTOR
1 506-S-58	SOIL	ASP95	SONC	AS REQUIRED	AS REQUIRED

ORGANIC DATA COMMENT PAGE

Laboratory Name: <u>SEVERN TRENT LABORATORIES INC.</u>

USEPA Defined Organic Data Qualifiers:

- U Indicates compound was analyzed for but not detected.
- 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.
- 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

000 Ctient No.

- 1 000 5 65 1		1506-S-58	_
Lab Name: <u>STL Buffalo</u> Contract:			
Lab Code: RECNY Case No.: SAS No.	: SI	DG No.: <u>1506S</u>	_
Matrix: (soil/water) <u>SOIL</u>	Lab Sample II	D: <u>A9095401</u>	
Sample wt/vol: $\underline{5.07}$ (g/mL) \underline{G}	Lab File ID:	<u>H2486.RR</u>	 _
Level: (low/med) <u>LOW</u>	Date Samp/Re	cv: <u>02/19/99</u>	02/24/99
% Moisture: not dec. 13.4 Heated Purge: \underline{Y}	Date Analyze	d: <u>03/01/99</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	ONCENTRATION		
CAS NO. COMPOUND	(ug/L or ug/K	g) <u>UG/KG</u>	Q
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 79-01-6Trichloroethene 124-48-1Dibromochloromethane		11 11 11 11 11 11 11 11 11 11 11 11 11	
79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 108-88-3Toluene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 100-42-5Styrene		11 11 11 11 11 17 11 11 11	ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט

ASP 95 - VOLATILES TENTATIVELY IDENTIFIED COMPOUNDS

Cocolient No.

har Name: STL Buffal	o Cont	tract:		1506-S-58	
DED Hame. DID Dallar	<u> </u>				
Lab Code: <u>RECNY</u> C	ase No.:	SAS No.: _	SD	G No.: 1506S	_
Matrix: (soil/water)	SOIL	La	b Sample II	A9095401	_
Sample wt/vol:	<u>5.07</u> (g/mL) <u>G</u> _	· La	b File ID:	H2486.RR	
Level: (low/med)	LOW	Da	te Samp/Rec	v: <u>02/19/99</u>	02/24/99
% Moisture: not dec.	<u>13.4</u>	Da	te Analyzed	l: <u>03/01/99</u>	
CC Column: DB-624	ID: (mm)	Di	lution Fact	or:1.00	
Soil Extract Volume:	(uL)	So	il Aliquot	Volume:	(uL)
Number TICs found: _	0		ENTRATION (/L or ug/Kg	INITS: J) <u>UG/KG</u>	
			T		

CAS NO.	Compound Name	RT	Est. Conc.	Q

ASP 95 - SEMIVOLATILES ANALYSIS DATA SHEET

Client No.

1	
1506-S-58	

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>1506S</u>

Matrix: (soil/water) SOIL Lab Sample ID: <u>A9095401</u>

Sample wt/vol: 30.13 (g/mL) G Lab File ID: Z26849.RR _____

Level: (low/med) LOW Date Samp/Recv: <u>02/19/99</u> <u>02/24/99</u>

% Moisture: 9.1 decanted: (Y/N) N Date Extracted: 03/06/99

Concentrated Extract Volume: __500(uL) Date Analyzed: <u>03/13/99</u>

Injection Volume: 2.00(uL) Dilution Factor: ____1.00

GPC Cleanup: (Y/N) \underline{Y} pH: $\underline{8.0}$

		CONCENTRATION UNIT		
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	\ប
95-57-8	2-Chlorophenol		360	\U
541-73-1	4 2 2 1 1 1		360	τ
	1,4-Dichlorobenzene		360	ט
95-50-1	1,2-Dichlorobenzene		360	υ
105 40 5	2 Mathed and a		360	U
108-60-1	2.2'-Oxybis(1-Chloropropar	ne)	360	Ū
1 			360	ש
621-64-7	4-Metnyiphenoi_ N-Nitroso-Di-n-propylamine	<u> </u>	360	U
67-72-1	Hexachloroethane		360	ש
98-95-3	Nitrobenzene		360	ט
78-59-1	Isophorone		360	ט
88-75-5	2-Nitrophenol		360	ט
105-67-9	2,4-Dimethylphenol		360	ט
111-91-1	Bis(2-chloroethoxy) methan	ne	360	טן
120-83-2	2,4-Dichlorophenol		360	ט
120-82-1	1,2,4-Trichlorobenzene		360	ט
91-20-3	Naphthalene		360	ט
106-47-8	4-Chloroaniline		360	ט
	Hexachlorobutadiene		360	ט
59-50-7	4-Chloro-3-methylphenol		360	ט
91-57-6	2-Methylnaphthalene	}	360	ט
77-47-4	Hexachlorocyclopentadiene		360	ט
88-06-2			360	טו
	2,4,5-Trichlorophenol		880	ប
91-58-7	2-Chloronaphthalene		360	บ
198-74-4	2-Nitroaniline		880	Ü
	Dimethyl phthalate		360	1-
1200-06-8	3		3 6 0	li i
606-20-2	2,6-Dinitrotoluene		3 6 0	Ü
000-20-2	3-Nitroaniline		880	TI O
77-07-2				5

ASP 95 - SEMIVOLATILES ANALYSIS DATA SHEET

000013 Client No.

360

IJ

			1506-S-58
ab Name:	STL Buffalo	Contract:	

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: 1506S

Matrix: (soil/water) SOIL Lab Sample ID: <u>A9095401</u>

<u>30.13</u> (g/mL) <u>G</u> Lab File ID: Z26849.RR Sample wt/vol:

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 83-32-9-----Acenaphthene 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 87-86-5----Pentachlorophenol 360 U 880 U 85-01-8-----Phenanthrene_____ 360 U 120-12-7----Anthracene 360 U 86-74-8-----Carbazole 360 U 77 J 360 U 129-00-0----Pyrene 360 U 85-68-7----Butyl benzyl phthalate 360 U 91-94-1----3,3¹-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

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: 226849.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>02/19/99</u> <u>02/24/99</u>

% Moisture: <u>9.1</u> 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:

Number TICs found: 11 (ug/L or ug/Kg) UG/KG

CAS NO.	Compound Name	RT	Est. Conc.	Q	
1. 2. 3. 4. 5. 6. 930-68-7 7. 8. 9. 57-10-3 10.	UNSATURATED HYDROCARBON UNKNOWN SUSPECTED ALDOL COND.PRODUCT OXYGENATED CMPD UNKNOWN HYDROCARBON 2-CYCLOHEXEN-1-ONE UNKNOWN HYDROCARBON UNKNOWN KETONE HEXADECANOIC ACID UNKNOWN ACID UNKNOWN	2.40 2.91 3.91 4.11 4.50 5.83 6.33 7.33 23.56 28.48 29.60	85 81 4000 300 81 75 750 110 100 370 600	F BC ABJ BJ JN BJ J BJN BJ BJ	

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

1506S58 Tab Name: STL Buffalo Contract: Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>1506S</u> 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: 8.0Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: CAS NO. COMPOUND (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 ប 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 U 180 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 U 36 11097-69-1-----Aroclor-1254 36 U 11096-82-5-----Aroclor-1260 36 U

DAY ENVAUNMENTAL, INC. 0954

RECRA LABNET, a division of Recra Environmental, Inc. (****A 7861)

CHAIN OF CUSTODY RECORD

SAMPLERS (SIGNATURE) SITE NAME 95 Mt. Read Blvd. Rochester, New Yark					NO. OF CON- TAINERS	\$1		1/3 8/				REMARKS						
STATION NO_	DATE		COMP	GRAB	SI	ATION LOCATIO	N		12		\ \ \ \		/				*	
001	2/19/99	liibo		X	\$ 506	-\$-58		a	X						MW-I	7A	(5-7') Also do (5-7') ms/mse) ,
										_								
												4						
										\triangleleft		}	-					
						· · h	1					\dashv		_				
					MA	2/13/44						+	\rightarrow	\dashv				
					71-													
														_				
		<u></u>	_							_			_	_				
IELINQUI					DATE/TIME 3/49 4:02		(SIGNATUR	E)	RELIN	auis	HED B	Y (SIC	SNATU	URE)	DATE	TIME	RECEIVED BY (SIGNATURE)	
IELINQUI	SHEDE	Y (SIG	NATUR			RECEIVED BY	SIGNATUR	E)	RELIN	QUISI	HED B	Y (SIG	NATU	JRE)	DATE	TIME	RECEIVED BY (SIGNATURE)	
ELINQUI	SHE D B	Y ISIG	NATURI	E) [DATE/TIME	ISIGNATURE	LABORATO LA COORDINATO	L 1			TIME	1	ARKS		· · · · · · · ·		3	



March 30, 1999

Mr. Jeff Danzinger Day Environmental, Inc. 2144 Brighton-Henrietta Town Line Road Rochester, NY 14623

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:

Ouote #: 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 Program Manager

> Susan L. Tinsmith Laboratory Manager

CLF/SLT/ltb Enclosure

I.D. #A98-6169, 6186 #NY8A7861

Severn Trent Laboratories 10 Hazelwood Drive

Amherst, NY 14228

Tel: (716) 691-2600

Fax: (716) 691-7991

www.stl-inc.com

This report contains $| \underline{\mathcal{I}} \underline{\mathcal{I}} \underline{\mathcal{I}} \underline{\mathcal{I}} |$ 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

Science a Service in.

SAMPLE DATA SUMMARY PACKAGE



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 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 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.

SAMPLE IDENTIFICATION AND ANALYTICAL REQUEST SUMMARY

LAB NAME: SEVERN TRENT LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY	ANALYTICAL REQUIREMENTS						
SAMPLE ID	SAMPLE ID	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	<u>-</u>	-	-	ASP95		
1506-W-MW11	A8618609	ASP95	-	1		ASP95	-	
1506-W-MW12	A8618610	ASP95	-	-		ASP95	<u>-</u>	
1506-W-MW13	A8618611	ASP95	<u>-</u>	-	-	ASP95	_	
1506-W-MW14	A8618612	ASP95	-	-	-	ASP95	<u>-</u>	
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	-	

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-N-MW9	WATER	12/21/98	12/23/98	-	12/31/99
1 506-W-MW1	WATER	12/22/98	12/23/98	-	12/31/99
1 506-W-MW10	WATER	12/22/98	12/23/98	-	12/30/99
1 506-W-MW11	WATER	12/22/98	12/23/98	-	12/31/99
1 506-W-MW12	WATER	12/22/98	12/23/98	-	12/30/99
1 506-W-MW13	WATER	12/22/98	12/23/98	_	12/31/99
06-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
1 506-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

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

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

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

SAMPLE PREPARATION AND ANALYSIS SUMMARY ORGANIC ANALYSIS

LAIB 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
1.506-W-MW11	WATER	ASP95		AS REQUIRED	AS REQUIRED
1506-W-MW12	WATER	ASP95		AS REQUIRED	AS REQUIRED
1506-W-MW13	WATER	ASP95	<u>-</u>	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
1 506-W-MW18	WATER	ASP95		AS REQUIRED	AS REQUIRED
1 506-W-MW19	WATER	ASP95		AS REQUIRED	AS REQUIRED
1 506-W-MW20	WATER	ASP95		AS REQUIRED	AS REQUIRED
1 506-W-MW21	WATER	ASP95		AS REQUIRED	AS REQUIRED
1 506-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

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

LAB NAME: SEVERN TRENT LABORATORIES, INC.

LAB NAME: SEVERN TRE	TEADORA	TORIES, 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

NYSDEC-7

ORGANIC DATA COMMENT PAGE

Laboratory Name: <u>SEVERN TRENT LABORATORIES INC.</u>

USEPA Defined Organic Data Qualifiers:

- U Indicates compound was analyzed for but not detected.
- 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.
- 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: <u>SEVERN TRENT LABORATORIES, INC.</u>

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.

000015 Client No.

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: ID: 0.53 (mm) Dilution Factor: 1.00	Name: <u>STL Buffalo</u> Contract:		1506-W-MW1	
Matrix: (soil/water) WATER Lab Sample ID: A8618601 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: J2174.RR	Maile: SID Bullato			
Sample wt/vol: 5.00 (g/mL) ML	Lab Code: RECNY Case No.: SAS No.	: SI	OG No.: <u>1506N</u>	_
Date Samp/Recv: 12/22/98 12/23/98 Moisture: not dec.	Matrix: (soil/water) <u>WATER</u>	Lab Sample II	D: <u>A8618601</u>	
# Moisture: not dec Heated Purge: N Date Analyzed: 12/31/98 GC Column: DB-624	Sample wt/vol: $5.00 \text{ (g/mL)} \text{ ML}$	Lab File ID:	<u>J2174.RR</u>	
Soil Extract Volume:	Level: (low/med) <u>LOW</u>	Date Samp/Re	cv: <u>12/22/98</u>	12/23/98
CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) Ug/L Q	% Moisture: not dec Heated Purge: N	Date Analyze	d: <u>12/31/98</u>	
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3Chloromethane 10 U 74-83-9Bromomethane 10 U 75-01-4Vinyl chloride 10 U 75-00-3Chloroethane 10 U 75-09-2Methylene chloride 10 U 75-15-0Carbon Disulfide 10 U 75-35-41,1-Dichloroethene 10 U 75-35-41,1-Dichloroethene 10 U 75-34-31,2-Dichloroethene 10 U 76-66-3	GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>1.00</u>	
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q 74-87-3Chloromethane 10 U 75-01-4Vinyl chloride 10 U 75-00-3Chloroethane 10 U 75-09-2Methylene chloride 10 U 67-64-1	Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
74-87-3Chloromethane 10 U 74-83-9Bromomethane 10 U 75-01-4Vinyl chloride 10 U 75-00-3Chloroethane 10 U 75-09-2Methylene chloride 10 U 67-64-1				
74-83-9Bromomethane 10	CAS NO. COMPOUND	(ug/L or ug/K	g) <u>UG/L</u>	Q
74-83-9Bromomethane 10	74-87-3Chloromethane		10	TT
75-01-4Vhloroethane	174-83-9Bromomethane			
75-00-3	75-01-4Vinvl chloride			
75-09-2Methylene chloride	IMP 00 7 Malamaathama			
67-64-1	75-09-2Methylene chloride			
75-34-31,1-Dichloroethane 10 U 540-59-01,2-Dichloroethane 10 U 107-06-21,2-Dichloroethane 10 U 107-06-21,2-Dichloroethane 10 U 107-06-21,1,1-Trichloroethane 10 U 78-93-32-Butanone 10 U 75-27-4Bromodichloromethane 10 U 78-87-51,2-Dichloropropane 10 U 1061-01-5cis-1,3-Dichloropropene 10 U 124-48-1Dibromochloromethane 10 U 79-01-61,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 1061-02-6trans-1,3-Dichloropropene 10 U 108-10-14-Methyl-2-pentanone 10 U 127-18-4Tetrachloroethene 10 U 108-88-3Toluene 10 U 108-90-7Chlorobenzene 10 U 108-90-7Chlorobenzene 10 U 108-90-7Chlorobenzene 10 U 108-90-7	67-64-1Acetone			
75-34-31,1-Dichloroethane 10 U 540-59-01,2-Dichloroethane 10 U 107-06-21,2-Dichloroethane 10 U 107-06-21,2-Dichloroethane 10 U 107-06-21,1,1-Trichloroethane 10 U 78-93-32-Butanone 10 U 75-27-4Bromodichloromethane 10 U 78-87-51,2-Dichloropropane 10 U 1061-01-5cis-1,3-Dichloropropene 10 U 124-48-1Dibromochloromethane 10 U 79-01-61,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 1061-02-6trans-1,3-Dichloropropene 10 U 108-10-14-Methyl-2-pentanone 10 U 127-18-4Tetrachloroethene 10 U 108-88-3Toluene 10 U 108-90-7Chlorobenzene 10 U 108-90-7Chlorobenzene 10 U 108-90-7Chlorobenzene 10 U 108-90-7	5-15-0Carbon Disulfide			
75-34-31,1-Dichloroethane 10 U 67-66-3Chloroform 10 U U 107-06-21,2-Dichloroethane 10 U U 107-06-21,2-Dichloroethane 10 U U 107-06-21,1,1-Trichloroethane 10 U U 107-55-61,1,1-Trichloroethane 10 U U 1061-01-5	75-35-41,1-Dichloroethene			
540-59-01, 2-Dichloroethene (Total) 10 U 67-66-3Chloroform 10 U 107-06-21, 2-Dichloroethane 10 U 78-93-32-Butanone 10 U 71-55-61, 1, 1-Trichloroethane 10 U 56-23-5Carbon Tetrachloride 10 U 78-87-51, 2-Dichloropropane 10 U 1061-01-5cis-1, 3-Dichloropropane 10 U 1061-01-5cis-1, 3-Dichloropropene 10 U 79-01-6Trichloroethane 10 U 79-00-51, 1, 2-Trichloroethane 10 U 71-43-2Benzene 10 U 1061-02-6trans-1, 3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethane 10 U 108-88-31,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Sthylbenzene 10 U	175-34-31 1-Dichloroethane			
67-66-3Chloroform 10 U 107-06-21, 2-Dichloroethane 10 U 78-93-32-Butanone 10 U 71-55-61, 1, 1-Trichloroethane 10 U 56-23-5Carbon Tetrachloride 10 U 75-27-4Bromodichloromethane 10 U 78-87-51, 2-Dichloropropane 10 U 10061-01-5cis-1, 3-Dichloropropene 10 U 79-01-6Trichloroethene 10 U 124-48-1Dibromochloromethane 10 U 79-00-51, 1, 2-Trichloroethane 10 U 71-43-2Benzene 10 U 1061-02-6trans-1, 3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 108-88-3Toluene 10 U 79-34-51, 1, 2, 2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 109-41-4Ethylbenzene 10 U 100-42-5	540-59-01,2-Dichloroethene (Total)			
78-93-32-Butanone 10 U 71-55-61,1,1-Trichloroethane 10 U 56-23-5Carbon Tetrachloride 10 U 75-27-4Bromodichloromethane 10 U 78-87-51,2-Dichloropropane 10 U 10661-01-5cis-1,3-Dichloropropene 10 U 79-01-6Trichloroethene 10 U 124-48-1Dibromochloromethane 10 U 79-00-51,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 10661-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 107-34-5Toluene 10 U 108-88-3Toluene 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 100-42-5Styrene 10 U	67-66-3Chloroform		10	[υ
78-93-32-Butanone 10 U 71-55-61,1,1-Trichloroethane 10 U 56-23-5Carbon Tetrachloride 10 U 75-27-4Bromodichloromethane 10 U 78-87-51,2-Dichloropropane 10 U 10661-01-5cis-1,3-Dichloropropene 10 U 79-01-6Trichloroethene 10 U 124-48-1Dibromochloromethane 10 U 79-00-51,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 10661-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 107-34-5Toluene 10 U 108-88-3Toluene 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 100-42-5Styrene 10 U	107-06-21,2-Dichloroethane		10	ט
Total Contro	178-93-32-Butanone	ì	10	ט
Total Contro	71-55-61,1,1-Trichloroethane		10	ע∖
75-27-4Bromodichloromethane 10 U 78-87-51,2-Dichloropropane 10 U 10061-01-5cis-1,3-Dichloropropene 10 U 79-01-6Trichloroethene 10 U 124-48-1Dibromochloromethane 10 U 79-00-51,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 10661-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 108-88-3Toluene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 109-41-4Ethylbenzene 10 U 100-42-5Styrene 10 U	56-23-5Carbon Tetrachloride		10	ט
78-87-51, 2-Dichloropropane 10 U 10061-01-5cis-1, 3-Dichloropropene 10 U 79-01-6Trichloroethene 10 U 124-48-1Dibromochloromethane 10 U 79-00-51, 1, 2-Trichloroethane 10 U 71-43-2Benzene 10 U 1061-02-6trans-1, 3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 108-88-3Toluene 6 BJ 108-88-3Toluene 10 U 108-90-7Chlorobenzene 10 U 109-41-4Ethylbenzene 10 U 109-42-5Styrene 10 U	175-27-4Bromodichloromethane	ì	10	្រ [
10061-01-5C13-1,3-Dichloropropene 10 U 79-01-6Trichloroethene 10 U 124-48-1Dibromochloromethane 10 U 79-00-51,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 1061-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 108-88-3Toluene 6 BJ 108-88-3Toluene 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 100-42-5Styrene 10 U	78-87-51,2-Dichloropropane		10	ַ ע
124-48-1Dibromochloromethane 10 U 79-00-51,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 10061-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U	10061-01-5Cis-1,3-Dichioropropene		10	[U
79-00-51,1,2-Trichloroethane 10 U 71-43-2Benzene 10 U 10061-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U			10	U
71-43-2Benzene 10 U 10061-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
10061-02-6trans-1,3-Dichloropropene 10 U 75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
75-25-2Bromoform 10 U 108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
108-10-14-Methyl-2-pentanone 10 U 591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
591-78-62-Hexanone 10 U 127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U	75-25-2Bromoform			
127-18-4Tetrachloroethene 6 BJ 108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U	108-10-14-Methy1-2-pentanone			
108-88-3Toluene 10 U 79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
79-34-51,1,2,2-Tetrachloroethane 10 U 108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
108-90-7Chlorobenzene 10 U 100-41-4Ethylbenzene 10 U 70-42-5Styrene 10 U				
100-41-4Ethylbenzene	/y-34-31,1,2,2-Tetrachioroethane			
' 70-42-5Styrene	100-90-/Chioropenzene			
	100-41-4	— — ——		1

000@16nt No.

Lab Name: STL Buffalo	Contract:	T206-M-MA	
Lab Code: RECNY Case No.:	_ SAS No.:	SDG No.: 15	506 N
Matrix: (soil/water) WATER	Lab Sample	ID: <u>A8618</u>	3601
Sample wt/vol: 5.00 (g/mL)) <u>ML</u> Lab File II	D: <u>J217</u> 4	<u> . RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/I	Recv: <u>12/2</u> 2	2/98 12/23/98
% Moisture: not dec	Date Analy:	zed: <u>12/3</u>	L/ <u>98</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u>	(mm) Dilution Fa	actor:	L.00
Soil Extract Volume: (uL)	Soil Alique	ot Volume: _	(uL)
Number TICs found: 1	CONCENTRATION	N UNITS: /Ka) UG/1	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	16	J

000017 No.

o Name: <u>STL Buffalo</u> C	ontract:		6-W-MW3 	
S Hame! DIE Ballaro	omerado:			
Lab Code: RECNY Case No.:	SAS No.:	SDG N	o.: <u>1506N</u>	_
Matrix: (soil/water) <u>WATER</u>	Lab Sampl	e ID:	A8618602	-
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{M}	<u>L</u> Lab File	ID:	J2175.RR	
Level: (low/med) <u>LOW</u>	Date Samp	/Recv:	12/22/98	12/23/9
% Moisture: not dec Heated	Purge: <u>N</u> Date Anal	yzed:	12/31/98	
GC Column: DB-624 ID: 0.53 (mm) Dilution	Factor:	1.00	
Soil Extract Volume: (uL)	Soil Aliq	uot Vol	ume:	(uL)
	CONCENTRATI	יי דותו דית	· c .	
CAS NO. COMPOUND	(ug/L or u		-	Q
				
74-87-3Chloromethane			10	ט
74-83-9Bromomethane		i	10	ט
75-01-4Vinyl chloride		\	10	ט
175-00-3Chloroethane			10	Ū
75-09-2Methylene chloride]	10	ן ט
67-64-1Acetone			10	ט
5-15-0Carbon Disulfide]	10	Ū
5-35-41,1-Dichloroethene		<u></u> -1	10	<u>ַ</u> טַ
1/5-34-3		l l	10	ļū
540-59-01,2-Dichloroethene (T	otal)		8	J
67-66-3Chloroform			10	Ū
107-06-21,2-Dichloroethane		 	10	Ü
71 55 6 1 1 1 Trightone			10	U
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride			10	Ū
75 27 4 Promodiable remothers		— —	10	Ü
75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane			10	Ü
10061-01-5cis-1,3-Dichloroprope	ane -		10 10	U
79-01-6Trichloroethene			10	ם
124-48-1Dibromochloromethane		-	10	ט
79-00-51,1,2-Trichloroethane			10	ט
71-43-2Benzene			10	ט
10061-02-6trans-1,3-Dichloropro	pene		10	ט
75-25-2Bromoform			10	υ
108-10-14-Methyl-2-pentanone			10	บ
E 01 - 79 - 6 2 - Hovanono		 -	10	υ
127-18-4Tetrachloroethene			2	BJ
108-88-3Toluene			10	טם
79-34-51,1,2,2-Tetrachloroet	hane		10	ט
108-90-7Chlorobenzene			10	υ
100-41-4Ethylbenzene			10	Ü
100-42-5Styrene			10	υ
330-20-7Total Xylenes			1.0	111

000018 nt No.

					1506-	EWM-W	
Lab Name: STL Buffa	<u>.lo</u>	Contract:					
Lab Code: <u>RECNY</u>	Case No.:	_ SAS No	ɔ.:	SI	OG No.	: <u>1506N</u>	_
Matrix: (soil/water) <u>WATER</u>		Lab	Sample II): <u>A</u>	.8618602	
Sample wt/vol:	5.00 (g/mL)) <u>ML</u>	Lab	File ID:	J	2175.RR	
Level: (low/med)	LOW		Date	e Samp/Red	cv: <u>1</u>	2/22/98	12/23/98
% Moisture: not dec	:		Date	e Analyze	d: <u>1</u>	.2/31/98	
GC Column: DB-624	ID: <u>0.53</u>	(mm)	Dilu	ition Fac	tor: _	1.00	
Soil Extract Volume	:: (uL)		Soil	l Aliquot	Volum	ne:	(uL)
Number TICs found:	0			NTRATION L C or ug/K			
CAS NO.	Compour	nd Name		RT	Est	Conc.	Q

 $00019_{\text{Client No.}}$

Name CON Duffelle	1506-W-MW4
Name: STL Buffalo Contract:	
Lab Code: RECNY Case No.: SAS No.:	SDG No.: <u>1506N</u>
Matrix: (soil/water) <u>WATER</u> Lab	Sample ID: <u>A8618603</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$ Lab	File ID: <u>J2176.RR</u>
Level: (low/med) <u>LOW</u> Dat	e Samp/Recv: <u>12/22/98</u> <u>12/23/98</u>
% Moisture: not dec Heated Purge: N Dat	e Analyzed: <u>12/31/98</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm) Dil	ution Factor:1.00
Soil Extract Volume: (uL) Soi	l Aliquot Volume: (uL)
CONCE	NTRATION UNITS:
CAS NO. COMPOUND (ug/	Lorug/Kg) <u>UG/L</u> Q
74-87-3	10 U U U U U U U U U U U U U U U U U U U
108-88-3Toluene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene	U 10 U
70-42-5Styrene	10 U

000020 nt No.

Lab Name: STL Buffalo Contract:		
Lab Code: RECNY Case No.: SAS No	.: SDG No.: <u>1506</u>	1_
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID: A8618603	3
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID: <u>J2176.RF</u>	<u> </u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: 12/22/98	3 12/23/98
% Moisture: not dec	Date Analyzed: 12/31/98	<u>3</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Factor: 1.00	<u>)</u>
Soil Extract Volume: (uL)	Soil Aliquot Volume:	(uL)
Number TICs found:1	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.40	14	J

000621 No.

Nome: CTI Puffalo Contract:		1506-W-MW6	
Name: STL Buffalo Contract:			
Lab Code: <u>RECNY</u> Case No.: SAS No.	: SI	G No.: 1506N	_
Matrix: (soil/water) <u>WATER</u>	Lab Sample II): <u>A8618604</u>	
Sample wt/vol: $5.00 \text{ (g/mL)} \underline{\text{ML}}$	Lab File ID:	<u>J2177.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Rec	v: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge: N	Date Analyzed	l: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or:1.00	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION U	MITTO.	
	(ug/L or ug/Kg		Q
74-87-3Chloromethane		10	U
		10	(บ
75-01-4Vinyl chloride		2	J
75-00-3Chloroethane		10	ט)
75-09-2Methylene chloride		10	ט
167-64-1Acetone		10	שו
5-15-0Carbon Disulfide		10	ט
5-35-41,1-Dichloroethene		10	Ū
75-34-31,1-Dichloroethane		10	ט
540-59-01,2-Dichloroethene (Total)		100	İ
67-66-3Chloroform		10	ט
107-06-21,2-Dichloroethane		3	J
170 02-22-Butanone		10	ប
71-55-61,1,1-Trichloroethane		10	Ū
56-23-5Carbon Tetrachloride		10	บ
75-27-4Bromodichloromethane		10	บ
70	ì	10	บั
10061-01-5cis-1,3-Dichloropropene		10	บั
79-01-6Trichloroethene		10	บ
124-48-1Dibromochloromethane		10	บ
79-00-51,1,2-Trichloroethane		10	บั
71-43-2Benzene		10	บ
10061-02-6trans-1,3-Dichloropropene		10	Ū
75 25 2		10	บี
108-10-14-Methyl-2-pentanone		10	Ü
1501 70 C 0 Herranana		10	Ŭ
Total 10 A	•	10	Ū
108-88-3Toluene		10	Ü
79-34-51,1,2,2-Tetrachloroethane		10	บ
108-90-7Chlorobenzene		10	Ü
100-41-4Ethylbenzene		10	lΰ
00-42-5Styrene		10	ū
→330-20-7Total Xylenes		10	11

000022 Client No.

			1506-W-MW6	
Lab Name: <u>STL Buffalo</u>	Contract:			
Lab Code: RECNY Case No.:	SAS No.:	SI	DG No.: <u>1506N</u>	-
Matrix: (soil/water) WATER	Lab	Sample II	D: <u>A8618604</u>	_
Sample wt/vol: $\underline{5.00}$ (g/mL)	ML Lak	File ID:	<u>J2177.RR</u>	
Level: (low/med) <u>LOW</u>	Dat	e Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	Dat	e Analyze	d: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u>	(mm) Dil	ution Fact	tor:1.00	
Soil Extract Volume: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:0		ENTRATION (L or ug/K	UNITS: g) <u>UG/L</u>	
CAS NO. Compour	nd Name	RT	Est. Conc.	Q

000023ent No.

Name: STL Buffalo Contract:		1506-W-MW7	
Name: <u>STL Buffalo</u> Contract:	<u> </u>		
Lab Code: RECNY Case No.: SAS No.	: SI	OG No.: 1506N	_
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	A8618605	
Sample wt/vol: $5.00 \text{ (g/mL)} \underline{\text{ML}}$	Lab File ID:	<u>J2178.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge: N	Date Analyzed	d: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
C	CONCENTRATION (UNITS:	
	(ug/L or ug/K		Q
74-87-3Chloromethane		10	U
74-83-9Bromomethane 75-01-4Vinyl chloride		10	ט
75-01-4Vinyl chloride		10	ע
75-00-3Chloroethane		10	ן ט
75-00-3Chloroethane 75-09-2Methylene chloride		10	Ū
67-64-1Acetone 5-15-0Carbon Disulfide		10	ש
5-15-0Carbon Disulfide		10	ש
75-35-41,1-Dichloroethene		10	ן ט
75-34-31,1-Dichloroethane		10	ָט
540-59-01,2-Dichloroethene (Total)		10	<u>u</u>
67-66-3Chloroform		10	Ŭ.
107-06-21,2-Dichloroethane		10	ָ <u>ט</u>
78-93-32-Butanone		10 10	Ü
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride		10	ប
75-27-4Bromodichloromethane		10	ט
78-87-51,2-Dichloropropane		10	ū
10061-01-5cis-1,3-Dichloropropene		10	ט
79-01-6Trichloroethene		10	Ü
124-48-1Dibromochloromethane		10	Ü
79-00-51,1,2-Trichloroethane		10	Ü
71-43-2Benzene		10	บ
10061-02-6trans-1,3-Dichloropropene		10	บั
75-25-2Bromoform		10	Ū
108-10-14-Methyl-2-pentanone		10	ט
591-78-62-Hexanone		10	ט
127-18-4Tetrachloroethene		10	ט
108-88-3Toluene		10	Ū
79-34-51,1,2,2-Tetrachloroethane		10	Ū
108-90-7Chlorobenzene		10	ט
100-41-4Ethylbenzene		10	ט
00-42-5Styrene		10	ט
T330-20-7Total Xylenes		10	ŢŢ

000 Critent No.

Lab Name: <u>STL Buffalo</u> Co	ontract:
<u> </u>	
Lab Code: <u>RECNY</u> Case No.:	SAS No.: SDG No.: <u>1506N</u>
Matrix: (soil/water) WATER	Lab Sample ID: A8618605
Sample wt/vol: $\underline{5.00}$ (g/mL)	ML Lab File ID: <u>J2178.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u>
% Moisture: not dec	Date Analyzed: <u>12/31/98</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u> (m	m) Dilution Factor: 1.00
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Number TICs found: 1	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN	5.18	12	J

000025 Client No.

b Name: STL Buffalo	Contract:		1506-W-MW8	
	_			
Lab Code: RECNY Case No.:	SAS No.	: Si	DG No.: 1506N	-
Matrix: (soil/water) WATER		Lab Sample II	D: <u>A8618606</u>	
Sample wt/vol: 5.00 (g/mL)	<u>ML</u>	Lab File ID:	<u>J2130.RR</u>	
Level: (low/med) LOW		Date Samp/Re	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heate	d Purge: N	Date Analyze	d: <u>12/29/98</u>	
GC Column: DB-624 ID: 0.53 (1	nm)	Dilution Fac	tor: <u>10.00</u>	
Soil Extract Volume: (uL)		Soil Aliquot	Volume:	(uL)
	C	ONCENTRATION	INITO.	
CAS NO. COMPOUND			g) <u>UG/L</u>	Q
				-
74-87-3Chloromethane			100	ប្
74-83-9Bromomethane			100	Ü
75-01-4Vinyl chloride			100	ש
75-00-3Chloroethane 75-09-2Methylene chloride			100	U
75-09-2Methylene Chioride_	<u> </u>		100	שַ
57-64-1Acetone			100	ש
5-15-0Carbon Disulfide			100	Ū
75-35-41,1-Dichloroethene			100	Ŭ
75-34-31,1-Dichloroethane_ 540-59-01,2-Dichloroethene	/Total)		100	Ü
67-66-3Chloroform	(10tal)		100	Ŭ
1 07 06 2 1 2 Dighloroothans		- 	100 100	U U
107-06-21,2-Dichloroethane_ 78-93-32-Butanone				ប្រ
78-93-32-Butanone			100	Ŭ
71-55-61,1,1-Trichloroetha			100	ū
56-23-5Carbon Tetrachlorid	<u> </u>		100	ָט
75-27-4Bromodichloromethan	e		100 100	Ŭ
78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropro	nene —		100	Ŭ,
79-01-6Trichloroethene	pene		540	ַ ט
124-48-1Dibromochloromethan			100	ט
79-00-51,1,2-Trichloroetha			100	l u
71-43-2Benzene			100	ט
10061-02-6trans-1,3-Dichlorop	ropene		100	υ
75-25-2Bromoform		 Ì	100	ט
108-10-14-Methyl-2-pentanon			100	ט
591-78-62-Hexanone		l	100	lΩ
127-18-4Tetrachloroethene			1600	١٥
108-88-3Toluene			100	U
79-34-51,1,2,2-Tetrachloro	et hane		100	ט
108-90-7Chlorobenzene			100	ט
100-41-4Ethylbenzene			100	ט
00-42-5Styrene	_		100	_
₩330-20-7Total Xylenes			100	Ü

1506-W-MW8

Lab Name: <u>STL Buffalo</u>	Contract:		T200-M-MM8	
Has name. <u>SIL sallato</u>				
Lab Code: RECNY Case No.:	_ SAS No.: _	S	DG No.: <u>1506N</u>	_
Matrix: (soil/water) WATER	Lal	Sample I	D: <u>A8618606</u>	
Sample wt/vol: $\underline{5.00}$ (g/mL) <u>ML</u> Lal	File ID:	<u>J2130.RR</u>	
Level: (low/med) LOW	Dat	ce Samp/Re	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	Dat	ce Analyze	d: <u>12/29/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u>	(mm) Di	lution Fac	tor:10.00	
Soil Extract Volume: (uL)	So	il Aliquot	Volume:	(uL)
Number TICs found:0			UNITS: g) <u>UG/L</u>	
CAS NO. COMPON	nd Name	RT	Est. Conc.	0

CAS NO.	Compound Name	RT	Est. Conc.	Q

000027 Client No

Tab Name: STL Buffalo Contract:		1506-W-MW9	
Lab Code: RECNY Case No.: SAS No.:		G No.: <u>1506N</u>	_
Matrix: (soil/water) <u>WATER</u>	Lab Sample ID	: <u>A8618607</u>	_
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID:	<u>J2139.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Rec	v: <u>12/22/98</u>	12/23/9
% Moisture: not dec Heated Purge: N	Date Analyzed	: 12/29/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	or: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL
	NCENTRATION U (ug/L or ug/Kg		Q
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane		10 10 10 10 10 5 53 12 17 23 2000 5 10 10 10 10 10 10 10 10 10 10 10 10 10	

000028 No.

				1506-W-MW9	
Lab Name: STL Buffal	<u>lo</u> Con	tract:			
Lab Code: RECNY	Case No.:	SAS No.:	SI	OG No.: <u>1506N</u>	_
Matrix: (soil/water)) <u>WATER</u>	Lab	Sample II	A8618607	_
Sample wt/vol:	_ <u>5.00</u> (g/mL) <u>ML</u>	Lab	File ID:	<u>J2139.RR</u>	
Level: (low/med)	LOW	Dat	e Samp/Red	ev: <u>12/22/98</u>	12/23/98
% Moisture: not dec	•	Dat	e Analyze	d: <u>12/29/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	or:1.00	
Soil Extract Volume	: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION W	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound N	ame	RT	Est. Conc.	Q

000029_{nt No.}

Name: <u>STL Buffalo</u> Contract:		1506-W-MW9 D	L
Lab Code: <u>RECNY</u> Case No.: SAS No.	.: SI	OG No.: <u>1506N</u>	<u> </u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	A8618607	<u>DL</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	<u>J2164.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge: N	Date Analyzed	d: <u>12/30/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	tor: <u>500.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION (INITE:	
CAS NO. COMPOUND	(ug/L or ug/Kg		Q
			
74-87-3Chloromethane		5000	<u>"</u>
174-83-9Bromometnane	ì	5000	ַ
75-01-4Vinyl chloride		5000	<u> u</u>
/5-00-3Chioroethane		5000	ַ טַ
75-09-2Methylene chloride		5000	[ט
67-64-1Acetone 5-15-0Carbon Disulfide		5000	ן ט
5-15-0Carpon Disulfide		5000	ן ט
75-35-41,1-Dichloroethene		5000	ן ט ן
75-34-31,1-Dichloroethane	 _]	5000	ע
67-66-3Chloroform		1400	DJ
		5000	U
107-06-21,2-Dichloroethane		5000	ָ <u>ט</u>
78-93-3Z-Butanone		5000	<u> </u>
71-55-61,1,1-Trichloroethane		5000	[[[]
56-23-5Carbon Tetrachloride		5000	ן ט
75-27-4Bromodichloromethane		5000	ן ט
78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene		5000 5000	ט
79-01-6Trichloroethene		59000	
124-48-1Dibromochloromethane		5000	ם D
79-00-51,1,2-Trichloroethane		5000	ט ו
71-43-2Benzene		5000	ט ו
10061-02-6trans-1,3-Dichloropropene		5000	ט
75-25-2Bromoform		5000	ט
108-10-14-Methyl-2-pentanone		5000	ט
591-78-62-Hexanone		5000	ט
127-18-4Tetrachloroethene		95000	BD
108-88-3Toluene		5000	שט
79-34-51,1,2,2-Tetrachloroethane		5000	ט
108-90-7Chlorobenzene		5000	ט '
100-41-4Ethylbenzene		5000	ט
70-42-5Styrene		5000	ט
→330-20-7Total Xylenes		5000	17

000030

Client No.

Lab Name: <u>STL Buffalo</u>	Contract:	1506-M-WMA DT
Lan Name: Sin Bullato	Concract:	
Lab Code: <u>RECNY</u> Case No.:	SAS No.:	SDG No.: <u>1506N</u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample	ID: <u>A8618607DL</u>
Sample wt/vol: $\underline{5.00}$ (g/mL)	ML Lab File ID	: <u>J2164.RR</u>
Level: (low/med) <u>LOW</u>	Date Samp/Re	ecv: <u>12/22/98</u> 12/23/98
% Moisture: not dec	Date Analyze	ed: <u>12/30/98</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u>	(mm) Dilution Fac	ctor: <u>500.00</u>
Soil Extract Volume: (uL)	Soil Aliquo	t Volume: (uL)
Number TICs found:0	CONCENTRATION (ug/L or ug/)	UNITS: Kg) <u>UG/L</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q

000031

Client No.

Name: <u>STL Buffalo</u> Contract:		1506-W-MW10	
			
Lab Code: <u>RECNY</u> Case No.: SAS No).: SI	DG No.: 1506N	_
Matrix: (soil/water) <u>WATER</u>	Lab Sample I	D: <u>A8618608</u>	
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	<u>J2151.R</u> R	
Level: (low/med) <u>LOW</u>	Date Samp/Red	cv: <u>12/22/98</u>	12/23/9
% Moisture: not dec Heated Purge: N	I Date Analyze	d: <u>12/30/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>50.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL
	CONCENTRATION	UNITS •	
	(ug/L or ug/K		Q
74-87-3Chloromethane		500	ט
1/4-83-9Bromometnane	í	500	lΰ
75-01-4Vinyl chloride		260	Ĵ
75-00-3Chloroethane		500	ĺΰ
75-00-3Methylene chloride		500	Ιΰ
100 04 1 3-5-5-5	l l	500	Ιΰ
5-15-0Carbon Disulfide		500	Ū
75-35-41,1-Dichloroethene		120	Ĵ
		500	Ιΰ
540-59-01,2-Dichloroethene (Total)		2100	
67-66-3Chloroform		500	ט
107-06-21,2-Dichloroethane		500	Ū
170 02 2 2 Putanono		500	ָ [֮]
71-55-61,1,1-Trichloroethane		500	บั
56-23-5Carbon Tetrachloride		500	Ū
75-27-4Bromodichloromethane		500	Ū
78-87-51,2-Dichloropropane		500	ט
10061-01-5cis-1,3-Dichloropropene		500	ט
79-01-6Trichloroethene		17000	E
124-48-1Dibromochloromethane		500	ש
79-00-51,1,2-Trichloroethane		500	טן
71-43-2Benzene		500	ט
10061-02-6trans-1,3-Dichloropropene		500	ט
75-25-2Bromoform		500	U
108-10-14-Methyl-2-pentanone		50 0	טן
591-78-62-Hexanone		500	Ū
127-18-4Tetrachloroethene		500	บ
108-88-3Toluene		500	Ū
79-34-51,1,2,2-Tetrachloroethane		500	บ
108-90-7Chlorobenzene		500	Ū
100-41-4Ethylbenzene		500	Ū
00-42-5Styrene		500	Ū
T330-20-7Total Xylenes		500	TT

 $000032_{\text{Client No.}}$

				1506-W-MW10	
Lab Name: STL Buffal	<u>o</u> Con	tract:			
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	SI	DG No.: <u>1506N</u>	
Matrix: (soil/water)	WATER	Lab	Sample II	D: <u>A8618608</u>	
Sample wt/vol:	5.00 (g/mL) <u>ML</u>	Lab	File ID:	<u>J2151.RR</u>	
Level: (low/med)	LOW	Dat	e Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec.		Dat	e Analyze	d: <u>12/30/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	tor: <u>50.00</u>	
Soil Extract Volume:	(uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found: _	0		NTRATION L	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound N	ame	RT	Est. Conc.	0

0000 & Rient No.

1000

U

1506-W-MW10 DL Name: STL Buffalo Contract: _____ Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>1506N</u> Matrix: (soil/water) WATER Lab Sample ID: A8618608DL Level: (low/med) LOW Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u> % Moisture: not dec. _____ Heated Purge: N Date Analyzed: 12/31/98 Dilution Factor: __100.00 GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm) Soil Extract Volume: ____ (uL) Soil Aliquot Volume: _____ (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L 0 74-87-3-----Chloromethane 1000 U 74-83-9-----Bromomethane 1000 U 75-01-4-----Vinyl chloride 230 DJ75-00-3-----Chloroethane 1000 IJ 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 TT 00-42-5----Styrene 1000 U ₹330-20-7----Total Xylenes

600034

				1506-W-MW10 I	OL -
Lab Name: STL Buffalo	Contrac	t:			
Lab Code: RECNY Car	se No.: SAS	3 No.:	SD	G No.: <u>1506N</u>	_
Matrix: (soil/water)	WATER	Lab Sa	ample ID): <u>A8618608</u> I	<u>DL</u>
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab Fi	ile ID:	<u>J2184.RR</u>	
Level: (low/med)	LOW	Date S	Samp/Rec	v: <u>12/22/98</u>	12/23/98
% Moisture: not dec.		Date A	Analyzed	l: <u>12/31/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dilut	ion Fact	or: <u>100.00</u>	
Soil Extract Volume:	(uL)	Soil A	Aliquot	Volume:	(uL)
Number TICs found:	<u>0</u>	CONCENTI (ug/L o		NITS: g) <u>UG/L</u>	
CAS NO.	Compound Name		RT	Est. Conc.	Q

000035 No.

		1506-W-MW11	
Name: STL Buffalo Contract:			·
Lab Code: RECNY Case No.: SAS No.	: SI	OG No.: <u>1506N</u>	_
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	D: <u>A8618609</u>	
Sample wt/vol: $5.00 \text{ (g/mL)} \text{ ML}$	Lab File ID:	<u>J2179.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge: \underline{N}	Date Analyze	d: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
·	CONCENTRATION	UNITS:	
CAS NO. COMPOUND	(ug/L or ug/K	g) <u>UG/L</u>	Q
75-09-2Methylene chloride 67-64-1Acetone 5-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 75-34-31,2-Dichloroethene (Total) 67-66-3Chloroform 107-06-21,2-Dichloroethane 78-93-32-Butanone 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride		10 10 10 10 10 10 10 10 22 10 10 10	ממממ ממממממ
75-27-4Bromodichloromethane		10 2 10 37 10 10	ם ח ח
71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-pentanone 591-78-62-Hexanone		10 10 10 10	ם מ מ
127-18-4Tetrachloroethene 108-88-3Toluene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 00-42-5Styrene 330-20-7Total Xylenes		120 1 10 10 10 10	B U U U

000036 No.

Lab Name: STL_Buffalo		506-W-MW11
The state of the s		
Lab Code: RECNY Case No.:	SAS No.: SDG	No.: <u>1506N</u>
Matrix: (soil/water) WATER	Lab Sample ID:	<u>A8618609</u>
Sample wt/vol: $\underline{5.00}$ (g/mL)	ML Lab File ID:	J2179.RR
Level: (low/med) <u>LOW</u>	Date Samp/Recv	7: <u>12/22/98</u> <u>12/23/98</u>
% Moisture: not dec	Date Analyzed:	12/31/98
GC Column: <u>DB-624</u> ID: <u>0.53</u> ((mm) Dilution Facto	or:1.00
Soil Extract Volume: (uL)	Soil Aliquot V	/olume: (uL)
Number TICs found: 1	CONCENTRATION UN (ug/L or ug/Kg)	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	7	J

 $000037_{\text{Client No.}}$

Name: <u>STL Buffalo</u> Contract:		1506-W-MW12	
Hame. <u>Bill Bullulo</u>			
Lab Code: <u>RECNY</u> Case No.: SAS No.	: SI	OG No.: <u>1506N</u>	-
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	D: <u>A8618610</u>	-
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	J2153.RR	
Level: (low/med) <u>LOW</u>	Date Samp/Red	ev: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge: N	Date Analyzed	d: <u>12/30/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	cor: <u>10.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION U	INITTS .	
	(ug/L or ug/Kg		Q
			
74-87-3Chloromethane		100	ן ט
174-83-9Bromomethane		100	ן ט
75-01-4Vinyl chloride		100	ע
175-00-3Cnioroethane		100	ט (
75-09-2Methylene chloride		100	ע)
160 64 1 3006 000		100	ן ט
5-15-0Carbon Disulfide		100	ן טן
75-35-41,1-Dichloroethene		100	ប [
75-34-31,1-Dichloroethane		100	ן ט
540-59-01,2-Dichloroethene (Total)		100	ן ט
67-66-3Chloroform		100	ן ט
107-06-21,2-Dichloroethane		100	ן ט
78-93-32-Butanone		100	ן ט
71-55-61,1,1-Trichloroethane		100	[ט
56-23-5Carbon Tetrachloride		100	ט (
75-27-4Bromodichloromethane		100	[ט
78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene		100	ן ש
79-01-6Trichloroethene		100	ט
124-48-1Dibromochloromethane		550	
79-00-51,1,2-Trichloroethane		100	ט
71-43-2Benzene		100	ט
10061-02-6trans-1,3-Dichloropropene		100 100	Ü
75-25-2Bromoform		100	ָט
108-10-14-Methyl-2-pentanone		100	U
108-10-14-Methy1-2-pentanone		100	U
127-18-4Tetrachloroethene		6700	U
108-88-3Toluene		100	BE
79-34-51,1,2,2-Tetrachloroethane			U
108-90-7Chlorobenzene		100	U
100-41-4Ethylbenzene		100	ָ ^ע
00-42-5Styrene		100	Ū
		100	<u>ַ</u> ט

 $000038_{\text{Client No.}}$

Lab Name: STL_Buffale	<u>o</u> Contr	act:	1506-W-MW12	
Lab Code: RECNY C	ase No.:S	AS No.: S	DG No.: <u>1506N</u>	_
Matrix: (soil/water)	WATER	Lab Sample I	D: <u>A8618610</u>	
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab File ID:	<u>J2153.RR</u>	
Level: (low/med)	LOW	Date Samp/Re	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec.		Date Analyze	d: <u>12/30/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>10.00</u>	
Soil Extract Volume:	(uL)	Soil Aliquot	Volume:	(uL)
Number TICs found: _	0	CONCENTRATION (ug/L or ug/K		

CAS NO.	Compound Name	RT	Est. Conc.	Q

→ b Name: <u>STL Buffalc</u>	Contract:		1506-W-MW12	DL
Lab Code: <u>RECNY</u> Ca	ase No.: SAS No.	: SI	OG No.: <u>1506N</u>	
Matrix: (soil/water)	WATER	Lab Sample II	D: <u>A8618610</u>	DL
Sample wt/vol:		Lab File ID:	<u>J2185.RR</u>	
Level: (low/med)	LOW	Date Samp/Re	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec.	Heated Purge: N	Date Analyze	d: <u>12/31/98</u>	
GC Column: DB-624	_ ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>50.00</u>	
Soil Extract Volume:	(uL)	Soil Aliquot	Volume:	(uL)
	C	CONCENTRATION	UNITS:	
CAS NO. COMPO		(ug/L or ug/K		Q
74-87-3Chlore	omethane		500	ט
			500	lσ
75-01-4Vinvl	chloride		500	ן מ
75-00-3Chlore	pethane		500	υ
75-09-2Methy	oethane lene chloride		500	ן ט
167-64-1Acetor	ne	1	500	ען ד
5-15-0Carbon	n Disulfide		500	ן ט
75-35-41,1-D	ichloroethene		500	ן ט
175-34-31.1-1):	ichloroethane		500	ן ט
540-59-01,2-D	ichloroethene (Total)		500	ט
167-66-3Chlore	oform	(500	ט
107-06-21,2-D	ichloroethane		500	ט
178-93-32-Buta	anone	ì	500	ט
71-55-61,1,1	-Trichloroethane		500	U
56-23-5Carboi	n Tetrachloride		500	ט
75-27-4Bromod	dichloromethane		500	ט
78-87-51, 2-D:	ichloropropane		500	ן ט
10061-01-5cis-1	,3-Dichloropropene		500	ט [
79-01-6Trich			380	DJ
124-48-1Dibro			500	ט
79-00-51,1,2			500	ט
71-43-2Benze			500	U
	-1,3-Dichloropropene		500	ט
75-25-2Bromo			500	ט
108-10-14-Met			500	ט (
591-78-62-Hex			500	ט
127-18-4Tetra			4500	BD
108-88-3Tolue			500	ט
	,2-Tetrachloroethane		500	ן ט
108-90-7Chlore			500	(ט (
100-41-4Ethyl			500	ן ט
00-42-5Styre			500	ט
₹330-20-7Total	Xylenes		50 0	ן ט

 $000040_{\rm Client\ No.}$

T I Was COME Duffe	.1.	.		1506-W-MW12	DL
Lab Name: STL Buffa	ilo Con	tract:			
Lab Code: RECNY	Case No.:	SAS No.:	SI	OG No.: <u>1506N</u>	_
Matrix: (soil/water	c) <u>WATER</u>	Lab	Sample II	D: <u>A8618610</u>	DL
Sample wt/vol:	5.00 (g/mL) ML	Lab	File ID:	<u>J2185.RR</u>	
Level: (low/med)	LOW	Dat	e Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	·	Dat	e Analyze	d: <u>12/31/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	tor: <u>50.00</u>	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION (L or ug/K	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound N	ame	RT	Est. Conc.	Q

→ Name: STL Buffalo Co	ontract:		5-W-MW13 	
			- 1506M	
Lab Code: RECNY Case No.:				
Matrix: (soil/water) <u>WATER</u>	Lab Sa	mple ID:	A8618611	
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{MI}	Lab Fi	le ID:	J2180.RR	
Level: (low/med) <u>LOW</u>	Date S	amp/Recv:	12/22/98	12/23/98
% Moisture: not dec Heated H	Purge: <u>N</u> Date A	nalyzed:	12/31/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Diluti	on Factor:	1.00	
Soil Extract Volume: (uL)	Soil A	liquot Vol	ume:	(uL)
	CONCENTR	ATION UNIT	S:	
CAS NO. COMPOUND		r ug/Kg)		Q
74-87-3Chloromethane			10	U
174-83-9Bromomethane			10	ט
75-01-4Vinyl chloride			10	ט
175-00-3Chioroethane			10	שׁ
75-09-2Methylene chloride			10	ט
67-64-1Acetone			10	ש
5-15-0Carbon Disulfide			10	ט
75-35-41,1-Dichloroethene			10	ש
175-34-31,1-Dichloroethane			10	ט
540-59-01,2-Dichloroethene (To	otal)		71	()
67-66-3Chloroform			10	ע
107-06-21,2-Dichloroethane			10	ע
78-93-32-Butanone			10	U
71-55-61,1,1-Trichloroethane			10	ַ ט
56-23-5Carbon Tetrachloride			10	U .
75-27-4Bromodichloromethane_	 		10	ַ
78-87-51,2-Dichloropropane		{	10	ן ש
10061-01-5cis-1,3-Dichloroprope	ne		10	ע (
79-01-6Trichloroethene			30	
124-48-1Dibromochloromethane			10	ן ט
79-00-51,1,2-Trichloroethane			10	ן ש
71-43-2Benzene			10	<u> </u>
10061-02-6trans-1,3-Dichloropro	pene		10	\ <u>u</u>
75-25-2Bromoform			10	ן ט
108-10-14-Methyl-2-pentanone			10	ט
591-78-62-Hexanone			10	ע
127-18-4Tetrachloroethene			10	B
108-88-3Toluene	hanc		10	[טַ
79-34-51,1,2,2-Tetrachloroet	nane		10	ן ט
108-90-7Chlorobenzene			10	\ <u>u</u>
100-41-4Ethylbenzene			10	ט (
00-42-5Styrene			10	ן ט
- 5.5(1-7U-/TOFAL XVIANAS			1.73	117 1

COCCEPIENT No.

Lab Name: STL Buffalo	Contract:	Į į	06-W-MW13	
Lab Code: RECNY Case No.: _	SAS No.:	SDG N	lo.: <u>1506N</u>	_
Matrix: (soil/water) WATER	Lab	Sample ID:	<u>A8618611</u>	_
Sample wt/vol:	/mL) <u>ML</u> Lab	File ID:	<u>J2180.RR</u>	
Level: (low/med) <u>LOW</u>	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) Dilu	tion Factor:	1.00	
Soil Extract Volume: (u	L) Soil	Aliquot Vol	Lume:	(uL)
Number TICs found: 1		TRATION UNIT or ug/Kg)	·	

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK	4.42	20	J

► Name: <u>STL_Buffalo</u> C	Contract:		1506-W-MW14	
			NO No. 1500	
Lab Code: <u>RECNY</u> Case No.:	SAS No.:	: SI	OG NO.: 1506N	
Matrix: (soil/water) <u>WATER</u>		Lab Sample II): <u>A8618612</u>	
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{M}	ML	Lab File ID:	<u>J2181.RR</u>	
Level: (low/med) <u>LOW</u>		Date Samp/Red	ev: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated	Purge: N	Date Analyzed	d: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm	n)	Dilution Fact	or:1.00	
Soil Extract Volume: (uL)		Soil Aliquot	Volume:	(uL)
	C		DITTO.	
CAS NO. COMPOUND		ONCENTRATION ((ug/L or ug/K		Q
				
74-87-3Chloromethane			10	ט
174-83-9Bromomethane		1	10	ן ט
75-01-4Vinyl chloride			10	ן ט
175-00-3Chloroethane		ì	10	ן ט
75-09-2Methylene chloride			10	ן ט
5-15-0Carbon Disulfide			10	U
5-15-0Carbon Disulfide			10	ַ ט
75-35-41,1-Dichloroethene			10	טַ
75-34-31,1-Dichloroethane 540-59-01,2-Dichloroethene (1	T-4-1\		10	[ט
540-59-01, 2-Dichloroethene (1	rotal)		10	ប
67-66-3Chloroform			10	ן ט
107-06-21,2-Dichloroethane			10	ប
71-55-61,1,1-Trichloroethane			10	U
56 22 5 Carbon Totrachloride	= <u></u>		10 10	U
56-23-5Carbon Tetrachloride 75-27-4Bromodichloromethane			10	ט
78-87-51,2-Dichloropropane		ľ	10	ן מ
10061-01-5cis-1,3-Dichloroprope			10	ט
79-01-6Trichloroethene		·	10	Ü
124-48-1Dibromochloromethane			10	ט
79-00-51,1,2-Trichloroethane			10	ΰ
71-43-2Benzene			10	ט ו
10061-02-6trans-1,3-Dichloropro	opene		10	υ
75-25-2Bromoform			10	ן ט
108-10-14-Methyl-2-pentanone			10	υ
591-78-62-Hexanone			10	ט '
127-18-4Tetrachloroethene			2	вл
108-88-3Toluene			10	บี
79-34-51,1,2,2-Tetrachloroet	thane		10	บ
108-90-7Chlorobenzene			10	บั
100-41-4Ethylbenzene			10	ט
00-42-5Styrene			10	ן ט
₹330-20-7Total Xylenes			10	177

000044

Client No.

			1506-W-MW14	
Lab Name:	STL_Buffalo	Contract:		

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>1506N</u>

Matrix: (soil/water) WATER Lab Sample ID: A8618612

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: J2181.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u>

% 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)

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) <u>UG/L</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 2.	UNKNOWN SILANE PEAK	4.42	33	J
	UNKNOWN SILANE PEAK	13.25	12	J

 $000045_{\tt Client No.}$

I Name CTI Puffalo	Contract:		1506-W-MW16	
Name: <u>STL Buffalo</u>	Concrace:			
Lab Code: <u>RECNY</u> Case No.:	SAS No.	: S	DG No.: 1506N	-
Matrix: (soil/water) <u>WATER</u>		Lab Sample I	D: <u>A8618613</u>	_
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID:	J2182.RR	
Level: (low/med) <u>LOW</u>		Date Samp/Re	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	Heated Purge: N	Date Analyze	d: <u>12/31/98</u>	
GC Column: DB-624 ID: C).53 (mm)	Dilution Fac	tor:1.00	
Soil Extract Volume:	(uL)	Soil Aliquot	Volume:	(uL)
	C	ONCENTRATION	INITTO.	
CAS NO. COMPOUND			g) <u>UG/L</u>	Q
74-87-3Chloromethane_			10	U
174-83-9Bromomethane			10	บั
75-01-4Vinyl chloride	<u> </u>		10	ט
75-00-3Chloroethane		Į.	10	ן ט
75-09-2Methylene chlo	oride		10	ן ט
67-64-1Acetone			10	ַ ע
5-15-0Carbon Disulfi	lde		1	J I
75-35-41,1-Dichloroet	hene		10	[ט
75-34-31,1-Dichloroet	hane		10	ע
540-59-01,2-Dichloroet	thene (Total)	_	5	[J
67-66-3Chloroform			10	ן ט
107-06-21,2-Dichloroet	hane		10	ן ט
178-93-32-Butanone			10	ן ט
71-55-61,1,1-Trichlon	coethane		10	ט
56-23-5Carbon Tetrach	nloride		10	ן ט
75-27-4Bromodichloron	methane		10	ן ט
78-87-51,2-Dichlorop i	copane		10	ן ט
10061-01-5cis-1,3-Dichlo			10	U
79-01-6Trichloroether			11	ļ
124-48-1Dibromochloror			10	ן ט
79-00-51,1,2-Trichlor	roethane		10	ן ט
71-43-2Benzene			10	U
10061-02-6trans-1,3-Dich	nloropropene		10	ן ט
75-25-2Bromoform	_ .		10	ן ט
108-10-14-Methyl-2-per	ntanone		10	υ
591-78-62-Hexanone			10	ט
127-18-4Tetrachloroetl	nene		8	BJ
108-88-3Toluene	1-1		10	Ü
79-34-51,1,2,2-Tetrac			10	<u>ט</u>
108-90-7Chlorobenzene			10	U
100-41-4Ethylbenzene_			10	Ū
70-42-5Styrene			10	ប
330-20-7Total Xylenes			10	บ

600046 Client No.

Lab Name: STL Buffalo	<u>o</u> Co	ontract:				
Lab Code: RECNY Ca	ase No.:	SAS No.:		SDG No	o.: <u>1506N</u>	
Matrix: (soil/water)	WATER		Lab Sample	ID:	A8618613	_
Sample wt/vol:	5.00 (g/mL)]	ML	Lab File II):	J2182.RR	
Level: (low/med)	LOW		Date Samp/R	Recv:	12/22/98	12/23/98
% Moisture: not dec.	<u>_</u>		Date Analyz	ed:	12/31/98	

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.00

Soil Extract Volume: ____ (uL)

Number TICs found: __2

Soil Aliquot Volume: _____ (uL)

1506-W-MW16

CONCENTRATION UNITS:

(ug/L or ug/Kg) <u>UG/L</u>

CAS NO.	Compound Name	RT	Est. Conc.	Q
1.	UNKNOWN SILANE PEAK UNKNOWN SILANE PEAK	4.42 13.18	13 12	J

 $000047_{\text{Client No.}}$

Name: <u>STL Buffalo</u> Contract		1506-W-MW17	<u> </u>
Lab Code: <u>RECNY</u> Case No.: SAS N	lo.: SI	OG No.: <u>1506N</u>	<u></u>
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	D: <u>A8618614</u>	<u>-</u>
Sample wt/vol: $\underline{5.00}$ (g/mL) $\underline{\text{ML}}$	Lab File ID:	<u>J2173.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge:	N Date Analyze	d: <u>12/31/98</u>	<u>.</u>
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fact	tor: <u>40.00</u>	_
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION	INTTS ·	
CAS NO. COMPOUND	(ug/L or ug/K		Q
74-87-3Chloromethane		400	U
74-83-9Bromomethane		400	บ็
74-83-9Bromomethane 75-01-4Vinyl chloride		400	υ
175 00 2 Chloroothano	•	400	υ
75-09-2Methylene chloride		400	บ็
167.64-1		400	ΰ
5-15-0Carbon Disulfide		400	Ü
75-35-41 1-Dighloroethene		400	
75-35-41,1-Dichloroethene 75-34-31,1-Dichloroethane		400	U
540-59-01,2-Dichloroethene (Total)	·	270	Ŭ,
LCD CC 2 Chlose form		400	J
107-06-21,2-Dichloroethane		400	U
78-93-32-Butanone		400	Ü
71 55 6 1 1 1 Trightorothans		400	Ü
71-55-61,1,1-Trichloroethane			Ü
56-23-5Carbon Tetrachloride		400	U
75-27-4Bromodichloromethane		400	Ŭ
78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene		400	ŭ
		400	Ιū
79-01-6Trichloroethene		3000	
124-48-1Dibromochloromethane		400	ŭ
79-00-51,1,2-Trichloroethane		400	ַ <u></u> ע
71-43-2Benzene		400	שׁ
10061-02-6trans-1,3-Dichloropropene		400	שן
75-25-2Bromoform		400	ט
108-10-14-Methyl-2-pentanone		400	Ųΰ
591-78-62-Hexanone		400	ט
127-18-4Tetrachloroethene		5800	B
108-88-3Toluene		400	ט
79-34-51,1,2,2-Tetrachloroethane		400	ט
108-90-7Chlorobenzene		400	ט
100-41-4Ethylbenzene		400	ט
00-42-5Styrene		400	ט
T1330-20-7Total Xylenes		400	υ

000048 no.

- 1 x cmx - 55	٦ ~			1506-W-MW17	
Lab Name: STL Buffa	alo Co	ntract:			
Lab Code: RECNY	Case No.:	SAS No.: _	SI	OG No.: <u>1506N</u>	_
Matrix: (soil/water	c) <u>WATER</u>	Lal	o Sample II	D: <u>A8618614</u>	
Sample wt/vol:	<u>5.00</u> (g/mL) <u>M</u>	<u>L</u> Lal	o File ID:	<u>J2173.RR</u>	
Level: (low/med)	LOW	Dat	te Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	·	Dat	ce Analyze	d: <u>12/31/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm) Dil	lution Fact	tor: <u>40.00</u>	
Soil Extract Volume	e: (uL)	So	il Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION /L or ug/K	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound	Name	RT	Est. Conc.	Q

The Name CTI Duffale	Contract.		1506-W-MW18	
Deb Name: STL Buffalo	Contract:			
Lab Code: <u>RECNY</u> Case No.: _	SAS No.	: SI	OG No.: 1506N	_
Matrix: (soil/water) <u>WATER</u>		Lab Sample I	D: <u>A8618615</u>	
Sample wt/vol:	g/mL) <u>ML</u>	Lab File ID:	<u>J2158.RR</u>	
Level: (low/med) <u>LOW</u>		Date Samp/Re	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec I	Heated Purge: <u>N</u>	Date Analyze	d: <u>12/30/98</u>	
GC Column: DB-624 ID: 0	. <u>53</u> (mm)	Dilution Fac	tor:1.00	
Soil Extract Volume: (1	ıL)	Soil Aliquot	Volume:	(uL)
	C	ONCENTRATION	UNITS:	
CAS NO. COMPOUND			g) <u>UG/L</u>	Q
74-87-3Chloromethane_			10	Ū
174-83-9Bromomethane			10	ט
75-01-4Vinyl chloride			24	ľ
1/5-00-3Chloroethane			10	ן ט
75-09-2Methylene chlor	ride		10	ט
67-64-1Acetone			10	ט
5-15-0Carbon Disulfic	de		10	Ū
75-35-41,1-Dichloroet	nene		8	Ĵ
75-34-31,1-Dichloroet	nane		2	Ĵ
540-59-01,2-Dichloroet	nene (Total)		81	ا
67-66-3Chloroform			10	טן
107-06-21,2-Dichloroet			10	ן ט
78-93-32-Butanone			10	ן ט
71-55-61,1,1-Trichlore	nethane		10	ט
56-23-5Carbon Tetrach	loride		10	
75-27-4Bromodichlorom	ethane		10	ָּט
78-87-51,2-Dichloropre				Ü
10061-01-5cis-1,3-Dichlor	ppane		10	מ
79-01-6Trichloroethen	cobrobette		10	ט
124-48-1Dibromochlorome			14	1
			10	ם
79-00-51,1,2-Trichlore	bethane		10	ָט
71-43-2Benzene			10	ט
10061-02-6trans-1,3-Dich	Loropropene		10	ט
75-25-2Bromoform			10	טן
108-10-14-Methyl-2-pen	tanone		10	ט
591-78-62-Hexanone			10	Ū
127-18-4Tetrachloroeth	ene		6	BJ
108-88-3Toluene			10	ט
79-34-51,1,2,2-Tetrac	hloroethane		10	ט
108-90-7Chlorobenzene			10	Ū
100-41-4Ethylbenzene			10	Ü
00-42-5Styrene			10	บ็
7330-20-7Total Xylenes			10	11

 $000050_{\rm Client No.}$

	_			1506-W-MW18	
Lab Name: STL Buffa	alo Co:	ntract:			<u></u>
Lab Code: RECNY	Case No.:	SAS No.:	SI	OG No.: <u>1506N</u>	<u></u>
Matrix: (soil/water) <u>WATER</u>	Lab	Sample II	D: <u>A8618615</u>	<u> </u>
Sample wt/vol:	<u>5.00</u> (g/mL) <u>M</u>	<u>L</u> Lab	File ID:	<u>J2158.RF</u>	2
Level: (low/med)	LOW	Dat	e Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	z	Dat	e Analyze	d: <u>12/30/98</u>	<u>l</u>
GC Column: DB-624	ID: <u>0.53</u> (mm) Dil	ution Fact	tor:1.00	<u>)</u>
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION U	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound	Name	RT	Est. Conc.	Q

000051 No.

SDG No.: 1506N Sample ID: A8618616 File ID: J2159.RR Samp/Recv: 12/22/98 12 Analyzed: 12/30/98 Ation Factor: 1.00 Aliquot Volume: STRATION UNITS: Lor ug/Kg) UG/L	2/23/98 (uL)
Sample ID: A8618616 File ID: J2159.RR Samp/Recv: 12/22/98 12 Analyzed: 12/30/98 Ation Factor: 1.00 Aliquot Volume: TRATION UNITS: Lor ug/Kg) UG/L	2/23/98 (uL)
File ID: J2159.RR Samp/Recv: 12/22/98 12 Analyzed: 12/30/98 Ation Factor: 1.00 Aliquot Volume: TRATION UNITS: Lor ug/Kg) UG/L	2/23/98 (uL)
e Samp/Recv: 12/22/98 12 e Analyzed: 12/30/98 ution Factor: 1.00 L Aliquot Volume: UTRATION UNITS: L or ug/Kg) UG/L	2/23/98 (uL)
e Analyzed: 12/30/98 ution Factor: 1.00 Aliquot Volume: UTRATION UNITS: L or ug/Kg) UG/L	(uL)
ution Factor: 1.00 Aliquot Volume: UTRATION UNITS: Lor ug/Kg) UG/L	
Aliquot Volume: TRATION UNITS: L or ug/Kg) <u>UG/L</u>	
NTRATION UNITS: Lor ug/Kg) <u>UG/L</u>	
or ug/Kg) <u>UG/L</u>	Q
	Q
10 10 10 10 10 10 10 10 10 10 10 10 10 1	ממממממממממממממממממממממממממממממ
	10 10 10 10 10 10 10 10 10 10 10 10 10 1

Lab Name: <u>STL Buffalo</u>	Contra	.ct:	1506-W-MW19	
Lab Code: <u>RECNY</u> Case			SDG No.: <u>1506N</u>	_
Matrix: (soil/water) <u>W</u>	<u>ATER</u>	Lab Sample 1	ID: <u>A8618616</u>	
Sample wt/vol:	5.00 (g/mL) ML	Lab File ID:	<u>J2159.RR</u>	
Level: (low/med) <u>L</u>	<u>ow</u>	Date Samp/Re	ecv: <u>12/22/98</u>	12/23/98
% Moisture: not dec		Date Analyze	ed: <u>12/30/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dilution Fac	ctor:1.00	
Soil Extract Volume: _	(uL)	Soil Aliquot	Volume:	(uL)
Number TICs found: 0		CONCENTRATION (ug/L or ug/H	UNITS: Kg) <u>UG/L</u>	
CAS NO.	Compound Name	RT	Est. Conc.	Q

000053t No.

Name: <u>STL Buffalo</u> Contra	act:	1506-W-MW20	
Lab Code: RECNY Case No.: SAS		G No.: 1506N	
Matrix: (soil/water) WATER	Lab Sample ID		
	-		_ _
Sample wt/vol: $5.00 \text{ (g/mL)} \text{ ML}$	Lab File ID:	<u>J2160.RR</u>	
Level: (low/med) <u>LOW</u>	Date Samp/Rec	v: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge	e: <u>N</u> Date Analyzed	l: <u>12/30/98</u>	
GC Column: DB-624 ID: 0.53 (mm)	Dilution Fact	or: <u>1.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION U	INITS:	
CAS NO. COMPOUND	(ug/L or ug/Kg	l) <u>ng\r</u>	Q
74-87-3Chloromethane		10	Ū
174-83-9Bromomethane		10	ט
75-01-4Vinyl chloride		10	ט
75-00-3Chioroethane		10	ע ו
75-09-2Methylene chloride		10	U
167-64-1Acetone		10	Ū
5-15-0Carbon Disulfide	Ì	10	ט
75-35-41,1-Dichloroethene		10	ט
75-34-31,1-Dichloroethane		10	ט
540-59-01,2-Dichloroethene (Total)	14	
67-66-3Chloroform		10	ט
107-06-21,2-Dichloroethane		10	ט
78-93-32-Butanone		10	ט
71-55-61,1,1-Trichloroethane		10	ט
56-23-5Carbon Tetrachloride		10	ט
75-27-4Bromodichloromethane		10	ט
100 00 C 1 0 Diahlamanana		10	ט
10061-01-5cis-1,3-Dichloropropene		10	บิ
79-01-6Trichloroethene		10	ប
124-48-1Dibromochloromethane		10	ט
79-00-51,1,2-Trichloroethane		10	บั
71-43-2Benzene		10	บ
10061-02-6trans-1,3-Dichloropropene	:	10	บ
75-25-2Bromoform		10	ប
108-10-14-Methyl-2-pentanone		10	บ
591-78-62-Hexanone		10	Ü
127-18-4Tetrachloroethene		10	ָ ט
108-88-3Toluene		10	[<u>ט</u>
79-34-51,1,2,2-Tetrachloroethane		10	บ
108-90-7Chlorobenzene	·	10	ט
100-41-4Ethylbenzene		10	ט
00-42-5Styrene		10	บ
330-20-7Total Xylenes		10	Ü
			1 -

000054

T - h Name Off Duffe	.].			1506-W-MW20	
Lab Name: STL Buffa	cont cont	ract:			
Lab Code: RECNY	Case No.:	SAS No.:	SI	OG No.: <u>1506N</u>	_
Matrix: (soil/water	c) <u>WATER</u>	Lab	Sample II	D: <u>A8618617</u>	
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab	File ID:	J2160.RR	
Level: (low/med)	LOW	Dat	e Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	:	Dat	e Analyze	d: <u>12/30/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dil	ution Fact	tor:1.00	
Soil Extract Volume	e: (uL)	Soi	l Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION (L or ug/K	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound Na	ame	RT	Est. Conc.	Q

10

10

10

U

U

U

ASP 95 - VOLATILES ANALYSIS DATA SHEET

Client No.

1506-W-MW21 Name: STL Buffalo Contract: _ Matrix: (soil/water) WATER Lab Sample ID: A8618618 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: <u>DB-624</u> ID: <u>0.53</u> (mm) Dilution Factor: <u>1.00</u> Soil Aliquot Volume: ____ (uL) Soil Extract Volume: ____ (uL) CONCENTRATION UNITS: CAS NO. COMPOUND (uq/L or uq/Kq) UG/L_ 0 74-87-3-----Chloromethane 10 U 74-83-9-----Bromomethane 10 ŢŢ 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 ŢŢ 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

00-42-5----Styrene

1330-20-7----Total Xylenes

000056

I - h Nama, CTI Duffa	lo Cons	traat.		1506-W-MW21	
Lab Name: STL Buffa	Con	LIACL:			
Lab Code: RECNY	Case No.:	SAS No.: _	Si	OG No.: <u>1506N</u>	-
Matrix: (soil/water) <u>WATER</u>	Lab	Sample II	D: <u>A8618618</u>	
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab	File ID:	J2161.RR	
Level: (low/med)	LOW	Dat	ce Samp/Red	cv: <u>12/22/98</u>	12/23/98
% Moisture: not dec	·	Dat	e Analyze	d: <u>12/30/98</u>	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Di	lution Fact	tor:1.00	
Soil Extract Volume	: (uL)	So	il Aliquot	Volume:	(uL)
Number TICs found:	0		ENTRATION /L or ug/K	UNITS: g) <u>UG/L</u>	
CAS NO.	Compound N	ame	RT	Est. Conc.	Q

000057 Client No.

U

March March CDI Duffelo Cost		1506-W-SUMP	
Tab Name: <u>STL Buffalo</u> Contract:			-
Lab Code: RECNY Case No.: SAS No.	: SI	OG No.: <u>1506N</u>	
Matrix: (soil/water) <u>WATER</u>	Lab Sample II	D: <u>A8618620</u>	
Sample wt/vol: $\underline{5.00}$ (g/mL) \underline{ML}	Lab File ID:	<u>J2186.RR</u>	<u> </u>
Level: (low/med) <u>LOW</u>	Date Samp/Red	ev: <u>12/22/98</u>	12/23/98
% Moisture: not dec Heated Purge: $\underline{\mathtt{N}}$	Date Analyze	d: <u>12/31/98</u>	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (mm)	Dilution Fac	tor: <u>40.00</u>	
Soil Extract Volume: (uL)	Soil Aliquot	Volume:	(uL)
	CONCENTRATION		
CAS NO. COMPOUND	(ug/L or ug/K	g) <u>UG/L</u>	Q
74-87-3		400 400 110 400 400 400 400 3200 400 400 400 400 400 400 400	מממממממ מלמממקממ
79-01-6Trichloroethene 124-48-1Dibromochloromethane 79-00-51,1,2-Trichloroethane 71-43-2Benzene 10061-02-6trans-1,3-Dichloropropene 75-25-2Bromoform 108-10-14-Methyl-2-pentanone 591-78-62-Hexanone 127-18-4Tetrachloroethene 108-88-3Toluene 79-34-51,1,2,2-Tetrachloroethane 108-90-7Chlorobenzene 100-41-4Ethylbenzene 00-42-5Styrene		4900 400 400 400 400 400 400 400 400 400	ממממממממממ

Tak Nama GMI Duffa	1. 0			-W-SUMP	
Lab Name: STL Buffa	Conti	ract:	_		
Lab Code: <u>RECNY</u>	Case No.:	SAS No.:	SDG No.	.: <u>1506N</u>	-
Matrix: (soil/water) <u>WATER</u>	Lab Sample	e ID: <u>/</u>	A8618620	_
Sample wt/vol:	<u>5.00</u> (g/mL) <u>ML</u>	Lab File	ID:	J2186.RR	
Level: (low/med)	LOW	Date Samp	/Recv: <u>:</u>	12/22/98	12/23/98
% Moisture: not dec	·	Date Anal	yzed: <u>:</u>	12/31/98	
GC Column: DB-624	ID: <u>0.53</u> (mm)	Dilution	Factor: _	40.00	
Soil Extract Volume	: (uL)	Soil Aliq	uot Volum	me:	(uL)
Number TICs found:	0	CONCENTRATI (ug/L or u		-	
CAS NO.	Compound Na	ne RT	Est	t. Conc.	Q

000059

Client No.

- Name: <u>STL Buffalo</u>	Contract:		TRIP	BLANK	
Lab Code: RECNY Case No.:			DG No	. 1506N	
Lab Code: RECNI Case No.:	SAS NO.	: S.	DG NO	.: <u>1306N</u>	-
Matrix: (soil/water) <u>WATER</u>		Lab Sample I	D:	<u> A8618619</u>	_
Sample wt/vol: $\underline{5.00}$ (g/mL)	ML	Lab File ID:		J2162.RR	
Level: (low/med) <u>LOW</u>		Date Samp/Re	cv:	12/22/98	12/23/98
% Moisture: not dec Heated	l Purge: <u>N</u>	Date Analyze	d:	12/30/98	
GC Column: <u>DB-624</u> ID: <u>0.53</u> (m	n m)	Dilution Fac	tor:	1.00	
Godd Extract Volume. (uI)		Soil Aliquot	พลไม	mo -	/T \
Soil Extract Volume: (uL)		SOIT ATTQUOE	VOIU	e:	(шь)
		ONCENTRATION			
CAS NO. COMPOUND		(ug/L or ug/K	g)	UG/L	Q
74-87-3Chloromethane			_	10	U
174-83-9Bromomethane				10	บ็
75-01-4Vinyl chloride				10	ט
1 7 5-00-3Chloroethane				10	ט
75-09-2Methylene chloride_				10	ן ט
67-64-1Acetone		ì		10	שׁ
5-15-0Carbon Disulfide				10	ט
75-35-41,1-Dichloroethene_				10	υ
75-34-31,1-Dichloroethane				10	ט (
540-59-01,2-Dichloroethene	(Total)			10	ן ש
67-66-3Chloroform	 			10	\ <u>u</u>
107-06-21,2-Dichloroethane				10	ט
78-93-32-Butanone				10	ָ <u></u> ָ
71-55-61,1,1-Trichloroethan	ie			10	U :
56-23-5Carbon Tetrachloride	<u> </u>			10	U
75-27-4Bromodichloromethane 78-87-51,2-Dichloropropane	⁼			10 10	ט
10061-01-5cis-1,3-Dichloroprop	nene			10	ן ט
79-01-6Trichloroethene				10	บ็
124-48-1Dibromochloromethane				10	ן ט
79-00-51,1,2-Trichloroetham				10	บั
71-43-2Benzene				10	ָ <u>ט</u>
10061-02-6trans-1,3-Dichlorop	ropene			10	ָ <u>ט</u>
75-25-2Bromoform				10	ט
108-10-14-Methyl-2-pentanone	= =====================================			10	ן ש
591-78-62-Hexanone				10	ט
127-18-4Tetrachloroethene				10	ט
108-88-3Toluene				10	ט
79-34-51,1,2,2-Tetrachloro	ethane			10	ט
108-90-7Chlorobenzene				10	ט
100-41-4Ethylbenzene				10	ט
00-42-5Styrene				10	ט
330-20-7Total Xylenes				10	ប

000060

TRIP BLANK

Lab Name: <u>STL Buffalo</u>	Contract:			
Lab Code: RECNY Case No.:	SAS No.: _	SDC	3 No.: <u>1506N</u>	_
Matrix: (soil/water) WATER	La	b Sample ID	: <u>A8618619</u>	_
Sample wt/vol:	mL) <u>ML</u> La	b File ID:	<u>J2162.RR</u>	
Level: (low/med) LOW	Da	te Samp/Rec	v: <u>12/22/98</u>	12/23/98
% Moisture: not dec	Da	te Analyzed	: 12/30/98	
GC Column: <u>DB-624</u> ID: <u>0.5</u>	<u>3</u> (mm) Di	lution Facto	or:1.00	
Soil Extract Volume: (uL) Sc	il Aliquot	Volume:	(uL)
Number TICs found:0		ENTRATION U		
CAS NO. Comp	ound Name	RT	Est. Conc.	Q

25

IJ

ASP 95 - SEMIVOLATILES ANALYSIS DATA SHEET

Client No

Lab Name: <u>STL Buffalo</u>	Contract		6-W-MW9
Lab Name: SID Bullato	Concract.		
Lab Code: <u>RECNY</u> Case No	o.: SAS No.	: SDG N	o.: <u>1506N</u>
Matrix: (soil/water) WATE	<u>R</u>	Lab Sample ID:	A8618607
Sample wt/vol: 1000	<u>.0</u> (g/mL) <u>ML</u>	Lab File ID:	Z26485.RR
Level: (low/med) <u>LOW</u>		Date Samp/Recv:	12/22/98 12/23/9
% Moisture: deca	nted: (Y/N) <u>N</u>	Date Extracted:	12/28/98
Concentrated Extract Volu	me: <u>1000</u> (uL)	Date Analyzed:	01/11/99
Injection Volume: 2.00	(uL)	Dilution Factor:	1.00
GPC Cleanup: (Y/N) N p	H: <u>7.0</u>		

CONCENTRATION UNITS: COMPOUND UG/L (ug/L or ug/Kg) CAS NO. 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 U 10 88-75-5----2-Nitrophenol 10 U 105-67-9----2,4-Dimethylphenol U 10 111-91-1-----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 U 106-47-8-----4-Chloroaniline 10 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 IJ 606-20-2----2,6-Dinitrotoluene 10 U

99-09-2----3-Nitroaniline

Client No

Lab Name: STL Buffalo	n .	Contract: _		1506	-W-MW9	
Deb Name. <u>DID Barrar</u>	<u> </u>	concrace				
Lab Code: <u>RECNY</u> Ca	ase No.:	SAS No.:	: SI	G No	.: <u>1506N</u>	-
Matrix: (soil/water)	WATER		Lab Sample II): <u>2</u>	A8618607	_
Sample wt/vol:	1000.0 (g/mL) !	ML	Lab File ID:	<u> </u>	Z26485.RR	<u> </u>
Level: (low/med)	LOW		Date Samp/Rec	:v: <u>:</u>	12/22/98	12/23/9
% Moisture:	decanted: (Y/	и) <u>И</u>	Date Extracte	ed: <u>:</u>	12/28/98	
Concentrated Extract	Volume: 1000 (u	ւ)	Date Analyzed	i: <u>(</u>	01/11/99	
Injection Volume:	2.00 (uL)		Dilution Fact	or:	1.00	

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO. COMPOUND	CONCENTRATION UNI (ug/L or ug/Kg)	TS: <u>UG/L</u>	0
O2 22 0 Agencyhthana		1.0	
83-32-9Acenaphthene		10 25	U
100-02-74-Nitrophenol		25 25	U
132-64-9Dibenzofuran		25 10	
132-64-9		10	,,,
84-66-2Diethyl phthalate		10	U
7005-72-34-Chlorophenyl phenyl et	h = 22	— ·	Ū
	.ner	10	U
86-73-7Fluorene		10	<u>u</u>
100-01-64-Nitroaniline		25	<u>u</u>
534-52-14,6-Dinitro-2-methylpher	101	25	U
86-30-6N-nitrosodiphenylamine		10	ט
101-55-34-Bromophenyl phenyl eth	ler	10	U
118-74-1Hexachlorobenzene		10	\U
87-86-5Pentachlorophenol		25	ט
85-01-8Phenanthrene		10	ט
120-12-7Anthracene		10	U
86-74-8Carbazole		10	ע)
84-74-2Di-n-butyl phthalate		10	U
206-44-0Fluoranthene		10	U
129-00-0Pyrene		10	ט
85-68-7Butyl benzyl phthalate_		10	ט
91-94-13,3'-Dichlorobenzidine		10	ប
56-55-3Benzo(a) anthracene		10	U
218-01-9Chrysene		10	ט
117-81-7Bis(2-ethylhexyl) phtha	late	3	J
117-84-0Di-n-octyl phthalate		10	บ
205-99-2Benzo(b) fluoranthene		10	ΰ
207-08-9Benzo(k) fluoranthene		10	ŭ
50-32-8Benzo(a) pyrene		10	
		10	1
193-39-5Indeno(1,2,3-cd)pyrene_			\ <u>\</u>
53-70-3Dibenzo (a, h) anthracene		10	ט
191-24-2Benzo(ghi)perylene		10	ט

000063

Client No

_			1506-W-MW9
Lab. Name: STL 1	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) <u>LOW</u> Date Samp/Recv: <u>12/22/98</u> <u>12/23/9</u>:

% 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) <u>N</u> pH: 7.0

CONCENTRATION UNITS:

Number TICs found: $\underline{4}$ (ug/L or ug/Kg) $\underline{\text{UG/L}}$

CAS NO.	Compound Name	RT	Est. Conc.	Q
1. 79-01-6 2. 127-18-4 3. 4. 7704-34-9	TRICHLOROETHENE TETRACHLOROETHENE UNKNOWN SULFUR	2.13 4.05 11.26 25.78	300 990 20 20	BJN JN J JN

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: <u>1000.0</u> (g/mL) <u>ML</u> Lab File ID: <u>Z26488.RR</u>

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u>

% 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) <u>N</u> pH: 7.0

		CONCENTRATION	UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/K	g) <u>UG/L</u>	Q
108-95-2			10	ט
111-44-4	Bis(2-chloroethyl) ether		20	J
95-57-8	2-Chlorophenol		10	U_
541-73-1	1,3-Dichlorobenzene		10	
106-46-7	1,4-Dichlorobenzene		10	ט
95-50-1	1,2-Dichlorobenzene		10	\บ
95-48-7	2-Methylphenol		10	ט
108-60-1	2,2'-Oxybis(1-Chloropropane)		10	ט
	4-Methylphenol		10	ן ט
621-64-7	N-Nitroso-Di-n-propylamine		10	ן ט
67-72-1	Hexachloroethane		10	U
98-95-3	Nitrobenzene		10	ַט
	Isophorone		10	ט
	2-Nitrophenol		10	U
	2,4-Dimethylphenol		10	ט
	Bis(2-chloroethoxy) methane_		10	ט
120-83-2	2,4-Dichlorophenol		10	ט
	1,2,4-Trichlorobenzene		10	(ט
	Naphthalene		10	ט
	4-Chloroaniline		10	U
	Hexachlorobutadiene		10	U
	4-Chloro-3-methylphenol		10	U
	2-Methylnaphthalene		10	ט
77-47-4	Hexachlorocyclopentadiene		10	U
88-06-2	2,4,6-Trichlorophenol		10	U
95-95-4	2,4,5-Trichlorophenol		25	ט
	2-Chloronaphthalene	-	10	ַ ט
88-74-4	2-Nitroaniline		25	עַ
131-11-3	Dimethyl phthalate		10	
	Acenaphthylene		10	lu
	2,6-Dinitrotoluene		10	ט
	3-Nitroaniline		2 5	ប
1			_	1

000065

Date Samp/Recv: 12/22/98 12/23/9

Client No

_			1506-W-MW16
Lab Name	: <u>STL Buffalo</u>	Contract:	

Lab Code: RECNY Case No.: ____ SAS No.: ____ SDG No.: 1506N

Matrix: (soil/water) WATER Lab Sample ID: <u>A8618613</u>

Sample wt/vol: $\underline{1000.0}$ (g/mL) \underline{ML} Lab File ID: <u>Z26488.RR</u>

% Moisture: ___ decanted: (Y/N) N Date Extracted: 12/28/98

Date Analyzed: 01/13/99

Concentrated Extract Volume: 1000 (uL)

Injection Volume: 2.00(uL) Dilution Factor: ____1.00

GPC Cleanup: (Y/N) N pH: 7.0

Level: (low/med) LOW

CONCENION ACTON TINITOC.

		CONCENTRATION UNI	TS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
83-32-9	Acenaphthene		10	U
51-28-5	2,4-Dinitrophenol		25	[ט
100-02-7	4-Nitrophenol		25	U
32-64-9	Dibenzofuran		10	ט
121-14-2	2,4-Dinitrotoluene		10	ט
84-66-2	Diethyl phthalate		10	שׁ
	4-Chlorophenyl phenyl ethe:	r	10	ש
	Fluorene		10	ט
100-01-6	4-Nitroaniline		25	ט
534-52-1	4,6-Dinitro-2-methylphenol		25	U
86-30-6	N-nitrosodiphenylamine		10	ע
101-55-3	4-Bromophenyl phenyl ether		10	ט
118-74-1	Hexachlorobenzene		10	ט
87-86-5	Pentachlorophenol		25	ט
85-01-8	Phenanthrene		10	υ
120-12-7	Anthracene		10	טן
	Carbazole		10	ט
84-74-2	Di-n-butyl phthalate		10	U
	Fluoranthene		10	ט
129-00-0	Pyrene		10	ט
85-68-7	Butyl benzyl phthalate		10	ט
91-94-1	3,3'-Dichlorobenzidine		10	ט
56-55-3	Benzo(a)anthracene		10	ប
1218-01-9	Chrysene		10	ט
117-81-7	Bis(2-ethylhexyl) phthalat	e	10	ש
117-84-0	Di-n-octyl phthalate		10	שו
205-99-2	Benzo(b)fluoranthene		10	שו
207-08-9	Benzo(k)fluoranthene		10	שׁ
50-32-8	Benzo(a)pyrene		10	U
-1 93-39-5	Indeno(1,2,3-cd)pyrene		10	ט
53-70-3	Dibenzo(a,h)anthracene		10	บ
191-24-2	Benzo(ghi)perylene		10	บิ
	<u>-</u>		- ·	-

Client No.

1506-W-MW16

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>1506N</u>

Matrix: (soil/water) WATER Lab Sample ID: <u>A8618613</u>

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: Z26488.RR

Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u> Level: (low/med) LOW

% 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) <u>N</u> pH: <u>7.0</u>

CONCENTRATION UNITS:

Number TICs found: 15 (ug/L or ug/Kg) <u>UG/L</u>

RT Est. Conc. CAS NO. Compound Name 0 UNKNOWN 2.10 3 1. 2 UNKNOWN 2.13 Bυ 2. 3.60 36 3. 127-18-4 TETRACHLOROETHENE JN 4.41 4 4. UNKNOWN J 4.70 5. OXYGENATED CMPD 8 J 6. 15980-15-1 1,4-OXATHIANE 5.43 37 JN CHLOROPYRIDINE ISOMER 6.48 52 7. J DICHLOROPYRIDINE ISOMER 10.13 10 J 8. 9. 105-60-2 5 CAPROLACTAM 13.45 JN 16.96 UNKNOWN 11 10. J 11. UNKNOWN 29.38 3 J 12. UNKNOWN 31.55 2 IJ UNKNOWN 31.65 3 J 13. 36.43 3 J UNKNOWN 14. 2 36.55 ВJ UNKNOWN 15.

Client No

		1506-W-MW17
Lab Name: STL Buffalo	Contract:	

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>1506N</u>

Matrix: (soil/water) WATER Lab Sample ID: A8618614

Sample wt/vol: 1000.0 (g/mL) MLLab File ID: <u>Z26482.RR</u>

Date Samp/Recv: 12/22/98 12/23/9 Level: (low/med) LOW

% 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 UNIT	rs:	
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
108-95-2			10	U
	Bis(2-chloroethyl) ether		10	ט
	2-Chlorophenol		10	ט
41-73-1	1,3-Dichlorobenzene		10	ប
1106-46-7	1,4-Dichlorobenzene		10	ប
	1,2-Dichlorobenzene		10	ប
95-48-7	2-Methylphenol		10	ប
108-60-1	2,2'-Oxybis(1-Chloropropane	e)	10	ប
106-44-5	4-Methylphenol		10	U
621-64-7	N-Nitroso-Di-n-propylamine	-	10	טן
67-72-1	Hexachloroethane		10	U
98-95-3	Nitrobenzene		10	ប
78-59-1	Isophorone		10	ט
88-75-5	2-Nitrophenol		10	ט
105-67-9	2,4-Dimethylphenol	-	10	U
111-91-1	Bis(2-chloroethoxy) methane	e	10	ט
120-83-2	2,4-Dichlorophenol		10	ט
120-82-1	1,2,4-Trichlorobenzene		10	υ
	Naphthalene		10	ט
106-47-8	4-Chloroaniline		10	ט
87-68-3	Hexachlorobutadiene		10	ַ ט
59-50-7	4-Chloro-3-methylphenol		10	ט
91-57-6	2-Methylnaphthalene		10	U
77-47-4	Hexachlorocyclopentadiene		10	ט
	2,4,6-Trichlorophenol		10	ប
	2,4,5-Trichlorophenol		25	lυ
91-58-7	2-Chloronaphthalene		10	ប
88-74-4	2-Nitroaniline		25	Ū
	Dimethyl phthalate		10	Ū
T 208-96-8	Agenanhthulene		10	υ
	2,6-Dinitrotoluene		10	ϋ
	3-Nitroaniline		25	ϋ
		-	23	١٠

600068

Client No.

				1506-W-MW17
Lab	Name:	STL Buffalo	Contract:	

CONCENSED A STORE INTERC

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) <u>LOW</u> Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u>

% 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 U	MITS:	
CAS NO.	COMPOUND	(ug/L or ug/Kg	J) <u>UG/L</u>	Q
	Acenaphthene		10	U
51-28-5	2,4-Dinitrophenol		25	\U
100-02-7	4-Nitrophenol		25	<u> </u>
132-64-9	Dibenzofuran		10	
121-14-2	2,4-Dinitrotoluene		10	ט
104 66 0	5 - 4 1 1 - 4 - 1 - 4 -		10	ט
7005-72-3	Dietnyl phthalate 4-Chlorophenyl phenyl ether		10	ט
	Fluorene		10	ן ט
100-01-6	4-Nitroaniline		25	ן ט
534-52-1	4,6-Dinitro-2-methylphenol_		25	ט
86-30-6	N-nitrosodiphenylamine		10	ן ט
101-55-3	4-Bromophenyl phenyl ether_		10	ט
118-74-1	Hexachlorobenzene		10	ן ט
87-86-5	Pentachlorophenol		25	ט
85-01-8	Phenanthrene		10	\U
120-12-7	Anthracene		10	ן ט
186-74-8	Carbazole		10] บ
84-74-2	Di-n-butyl phthalate		10	ן די
206-44-0	Fluoranthene		10	ט !
129-00-0	Pyrene	Į.	10	\ U :
85-68-7	Butyl benzyl phthalate		10	ט
91-94-1	3,3'-Dichlorobenzidine		10	U
56-55-3	Benzo(a) anthracene		10	ט
	Chrysene		10	ט
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	Ū
	Benzo(k)fluoranthene		10	บ
50-32-8	Benzo(a) pyrene		10	
193-39-5	Indeno(1,2,3-cd)pyrene		10	ار
53-70-3	Dibenzo(a,h)anthracene		10	Ü
101-24-2	Benzo(ghi)perylene		10	Ü
131-44-4	Delizo (Ant) bet à tene			

000069

Client No.

_		1506-W-MW17
Lab Name: STL Buffalo	Contract:	

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>1506N</u>

Matrix: (soil/water) WATER Lab Sample ID: A8618614

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: Z26482.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/22/98</u> <u>12/23/98</u>

% 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) <u>N</u> pH: <u>7.0</u>

CONCENTRATION UNITS:

Number TICs found: $\underline{4}$ (ug/L or ug/Kg) $\underline{\text{UG/L}}$

	CAS NO.	Compound Name	RT	Est. Conc.	Q
3.	79-01-6 127-18-4 7704-34-9	TRICHLOROLTHENE TETRACHLOROETHENE UNKNOWN SULFUR	2.13 3.85 19.68 25.91	120 980 17 360	BJN JN J JN

1506WMW9

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: <u>STL Bu</u>	<u>ffalo</u>	Contract: _				
Lab Code:	_ Case No.:	_ SAS No.: _	SDG	No.:	<u>1506N</u>	-
Matrix: (soil/wa	ter) <u>WATER</u>	La	ab Sample ID:	<u> </u>	8607	
Sample wt/vol:	<u>1000</u> (g/mL)	MLLa	ab File ID:			
% Moisture:	decanted: (Y/	N) Da	ate Received:	12/2	3/98	
Extraction: (S	epF/Cont/Sonc)	<u>CONT</u> Da	ate Extracted:	: 12/2	8/98	
Concentrated Ext	ract Volume: <u>10</u>	<u>,000</u> (uL) Da	ate Analyzed:	12/2	9/98	
Injection Volume	: <u>1.00</u> (uL)	Di	ilution Factor	c:	1.00	
GPC Cleanup: (Y/N) <u>N</u> pH:	<u>7.0</u> Su	ılfur Cleanup:	: (Y/N) <u>N</u>	
CAS NO.	COMPOUND		RATION UNITS: r ug/kg) <u>UG/L</u>		Q	
319-85-7- 319-86-8- 58-89-9 76-44-8 309-00-2- 1024-57-3 959-98-8- 60-57-1 72-55-9 72-20-8 33213-65- 72-54-8 1031-07-8 50-29-3 72-43-5 53494-70- 7421-93-4 5103-71-9 5103-74-2 8001-35-2 12674-11- 11104-28- 11141-16- 53469-21- 12672-29-	Endrin ketor Endrin alder gamma-Chlord Toxaphene -2Aroclor-1212 -5Aroclor-1232 -9Aroclor-1242	epoxide II Sulfate ne nyde dane dane 2 2 8		0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.10 0.1	ם מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ מ	
	-1Aroclor-1254 -5Aroclor-1260			1.0	ì e	

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

 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:

(ag/L or ug/Kg) UG/L Q

	T	
319-84-6alpha-BHC	0.050	ן ט
319-85-7beta-BHC	0.050	
319-86-8delta-BHC	0.050	
58-89-9gamma-BHC (Lindane)	0.050	
76-44-8Heptachlor	0.050	I I
309-00-2Aldrin	0.050	1 - 1
1024-57-3Heptachlor epoxide	0.050	I I
959-98-8Endosulfan I	0.050	υ
60-57-1Dieldrin	0.10	ן ט
72-55-94,4'-DDE	0.10	ט
72-20-8Endrin	0.10	ן ט
33213-65-9Endosulfan II	0.10	υ
72-54-84,4'-DDD	0.10	υ
1031-07-8Endosulfan sulfate	0.10	ן ט
50-29-34,4'-DDT	0.10	ט
72-43-5Methoxychlor	0.50	ן ט ן
53494-70-5Endrin ketone	0.10	ט
7421-93-4Endrin aldehyde	0.10	ן ט
5103-71-9alpha-Chlordane	0.050	ן טן
5103-74-2gamma-Chlordane	0.050	ן ט
8001-35-2Toxaphene	5.0	ן ט
12674-11-2Aroclor-1016	1.0	ן ט
11104-28-2Aroclor-1221	2.0	ט
11141-16-5Aroclor-1232	1.0	ן טן
53469-21-9Aroclor-1242	1.0	ן ט
12672-29-6Aroclor-1248	1.0	1
11097-69-1Aroclor-1254	1.0	
11096-82-5Aroclor-1260	1.0	ł I
	-	
		·——·

1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1506WMW17

Lab Name: <u>STL Buffa</u>]	<u>lo</u>	Contract:				
Lab Code:	Case No.:	SAS No.:	SDG	No.:	<u>1506N</u>	_
Matrix: (soil/water)	WATER	L	ab Sample ID:	<u> </u>	18614	
Sample wt/vol:	1000 (g/mL) <u>M</u>	<u>iL</u> L	ab File ID:			
% Moisture:	_ decanted: (Y/N	ם (ו	ate Received:	12/2	23/98	
Extraction: (SepF/	Cont/Sonc)	<u>'ONT</u> D	ate Extracted	: 12/2	<u>28/98</u>	
Concentrated Extract	Volume:100	<u>000</u> (uL) D	ate Analyzed:	12/2	<u> 29/98</u>	
Injection Volume: <u>1</u>	<u>1.00</u> (uL)	D	ilution Facto	r:	1.00	
GPC Cleanup: (Y/N)	<u>N</u> pH: _	<u>7.0</u> S	ulfur Cleanup	: (Y/1	1) <u>N</u>	
CAS NO.	COMPOUND		RATION UNITS: or ug/Kg) <u>UG/L</u>		Q	
319-85-7 319-86-8 58-89-9 76-44-8 309-00-2 1024-57-3 959-98-8 72-55-9 72-54-8 33213-65-9 72-54-8 50-29-3 72-43-5 5103-71-9 5103-74-2 8001-35-2 1104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	delta-BHC(Li gamma-BHC (Li Heptachlor Heptachlor ep Endosulfan I Dieldrin	ooxide		0.050 0.050 0.050 0.050 0.050 0.050 0.10 0.1	מממממממממממממממממממממ	

1 INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: RECRA Lab Code: RECNY Matrix (soil/wa Level (low/med) Solids:	YCas ater): WATE 0: LOW0.0	se No.: 786 R	S1_ SAS No.:	Lab Date	Sample Recei	N-MW9 SDG No.: 1506N D: A8616901 ved: 12/22/98
Cor	ncentration	Units (ug/	L or mg/kg dry	y weı	ght):	
	CAS No.	Analyte	Concentration	С	Q	1
	7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-97-6 7440-02-0	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide HexaChrom				TR TR TR TR TR TR TR TR TR TR
Color Before: Color After:			ty Before:			Texture:
mments: LAB SAMPLE	 ID:_A861690 LE_ID:_1506	1-STA00268				

NYSDEC-ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NC

				W-MW1	
${ t Lab}$ ${ t Name:}$ ${ t RECRA_LABNE}$	ET_INC	Contract: NY	797-209		
Lab Code: RECNY	Case No.: 786	SAS No.:	;	SDG No.:	1506N
Matrix (soil/water):	WATER	_	Lab Sample	D: AD90	0110
Level (low/med):	LOW		Date Recei	ved: 12/2	3/98
% Solids:	0.0			-	•

Concentration Units (ug/L or mg/kg dry weight): $UG/L_{_}$

	r				 .
CAS No.	Analyte	Concentration	С	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	1-1		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			<u></u>	NR
7440-28-0	Thallium_		1_		NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc		_		NR
	Cyanide		_	l	NR
	HexaChrom	10.0	Ū		A_
] <u> </u>	<u> </u>		l_	l	.
\ <u></u>			_	l	
l			_		.
			_		.
	l		._	<u> </u>	.\
	l	<u> </u>	. _		.
	l		.1_	l	.1

	Before: After:	COLORLESS COLORLESS	Clarity Clarity		Texture: Artifacts:	
Commei LAI CL:	B SAMPLE	ID:_A8618601-STA LE_ID:_1506-W-M	A00273		 	<u> </u>
			FOR	M I - IN	 	

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
--------	--------	----

					W-MW10	
Lalo Name: RECRA_LABNI	ET_INC	Con	tract: NYS	97-209		
Lab Code: RECNY_	Case No.:	7861_	SAS No.:		SDG No.:	1506N_
Matrix (soil/water):	WATER			Lab Sample		
Level (low/med):	LOW		I	Date Recei	ved: 12/2	23/98
% Solids:	0.0					

CAS No.	Analyte	Concentration	С	Q	M
7420 00 5	77		_		
7429-90-5	Aluminum_		-		NR
7440-36-0	Antimony_		 -		NR
7440-38-2	Arsenic		_		NR
7440-39-3	Barium		_		NR
7440-41-7	Beryllium		<u> </u>		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		 	l	NR
7439-97-6	Mercury		l_		NR
7440-02-0	Nickel		l_		NR
7440-09-7	Potassium		l_		NR
7782-49-2	Selenium_		 _		NR
7440-22-4	Silver		_		NR
7440-23-5	Sodium		l_	\	NR
7440-28-0	Thallium_		l_		NR
7440-62-2	Vanadium_		l_		NR
7440-66-6	Zinc		_		NR
	Cyanide		l_		NR
	HexaChrom	10.0	Ū		A_
			_	l	
				1	
			1		
·		· 			. —

	Before: After:	COLORLESS COLORLESS	Clarity Clarity	Before: After:	Texture: Artifacts:	
	SAMPLE_	ID:_A8618608- LE ID: 1506-W			 	
——————————————————————————————————————	LENI_SAM			A T TNI		

1 INORGANIC ANALYSES DATA SHEET

NVSDEC	SAMPLE	NO

	W-MW11
Lab Name: RECRA LABNET_INC Contract: NY97-2	09
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	

					 ,
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{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		<u> </u>		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	<u> </u>	-	J ———	NR
7440-62-2	Vanadium		-	l ———	NR
7440-66-6	Zinc		-		NR
	Cyanide		-		NR
	HexaChrom	10.0	Ū	l ———	Α
	-		ľ	l	
			-		
	\ 		-		
	-		-		
			-		
			-		1
	- - 	·	-		
	_	I	۱	ł	l

Before: After:	COLORLESS COLORLESS	Clarity Be		Texture: _ Artifacts: _	
SAMPLE 3	ID:_A8618609-STA LE_ID:_1506-W-M				
		FORM	T - TN		

NYSDEC SAMPLE NO.

					W-MW12	
Lab Name: RECRA_LABNI	ET_INC	Con	tract: NY97	7-209		
Lab Code: RECNY	Case No.:	7861_	SAS No.:		SDG No.:	1506N
Matrix (soil/water):	WATER	_	La	b Sample	ID: AD90	0120
Level (low/med):	LOW		Da	ite Recei	.ved: 12/2	23/98
% Solids:	0.0					

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{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		1-	l	NR
7782-49-2	Selenium			<u> </u>	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		1-		NR
7440-88-8	Cyanide		-]	NR
	HexaChrom	587	-		ı
	nexaciiioiii		-		A
			-		\
			-		<u> </u>
			-		 —
			-1-		
			- -		 —
		ļ ———	- -	l	
			.1_	l	١

Before: After:	COLORLESS COLORLESS	Clarity Clarity		Texture: Artifacts:	
SAMPLE_	ID:_A8618610- LE_ID:_1506-W		 		
 		FOR	 		

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO.
れっつしいへ	DELLIN	TAC

					W-MW13
Lab Name: RECRA_LABNI	ET_INC		Contract:	NY97-209_	<u> </u>
Lab Code: RECNY_		No.: 7861	_ SAS No		SDG No.: 1506N
Matrix (soil/water):	WATER		_	Lab Sample	e ID: AD900121 -
Level (low/med):	LOW			Date Rece:	ived: 12/23/98
% Solids:	0.0				

					 ,
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-	·	$\overline{ m NR}$
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic	 -	-		NR
7440-39-3	Barium		<u> </u> –		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	'·-	٦		NR
7440-50-8	Copper Copper		-		NR
7439-89-6	Iron		-	l	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		-	ļ <i>-</i>	NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		-	l 	NR
7440-28-0	Vanadium		\ <u> </u>	<u> </u>	NR
7440-66-6	Zinc		[-		NR
7440-00-0	Cyanide		-		NR
	HexaChrom	10.0	ប៊	}	A
	Inexactit oiii		ļ۲		1~-
			-		\\
			-	<u> </u>	11
	<u> </u>		-	{	
			1-	l ———	-
<u> </u>			1-	I ——	
l		- 	-	\ 	
l	.		. 1 🖵	l	11

Color Before: Color After:	COLORLESS COLORLESS	Clarity Before Clarity After:	: CLEAR_ CLEAR_	Texture: Artifacts:	
	_ID:_A8618611- PLE_ID:_1506-W				_ _ _
		FORM I - I	N .		<u> </u>

NYSDEC	SAMPLE	NO.
--------	--------	-----

			W-MW14
Lab Name: RECRA_LABNET_I	NC Contra	ct: NY97-209	
		S No.:	SDG No.: 1506N
Matrix (soil/water): WAT	ER		e ID: AD900122
Level $(low/med): LOW$		Date Rece	ived: 12/23/98
% Solids:0	. 0		

ı — · — — —					— ı
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{NR}
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium		-		NR
7440-33-3	Beryllium		-		NR
7440-43-9	Cadmium		-		NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.0	ប៊		P
7440-48-4	Cobalt		اٽا		NR
7440-50-8	Copper Copper		-		NR NR
7439-89-6	Iron		-		NR
7439-92-1	Lead		-		NR
7439-92-1	Magnesium	<u> </u>	-		NR
7439-95-4	Manganese		-		NR
7439-96-5	Mercury		-		NR NR
7440-02-0	Nickel		-		NR
	Potassium	<u> </u>			1 1
7440-09-7	1		-		NR
7782-49-2	Selenium_		\ <u> </u>		NR
7440-22-4	Silver		_		NR
7440-23-5	Sodium		<u> </u>	l 	NR
7440-28-0	Thallium_		 _]	NR
7440-62-2	Vanadium_		I _		NR
7440-66-6	Zinc		l_		NR
<u> </u>	Cyanide		<u> </u> _		NR
	HexaChrom	10.0	₩		A_
			_		l1
			l		ll
			-		-
			I^-		
			-		-
1 ———		· — — — — — — — — — — — — — — — — — — —	. —	' —	''

Before: After:	COLORLESS COLORLESS	Clarity Clarity		Texture:Artifacts:	
SAMPLE]	ID:_A8618612-STA LE_ID:_1506-W-MV				-
		FOR	 		<u> </u>

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	: NO

	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 Samp	le ID: AD818847
Level (low/med): LOW Date Rec	eived: 12/23/98
% Solids:0.0	

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 E P 7440-47-3 Chromium 11.8 P P 7440-48-4 Cobalt 19.9 B P 7439-89-6 Copper 233 P P 7439-95-1 Lead 24.4 * P 7439-95-4 Magnesium 55000 EN* P 7440-02-0 Nickel 30.9 B P 7440-02-0 Nickel 30.9 B P 7440-22-4 Silver 2.8 B P 7440-22-5 Sodium <th>ı </th> <th></th> <th>-</th> <th></th> <th></th> <th><u> </u></th>	ı 		-			<u> </u>
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 P 7440-47-3 Chromium 11.8 P P 7440-48-4 Cobalt 19.9 B P P 7440-50-8 Copper 233 P P 7439-89-6 Iron 13400 P EN* P 7439-95-4 Magnesium 55000 EN* P 7439-96-5 Manganese 230 E P 7440-02-0 Nickel 30.9 B P 7440-09-7 Potassium 25800 * P 7440-22-4 Silver 2.8 B P 7440-28-0 Thallium 6.0 U P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P	CAS No.	Analyte	Concentration	С	Q	M
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 P 7440-47-3 Chromium 11.8 P P 7440-48-4 Cobalt 19.9 B P P 7440-50-8 Copper 233 P P 7439-89-6 Iron 13400 P EN* P 7439-95-4 Magnesium 55000 EN* P 7439-96-5 Manganese 230 E P 7440-02-0 Nickel 30.9 B P 7440-09-7 Potassium 25800 * P 7440-22-4 Silver 2.8 B P 7440-28-0 Thallium 6.0 U P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P	7429-90-5	Aluminum	456	-	EN*	$ \overline{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 P 7440-70-2 Calcium 191000 E E P 7440-47-3 Chromium 11.8 P 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 7440-96-5 Mercury 0.20 U CV 7440-02-0 Nickel 30.9 B P 7440-09-7 Potassium 18.5 N P 7440-22-4 Silver 2.8 B P 7440-23-5 Sodium 418000 EN* P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P 700-0 Thallium 6.0 U P		_		\overline{B}		
7440-39-3 Barium 147 B P 7440-41-7 Beryllium 1.2 B P 7440-43-9 Cadmium 10 P P 7440-70-2 Calcium 191000 E E P 7440-47-3 Chromium 11.8 P P 7440-48-4 Cobalt 19.9 B P 7439-89-6 Copper 233 P P 7439-92-1 Lead 24.4 P * 7439-95-4 Magnesium 55000 EN* EN* 7439-97-6 Mercury 0.20 U CV 7440-02-0 Nickel 30.9 B P 7440-02-0 Nickel 30.9 B P 7440-22-4 Silver 2.8 B P 7440-22-4 Silver 2.8 B P 7440-28-0 Thallium 6.0 U P 7440-66-6 Zinc 218 P P 7440-66-6 Zinc 218 P P	7440-38-2			U		
7440-43-9 Cadmium 10 P 7440-70-2 Calcium 191000 E P 7440-47-3 Chromium 11.8 P P 7440-48-4 Cobalt 19.9 B P 7439-89-6 Copper 233 P 7439-92-1 Lead 24.4 * P 7439-95-4 Magnesium 55000 EN* P 7439-96-5 Manganese 230 E P 7440-02-0 Nickel 30.9 B P 7440-02-0 Nickel 30.9 B P 7440-22-4 Silver 25800 * P 7440-23-5 Sodium 418000 EN* P 7440-28-0 Thallium 6.0 U P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P	7440-39-3		147	В		$ P^- $
7440-43-9 Cadmium 10 P 7440-70-2 Calcium 191000 E P 7440-47-3 Chromium 11.8 P P 7440-48-4 Cobalt 19.9 B P 7439-89-6 Copper 233 P 7439-92-1 Lead 24.4 * P 7439-95-4 Magnesium 55000 EN* P 7439-96-5 Manganese 230 E P 7440-02-0 Nickel 30.9 B P 7440-02-0 Nickel 30.9 B P 7440-22-4 Silver 25800 * P 7440-23-5 Sodium 418000 EN* P 7440-28-0 Thallium 6.0 U P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P	7440-41-7	Bervllium		В		$ P^- $
7440-47-3 Chromium Cobalt 19.9 B P 7440-48-4 Cobalt 19.9 B P 7440-50-8 Copper 233 B P 7439-89-6 Iron 13400 B P 7439-92-1 Lead 24.4 B * 7439-95-4 Magnesium Magnesium 55000 B EN* P 7439-97-6 Mercury 0.20 U CV 7440-02-0 Nickel 30.9 B P P 7440-09-7 Potassium 25800 B P * 7440-22-4 Silver 28 B P N P 7440-23-5 Sodium 300 B P EN* P 7440-28-0 Thallium 6.0 U P EN* P 7440-66-6 Zinc 218 P P 7440-66-6 Zinc 218 P P Cyanide 10.0 U C To.0 U C	l,		10			$_{\rm P}^{-}$
7440-48-4 Cobalt Copper 233 P 7440-50-8 Iron 13400 P 7439-89-6 Iron 13400 P 7439-92-1 Lead 24.4 * 7439-95-4 Magnesium Magnesium Magnese 55000 EN* P 7439-97-6 Mercury 0.20 U CV 7440-02-0 Nickel 30.9 B P 7440-09-7 Potassium 25800 * P 7440-22-4 Silver 28.8 N 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	7440-70-2	Calcium	191000	-		P_
7440-50-8 Copper	7440-47-3	Chromium	11.8	-		$ P^{-} $
7440-50-8 Copper	7440-48-4	Cobalt	19.9	\overline{B}		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 7440-02-0 Nickel 30.9 B P 7440-09-7 Potassium 25800 * P 7440-22-4 Silver 2.8 B P 7440-23-5 Sodium 418000 EN* P 7440-28-0 Thallium 6.0 U P 7440-66-6 Zinc 218 P 7440-66-6 Zinc 218 P Cyanide 10.0 U C	7440-50-8	Copper				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 7440-22-4 Selenium 18.5 N 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	7439-89-6		13400	-		$ 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	7439-92-1	Lead	24.4	-	*	P
7439-97-6 Mercury	7439-95-4	Magnesium	55000		EN*	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	7439-96-5	Manganese	230	-	- E	
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	7439-97-6		0.20	บิ		CV
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	7440-02-0	Nickel	30.9	В		
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	7440-09-7	Potassium	25800	}	*	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	7782-49-2	Selenium	18.5		N_	P_
7440-28-0 Thallium 6.0 Ū P 7440-62-2 Vanadium 25.3 B P 7440-66-6 Zinc 218 P Cyanide 10.0 Ū C	7440-22-4	Silver	2.8	B		P_
7440-62-2 Vanadium 25.3 B P 7440-66-6 Zinc 218 P P Cyanide 10.0 U C	7440-23-5	Sodium	418000	l	EN*	P
7440-66-6 Zinc218P_C	7440-28-0	Thallium		0		
Cyanide 10.0 U C	7440-62-2	Vanadium	25.3	В		
	7440-66-6	Zinc	218	ì		
HexaChrom 10.0 U A		Cyanide	10.0	ΙŪ	ļ — — — —	c
		HexaChrom	10.0	U		A
				_		-
]_		
				1		1
-				-		1
				-		_

	Before: After:	COLORLESS COLORLESS	Clarity Clarity	Before: After:	Texture: Artifacts:	_
Commen		ID:_A8618613-CGA	A02077			_
CLI RED	ENT SAMPI	LE_ID:_1506-W-MV NUMBER:_AD9024	√16 74			

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

Lalo Name: RECRA LABNI	en inc		Con	tract: NY	797_209	W-MW17	
ьаю маше: къска цави			_	LIACL: N	[97-209]	
Lab Code: RECNY_		No.: 78	361_	SAS No.:		SDG No.:	
Matrix (soil/water):	WATER				Lab Sample		
Level (low/med):	LOW				Date Rece	ived: 12/2	23/98
% Solids:	0.0						

Analyte	Concentration	c	_	l
			Q	М
Aluminum	4090	-	EN*	\overline{P}
Antimony -	17.0	ਹ		$_{\rm P}^{-}$
Arsenic -		ט		P_
Barium —	173	В		P_
Bervllium	1.0	וט		$_{\rm P}^{-}$
Cadmium	4.4	В		P_
	194000			$_{\rm P}^{-}$
		-		P ⁻
Cobalt		$\overline{\mathtt{B}}$		P_
Copper	14.8	В		P
Iron —	7340			P
Lead	80.9		*	P
Magnesium	65200	-	EN*	P_
	145	-	– _E ––	P_
Mercury	0.20	บิ		CV
Nickel	12.0	В		P
Potassium	8900		*	P_
Selenium	5.0	บิ	N	P_
Silver	1.5	U		P_
Sodium	93600		EN*	P_
Thallium	6.0	บิ		P
Vanadium_	8.1	В		P
Zinc	64.6			P_
Cyanide	10.0	บิ		$ c^{-} $
HexaChrom	10.0	U		A^{-}
				-
		-		
		-		1—
		1-		
		-		
		-		
		-		
	Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_	Antimony	Antimony	Antimony

	Before: After:	GRAY COLORLESS	Clarity Clarity		Texture: Artifacts: _	
′ mmer		ID 30610614	GGN 0 2 0 7 7			
		ID:_A8618614-				
CL:	ENT SAMPI	LE ID: 1506-W	-MW17		 	
REI	TGESTION	NUMBER . AD90	2475	-		

NYSDEC	SA	MPI	Æ.	NC

				W-MW18
Lab Name: RECRA_LABNI	ET_INC	Contract: NY	797-209_	
Lab Code: RECNY_	Case No.: 786	1_ SAS No.:	:	SDG No.: 1506N
Matrix (soil/water):	WATER	_	Lab Sample	ID: AD900123
Level (low/med):	LOW		Date Receiv	ved: 12/23/98
% Solids:	0.0			

					ı
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		$\overline{\rm NR}$
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		-	i	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		Ι_		NR
	HexaChrom	10.0	∤ΰ		A_{\perp}
	_		l		
					I =
			_		
					<u> </u>

	Before: After:		Clarity Clarity		Texture: Artifacts:	_
Commen	SAMPLE I	ID:_A8618615-STA LE ID: 1506-W-MV	A00273		 	_
			FODI	4 T TN		

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

					W-MW19	
Lab Name: RECRA_LABNE			tract: NY97	7-209		
Lab Code: RECNY_	Case No.:	7861_	SAS No.:		SDG No.:	
Matrix (soil/water):	WATER		Lā	ab Sample	D: AD90	00124
Level (low/med):	LOW		Da	ate Recei	ived: 12/2	23/98
% Solids:	0.0					

	Analyte	Concentration	c		
				Q	M
7429-90-5 A	luminum		-		\overline{NR}
	ntimony		-		NR
	rsenic		1		NR
	arium —		-		NR
	eryllium		-	. ———	NR
	admium		-		NR
7440-70-2 C	alcium		-		NR
7440-47-3 C	hromium		B		Р
7440-48-4 C	obalt —				NR
7440-50-8 C	opper		_		NR
	ron —		-		NR
7439-92-1 L	ead		_		NR
7439-95-4 M	agnesium		-		NR
	anganese		-		NR
	ercury		_		NR
7440-02-0 N	ickel		-		NR
7440-09-7 P	otassium		<u> </u>		NR
7782-49-2 S	elenium		-		NR
7440-22-4 S	ilver		_		NR
7440-23-5 S	odium		_		NR
7440-28-0 T	hallium		_		NR
7440-62-2 V	anadium		-		NR
7440-66-6 Z	inc		-		NR
	yanide		_		NR
н	exaChrom		וּד		A
	_		l_		_
			ΙĪ		
			_		

Color Color		COLORLESS COLORLESS	Clarity Clarity		Texture: Artifacts:
Commen LAB CLI	SAMPLE I	D:_A8618616-STA E_ID:_1506-W-MV	A00273 V19		

NVCDEC	SAMPLE	NIC
שממסבונו	JANELLE	TAC

				W-MW20
Lab Name: RECRA_LABNE	ET_INC	Contract: N	Y97-209	
Lab Code: RECNY_	Case No.: 7	861_ SAS No.	: _ <u> </u>	OG No.: 1506N
Matrix (soil/water):	WATER		Lab Sample 1	D: AD900125
Level (low/med):	LOW		Date Receive	ed: 12/23/98
% Solids:	0.0			

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		[]	·	\overline{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		\ <u> </u>		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver	<u> </u>	-		NR
7440-23-5	Sodium				NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium_			l ———	NR
7440-66-6	Zinc -		-	i ———	NR
	Cyanide		-		NR
	HexaChrom	10.0	Ū		Α
	1				_
			-		
			-		
			-		
			1-		
	·}		1-		<u> </u>
		I 		· ———	· —

Color E		COLORLESS COLORLESS	Clarity Clarity	Before: After:	Texture: Artifacts:	
	SAMPLE I	ED:_A8618617-STA LE_ID:_1506-W-MV				
			EOBI	VIT - TN		

1 INORGANIC ANALYSES DATA SHEET

					W-MW21	
Lab Name: RECRA_LABNI	ET_INC	C	ontract: 3	NY97-209		
Lab Code: RECNY	Case No.:	7861	SAS No	.:	SDG No.:	1506N
Matrix (soil/water):	WATER	_		Lab Sampl	le ID: AD9	00126
Level (low/med):	LOW			Date Rece	eived: 12/3	23/98
% Solids:	0.0				•	-

					<u> </u>
CAS No.	Analyte	Concentration	c	Q	М
					<u></u>
7429-90-5	Aluminum_				NR
7440-36-0	Antimony_		l — I		NR
7440-38-2	Arsenic		l_l		NR
7440-39-3	Barium		_		NR
7440-41-7	Beryllium	I 	l l		NR
7440-43-9	Cadmium		ا_ا		NR
7440-70-2	Calcium_		I_		NR
7440-47-3	Chromium_	53.5	ا_ا		P_
7440-48-4	Cobalt		_		NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead		1-1		NR
7439-95-4	Magnesium		l-I		NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury				NR
7440-02-0	Nickel		1-		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	lπ		A
			١		^-
			1-		
			1-	l ———	
-			-	İ———	 —
		l	-	l	
			$\cdot -$	l	
			- -		 —
	1	l	. 1	l	١

Color Before: Color After:	GRAY	Before: After:	Texture: Artifacts:
	ID:_A8618618-ST LE_ID:_1506-W-M		

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO T

			W-MW3
Lab Name: RECRA_LABNI	ET_INC	Contract: NY97-209	
Lab Code: RECNY_	Case No.: 7861	SAS No.:	SDG No.: 1506N
Matrix (soil/water):	WATER	Lab Sample	E ID: AD900111 -
Level (low/med):	LOW	Date Rece	ived: 12/23/98
% Solids:	0.0		

			г		
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		<u> </u>		\overline{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	ប៊		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	i 	-	-	NR
7440-23-5	Sodium	— 	-		NR
7440-28-0	Thallium	ļ 	-		NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc		-	l ———	NR
	Cyanide	-	-		NR
	HexaChrom	10.0	ΙŪ		A
	1		-	l ———	
			-		
			-		
			-		-
			1-		-
			1-		-
			1-]	-

Color Before: Color After:	COLORLESS COLORLESS	Clarity Clarity		Texture:Artifacts:	
	ID:_A8618602- LE_ID:_1506-W			 	_ _ _
		FORM	1 T - TN		<u> </u>

INORGANIC ANALYSES DATA SHEET

NYSDEC S	SAMPLE	NO
----------	--------	----

			W-	-MW4
Lab Name: RECRA_LABNI	ET_INC	Contract: NY97-	209	
Lab Code: RECNY_	Case No.: 7861			No.: 1506N
Matrix (soil/water):	WATER	Lab	Sample ID	: AD900112
Level (low/med):	LOW	Dat	e Received	: 12/23/98
% Solids:	0.0			

					— ı
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{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	ΙĦΙ		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	ซ		A_
			_		اا
			 _		l
			_		
			<u> </u> _		
			-		
			-1-		
1			. _	l	l

		Clarity Clarity	Before: After:	Texture: Artifacts:	
SAMPLE_1	ID:_A8618603-STA LE_ID:_1506-W-MV			 	

MICODEC	CANADID	370
NYSDEC	SAMPLE	NU

			W-MW6
Lab Name: RECRA_LABNI	ET_INC	Contract: NY97-209	1
Lab Code: RECNY_	Case No.: 7	SAS No.:	SDG No.: 1506N
Matrix (soil/water):	WATER	Lab Sampl	e ID: AD900113
Level (low/med):	LOW	Date Rece	eived: 12/23/98
% Solids:	0 0		•

					
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				\overline{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	$\frac{-}{B}$		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	ļ 	-		NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium	·	-	l 	NR
7440-62-2	Vanadium		1-	[——	NR
7440-66-6	Zinc		\ <u> </u>	\——	NR
,110 00 0	Cyanide		-	l ———	NR
	HexaChrom	10.0	บั		A
	1		ľ]	
	·		1-	l	
			-		
	·		-		—
	· ———		-		I
	·		-	ļ	
, 	·	\ 	1-	}	
	. l <u></u>	l	ł	l	l

Color Before: Color After:	COLORLESS COLORLESS	Clarity Before Clarity After:		Texture:				
	_ID:_A8618604- PLE ID: 1506-W				-			
CLIENT_SAMPLE_ID:_1506-W-MW6								

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

					W-MW7	
Lab Name: RECRA LABNI	ET_INC.	Co	ontract: NY9	7-209		
Lab Code: RECNY_	Case No.	.: 7861_	SAS No.:		SDG No.:	1506N
Matrix (soil/water):	WATER	_			ID: AD90	
Level (low/med):	LOW		D	ate Recei	ved: 12/2	23/98
% Solids:	0.0					

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-		\overline{NR}
7440-36-0	Antimony _		-1		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		Р
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 —		-		$_{\rm NR}$
7440-09-7	Potassium	 	-		NR
7782-49-2	Selenium	<u> </u>]-		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	ี่บิ		A
-	,		}		-
· 			-		
			-		
<u> </u>			-		
_		-	-	<u> </u>	
			-		1-
	·		1-	l ———	1

	Before: After:	COLORLESS COLORLESS		Before: After:	Texture:
	B SAMPLE	ID: A8618605-ST			
СЬ.	ENT_SAMPI	LE_ID:_1506-W-M	^ /		

1 INORGANIC ANALYSES DATA SHEET

MVCDEC	SAMPLE	NO.
NIODEC	SAMPLE	NO

				W-MW8	1
Lab Name: RECRA_LABNET	_INC	Contract	: NY97-209_		1
Lab Code: RECNY_	Case No.: 7	861 SAS 1	No.:	SDG No.: 1506N	•
Matrix (soil/water): W	IATER	_	Lab Sample	e ID: AD900115 -	
Level (low/med): $ t L$	WO		Date Rece	ived: 12/23/98	
% Solids:	0.0				

ı 	T				—- ₁
CAS No.	Analyte	Concentration	C	Q	М
7429-90-5	Aluminum				\overline{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		<u> </u>		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_		<u> </u>		NR
7440-22-4	Silver				NR
7440-23-5	Sodium	<u> </u>	l_{-}		NR
7440-28-0	Thallium_		<u> </u>]	NR
7440-62-2	Vanadium_		1_		NR
7440-66-6	Zinc	 	_		NR
	Cyanide		_		NR
	HexaChrom	32300	 _	l	A_
			_	<u> </u>	
<u> </u>	.		. _	l	\\
	.		. _	l	
			. _		
	.		. _		ا <u>ــــ</u> ا
	.		. _	l	
	.		. _		

Color Be			Clarity Clarity			Texture:Artifacts:			
	SAMPLE_I	D:_A8618606-STA E_ID:_1506-W-MW					_ _ _		
	FORM I - IN								

1 INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: RECRA LABNET INC.	Contract: NY97-209	W-MW9
Lab Code: RECNY Case No.: 7861	SAS No.:	SDG No.: 1506N
Matrix (soil/water): WATER	Lab Sample	e ID: AD818846 -
Level (low/med): LOW	Date Recei	ived: 12/23/98

Level (low/med): LOW_ % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

	T				
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	9270	-	EN*	$ \overline{P} $
7440-36-0	Antimony	19.8	₽		$ \bar{P}^{-} $
7440-38-2	Arsenic	5.0	שׁ		P
7440-39-3	Barium	104	В		$ \bar{P}^- $
7440-41-7	Beryllium	1.0	ן ט		$ \bar{P}^- $
7440-43-9	Cadmium	10.0			$ \tilde{P}^- $
7440-70-2	Calcium	239000	-		$ P^- $
7440-47-3	Chromium	1110	-		$ \tilde{P}^- $
7440-48-4	Cobalt		\overline{B}		$ P^- $
7440-50-8	Copper				$ P^- $
7439-89-6	Iron	14400	-		$ P^- $
7439-92-1	Lead	36.1	-	*	P
7439-95-4	Magnesium	108000	-	EN*	P-
7439-96-5	Manganese	643	-	- _E	$ P^- $
7439-97-6	Mercury	0.20	ีซี		CV
7440-02-0	Nickel	309	 		P
7440-09-7	Potassium	10200		*	P-
7782-49-2	Selenium	5.0	ਹ	N	P_
7440-22-4	Silver	1.5	U		P_
7440-23-5	Sodium	117000		EN*	P
7440-28-0	Thallium	11.3	-		P_
7440-62-2	Vanadium_	51.4	-		P_
7440-66-6	Zinc	117	-		P_
	Cyanide	10.0	Ū		$ c^{-} $
	HexaChrom	283			A
			-		-
			_		
			-		
_			-		
			-		
	·				-

Color Before: Color After:	COLORLESS COLORLESS	Clarity Clarity		Texture: _ Artifacts: _	
Comments:		~~~~			
	ID: A8618607-		 		
	LE ID: 1506-W				
REDIGESTION	_NUMBER:_AD90	2473			

FORM I - IN

1 INORGANIC ANALYSES DATA SHEET

		_
NYSDEC	SAMPLE	NC T

							W-	SUMP		
Lab Name: RECRA_LABNI	ET_INC.			Contrac	t: NY	97-209	1			١
Lab Code: RECNY_	Case	No.:	78 61_	SAS	No.:		SDG	No.:	1506N	- '
Matrix (soil/water):	WATER			_		Lab Sampl				-
Level (low/med):	LOW					Date Rece	ived:	12/2	23/98	
% Solids:	0.0									

Concentration Units (ug/L or mg/kg dry weight): $UG/L_{_}$

Analyte	Concentration	C	Q	M
Aluminum		-		$\overline{\rm NR}$
Antimony -		-		NR
Arsenic		-		NR
Barium —		1 ⁻		NR
Beryllium		-		NR
Cadmium		-		NR
Calcium		-		NR
Chromium	134	-		P
Cobalt		-		NR
		-		NR
Iron		-		NR
Lead		-		NR
Magnesium				NR
Manganese		-		NR
Mercury				NR
Nickel		-		NR
Potassium		-		NR
Selenium		-		NR
Silver		-		NR
Sodium		i —	ļ 	NR
		-	l ———	NR
		-		NR
_		-	<u> </u>	NR
		\ <u> </u>		NR
	10.0	ΙŪ	—	A
		ľ		-
	·	-	ļ ———	
·	 -	-		1
		-		
		-		
		1-	l———	-
		1-		-
	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide

Color Befo		Clarity Before: Clarity After:	Texture: Artifacts:	
	MPLE_ID:_A8618620 _SAMPLE_ID:_1506-V			_ _ _
		FORM I - IN	 	_

DAY ENVIRON MENTAL, INC.

RECRA LABNET, a division of Recra Environmental, Inc. (NYBA7861)

CHAIN OF CUSTODY RECORD

PROJECT		506R			SITE NAME Rochester	95 met. Real Blud New York		120	/sv.	\int	/	$\overline{/}$	$\overline{/}$	7/		
	AMPLEAS (SIGNATURE)			NO. OF CON- TAINERS	1 /			//	//	/ /		REMARKS				
140	DATE		COMP.	GRAB	STA	TION LOCATION		\\	_	_	_		_			
001	174/98	1635		X	1506 - N	-mwq	1	×								
								-								
							 									
				_												
	_															
						2/21/10						·				
							ļ			_						
	_			1												
							<u> </u>									
aller 1	1	3	<u> </u>	12/2	1/98 1700	RECEIVED BY (SIGNATU		RELIN						DATE/TIM	RECEIV	/ED BY (SIGNATURE)
ELINQUIS				12/2	298 1100	RECEIVED BY ISIGNATUR		RELIN						DATE/TIM	RECEIV	/ED BY (SIGNATURE)
ELINQUIS	HED B	Y (SIG	NATURE		DATE/TIME	RECEIVED FOR LABORAT (SIGNATURE)	TORY BY	D	ATE/	TIME	REM	IARKS	6			

RE	NO 1	5061	R-97		SITE NAME 95 mt. Read Blvd. Rochester, New York		15%		<u>(पड</u>	3	7	5-3 + C	LP-m)
AMPLER	,			1/2.	12	NO OF CON- TAINERS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	y 5			* /	REMARKS
STATION NO	1 1	TIME		GRAB	STATION LOCATION		15.3	*/ ^	1/2	\ <u>x</u>	Z	/ / .	1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
001	724	1357		×	1506 - W - MWI	니		X	×	X		$\perp \perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$	tex Cr. collected at 1630 MAII other parameters collected at time specified "
002	17/22/98			*	1506 - w - mw 3	4		×	×	×]]	Hex(r collected at 1735 *
003	12/22/	1412		x_	1506-W-MW4	4		x	×	X		i 1	tex Cr. collected at 1605 *
004	12/12/92	1347	·]	x	1506-W-MW 6	4		×	×	X		i I	ta Cr. collected at 1630 *
005	17/22/90	1425		X	1506-W-MW7	4	ð.	x	×	X			lex Cr. collected at 1615k
006	17-494	1130		х	1506 - W - MW 8	8	<u> </u>	x	×	X		F	tex Cr Collected at 1525 * Also do MS/MSD tex Cr collected at 1547 *
007	13/24/95	1300		X	1506-W-MW9	6	Χ			*]	}	
೧೦೪	17/2/92	1510		X	1506 - W-MW10	4		x	×	×		1_	tex Cr. collected at 1510 *
009	17/24/98	135%		X	1506-W-MW11	4		×	×	×			tex Cr. collected at 1355*
010	17/24/8	15911		X	1506-W-MW/2	4		×	×	×		¥	lex. Cr. collected at 1540 &
011	17/2/40	19/1		X	1506-W-MW 13	4		X	×	×)	HexCr. collected at 1611 *
012	12/2/94	0855		X	1506-W-MW 14	4		X	X	X		1	lex Cr. collected at 1730*
013	1/2/1			X	1506-W-MW-S		\bigcap	X	X	To			lex to rolled All I to
014		1005		×	 	6	X			×		1	tex Cr. collected at 1737 &
ELINQUI	SHED E	IV ĮSIGI	<i>~</i>	72/	DATE/TIME RECEIVED BY (SIGNAT						GNATI		DATE/TIME RECEIVED BY (SIGNATURE)
TÉLINQÚI	SHED E	IY (SIGI	NATUR	E)	DATE/TIME RECEIVED BY (SIGNAT	URE)	RELI	NGUIS	HED	BY (SI	GNATU	URE)	DATE/TIME RECEIVED BY (SIGNATURE)
IELINQUI	SHED B				DATE/TIME RECEIVED FOR LABOR. (SIGNATURE) mal accompanies shipment copy to coordin	<u> </u>	<i>A</i> .	DATE/		-4	ARKS		olera 4°C

RECRA LABNET, a division of Recra Environmental, Inc. (*NYBA 7861)

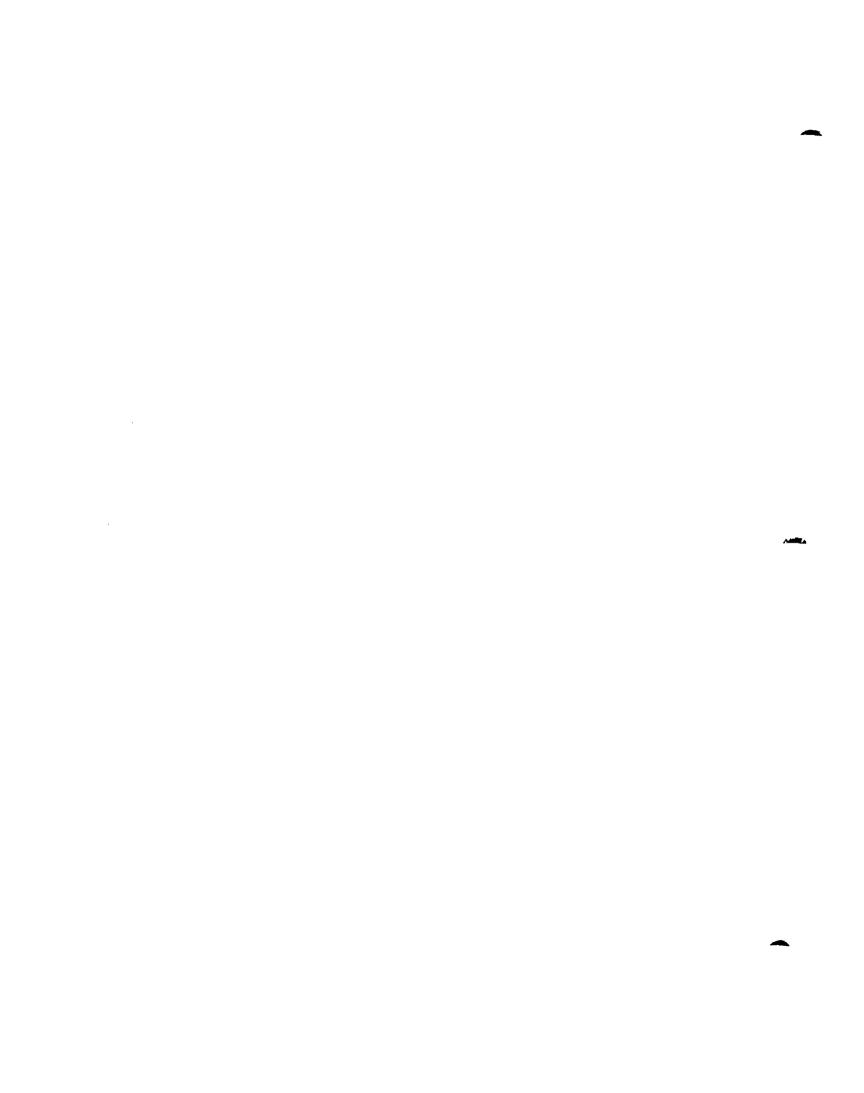
CHAIN OF CUSTODY RECORD

PROJECT	NO		- 97	·		95 Mt Read Blvd. New York		\$ /	/>	\$7	?\ <u>`</u>	/0	7	
SAMPLE				- 1 de	مر المحال	ince force	NO OF CON- TAINERS	1 /		/تني		15 14 T	/	REMARKS
STATION NO	DATE	TIME	COMP	GRAB	STA	TION LOCATION		13.9	Ž X	101	<i>4</i> 50	¥		
015	17/11/42	1115		Х	1506-u	- MW17	111	X			Χ			Hex Cr. collected at 155 th Hex Cr. collected at 17/0%
016	12/24/98	1030	L,	X .	1506-4	-muig	- 4		×	*	×			Hex Cr. reliected at 17/0%
017	727/98	1031		X	1506-1	w-mw19	4		X	X	X			Hex Cr. Collected at 1725 &
018	12/	ł		X	1506-1	u- mu 20	4		×	×	×			Hex Cr collected at 16454
019				X	1506-	u-mu21	4		×	X	×			Hex Cr collected at 1355 +
020	1744			×	1506 -	W- Trip	2		X					
021	12/23/96	1625		×	1506-1	N - Sump	4		×	×	X			Hax Cr. rulkital at 1625 * .
022	12/1/12	1635		X	1506-h	4-mw9	3.		X	X				
		<u> </u>				·						, - '		
								_ ,	1					
	-										_			
	₩								•			*	_	
ELINQUI				· -	DATE/TIME 2/98 1745	RECEIVED BY (SIGNATUR	RE)	RELIN	ouis	HED	3Y (SI	GNAT	ÚRE)	DATE TIME RECEIVED BY (SIGNATURE)
ELMOUI						RECEIVED BY (SIGNATUR	E	RELIÑ	QUIS	HE D.E	BY (SI	GNAT	URE)	DATE/TIME RECEIVED BY (SIGNATURE)
ELINQUIS	SHED B					RECEIVED FOR LABORATI	<u> </u>	2 23				IARKS		cooler@4°C
		``.	Distribut	on: Origin	al accompaniés						1			over (e) 4°C

PcB "

)L9 /510

000147



RECEIVED

APR 0 5 1999

Severn Trent Laboratories

10 Hazelwood Drive

Amherst, NY 14228

Tel: (716) 691-2600 Fax: (716) 691-7991

www.stl-inc.com



Committed To Your Success

April 1, 1999

Mr. Jeff Danzinger Day Engineering 2144 Brighton-Henrietta Town Line Road Rochester, NY 14623

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:

Ouote #: 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/ltb Enclosure

I.D. #A98-1261, 1289 #NY8A7861

This report contains <u>97</u> pages which are individually numbered.

Laboratory Locations:

- Monroe, CT
- · Pensacola, FI
- · University Park, IL
- Billerica, MA · Westfield, MA
- Edison, NJ
- · Whippany, NJ
- · Newburgh, NY
- Houston, TX ◆ Calchester VT

Service Center Locations:

- . Mt. Laurel, NJ
- Glen Cave, NY
- Dallas, TX

Sales Office Locations:

- · Cantonment, FL
- · New Orleans, LA
- · Waterford, Mi
- · Blairstown, NJ Schenectady, NY
- Cleveland, ÓH

a part of

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-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-16

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.



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: <u>SEVERN TRENT LABORATORIES INC.</u>

USEPA Defined Organic Data Qualifiers:

- U Indicates compound was analyzed for but not detected.
- 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	
Lalb Code: RECNY_ Case No.: 7861_	SAS No.:	SDG No.:150601
Version: ASP95		
NYSDEC Sample No. _S04 _S05 _S06 _S07 _S13 _S15 _S16 _S17 _S17D _S17S _T19 _T19D _T19D _T19S	Lab Sample ID AD804962 AD804963 AD804964 AD804965 AD804975 AD804976 AD804977 AD804978 AD804979 AD804980 AD804981 AD804983	
Were ICP interelement corrections app	lied ?	Yes/No YES
Were ICP background corrections appli If yes - were raw data generated application of background correc	before	Yes/No YES Yes/No NO_
Comments:		
I certify that this data package is is conditions of the contract, both tech other than the conditions detailed about in this hardcopy data package and in on floppy diskette has been authorized Manager's designee, as verified by the Signature:	nically and for comple love. Release of the d the computer-readable ed by the Laboratory Ma	teness, for ata contained data submitted nager or the
Date: 4/1/99	Title: Laboratory_	Manager
—	COVER PAGE - IN	10/95

MYCDEC	SAMPLE	NIO 4
NISDEC	SAMPLE	NO

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

_90.7

% Solids:

				_	TΠ
CAS No.	Analyte	Concentration	C	Q	М
7429-90-5	Aluminum		_		$\frac{1}{NR}$
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium		-		NR
7440-41-7	Beryllium		-	l ———	NR
7440-43-9	Cadmium		-]	NR
7440-70-2	Calcium		-		NR
7440-47-3	Chromium	157	-	*	Р
7440-48-4	Cobalt	 _	-	l -	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		-	1	NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		-		NR.
7440-66-6	Zinc	i 	-		NR
	Cyanide		-	\ 	NR
1333-82-0	HexaChrom		-		NR
	MOLYBDENU		-		NR
		}	1-	\ 	-
			1-		·
		-	-	 -	
			1-	· [-
] 			-		-
			-1		-
·	I	1	. 1	. ———	- 1

Color Before: Color After:	GRAY YELLOW	Clarity Befo Clarity Afte		Texture: Artifacts:	MEDIUM
	_ID:_A8126101-S' PLE_ID:_1506-S-				
		FORM I -	IN		

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO.
--------	--------	-----

					S05	
Lalo Name: RECRA LABNI	ET_INC	C	ontract: NY	97-209		
Lalo Code: RECNY_	Case No.:	78 61_	SAS No.:		SDG No.:	150601
Matrix (soil/water):	SOIL_	_		Lab Sampl	e ID: AD80	04963
Level (low/med):	LOW			Date Rece	ived: 04/	15/98
% Solids:	_84.4					

1				_	<u> </u>
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{NR}
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium —	- <u></u>	-		NR
7440-41-7	Beryllium		_		$ _{ m 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
			-		
			-		
			1-		-
			1-		
		-	1-		
		-	1-		
· ———	1 ,		۱	·	١

Before: After:	BROWN		Before: After:	Texture: Artifacts:	MEDIUM
B SAMPLE	ID:_A8126102-ST LE_ID:_1506-S-0				<u> </u>
		FOR	VIT - IN		

THODGANTO ANALYCES DATA CHEET

NYSDEC SAMPLE NO

THORGANIC	HIMPIDES	DAIN	SHEET		
				l S06	
				1 -00	

SDG No.: 150601

Matrix (soil/water): SOIL Lab Sample ID: AD804964 Level (low/med): Date Received: 04/15/98 LOW

% Solids: 85.1

7429-90-5 Aluminum 3210 7440-36-0 Antimony 1.2 7440-38-2 Arsenic 1.2 7440-39-3 Barium 28.1 B 7440-41-7 Beryllium 0.23 U 7440-70-2 Cadmium 0.12 U N 7440-47-3 Chromium 8.0 * 7440-48-4 Cobalt 2.8 B 7439-89-6 Iron 6940 * 7439-92-1 Lead 4.0 * 7439-95-4 Magnesium 17800 * 7439-97-6 Mercury 0.11 U 7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B				— т		— г
7440-36-0 Antimony 1.2 U 7440-38-2 Arsenic 1.2 B 7440-39-3 Barium 28.1 B E 7440-41-7 Beryllium 0.23 U N 7440-43-9 Cadmium 0.12 U N 7440-47-3 Chromium 49700 * 7440-48-4 Cobalt 2.8 B 7439-89-6 Copper 8.2 7439-92-1 Lead 4.0 7439-95-4 Magnesium 17800 7439-97-6 Mercury 0.11 U 7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-23-5 Sodium 1430 U 7440-28-0 Thallium 1.4 U 7440-66-6 Zinc 16.5 E 1333-82-0 HexaChrom E E	CAS No.	Analyte	Concentration	С	Q	M
7440-38-2 Arsenic 1.2 B B 7440-39-3 Barium 28.1 B E 7440-41-7 Beryllium 0.23 U 7440-43-9 Cadmium 0.12 U N 7440-47-3 Chromium 49700 * 7440-48-4 Cobalt 2.8 B * 7439-89-6 Copper 8.2 * 7439-92-1 Lead 4.0 * 7439-95-4 Magnesium 17800 * 7439-97-6 Mercury 0.11 U * 7440-02-0 Nickel 4.7 B * 7440-09-7 Potassium 840 B * 7782-49-2 Selenium 1.2 U * 7440-22-4 Silver 0.26 U U 7440-28-0 Thallium 1.4 U U 7440-66-6 Zinc 16.5 E Cyanide 16.5 E 1333-82-0 HexaChrom E E	7429-90-5	Aluminum	3210	-		$ \overline{P} $
7440-38-2 Arsenic 1.2 B 7440-39-3 Barium 28.1 B E 7440-41-7 Beryllium 0.23 U 7440-43-9 Cadmium 0.12 U N 7440-70-2 Calcium 49700 - 7440-47-3 Chromium 8.0 - * 7440-48-4 Cobalt 2.8 B - 7440-50-8 Copper 8.2 - - 7439-89-6 Iron 6940 - * 7439-95-4 Magnesium 17800 - * 7439-97-6 Mercury 0.11 U 7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-23-5 Sodium 1430 7440-28-0 Thallium 1.4 U 7440-66-6 Zinc 16.5 E Cyanide - - - 1333-82-0 HexaChrom -	7440-36-0	Antimony		ប៊] _P _
7440-41-7 Beryllium 0.23 U 7440-43-9 Cadmium 0.12 U N 7440-70-2 Calcium 49700	7440-38-2		1.2	В		P_
7440-41-7 Beryllium 0.23 U 7440-43-9 Cadmium 0.12 U N 7440-70-2 Calcium 49700	7440-39-3	Barium		В	E	_P _
7440-43-9 Cadmium 0.12 U N 7440-70-2 Calcium 49700 * 7440-47-3 Chromium 8.0 * 7440-48-4 Cobalt 2.8 B 7440-50-8 Copper 8.2 7439-89-6 Iron 6940 7439-92-1 Lead 4.0 7439-95-4 Magnesium 17800 7439-97-6 Mercury 0.11 7440-02-0 Nickel 4.7 7440-09-7 Potassium 840 7782-49-2 Selenium 1.2 7440-22-4 Silver 0.26 7440-28-0 Thallium 1.4 7440-62-2 Vanadium 8.0 7440-66-6 Zinc 16.5 Cyanide E 1333-82-0 HexaChrom	7440-41-7	Bervllium		ט		$ P^- $
7440-70-2 Calcium 49700 — * 7440-47-3 Chromium 8.0 — * 7440-48-4 Cobalt 2.8 B 7440-50-8 Copper 8.2 7439-89-6 Iron 6940 7439-95-4 Magnesium 17800 7439-95-4 Magnesium 17800 7439-97-6 Mercury 0.11 7440-02-0 Nickel 4.7 7440-09-7 Potassium 840 8 840 8 7782-49-2 Selenium 1.2 7440-23-5 Sodium 1430 7440-28-0 Thallium 1.4 7440-62-2 Vanadium 8.0 7440-66-6 Zinc 16.5 Cyanide E 1333-82-0 HexaChrom			0.12	ט	N	$ P^- $
7440-47-3 Chromium 8.0 * 7440-48-4 Cobalt 2.8 B 7440-50-8 Copper 8.2 * 7439-89-6 Iron 6940 * 7439-95-4 Magnesium 17800 * 7439-96-5 Manganese 271 * 7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-22-4 Silver 0.26 U 7440-23-5 Sodium 1430 * 7440-62-2 Vanadium 8.0 B 7440-66-6 Zinc 16.5 E Cyanide HexaChrom *						$ P^- $
7440-48-4 Cobalt 2.8 B 7440-50-8 Copper 8.2 7439-89-6 Iron 6940 7439-92-1 Lead 4.0 7439-95-4 Magnesium 17800 7439-96-5 Manganese 271 7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-22-4 Silver 0.26 U 7440-23-5 Sodium 1430 7440-28-0 Thallium 1.4 U 7440-66-6 Zinc 16.5 E Cyanide HexaChrom E				_	*	P-
7440-50-8 Copper 8.2 —				\overline{B}		P
7439-89-6	7440-50-8		8.2			$ P_{ }$
7439-95-4 Magnesium			6940	_		$ P^- $
7439-96-5 Manganese 271 7439-97-6 Mercury 0.11 U 7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-22-4 Silver 0.26 U 7440-23-5 Sodium 1430 7440-28-0 Thallium 1.4 U 7440-62-2 Vanadium 8.0 B 7440-66-6 Zinc 16.5 E 7440-66-6 HexaChrom	7439-92-1	Lead	4.0	-	*	$ P^- $
7439-96-5 Manganese 271	7439-95-4	Magnesium	17800	_		P
7439-97-6 Mercury 0.11 U 7440-02-0 Nickel 4.7 B 840 B 7782-49-2 Selenium 1.2 U 7440-23-5 Sodium 1430 7440-62-2 Vanadium 8.0 B 7440-66-6 Zinc 16.5 Cyanide HexaChrom	7439-96-5		271	-		$ P^- $
7440-02-0 Nickel 4.7 B 7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-22-4 Silver 0.26 U 7440-23-5 Sodium 1430 7440-28-0 Thallium 1.4 U 7440-62-2 Vanadium 8.0 B 7440-66-6 Zinc 16.5 Cyanide E 1333-82-0 HexaChrom	7439-97-6		0.11	ប៊		c⊽
7440-09-7 Potassium 840 B 7782-49-2 Selenium 1.2 U 7440-22-4 Silver 0.26 U 7440-23-5 Sodium 1430 7440-28-0 Thallium 1.4 U 7440-62-2 Vanadium 8.0 B 7440-66-6 Zinc 16.5 E Cyanide E 1333-82-0 HexaChrom	7440-02-0		4.7	В		P
7782-49-2 Selenium	7440-09-7		840	В		$ P^- $
7440-23-5 Sodium 1430	7782-49-2	Selenium	1.2	ט		$ P^- $
7440-28-0 Thallium 1.4 U 7440-62-2 Vanadium 8.0 B E 7440-66-6 Zinc 16.5 E E 1333-82-0 HexaChrom	7440-22-4	Silver	0.26	ַ		P_
7440-62-2 Vanadium 8.0 B E E E E E E E E E E E E E E E E E E	7440-23-5	Sodium	1430	ł		P
7440-66-6 Zinc	7440-28-0	Thallium	1.4	Ū		P
Cyanide	7440-62-2	Vanadium	8.0	В		P_
Cyanide	7440-66-6	Zinc	16.5		E	P
1333-82-0 HexaChrom				-		NR
	1333-82-0			-	_	NR
				-		P
				-		-
				-		\ <u> </u>
				-		
				-]	
				-		
				-		

Color Befo Color Afte		Clarity Before: Clarity After:		Texture: Artifacts:	MEDIUM
	MPLE_ID:_A8126103- SAMPLE ID: 1506-S				
		FORM I - I	N		

10/95

NYSDEC-ASP

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

				S07
Lab Name: RECRA LABNI	ET INC.	Contract:	NY97-209	
Lab Code: RECNY	Case No.: 78	861_ SAS No	· • •	SDG No.: 150601
Matrix (soil/water):	SOIL	_		E ID: AD804965
Level (low/med):	LOW		Date Recei	ived: 04/15/98
& Solids:	88.5			

					l
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				\overline{NR}
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium		-		NR
7440-41-7	Beryllium		-	l ——	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	<u> </u>	-		NR
7440-02-0	Nickel		1-	l ——	NR
7440-09-7	Potassium		_		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		1-		NR
7440-23-5	Sodium		1-		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
			-		1
			-		
			-	1	
			-		
,			-1-		
			- -	\	
	·	. 1	- ' —		·

	'		 ··
Color Before: Color After:	BROWN	Clarity Before:CLEAR	Texture: MEDIUM Artifacts:
Comments: LAB_SAMPLE CLIENT_SAM	_ID:_ A 8126104- PLE_ID:_1506-8	-STA00242	
		FORM T - TN	

NYSDEC	SAMPLE	NO 4
--------	--------	------

83.8

% Solids:

			П		I
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-	· · · · ·	\overline{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	-	*	Р
7440-48-4	Cobalt		-		$N\overline{R}$
7440-50-8	Copper		-		NR
7439-89-6	Iron		-		NR
7439-92-1	Lead		-		NR
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		-	l ———	NR
7439-97-6	Mercury_		-	l 	NR
7440-02-0	Nickel		-	J	NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		1-	l ———	NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		1-		NR
7440-66-6	Zinc		-	ļ 	NR
7110 00 0	Cyanide		1-		NR
1333-82-0	HexaChrom		-	l —	NR
1333 02 0_	MOLYBDENU		-	<u> </u>	NR
	HOBIDDENO		· -	I	1
	·		-		1-
	·		- -		·
	· [———	-	- -		·
	· 	\ <u> </u>	-		·
	· 		- -		· —
	.	l	.	l	. I

Color Befo	- 	Clarity Before: Clarity After:		Texture: Artifacts:	MEDIUM
	MPLE_ID:_A8128906- SAMPLE_ID:_1506-8		- <u>-</u>		
		FORM T - II			

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
MIDDEC		710

			S15
Lab Name: RECRA LABNI	ET INC.	Contract: NY97-	
Lab Code: RECNY	Case No.: 78		SDG No.: 150601
Matrix (soil/water):	SOIL		Sample ID: AD804976
Level (low/med):	LOW	Dat	e Received: 04/16/98
% Solids:	89.3		

,					
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	3600	-		$ \overline{P} $
7440-36-0	Antimony -	1.2	ប៊		P
7440-38-2	Arsenic	1.3	В		P_
7440-39-3	Barium	38.8	В	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	0		CV
7440-02-0	Nickel	6.1	В		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	В		P_
7440-28-0	Thallium	1.3	U		P_
7440-62-2	Vanadium_	9.7	В		P
7440-66-6	Zinc	23.3		E	P
	Cyanide				NR
1333-82-0	HexaChrom		1		NR
_	MOLYBDENU	0.47	Įΰ		P
					-
			1		-
			1		
	-		1-		
			-	\	1
			-		1
I ————	· ————	.	٠ ' —	· I ———	· ' —— '

Before: After:	BROWN	Clarity Clarity		Texture: Artifacts:	MEDIUM
SAMPLE_	ID:_A8128908-C LE_ID:_1506-S-			 	
 		FORI	M I - IN	 	

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
NIDDEC	SHIPLE	INC

				S16
Lab Name: RECRA_LABNI	ET_INC	Contract:	NY97-209	
Lab Code: RECNY	Case No.: 7	7861 SAS No	o.:	SDG No.: 150601
Matrix (soil/water):	SOIL		Lab Sampl	e ID: AD804977
Level (low/med):	LOM _		Date Rece	ived: 04/16/98
% Solids:	_89.4			

CAS No.	Analyte	Concentration	С	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_		-	l —	NR
7439-89-6	Iron		-		NR
7439-92-1	Lead		-		NR
7439-95-4	Magnesium		-	l ———	NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury		-		NR
7440-02-0	Nickel		-	l ———	NR
7440-02- 0	Potassium] 	-		NR
7782-49-2	Selenium		-	ļ ———	NR
7440-22-4	Silver		-		NR
7440-22-4	Sodium		-		NR
7440-23-3	Thallium			ļ <i>-</i>	NR
7440-28-0	Vanadium		-	<u> </u>	NR
7440-62-2	Zinc		-		NR
/440-66-6	Cyanide	-	 		NR
1333-82-0	HexaChrom	-	\ <u> </u>	-	NR
1333-82-0_			-	1 	NR NR
	MOLYBDENU		· —		INK
	· [———		-	\ <u> </u>	
	.		· -	l	[
	.		. _	·	
	.		. _	.	\
	.		. _	.	.
	.		. _		.

Color Befor Color After		Clarity E Clarity F		Texture: Artifacts:	MEDIUM
	LE_ID:_A8128909 AMPLE ID: 1506				_
		FORM	T - IN		

NVCDEC	SAMPLE	NIO
. איז כו ביו או	SAMEDO	INC

	S17
Lab Name: RECRA LABNET INC. Contract: NY97-209	
	SDG No.: 150601
Matrix (soil/water): SOIL Lab Sample	e ID: AD804978

Matrix (soil/water): SOIL_ Level (low/med): LOW % Solids:

_88.5

Date Received: 04/16/98

· 					
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				\overline{NR}
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium		-		NR
7440-41-7	Beryllium		_	l 	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		-	1	NR
_	MOLYBDENU		-	1	NR
			-		•
			-		1
			-		
			-	1	1-
			-1-	1	1-
I	. ' ————	· I —————	٠ ' —	. ' ———	· ' —

Before: After:	GRAYYELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUM
B SAMPLE_	ID:_A8128910-STA LE_ID:_1506-S-1				
 		FORM	1 - IN	 ·	

NYSDEC-ASP

1 INORGANIC ANALYSES DATA SHEET

NYSDEC S	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

	 			-	 ı
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	3420			$\left {P} \right $
7440-36-0	Antimony -	1.2	บิ		P_
7440-38-2	Arsenic	1.8	В		P
7440-39-3	Barium	35.8	в	E	P
7440-41-7	Beryllium	0.22	บ		P
7440-43-9	Cadmium		บ	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	ਹ		CV
7440-02-0	Nickel	6.3	В		P
7440-09-7	Potassium	758	В		P_
7782-49-2	Selenium	1.1	บ		P_
7440-22-4	Silver -	0.25	บ		P_
7440-23-5	Sodium	984	В		P_
7440-28-0	Thallium	1.3	บ		P_
7440-62-2	Vanadium_	7.8	В		_P _
7440-66-6	Zinc	19.3		E	` p
	Cyanide		-		NR
1333-82-0	HexaChrom		-		NR
_	MOLYBDENU	0.47	Ū		P
					-
			1-		- -
			-		1-
			-		-
					1
			-		-
	· ———	1	' —	· ——	- 1

	Before: After:	BROWN YELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUM
	S_SAMPLE_	ID:_A8128912-C LE ID: 1506-T-		 		
——————————————————————————————————————						

RECRA LABNET, a division of Recra Environmental, Inc.

CHAIN OF CUSTODY RECORD

PROJECT	NO	1500	SR-9	7	Rocheste	95Mt. Read Blud N.Y.	NO	P3/		*\	1/2			
SAMPLEF	S (SIG	NATUR	IE)			·	OF CON TAINERS				Jaly Jaly			REMARKS
STATION NO				GRAB	STA	TION LOCATION		1	/ 3	<u> </u>		/_/	/	/
001	4/14/98	1525		×_	1506 - 5	5 - 04	1	×	×					TB-14 (12-15.5')
002	4/14/48			×	1506 - 3	1 - 05	1	×	×					TB-13 (8- 12')
203	4/14/18	920		X	1506 - 3	- 06	١		X	Х				TB-18(12-14.2)
704	1/14/qB			X	1506 - 5	- 07	1	X	×					TB-9 (4-8')
										_				
			_											
				,			ļ							
						·	\	1/4	6					
_							4/19	/						
						- Hole						_		
											_		_	
					\mathcal{A}					_		\rightarrow	_	
					<u> </u>			-	_				_	
							<u> </u>							5.5
ELINQUI	SHED E	Y (SIG	NATUR) —	DATE/TIME	FOSCY Kacalo	1	1	,	HED E	3Y (SIG	NATU	JRE)	DATE/TIME RECEIVED BY ISIGNATURE
ECINQUI	SHED B	IV ISTG	NATUR	E)		RECEIVED BY (SIGNATU				HED 8	Y (SIG	NATL	IREI	DATE/TIME RECEIVED BY (SIGNATURE)
ELINQUI	SHED 8	Y ISIG	NATUR	EI		RECEIVED FOR LABORAT	ORY BY	0	ATE/	TIME	REMA			
		-	Distribut	ion: Origin	nal accompanies s	shipment copy to coordinate	tor field files		1		1	P	~~	ler AT 10°C

RECRA LABNET, a division of Recra Environmental, Inc.

Recrat ny 8A7861 CHAIN OF CUSTODY RECORD

PROJECT]		R-97		SITE NAME 95 Mt. Read Blvd. Rochester, NY	1	3/		/*	75/10/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/	\] S	
SAMPLER	-				·	NO OF CON	1 /	\sim	\\ \ta\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	12 / J	7)	/ REMARKS
NOUTAY	1/3/	1	77	<i>z</i>		TAINERS	1/6	7/2	\$/;		<i>"</i> /	
STATION				GRAB	STATION LOCATION		/ ^	/	7/5	7-7	-{-	<i></i>
001	4/13/ 198	1345		X	1506-5-08	1				X		TB-20 (B-10')
002	1/13/9B	1720		*	1506-5-09	1				X		T8-6(8-9.3')
003	4/11/9B	1420		×	1506-5-10	1				X	_	TB-8(12-15')
004	%14/9B	151B		×	1506-5-11	1				X		TB-14 (8-12')
005	4/15/9B	1253		X	1506-5-12	1				X		TB-11 (12-14.5')
006	1/15/18	1235		×	1506-5-13	2	X	X		X		TB-11 (0-4')
007	1/15/18	1055		×	1506-5- 44					X		TB-5(8-12')
	1/15/18			×	1506-5-15	l l		X	X			T8=10A(8-11.3')
909	1/17/98	1245		X	1506-5-16	1	Х	X		X		T8-11 (6-12')
010				×	1506-5-17	2	×	X		×		TB-11 (B-12') MS/MSD or MS/MD
110	4/2/98	ДИ		X	1506-T-18	a				X		TRIP BLANK
012	1/.5/98	1415		×	1506-5-19	1			X			TB-10A(B-11.3') MS/MD
												7-6
												3
ELINOUI	SHED	BYISIC	NATUB		DATE TIME RECEIVED BY ISIGNA	TURE)	RELIN	VQUIS	HED	BY (SIG	NATURE	DATE/TIME RECEIVED BY (SIGNATURE)
ble?	20			4/	4/98 1128							~
ELINOUIS	SHED	BY (SIG	NATUR	IE)	DATE TIME RECEIVED BY ISIGNAT	TUREI	RELIN	lauis	HED	BY (SIGI	SRUTAN	DATE/TIME RECEIVED BY (SIGNATURE)
ELINQUIS	HEO 6	Y ISIG		E)	DATE/TIME RECEIVED FOR LABOR	ATOMAY)			1/28	REMA	AKS	

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



APR 1 3 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 1 3 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.

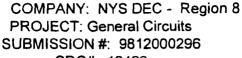
cc: Mr. John M. Ryan

NYS DEC

Bureau of Watershed Assessment & Research

50 Wolf Road, Room 392 Albany, NY 12233-3502

CASE NARRATIVE



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 $5.0~^{\circ}$ 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.

NYS DEC 9812000296 - page 2

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

CAS ASP/CLP BATCHING FORM / LOGIN SHEET

SUBMISSION 9812000296 DISKETTE REQUESTED: Y N X DATE DUE: 1/28/99	SDG #:12422	CASE No.:SH898	ватсн с	OMPLETE:yes		DATE REVI	SED:		
CLIENT REP: Michael Perry PROJECT: GENERAL CIRCUITS CHAIN OF CUSTODY: PRESENT/ABSENT: CAS JOB # CLIENT/EPA ID MATRIX REQUESTED PARAMETERS DATE SAMPLED RECEIVED (SOLIDS SOLIDS SAMPLE CONDIT 263989 B21616 MATER TAL Metals 12/22/98 12/22/98 263990 B21617 MATER 95-1 12/22/98 12/22/98 263991 B21618 MATER 95-1 12/22/98 12/22/98 263992 B21620 MATER TAL Metals 12/22/98 12/22/98 263993 B21608 MATER TAL Metals 12/22/98 12/22/98 263994 COOLER BLANK MATER 95-1 12/22/98 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER 95-1 12/22/98 MATER	SUBMISSION	9812000296				DATE DUE:	1/28/99		•
PROJECT: GENERAL CIRCUITS	CLIENT:	NYS DEC - Region 8	DATE: 1	2/28/98		PROTOCOL:	ASP-B		
PROJECT: GENERAL CIRCUITS			CUSTODY	SEAL: PRESENT/ABSENT:		SHIPPING	No.:		
SAMPLED RECEIVED (SOLIDS SOLIDS SAMPLE CONDIT 263989 B21616 WATER			CHAIN O	F CUSTODY: PRESENT/ABSENT:					
263999 B21617 WATER TAL Metals 12/22/98 12/22/98 263990 B21617 WATER 95-1 12/22/98 12/22/98 263991 B21618 WATER 95-1 12/22/98 12/22/98 263992 B21620 WATER TAL Metals 12/22/98 12/22/98 263993 B21608 WATER TAL Metals, 95-1, CR+6 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 263994 2	CAS JOB #	CLIENT/EPA ID	MATRIX	REQUESTED PARAMETERS	DATE	DATE	pН	ક	REMARKS
263990 B21617 WATER 95-1 12/22/98 12/22/98 263991 B21618 WATER 95-1 12/22/98 12/22/98 12/22/98 263992 B21620 WATER TAL Metals 12/22/98 12/22/98 263993 B21608 WATER TAL Metals, 95-1, CR+6 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 1					SAMPLED	RECEIVED	(SOLIDS	SOLIDS	SAMPLE CONDITION
263991 B21618 WATER 95-1 12/22/98 12/22/98 263992 B21620 WATER TAL Metals 12/22/98 12/22/98 263993 B21608 WATER TAL Metals, 95-1, CR+6 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 263994 26399	263989	B21616	WATER	TAL Metals	12/22/98	12/22/98			
263992 B21620 WATER TAL Metals 12/22/98 12/22/98 263993 B21608 WATER TAL Metals, 95-1, CR+6 12/22/98 12/22/98 263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98 12/22/98 263994 26	263990	B21617	WATER	95 - 1	12/22/98	12/22/98			
263993 B21608 WATER TAL Metals, 95-1, CR+6 12/22/98 12/22/98	263991	B21618	WATER	95 - 1	12/22/98	12/22/98			
263994 COOLER BLANK WATER 95-1 12/22/98 12/22/98	263992	B21620	WATER	TAL Metals	12/22/98	12/22/98			
	263993	B21608	WATER	TAL Metals, 95-1, CR+6	12/22/98	12/22/98			
	263994	COOLER BLANK	WATER	95-1	12/22/98	12/22/98			
		<u> </u>			<u> </u>				l
								<u> </u>	
				·					·
			ļ					' 	
				· · · · · · · · · · · · · · · · · · ·				 	
)					·		
	ļ								
	<u> </u>								
	 								ļ
		<u> </u>							}
		 							ļ
		 		·					
	<u> </u>	 		~					
				- 					
				~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
<u> </u>				·					<u> </u>

BATCHIN1.XLS

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

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

10/95

COL "1BIA ANALYTICAL SERVICES, INC. 1 ard St., Suite 250, Rochester, NY 14609-6925

(716) 288-5380 • FAX (716) 288-8475

CHAIN OF TUSTODY/LABORATORY ANALYSIS REQUEST FORM

(800) 695-7222

DATE	12/22/98	PAGE 1	05	1.
DATE	1977	PAGE 1	OF	ľ

																									<u> </u>
PROJECT NAME Genera	al Cir	cuits														QUE	EST	ED							
PROJECT MANAGER/CONT.	fact <i>Fr</i>	ank s	Sowers			_			_		Į.s.	<u></u>	S is		METALS, DISSOLVED (LIST BELOW)								PRES	SERVA	TION
COMPANY/ADDRESS NY					၂္က	1 95-1	95-2		95-3	OA's	Š	Ō	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		l _e	Ĩ			ĺ						
6274 East	Avon	- 4im	1 Rd.		CONTAINERS		ي ا		CB's	227	STAR'S LIST 8270 SVOA'S	ALS 10A's	CTE	با	OLVE	mium									} ;
TEL (716) 226 2461	6	_FAX (7	16,226-8	696	NIA	A's D\A's	0 A's	8	ES/P	STB	ST 8	MET/	&8 ¥□	\$ ₫	OW)	Chro									
SAMPLER'S SIGNATURE _	To	ant S	For			GC/MS VOA's	GC/MS SVOA's	OA's	5 2	I'S LI	TAL	□ s ¥	act C	LS. BEL	LS.								2.0	12	<u> </u>
SAMPLE I.D.	DATE	TIME	FOR OFFICE USE ONLY LAB 1.D.	SAMPLE	- \b		GC/N	180 190	PEST 180	STAR	STAR	泛	WAS Be	NET/	MET/	Hex							Hq.		Other
B21616 MW-16 12			17		+-					-		<u> </u>		×					-						-
B21617 MW-1712			263990	Water	2	X	├─	-	┼-		-		┼	 ^											-
				Vater	12	+ -	 	\vdash	├	 -	-		┢╌	-						-					-
B21618 MW-1812				Water	1.	1		-	-	_	-		- -	X							-				
B 21620 MW-2012	12248	10.30	263771	water	14	 	-		-				-	 		X	\dashv					-			-
B21608MW-812	12418	11,50		Water	+-	X	-	-	-				├	<u> </u>		4	\vdash								<u> </u>
	\longrightarrow		263994	<u> </u>	+	-		-					-											<u></u> _	
	}			<u> </u>	-	-	-		-				-												
					╀	-	↓	<u> </u>	├	 		_		<u> </u>											
					↓_	 		_	ļ	_															<u> </u>
								-1170						اـــا											L
RELINQUISHED BY:			RECEIVED BY:	į	hr.				l	POH1 I Routine	REQUII Report	HEME	NIS		INVOI	CE INF	ORMAT	IION:				_	RECEIF		
Signature Frank Sower	<u> </u>	Signature	Jani Janso	 -	andard (1				2.		Rep. w/	CASE		P.O. #	:					Shippi	ng Via: _	Cl	un	<u>み</u> _	
Printed Name N Y 5 D EC	{	Printed Nam	C.A.S.	<i>/</i>	ovide Vei		-		3.	EPA Lev	vel tii			Bill To:						Shipph	ng #: _ rature: _				—
Date/Time 12/22/98 1210		Pirm 13	137 38 191	108 1	ovide FA					Validata N.J. Red	bie Paci duced	age		_						Tempe	rature: _	<u>ی</u>	· <i>O</i>		
RELINQUISHED BY:			RECEIVED BY:	Reque	sled Rep	ort Date		:	1		ibles Lev VCLP De		les							Submis	ssion No):	J -	29	<u>6</u>
Signature	(;	Signal ure	- Hastinas	<u> </u>							citic QC														
Printed Name	·	Primed Nagar	Flastings	SPE	CIAL	INSTR	UCTIO	ONS/C	OMM	ENTS	:														
Figure		5/2/2x	198 1208	MET	ALS			_															_		
Date Time RELINQUISHED BY:	\dashv		RECEIVED BY:	ORC	SANIC	s: 🗆	TCL		PL [] AE (Only	□ Br	N Only		Specia	ıl List									
	\.																				_				_
Signature Printed Name	- 1	Signature Printed Name														_									— I
Firm		Firm																							
Date/Time	I-	Date/Time																							

Columbia Analytical Services Inc. Cooler Receipt And Preservation Check Form

Project/Client_NYS	DEC				Submiss	ion Number_	12-29	26
Cooler received on <u>/2</u>		opened o	n 12/2	198	_by	M	<u> </u>	_
Is the temperate If No, Explain Date/Time	where? & date correct apers properly rrive in good labels completed bels and tags a stilles used for schecked for ottles original of cooler(s) we within 4 ± 2° Below Temperatures Temperatures	t? filled out condition te (i.e. an agree with the tests absence te? CAupon receive?	ut (ink, sign (unbroke alysis, prohocustody indicated of air bub S/A CA capt:	en)? eservation papers papers bbles, and S/K C S-0 es O O O O O O O O O O O O O	on, etc)? ? ad noted if AS/S CA Yes No Temp Blan	Yes No No No No No No No No No No	NO NO NO NO NO NO NO Yes \square	Yes D No D
		YES	NO	Sampl	e I.D.	Reagent	Vol. A	dded
pН	Reagent							
12	NaOH	 	 -	 				
2	HNO ₃	V		 			- 	
2	H₂SO₄							
5-9*	P/PCBs							
	(608 only)						\ ·	1
(Tes	ed at lab as listed I, use NaOH and/ Vial pH Verification of after Analysis lowing Samples thibited pH > 2	on						
CLIENT NOTIFICATION								

4: 1 group | ga _ docum | sup | discrep. doc.

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name:	CAS/RC	CH			Contract:	NYSDEC	_	
Lab Code:	10145		Case No.:	9812-296	SAS No	.: s	DG No.: 12422	
Matrix: (soil/	vater)	WATE	<u>R</u>		Lat	Sample ID:	MET BLK	_
Sample wt/vo	oł:	5.0	(g/ml)	ML	Lat	File ID:	A4204.D	-
Level: (low/n	ned)	LOW			Dat	le Received:	12/22/98	-
% Moisture: ı	not dec.				Da	te Analyzed:	12/24/98	-
GC Column:	RTX50	02. ID:	<u>0.53</u> (n	nm)	Dile	ution Factor.	1.0	-
Soil Extract \	/olume:		(uL)		So	il Aliquot Volu	ıme:	_ (uL

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	<u>1</u> 0	U
10061-01-5_	cis-1,3-Dichloropropene	10	U_
10061-02-6	trans-1,3-Dichloropropene	10	υ
79-00-5	1,1,2-Trichloroethane	10	_ U
124-48-1	Dibromochloromethane	10	Ū
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.	Ū
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachioroethane	10	U
108383& 106423	(m+p) Xylene	10	U_

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	CAS/RC	OCH			Contract	NYSDE	EC	VBLK	.01
Lab Code:	10145	Cas	e No.: <u>981</u>	2-296	SAS	lo.:	SD	G No.: 124	22
Matrix: (soil/	water)	WATER			L	ab Sampl	e ID: N	MET BLK	
Sample wt/v	ol:	5.0	(g/ml) ML		_ L	ab File ID	: <u>/</u>	\4204.D	
Level: (low/	med)	LOW_			0	ate Recei	ived: 1	2/22/98	
% Moisture:	not dec.				D	ate Analy	zed: j	2/24/98	
GC Column:	RTX50	02. ID: 0.5	3 (mm)		D	ilution Fa	ctor: 1	1.0	
Soil Extract	Volume:		_ (uL)		S	oupilA lio	t Volun	ne:	(uL)
Number TIC	s found:	0			NCENTRA	ATION UN			
CAS NO.	}	СОМРОИ	ND			RT	ES	r. conc.	Q

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Soil Extract Volume: _____ (uL)

EPA SAMPLE NO.

VBLK01MS

Lab Name:	CAS/RO	DCH		Contract:	NYSDEC	. L
Lab Code:	10145	Case No.: 981	12-296	SAS No	.: s	DG No.: 12422
Matrix: (soil/	water)	WATER		Lat	Sample ID:	BLK SPK
Sample wt/v	ol:	5.0 (g/ml) ML	<u>L</u>	Lat	File ID:	A4206.D
Level: (low/	med)	LOW		Dat	te Received:	12/22/98
% Moisture:	not dec.			Dat	te Analyzed:	12/24/98
GC Column:	RTX5	02. ID: <u>0.53</u> (mm))	Dile	ution Factor:	1.0

CONCENTRATION UNITS:

Soil Aliquot Volume: _____ (uL)

	CONCENTRATION UNITS:						
CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L		Q		
74-87-3	Chloromethane			10	υ		
75-01-4	Vinyl chloride			10	U		
75-00-3	Chloroethane			10	C		
74-83-9	Bromomethane			10	U		
67-64-1	Acetone			10	U		
75-35-4	1,1-Dichloroeth	ene		49			
75-09-2	Methylene chlo	ride		10	U		
75-15-0	Carbon disulfid	e		10	U		
75-34-3	1,1-Dichloroeth	ane		10	U		
78-93-3	2-Butanone			10	U		
540-59-0	1,2-Dichloroeth	ene (total)		10	U		
67-66-3	Chloroform			10	U		
107-06-2	1,2-Dichloroeth	ane		10	U		
71-55-6	1,1,1-Trichloroe	ethane		10	<u> </u>		
56-23-5	Carbon tetrach	lorid <u>e</u>		10	U		
71-43-2	Benzene			49			
79-01-6	Trichloroethene	9		47			
78-87-5	1,2-Dichloropro			10	<u> </u>		
75-27-4	Bromodichloro	methan <u>e</u>		10	U		
10061-01-5	cis-1,3-Dichlore	opropene		10	Ū		
10061-02-6	trans-1,3-Dichle			10	U		
79-00-5	1,1,2-Trichloro			10	<u> </u>		
124-48-1	Dibromochloro	methane		10	U		
75-25-2	Bromoform			10	<u> </u>		
108-10-1	4-Methyl-2-pen	tanone		10	U		
108-88-3	Toluene			_50			
591-78 - 6	2-Hexanone			10	U		
127-1 <u>8</u> -4	Tetrachloroeth	ene		10	U		
108-90-7	Chlorobenzene	-		50			
100-41-4	Ethylbenzene			10	U		
1330-20-7	o-Xylene			10	υ		
100-42-5	Styrene			10	U		
108-88-3	1,1,2,2-Tetrach	nloroethane		10	כ		
108383& 106423				10	د		

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	CAS/RC	СН			Contract:	NYSDEC	2	VBLK01	MS
Lab Code:	10145	Cas	se No.:	9812-296	SAS No).:	SD	G No.: 124	22
Matrix: (soil/	water)	WATER	-		Lai	b Sample	ID: E	BLK SPK_	
Sample wt/ve	ol:	5.0	(g/ml)	ML	Lai	b File ID:	<u> </u>	\4206.D	
Level: (low/r	med)	LOW	<u>-</u>		Da	te Receiv	ed: 1	2/22/98	
% Moisture:	not dec.				Da	te Analyz	ed: 1	2/24/98	
GC Column:	RTX50	02. ID: 0.5	3_ (n	nm)	Dil	ution Fact	tor: 1	1.0	
Soil Extract \	Volume:		_ (uL)		So	il Aliquot	Volun	ne:	(uL)
				CO	NCENTRA	TION UNI	TS:		
Number TIC:	s found:	0	_	(ug/	L or ug/Kg)	UG/	L_		
CAS NO.		COMPOL	IND			RT	ES1	r. CONC.	Q

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

				B21617
Lab Name:	CAS/ROCH	Contract:	NYSDEC	

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: 18 as mulisky

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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	
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	Ū
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	Ū
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	Ü
75-25-2	Bromoform	250	U
108-10-1	4-Methyl-2-pentanone	250	כ
108-88-3	Toluene	250	ح
591-78-6	2-Hexanone	250	٦
127-18-4	Tetrachloroethene	3700	
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	C
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		250	Ū

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	CAS/RC	ОСН		_	Contract:	NYSDE	2	В	2161	7
Lab Code:	10145	C	ase No.: 981	12-296	SAS No	.:	SC	OG No.:	1242	2
Matrix: (soil/	water)	WATER			Lai	Sample	ID:	263990	25	
Sample wt/v	ot:	5.0	(g/ml) <u>M</u> l	L	Lai	File ID:		A4215.D)	
Level: (low/	med)	LOW			Da	te Receiv	ed:	12/22/98		
% Moisture:	not dec.				Da	te Analyz	ed:	12/24/98		_
GC Column:	RTX5	02. ID: 0).53 (mm)		Dif	ution Fac	tor:	18° 25	TH.	1/13/55
Soil Extract	Volume:		(uL)		So	il Aliquot	Volu	me:		_ (uL)
				CON	ICENTRAT	TION UNI	TS:			
Number TIC	s found:	0		(ug/l	or ug/Kg)	UG/	L _			•
CAS NO.		СОМРО	DUND			RT	ES	T. CONO	3.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21618

Lab Name:	CAS/RC	OCH		Contract:	NYSDEC	
Lab Code:	10145	Case N	o.: <u>9812-296</u>	SAS No	o.: s	DG No.: 12422
Matrix: (soil/	water)	WATER		Lal	o Sample ID:	263991 1.0
Sample wt/vo	ol:	<u>5.0</u> (g/	mi) ML	Lai	b File ID:	A4216.D
Level: (low/r	ned)	LOW		Da	te Received:	12/22/98
% Moisture:	not dec.		_	Da	te Analyzed:	12/24/98
GC Column:	RTX5	02. ID: 0.53	(mm)	Đil	ution Factor:	1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	10	Ū
75-01-4	Vinyl chloride	30	
75-00-3	Chloroethane	10	U
74-83-9	Bromomethane	10	U
67-64-1	Acetone	10	Ū
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	Ū
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	C
1330-20-7	o-Xylene	10_	C
100-42-5	Styrene	10	U
108-88-3	1,1,2,2-Tetrachloroethane	10	C
108383& 106423	(m+p) Xylene	10	U

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	CAS/RO	OCH			Contract:	NYSDE	<u>c</u>	DZ 10	
Lab Code:	10145	Ca	se No.:	9812-296	SASN	o.:	_ sı	DG No.: 124	22
Matrix: (soil/	water)	WATER	_		La	b Sample	ID:	263991 1.0	
Sample wt/v	ol:	5.0	(g/ml)	ML	La	b File ID:		A4216.D	
Level: (low/	med)	LOW	_		Da	ate Receiv	ed:	12/22/98	
% Moisture:	not dec.				Da	ate Analyz	ed:	12/24/98	
GC Column:	RTX5	02. ID: 0.	<u>53</u> (n	nm)	Di	lution Fac	tor:	1.0	
Soil Extract	Volume:		_ (uL)		So	oil Aliquot	Volu	ıme:	(uL)
				COI	NCENTRA	TION UNI	TS:		
Number TIC	s found:	0	-	(ug/	L or ug/Kg) <u>UG</u>	<u>L</u>		
CAS NO.		COMPOL	JND			RT	ES	ST. CONC.	Q

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21608

Lab Name:	CAS/RC	DCH			Contract:	NYSDEC			
Lab Code:	10145	Cas	se No.:	9812-296	SAS No	.:	SDG No.:	12422	_
Matrix: (soil/	water)	WATER			Lat	Sample II	D: <u>263993</u>	5.0	
Sample wt/v	ol:	5.0	(g/ml)	ML	_ Lat	File ID:	A4210.l	D	
Level: (low/r	med)	LOW	_		Dat	te Receive	d: <u>12/22/9</u>	8	
% Moisture:	not dec.				Dat	te Analyzed	i: <u>12/24/</u> 9	8	
GC Column:	RTX5	02. ID: 0.5	<u>3</u> (n	nm)	Dili	ution Facto	r: <u>1.87 5</u>	7m 1/13/99	
Soil Extract \	Volume:		_ (uL)		Soi	il Aliquot Vo	olume:		(uL)

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> </u>
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	Ū
75-15-0	Carbon disulfide	50	U
75-34-3	1,1-Dichloroethane	50	U_
78-93-3	2-Butanone	50	Ū
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	<u>5</u> 0	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	Ú
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	C
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	1300	Ε
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.

Lab Name:	CAS/RO	СН			Contract:	NYSDE	3	B2	21608	
Lab Code:	10145	Cas	se No.:	9812-296	SAS N	0.:	 _ SD	OG No.: 1	12422	
Matrix: (soil/w	rater)	WATER	-		La	ıb Sample	ID:	263993 5	.0	
Sample wt/vo	ıl:	5.0	(g/ml)	ML	La	b File ID:	<u>.</u>	A4210.D		
Level: (low/m	ned)	LOW	_		Da	ate Receiv	ed:	12/22/98		
% Moisture: n	ot dec.				Da	ate Analyz	ed:	12/24/98		
GC Column:	RTX50	<u>2.</u> ID: <u>0.</u>	<u>53</u> (m	nm)	Di	lution Fac	tor:	18 5	Dr 1/13/	199
Soil Extract V	olume: .		_ (uL)		So	oil Aliquot	Volu	me:		(uL)
				CO	NCENTRA	TION UNI	TS:			
Number TICs	found:	0		(ug/	L or ug/Kg) <u>UG/</u>	<u>L</u>			
CAS NO		COMPO	IND			ŖΤ	FS	T CONC		Ω.

1A EF VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

. NVCDEC	B21608DL
----------	----------

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)	Lab Mame.	CASIRC	<u> </u>		Contract. NYSDEC	
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	Lab Code:	10145	Cas	se No.: 9812-296	SAS No.:	SDG No.: 12422
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	Matrix: (soil/	water)	WATER	_	Lab Sample IC	D: <u>263993 10</u>
% Moisture: not dec. Date Analyzed: 12/24/98 GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 10.0	Sample wt/v	ol:	5.0	(g/ml) ML	Lab File ID:	A4211.D
GC Column: RTX502. ID: 0.53 (mm) Dilution Factor: 10.0	Level: (low/	med)	LOW	_	Date Received	1: 12/22/98
	% Moisture:	not dec.			Date Analyzed	i: <u>12/24/98</u>
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)	GC Column:	RTX50	02. ID: 0.	53_ (mm)	Dilution Factor	r: <u>10.0</u>
	Soil Extract	Volume:		_ (uL)	Soil Aliquot Vo	olume: (uL)

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane	100	Ū
75-01-4	Vinyl chloride	100	
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	Ū
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	C
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	C
127-18-4	Tetrachloroethene	1400	۵
108-90-7	Chlorobenzene	100	٦
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	Ū
108383& 106423		100	Ū

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO	EPA	SA	MP	LE	NO.
---------------	-----	----	----	----	-----

Lab Name:	CAS/RC	СН		Contract	: NYSD	EC	B21608	DL
Lab Code:	10145	Ca	se No.: 9812-29	- <u>6</u> SAS!	No.:		OG No.: 1242	22
Matrix: (soil/	water)	WATER	_		ab Samp	le ID:	263993 10	
Sample wt/v	ol:	5.0	(g/ml) ML		ab File II) :	A4211.D	
Level: (low/s	med)	LOW	_	r	Date Rece	eived:	12/22/98	
% Moisture:	not dec.			r	Date Anal	yzed:	12/24/98	
GC Column:	RTX50	02. ID: <u>0.</u>	53 (mm)	ī	Dilution F	actor:	10.0	
Soil Extract	Volume:		(uL)	9	Soil Aliqu	ot Volu	me:	(uL)
Number TIC	s found:	0		ONCENTR g/L or ug/K				
CAS NO.		COMPO	JND		RT	ES	T. CONC.	Q

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21608DLMS

Lab Name:	CAS/RC	<u> </u>		Contract: NYSDEC	_	
Lab Code:	10145	Cas	se No.: <u>9812-296</u>	SAS No.: S	DG No.: 12422	
Matrix: (soil/	water)	WATER		Lab Sample ID:	263993 10 MS	
Sample wt/v	ol:	5.0	(g/ml) ML	Lab File ID:	A4212.D	
Level: (low/i	med)	LOW	_	Date Received:	12/22/98	
% Moisture:	not dec.			Date Analyzed:	12/24/98	,
GC Column:	RTX5	02. ID: 0.5	53 (mm)	Dilution Factor:	10.0	•
Soil Extract	Volume:		(uL)	Soil Aliquot Volu	ume:	(uL

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	υ
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	υ
75-27-4	Bromodichloromethane	100	υ
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	υ
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	Ų
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	J

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	CAS/RC	OCH		Contract	: NYSDE	<u>c</u>	BZTOUODL	.141.5
Lab Code:	10145	Cas	se No.: <u>9812-2</u>	296 SAS 1	No.:	_ sc	OG No.: 1242	2
Matrix: (soil/	water)	WATER		L	ab Sample.	: ID:	263993 10 MS	<u>.</u>
Sample wt/ve	ol:	5.0	(g/ml) ML	\	ab File ID:		A4212.D	
Level: (low/r	med)	LOW	_	כ	Date Receiv	ved:	12/22/98	_
% Moisture:	not dec.			מ	Date Analyz	zed:	12/24/98	
GC Column:	RTX5	02. ID: <u>0.5</u>	53_ (mm)	C	Dilution Fac	tor:	10.0	_
Soil Extract \	Volume:		_ (uL)	S	Soil Aliquot	Volu	me:	(uL)
				CONCENTR				
Number TIC:	s found:	0	_	(ug/L or ug/K	g) <u>uu</u>	<u></u>		
CAS NO		COMPOU	IND		RT	ES	T. CONC.	Q

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B21608DLMSD

Lab Name: C	CAS/RC	DCH			Contract:	NYSDEC	_	
Lab Code: 1	10145	Cas	e No.:	9812-296	SAS No	o.: s	DG No.: 12422	
Matrix: (soil/wa	ater)	WATER			Lai	b Sample ID:	263993 10 MS	
Sample wt/vol	:	5.0	(g/ml)	ML	Lal	b File ID:	A4213.D	
Level: (low/me	ed)	LOW			Da	te Received:	12/22/98	
% Moisture: no	ot dec.				Da	te Analyzed:	12/24/98	

CONCENTRATION UNITS:

GC Column: RTX502. ID: 0.53 (mm)

Soil Extract Volume: _____ (uL)

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
		` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `		

Dilution Factor: 10.0

Soil Aliquot Volume: _____ (uL)

5 7 (5 115.	(ugre or ug/rig)		_
74-87-3	Chloromethane	100	Ū
75-01-4	Vinyl chloride	100	U
75-00-3	Chloroethane	100	U
74-83-9	Bromomethane	100	Ū
67-64-1	Acetone	100	Ü
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	υ
71-55-6	1,1,1-Trichloroethane	100	Ū
56-23-5	Carbon tetrachloride	100	U
71-43-2	Benzene	510	D
79-01-6	Trichloroethene	930	٥
78-87-5	1,2-Dichloropropane	100	د
75-27-4	Bromodichloromethane	100	ט
10061-01-5	cis-1,3-Dichloropropene	100	כ
10061-02-6	trans-1,3-Dichloropropene	100	٦
79-00-5	1,1,2-Trichloroethane	100	כ
124-48-1	Dibromochloromethane	100	כ
75-25-2	Bromoform	100	U
108-10-1	4-Methyl-2-pentanone	100	د
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 EPA SAMPLE NO. TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:	CAS/RO	ОСН		Contract	: NYSDE	EC	B21608D	LMSD
Lab Code:	10145	Cas	e No.: 9812	-296 SAS I	No.:	SDO	G No.: 124	22
Matrix: (soil/	water)	WATER		ι	ab Sampi	e ID: 2	63993 10 N	AS
Sample wt/v	ol:	5.0	(g/ml) ML		ab File ID	: <u>A</u>	4213.D	
Level: (low/	med)	LOW_			oate Recei	ved: <u>1</u>	2/22/98	
% Moisture:	not dec.			5	Date Analy	zed: <u>1</u>	2/24/98	
GC Column:	RTX5	02. ID: 0.5	3 (mm)	ſ	Dilution Fa	ctor: 1	0.0	
Soil Extract	Volume:		_ (uL)	5	Soil Aliquo	t Volum	ne:	(uL)
Number TIC	s found:	0		CONCENTR (ug/L or ug/K				
CAS NO.		COMPOU	ND		RT	EST	CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COOLER BLK

Lab Name:	CASIRO	<u> </u>		Contract: NYSDEC	_	
Lab Code:	10145	Cas	se No.: 9812-296	SAS No.: S	DG No.: 12422	
Matrix: (soil/	water)	WATER	_	Lab Sample ID:	263994 1.0	
Sample wt/v	ol:	5.0	(g/ml) ML	_ Lab File ID:	A4217.D	
Level: (low/i	med)	LOW	_	Date Received:	12/22/98	
% Moisture:	not dec.		_	Date Analyzed:	12/24/98	
GC Column:	RTX5	02. ID: 0.5	53 (mm)	Dilution Factor:	1.0	
Soil Extract	Volume:		(ul.)	Soil Aliquot Vol	nwe.	(uL

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	C
67-64-1	Acetone		10	C
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	Ų
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	כ
100-41-4	Ethylbenzene		10	U
1330-20-7	o-Xylene		10	U
100-42-5	Styrene		10	Ū
108-88-3	1,1,2,2-Tetrachloroethane		10	Ū
108383& 106423			10	Ū

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA	SAM	PLE	NO.

Lab Name:	CAS/RC	CH			Contract:	NYSDE	<u> </u>	COOLER	BLK
Lab Code:	10145	Cas	e No.:	9812-296	SAS No	o.:	_ s	DG No.: 1242	22
Matrix: (soil/	water)	WATER			La	b Sample	ID:	263994 1.0	
Sample wt/v	ol:	5.0	(g/ml)	ML	La	b File ID:		A4217.D	
Level: (low/	med)	LOW			Da	ate Receiv	ed:	12/22/98	
% Moisture:	not dec.				Da	ate Analyz	ed:	12/24/98	
GC Column:	RTX5	02. ID: 0.5	i3 (n	n m)	Di	lution Fac	tor:	1.0	
Soil Extract	Volume:		_ (uL)		Sc	oil Aliquot	Volu	me:	(uL)
				CO	NCENTRA	TION UNI	TS:		
Number TiC	s found:	0	-	(ug/	'L or ug/Kg) UG/	L		
CAS NO		COMPOL	IND			RT	FS	ST CONC	0

	312000296		SDG No.: 12422
Code:	Case No.: SH8	98	SAS No.:
code.			
No.: NYS	ASP 12/91		
	Sample No.	Lab Sample ID.	
	B21616	263989	
	B21620	263992	
	B21608	263993	
	B21608D	263993D	
	B21608S	263993s	
	<u>B21608S</u>	263993SF	
re ICP into	erelement corrections applied?		Yes/No YES
	kground corrections applied?		Yes/No YES
	were raw data generated before		165/100
	tion of background corrections?		Yes/No NO
mments:	see the attack	chod ease p	orralize
certify tha	at this data package is in complia	nce with the terms a	nd conditions of the
- -	th technically and for completenes		
ntract, bot	ase of the data contained in this	hardcopy data packag	e and in the
		kette has been autho	rized by the Laboratory
ove. Relea	dable data submitted on floppy dis		
ove. Relea	dable data submitted on floppy dis he Manager's designee, as verified		gnature.
ove. Relea			gnature.
ove. Releamputer-read		by the following si	gnature.

COVER PAGE - IN NYS ASP 12/91

Title: Laboratory Mus

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE	NO.	_	
B21616			

Contract: 9812000296

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

Lab Code:

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	167	В	1	P
7440-36-0	Antimony	3.0	ט	1	P
7440-38-2	Arsenic	4.0	ซ	N	P
7440-39-3	Barium	102	В	\	P
7440-41-7	Beryllium	2.8	В	j	P
7440-43-9	Cadmium	3.6	В	<u> </u>	P
7440-70-2	Calcium	188000		<u> </u>	P
7440-47-3	Chromium	1.4	В	<u> </u>	P
7440-48-4	Cobalt	4.3	U	<u> </u>	P
7440-50-8	Copper	5.1	ט	I	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		1	P
7439-97-6	Mercury	0.10	ט	T	CV
7440-02-0	Nickel	2.5	В	}	P
7440-09-7	Potassium	5260	<u> </u>	} <u> </u>	P
7782-49-2	Selenium	1.5	บ	WN	F
7440-22-4	Silver	2.3	В	1	P
7440-23-5	Sodium	510000		1	P
7440-28-0	Thallium	28.4		1	P
7440-62-2	Vanadium	3.4	ט	И	P
7440-66-6	Zinc	30.1			P

Color Before: COLORLESS

Clarity Before: CLOUDY

Texture

Color After: YELLOW

Clarity After:

CLEAR

Artifacts:

Comments:

-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO. B21620

Contract: 9812000296

Lab Code:

Level (low/med): LOW

Case No.: SH898

SAS No.:

SDG NO.: 12422

Matrix (soil/water): WATER

Lab Sample ID: 263992

Date Received: 12/22/98

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): µG/L

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	3260			P
7440-36-0	Antimony	3.0	ש		P
7440-38-2	Arsenic	4.0	ט	N	P
7440-39-3	Barium	121	В	1	P
7440-41-7	Beryllium	2.0	В	1	p
7440-43-9	Cadmium	2.2	В		P
7440-70-2	Calcium	169000			P
7440-47-3	Chromium	14.4			P
7440-48-4	Cobalt	4.3	ש		P
7440-50-8	Copper	28.0			P
7439-89-6	Iron	11200		1	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	ט		cv
7440-02-0	Nickel	9.0	В		P
7440-09-7	Potassium	7700			P
7782-49-2	Selenium	1.5	ט	WN	F
7440-22-4	Silver	3.1	В		P
7440-23-5	Sodium	108000			P
7440-28-0	Thallium	19.2			P
7440-62-2	Vanadium	8.6	В	N	P
7440-66-6	Zinc	37.2			P

Color Before: GREY

Clarity Before:

CLOUDY

Texture

Color After:

COLORLESS

Clarity After:

CLEAR

Artifacts:

Comments:

-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	С	Q	M
7429-90-5	Aluminum	721			P
7440-36-0	Antimony	780		{	P
7440-38-2	Arsenic	24.7		И	P
7440-39-3	Barium	26.9	В	<u> </u>	P
7440-41-7	Beryllium	0.35	В	! <u> </u>	P
7440-43-9	Cadmium	0.88	ט	1	P
7440-70-2	Calcium	373000		1	P
7440-47-3	Chromium	52300		_	P
7440-48-4	Cobalt	4.3	В	<u> </u>	P
7440-50-8	Copper	10.1	В		P
7439~89~6	Iron	1710			P
7439-92-1	Lead	1.6	ַס	<u> </u>	₽
7439-95-4	Magnesium	151000			P
7439-96-5	Manganese	123			P
7439-97-6	Mercury	0.10	ט		cv
7440-02-0	Nickel	16.3	В		P
7440-09-7	Potassium	10500			P
7782-49-2	Selenium	1.6	В	MN	F
7440-22-4	Silver	3.7	В		P
7440-23-5	Sodium	64200			P
7440-28-0	Thallium	111			P
7440-62-2	Vanadium	3.4	ט	И	P
7440-66-6	Zinc	9.3	В		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
Date Received: 12/22/98

Order #:263993

Submission #:9812000296

Sample Matrix:WATER

ANALYTE	PQL _	RESULT	UNITS	DATE ANALYZED	ANALYTICAL DILUTION
HEXAVALENT CHROMIUM	0.0100	42.0	MG/L	12/23/98	200.0

		_
		_
		_

APR 1 9 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/ltb Enclosure

I.D. #A98-4049, 4067, 4076, 4146

#NY8A7861

This report contains [22] 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 CONTRACTOR SOLVEN



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.



"Exertify 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

This data report shall not be reproduced, except in full, without the written authorization of Severn Trent Laboratories.

Day Environmental, Inc. (716) 292-1090

CHAIN OF CUSTODY RECORD

						- ' '					-			 ,	
PROJECT					SITE NA	ME (75 Mt Rend Blvd.		9	/₹	W/01	/ دم	u/.		/ /
	1506	R-9	7		Roch	este	75 Mt Read Blvd. r, New York]	18/	No.	<i>3</i> /37	y / \	3/4	/	/ /
SAMPLER	RS (SIG	NAJUI	RE)				,	NO OF	[",	/ ~ ~	No.	7 $\overset{5}{\sim}$	/ %/		/ /
1	//			22	_			CON	I /	\checkmark	3	1 / / P			REMARKS
CTATIO	<i>411</i>							TAINERS	/:	4 / .	₹ / .¢	¥⁄ ३	Y	/	/ I
STATION	DATE	TIME	COMP.	GRAB		STA	TION LOCATION		/ ど	× ×	/ ト	71			
	5/17/							Ι,							
001	5/12/98	1230		X	150	6 -	5-20		X						TB-17 (2-4')
1	5/17/	12.0	1 -					1	.,						
002	5/17/48	1305		X	1506	6 - S	5 - 2 3		X			إ			TB-17 (8-10')
	13/98				150	, _ <		1 1							TA TO (0 101)
003	1 /98	1110	<u> </u>	X	1306	9 ° Y	- 24	 '	X				\longrightarrow		TB-3 (B-10')
004	4/14/41	1204	,	X	ICAL	_ <	- 25	1 1	X						T8-7 (8-10')
004	141	5 (~)	<u> </u>	ļ <u></u>	1300	<u> </u>		 ' -	\vdash			-		_	16 1 0 10 1
005	7/22/98	1105	1	X	1506	5-5	- 26		\times	X					TB-ZB(B-10')
	745		 	/	├			 	\vdash	+			-		
006	9/22/12	1400		X	1506	,- \$	- 27		X	X					TB-34 (10-11.4')
								<u> </u>							
007	9/27/90	1655		X	1506	; - \$	- 28			X		X			TB-27A (1.5-3.0)
	110														
i	1 1		1		ľ										
							-								
				l						-	- 1				
	<u> </u>														
ł															
<u> </u>															
			ļ												
	\vdash		 					.				\Box			
ł			1												
	 	_	-		<u> </u>					 ∔			\vdash	-	
1				,						ł					P 9
RELINGU	ISHED	BY (SI	GNATUF	RE)	DATE/1	IME	RECEIVED BY (SIGNATU	RE)	RELIN	iquis	HED	BY (SI	GNATL	JRE)	DATE TIME RECEIVED BY ISIGNATURE
1	1	/	\wedge												
7//	RELINQUISHED BY (SIGNATURE) DATE / TIME RECEIVED BY (SIGNATURE)					BECEIVED BY 1010***	0.5.	05115	0.45	450		CNAT	10.C:	2415 (1145 2525 252 252 252 252 252 252 252 252	
HELINGU	ISHED	B 4 (2)(JNATUF	'E'	DATE/1	IME	RECEIVED BY (SIGNATU	ME)	HELIN	UUIS	MED (3Y (SI	GNATU	INE)	DATE TIME RECEIVED BY ISIGNATURE
		_)		_ _)_		·			
RELINQU	ISHED	BY ,_R	SNATUR	(E)	DATE/T	IME	RECEIVED FOR LABORATION (SIGNATURE)	ORY BY					MARKS		
<u> </u>							PW	at	913	198	74:4 <u>9</u>	<u> </u>	,	-	· · ·
•			-	•			·								

Day Environmental, Inc. (7/6) 292-1090

RE	CR	A L	AB	NET	, a di	/isio	n of Recra Enviro	nmental	, Inc	· (#	NYE	3A76	361)		CHAIN OF CUSTODY RECORD
SAMPLER STATION	is isign	NA TUR	Vá	the			TION LOCATION	NO OF CON TAINERS	238	* \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4/3°	R. J.			REMARKS
001	1/23/ 1/98	1250		X_	150	6 -	\$-29	ı	X	K					TB-26 (8.0 - 10.2"
002	7/23/48	1525		X	150	6-;	S- 30	1	X						TB-42 (12.0-14.51)
003				×	150	6- 5	5-31	1	X	X					TB-31 (8.0 -11.75')
				X	150	6-B	- 32	1	X					_	TB-31 (4-8')
005				X			- 33	1	X						TB. 31 (11.75'-14')
006	1/23/98	905		X	150	6:5	5-34	1	Y .	X				_ ·	T2.33 (1:1-14.5')
														+	The state of the s
I LA	(INQUISHED BY (SIGNATURE) DATE TIME RECEIVED BY (SIGNAT						1	RE)	RELIN	iauis	HED	BY (SIC	GNATU	RE)	DATE/TIME RECEIVED BY ISIGNATURE
	SUNCE STATE PROCEIVED BY (SIGNATURE) DATE TIME RECEIVED BY (SIGNATURE)					RE)	RELIN	QUIS	HED	BY (SIC	GNATU	REI	DATE/TIME RECEIVED BY (SIGNATORE)		
RELINQUISHED BY (SIGNATURE) DATE TIME RECEIVED FOR LABORAT (SIGNATURE)					9/24/9K 0445 50000 0 000										

DAY Environmental Inc. (716)292-1090

900006

RE	CR	A L	AB	NE1	, a divisio	n of Recra Environ	nmental	, Inc	*.(#	NYB	A7	861)	СН	AIN C	OF CUST	ODY RE	CORD	
PROJECT			R - 9	7	Rocheste	95 Mt. Read Blud NY	NO OF	P39/	A LA LA LA LA LA LA LA LA LA LA LA LA LA										
X	Do	re/	LU	Low			CON						REMARKS						
STATION	DATE	TIME	COMP	GRAS	STA	TION LOCATION		/ 4	\$:	* /-	*								
	9/29/45	04:30		Y.	1506-8	- 35	l			X				TB-30	(0-1 15/M	4') Als 150	o do		
2	724/95	09:55	d 	×	1506-S	- 36	1	4	X					TB-30	8-1	(°01			
3	9/24/28	10:45		*	1506-5	37		X	*								')		
4	9/21/8	u:40		*	1506-5			K	*					TB-37	(11' MS/	12') A	elso c	bo	
				*	1506-		4	X	X		_					Rinsa			
	5 /2/58 15:15 x 1506-5-39 Trip Blank																		
	I I O COURT						·								-				
					11	1	1					_		Δ.					
				-	1 1	5-0:		7					5)	7 / Z	D 1/	-			
					14		 	4-	4		-			- / C	- -	\mathcal{S}			i
			-				†	-											
		_																	200
					 		 	\vdash	-										of the
-					1			 - -	-						,				1
REUNQUI		(1)	_	<u> </u>		RECEIVED BY (SIGNATU	RE)	RELII	NQUIS	SHED	BY (SI	GNAT	URE)	DATE	/TIME	RECEIVED	BY (SIGN	(ATURE)	9
HEINOU	SHED		LLE SNATUR		DATE/TIME	RECEIVED BY ISIGNATU	REI	RELI	MS	HED	BY (SI	GNAT	URE	DATE	/TIME	RECEIVED	RY (SIGN	ATURE	7
			,													COEIVED	J. 1310N		•
RELINQUI	LINQUISHED BY (SIGNATURE) DATE TIME RECEIVED FOR LABORAT					ATORY BY DATE/TIME REMARK				AARK!	KS								

RECRA LABNET, a division of Recra Environmental, Inc (* NY8A7861)

CHAIN OF CUSTODY RECORD

			-		<u> </u>								
PROJECT	NO 1	5061	R-97		Rochester	95 Mt. Read Blud		3	Ž.		77	$\overline{}$	77
SAMPLE	S (SIG	natu) out		_	NO OF CON TAINERS	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			//	/ /	REMARKS
TATION NO	DATE	TIME	COMP	GRAB	STA	TION LOCATION		/_/	<i>y</i>	y /		\angle	
	128/	13:55		7-	1506-	5-40		X					TB-37(10-12')
2,	Jec/	15:15		*	1506-	5-41	ļ	X					TB-39(8'-10')
3	/% /%	18:45		*	1506-			X					TB-36(8-10)
4	9/29/98	0830		*	1506-	5-43		X	×				TB-29 (6'-7.9')
5	23/20	11:10		*	1506-			×	*				TB-25(10-11.9')
6	7/2	12:15		4		s-45		X	X				TB-23(8'-10')
						•							
		-											
				-									
									_				
				·	-								
											\dashv	+-1	
											-		
FLINOUI	SHEP	SIC	MATUR	(E) 9/20	DATE/TIME	RECEIVED BY (SIGNATU	RE)	AELIN	VQUIS	HED BY	(SIGNA	<u>I</u> TURE)	DATE TIME RECEIVED BY (SIGNATURE)
(diplo)	HEDI	BY (SIG	NA) UR	(E)	DATE/TIME	RECEIVED BY ISIGNATU	RE)	RELIN	iquis	HED BY	SIGNA	TURE)	DATE/TIME RECEIVED BY (SIGNATURE)
ELINQUI	LINQUISHED BY (SIGNATURE) DATE/TIME RECEIVED FOR LABOR						173			TIME A			C S -
			Distribut	ion: Origi	nal accompanies	shipment copy to coordina	tor field files	-11	1.4		200	<u>سہ عا</u>	5 °

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: RECRA_LABNET_INC	Contract:	NY97-209	_	
Lab Code: RECNY_ Case No.: 7861_	SAS No.:		SDG No.:S	20
Version: ASP-95				
NYSDEC Sample No. 20 23 24 25 26 27 28 29 30 31 32 33 33D 33S 34 35 35D 35S 35D 35S 36 37	Lab SamplAD81258AD81258AD81258AD81258AD81258AD81259AD81259AD81259AD81259AD81289AD81290AD81259AD81259AD81259AD81259AD81259AD81259AD81260AD81260AD81260	3 4 		
Were ICP interelement corrections appl	lied ?		Yes/No	YES
Were ICP background corrections applied If yes - were raw data generated application of background correct	before		Yes/No Yes/No	YES NO
Comments:HC and HexaChrom represent		Chromium.		-
I certify that this data package is in conditions of the contract, both techn other than the conditions detailed about in this hardcopy data package and in the confloppy diskette has been authorized Manager's designee, as verified by the Signature:	nically and ove. Releas the computer by the Lab e following Name: K	for complete of the coratory Massignature Cenneth_E. Laboratory	eteness, f data conta data subm anager or _Kasperek_ _Director_	or ined itted the
•	COVER PAGE	- TN	10/	95

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. 38	Lab Sample IDAD812603 AD812604/MDAD812605/MS AD812578 AD812831 AD812834	
Were ICP interelement corrections appl	lied ?	Yes/No YES
Were ICP background corrections applie		Yes/No YES
<pre>If yes - were raw data generated application of background correct</pre>		Yes/No NO_
Comments: HC and HexaChrom represent	Hexavalent Chromium.	
I certify that this data package is in conditions of the contract, both technother than the conditions detailed about this hardcopy data package and in the conditions detailed in the confloppy diskette has been authorized Manager's designee, as verified by the	nically and for comple ove. Release of the o the computer-readable d by the Laboratory Ma	eteness, for data contained data submitted anager or the
Signature:	Name: Kenneth_E.	_Kasperek
Date:	Title: Laboratory	_Director
	COVER PAGE - IN	10/95

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NΩ

Lab Name: RECRA LABNI	ET INC.	Contract: NY97-2	20
Lab Code: RECNY	Case No.: 786		SDG No.: S20
Matrix (soil/water):	SOIL_		Sample ID: AD812583
Level (low/med):	LOW	Date	Received: 09/23/98
% Solids:	_94.4		

		-			— ı
CAS No.	Analyte	Concentration	С	Q	М
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	- 	l-	·	NR
7439-96-5	Manganese		-		NR
7439-97-6	Mercury		-	l ———	NR
7440-02-0	Nickel -		-		NR
7440-09-7	Potassium		l-		NR
7782-49-2	Selenium		-	I ———	NR
7440-22-4	Silver		-		NR
7440-23-5	Sodium		-	i ———	NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc		-		NR
	Cyanide		-		NR
7439-98-7	Molybdenu				NR
_	HexaChrom		-		NR
			-		` \
			1-		1
·			1-		
			1-		1
			1-		1
·-			1-	·	1-
l ————	.	1	.	I	. 1

Before: After:	GRAYYELLOW	Clarity Clarity	CLEAR_	Texture: Artifacts:	FINE
SAMPLE_	ID:_A8404901-S LE_ID:_1506-S-		 		
 		FOR	 		

1 INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

10/95

							23	
Lab l	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

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-		\overline{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	J	-		NR
7440-50-8	Copper		-		NR
7439-89-6	Iron		 		NR
7439-89-8	Lead		-		NR
7439-92-1			-	l	NR
7439-95-4	Magnesium		-	l	
	Manganese		-		NR
7439-97-6	Mercury Nickel	- 	-	l	NR
7440-02-0		-	-		NR
7440-09-7	Potassium		_]	NR
7782-49-2	Selenium_		_	·	NR
7440-22-4	Silver		-		NR
7440-23-5	Sodium	l	 _		NR
7440-28-0	Thallium_		l_		NR
7440-62-2	Vanadium_		 _		NR
7440-66-6	Zinc		_		NR
	Cyanide		l_		NR
7439-98-7	Molybdenu				NR
_	HexaChrom				NR
			ľ		
			1		
			1		
			1-	<u> </u>	
			1-		1-
			1-		

Before: After:	BROWN		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUN
SAMPLE_	ID:_A8404902-ST LE_ID:_1506-S-2					
		FOR	M I - IN			

1 INORGANIC ANALYSES DATA SHEET

MVCDEC	SAMPLE	NTO

rab Nama : DECDA IADM	EM TNO	Contract MAG 200	24
Lab Name: RECRA_LABNI	EI_INC.	Contract: NY97-209_	
Lab Code: RECNY_	Case No.: 7861	SAS No.:	SDG No.: S20
Matrix (soil/wa \overline{t} er):	SOIL_	Lab Sam	ple ID: AD812585
Level (low/med):	rom _	Date Re	ceived: 09/23/98
& Solids:	89.2		

					 i
CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum		-		\overline{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	<u> </u>	-		NR
7782-49-2	Selenium	<u> </u>			NR
7440-22-4	Silver		-]	NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium	<u> </u>	-		NR
7440-62-2	Vanadium_		_	- - -	NR
7440-66-6	Zinc_		Ι.		NR
	Cyanide		_		NR
7439-98-7	Molybdenu		Ι_		NR
_	HexaChrom		_		NR
			1		l
			_		
]_		
			-		
		· — — — — — — — — — — — — — — — — — — —	. —		

	Before: After:	GRAY YELLOW	Clarity Before: Clarity After:		Texture: Artifacts:	MEDIUM
	B_SAMPLE_	ID:_A8404903-S LE_ID:_1506-S-				
_			FORM I - IN	v		

INORGANIC ANALYSES DATA SHEET

NYSDE	C SA	MPT.	E NO
NIDDE	_ DE		

		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	E ID: AD812586
Level (low/med): LOW	Date Recei	ived: 09/23/98

Concentration Units (ug/L or mg/kg dry weight): MG/KG

_90.6

% Solids:

ı 			Т		— і
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{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	Molybdenu		_		NR
	HexaChrom				NR
			-		1
			_		
			_		
			-		1
			1-		
			1-		
-		· 	. —	. ————	· —

	Before: After:	BROWN		Before: After:	CLEAR	Texture: Artifacts:	MEDIUM
LAI		ID:_A8404904-ST. LE ID: 1506-S-2					
			FOR	M T - TN			

10/95

NYSDEC-ASP

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

			26
Lab Name: RECRA_LABNE	T_INC	Contract: NY97-209]
Lab Code: RECNY_	Case No.: 7861	SAS No.:	SDG No.: S20
Matrix (soil/water): :	SOIL	Lab Sampl	e ID: AD812587
Level (low/med):	LOW	Date Rece	ived: 09/23/98

Level (low/med): % Solids: LOW

			1		, ,
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		$[\overline{NR}]$
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		-	ļ- —	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		Ι_		NR
7439-97-6	Mercury		I		NR
7440-02-0	Nickel		<u> </u>		NR
7440-09-7	Potassium		1_		NR
7782-49-2	Selenium_			1	NR
7440-22-4	Silver				NR
7440-23-5	Sodium		_		NR
7440-28-0	Thallium_		_	·	NR
7440-62-2	Vanadium_		_	l	NR
7440-66-6	Zinc		_		NR
	Cyanide		 _		NR
7439-98-7_	Molybdenu	 	l_	Í	NR
	HexaChrom		[_		NR
			1_		
			1_]
			_	 	
			_		
			_	·	
l	l	l	.	1	.1

	Before: After:	BROWNYELLOW	Clarity Bef Clarity Aft		CLEAR_	Texture: Artifacts:	MEDIUM
Commer LAE CL:	SAMPLE	ID:_A8404905-S LE_ID:_1506-S-	ГА00242 26				
			FORM I	- IN			

10/95

NYSDEC-ASP

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

				27	
Lab Name: RECRA LABNI	ET_INC		ontract: NY97	-209	
Lab Code: RECNY	Case No.	: 7861	SAS No.:	SDG No.:	S20
Matrix (soil/water):	SOIL_	_		o Sample ID: AD8	
Level (low/med):	LOM		Dat	te Received: 09/	23/98
% Solids:	85.8				

			T	г	r ı
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		\overline{NR}
7440-36-0	Antimony		-	l	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		l ⁻		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		-	<u>-</u>	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		1-		NR
7439-98-7	Molybdenu		-		NR
_	HexaChrom		1-		NR
			-		·
			-		
			1-		
			1_		\ <u> </u>
			1-		
			-		1
	· · ————	·	—		· • ——

	Before: After:	BROWN		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
LA		ID:_A8404906-STA LE_ID:_1506-S-2					
			FOR	<u> </u>			

INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

28

Lab Name: RECRA_LABNET_INC.____ Contract: NY97-209_

SDG No.: S20

Lab Code: RECNY Case
Matrix (soil/water): SOIL

Case No.: 7861 SAS No.:

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	С	Q	М
7429-90-5	Aluminum	22900	-	*	$ \overline{P} $
7440-36-0	Antimony	1.9	B	${N}$	$ P^- $
7440-38-2	Arsenic	$\frac{1}{14.0}$			P^-
7440-39-3	Barium	2650	-		$ P^- $
7440-41-7	Beryllium	1.6	-		$ 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	l		P
7439-89-6	Iron	15000	_	N*	$ P^- $
7439-92-1	Lead	565	-		P
7439-95-4	Magnesium	10100	-		$ P^- $
7439-96-5	Manganese	2120	_		P
7439-97-6	Mercury	0.12	ប៊		[cv]
7440-02-0	Nickel	19.3	ł	N	P
7440-09-7	Potassium	1980	_	E	P
7782-49-2	Selenium	12.1	ปี		P_
7440-22-4	Silver	0.71	В	N	P
7440-23-5	Sodium	1540	ł	l — —	P
7440-28-0	Thallium	2.0	$ \overline{B} $		P
7440-62-2	Vanadium	25.8	1		[P_]
7440-66-6	Zinc	2770	-	N	P
	Cyanide		-	 — —	NR
7439-98-7	Molybdenu	23.1	-		P_
	HexaChrom		-		NR
	`l				[]_ [
			_		
			_		-
			1		-11
			1-		-\—\
			1		-
	- ' ————	I			_ ' '

Color Before: Color After:	BLACK	Clarity Clarity	CLEAR_	Texture: Artifacts:	FINE
Comments: LAB_SAMPLE_	ID:_A8404907-CG	A01515			

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).________

INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

	29
ab Name: RECRA_LABNET_INC Contract: NY97-209	
	SDG No.: S20
Matrix (soil/water): SOIL Lab Sample	E ID: AD812592
Level (low/med): LOW Date Rece	ived: 09/24/98

Level (low/med): LOW_____ % Solids: __91.1

CAS No.	Analyte	Concentration	С	Q	М
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		-	<u> </u>	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	Molybdenu		_		NR
	HexaChrom		-		NR
_	110110111111111111111111111111111111111		-		
·			-		
			-		·
	· 		1-		·
	· 		1-	l 	·
	·	l	1-	· · · · · · · · · · · · · · · · · · ·	·

	Before: After:			Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
─ LA		ID:_A8406701-ST LE_ID:_1506-S-2					
			FOR	M T _ TN			

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
	ID: AD812593
Level (low/med): LOW Date Received	ived: 09/24/98
% Solids: 81.5	

			-	г - 1
Analyte	Concentration	С	Q	M
Aluminum		-		NR
Antimony		-		NR
Arsenic		-		NR
Barium —		-		NR
Beryllium		-		NR
Cadmium		-		NR
Calcium		-		NR
Chromium	4.4	-	EN*	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
Molybdenu		-		NR
HexaChrom		1-		NR
}		-		1
		1-		
		1-		
	l ——————	1-		
		1-	I	1—
				-
	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium Thallium_ Vanadium_ Zinc_ Cyanide_ Molybdenu	Aluminum_ Antimony_ Arsenic Barium Beryllium Cadmium Calcium_ Chromium_ Cobalt Copper Iron Lead_ Magnesium Manganese Mercury_ Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide Molybdenu	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide Molybdenu	Aluminum_ Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide Molybdenu

Color Be		LOW	Clarity Clarity	Before: After:	CLEAR	Texture: Artifacts:	MEDIUM
	AMPLE_ID:_A	A8406702-STA					
			FOR				

1 INORGANIC ANALYSES DATA SHEET

NYSDEC	CAMDIE	NTO
NIODEC	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	E ID: AD812594

Level (low/med): % Solids: $_{79.0}$

Date Received: 09/24/98

					I
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	-	1-		NR
,	Cyanide		-	1	NR
7439-98-7	Molybdenu	- <u> </u>	-		NR
	HexaChrom		-		NR
			-		
			-		1
			1-	1-	1-
			-	1	1-
		-		\ ——	1-
	-		-	·	

	Before: After:	YELLOW	Clarity Clarity		Texture: Artifacts:	MEDIUM
	B_SAMPLE_	ID:_A8406703-8			 ·	
 CT	IENT_SAMP	LE_ID:_1506-S	-31			
-			FORM	M T _ TN	 	

INORGANIC ANALYSES DATA SHEET

	~~~~~	
NYSDEC	SAMPLE	NO.

				32
Lab Name: RECRA_LABN	ET_INC	Contract: N	Y97-209	
Lab Code: RECNY	Case No.: 78	61 SAS No.	: <u>S</u>	DG No.: S20
Matrix (soil/water):	SOIL	_	Lab Sample	ID: AD812595
Level (low/med):	LOW -		Date Receiv	ed: 09/24/98
% Solids:	_89.1			· •

7440-36-0       Antimony       NF         7440-38-2       Arsenic       NF         7440-39-3       Barium       NF         7440-41-7       Beryllium       NF         7440-43-9       Cadmium       NF         7440-47-3       Chromium       408       EN*         7440-48-4       Cobalt       NF         7439-89-6       Iron       NF         7439-92-1       Lead       NF         7439-95-4       Magnesium       NF         7440-02-0       Nickel       NF         7440-02-0       Nickel       NF         7440-22-4       Silver       NF         7440-23-5       Sodium       NF         7440-28-0       Thallium       NF         7440-66-6       Zinc       NF         Cyanide       NF         7439-98-7       Molybdenu       NF	· ——			_		<del>-</del> г
7440-36-0       Antimony       NF         7440-38-2       Arsenic       NF         7440-39-3       Barium       NF         7440-41-7       Beryllium       NF         7440-43-9       Cadmium       NF         7440-47-3       Chromium       408       EN*         7440-48-4       Cobalt       NF         7439-89-6       Iron       NF         7439-92-1       Lead       NF         7439-95-4       Magnesium       NF         7440-02-0       Nickel       NF         7440-02-0       Nickel       NF         7440-22-4       Silver       NF         7440-23-5       Sodium       NF         7440-28-0       Thallium       NF         7440-66-6       Zinc       NF         Cyanide       NF         7439-98-7       Molybdenu       NF	CAS No.	Analyte	Concentration	C	Q	М
7440-36-0       Antimony       NF         7440-38-2       Arsenic       NF         7440-39-3       Barium       NF         7440-41-7       Beryllium       NF         7440-43-9       Cadmium       NF         7440-47-3       Chromium       408       EN*         7440-48-4       Cobalt       NF         7439-89-6       Copper       NF         7439-92-1       Lead       NF         7439-95-4       Magnesium       NF         7440-02-0       Nickel       NF         7440-02-0       Nickel       NF         7440-22-4       Silver       NF         7440-23-5       Sodium       NF         7440-28-0       Thallium       NF         7440-66-6       Zinc       NF         7439-98-7       Molybdenu       NF	7429-90-5	Aluminum		-	_	$\overline{ m NR}$
7440-38-2   Arsenic	_			-		NR
7440-39-3       Barium       NI         7440-41-7       Beryllium       NI         7440-43-9       Cadmium       NI         7440-70-2       Calcium       NI         7440-48-4       Cobalt       NI         7440-50-8       Copper       NI         7439-89-6       Iron       NI         7439-92-1       Lead       NI         7439-95-4       Magnesium       NI         7440-02-0       Nickel       NI         7440-02-0       Nickel       NI         7440-22-4       Silver       NI         7440-23-5       Sodium       NI         7440-66-6       Zinc       NI         7439-98-7       Molybdenu       NI	7440-38-2			-		NR
7440-43-9         Cadmium         NI           7440-70-2         Calcium         NI           7440-47-3         Chromium         408         EN*           7440-48-4         Cobalt         NI           7449-89-6         Copper         NI           7439-92-1         Lead         NI           7439-95-4         Magnesium         NI           7439-96-5         Manganese         NI           7440-02-0         Nickel         NI           7440-09-7         Potassium         NI           7440-22-4         Silver         NI           7440-23-5         Sodium         NI           7440-66-6         Zinc         NI           7439-98-7         Molybdenu         NI	7440-39-3			-		NR
7440-70-2       Calcium       408       EN*       P         7440-48-4       Cobalt       NI         7439-89-6       Iron       NI         7439-92-1       Lead       NI         7439-95-4       Magnesium       NI         7439-97-6       Mercury       NI         7440-02-0       Nickel       NI         7440-22-4       Selenium       NI         7440-23-5       Sodium       NI         7440-62-2       Vanadium       NI         7440-66-6       Zinc       NI         7439-98-7       Molybdenu       NI	7440-41-7	Beryllium		-	_	NR
7440-47-3         Chromium         408         EN*         P           7440-48-4         Cobalt         NH           7440-50-8         Copper         NH           7439-89-6         Iron         NH           7439-95-4         Magnesium         NH           7439-96-5         Manganese         NH           7440-02-0         Nickel         NH           7440-09-7         Potassium         NH           7782-49-2         Selenium         NH           7440-22-4         Silver         NH           7440-23-5         Sodium         NH           7440-66-6         Zinc         NH           7439-98-7         Molybdenu         NH	7440-43-9	Cadmium		-		NR
7440-48-4       Cobalt       NI         7449-89-6       Iron       NI         7439-92-1       Lead       NI         7439-95-4       Magnesium       NI         7439-96-5       Manganese       NI         7440-02-0       Nickel       NI         7440-09-7       Potassium       NI         7782-49-2       Selenium       NI         7440-22-4       Silver       NI         7440-28-0       Thallium       NI         7440-66-6       Zinc       NI         7439-98-7       Molybdenu       NI	7440-70-2	Calcium		-		NR
7440-50-8       Copper       NI         7439-89-6       Iron       NI         7439-92-1       Lead       NI         7439-95-4       Magnesium       NI         7439-96-5       Manganese       NI         7440-02-0       Nickel       NI         7440-09-7       Potassium       NI         7782-49-2       Selenium       NI         7440-22-4       Silver       NI         7440-23-5       Sodium       NI         7440-66-6       Zinc       NI         7440-68-7       Vanadium       NI         7439-98-7       Molybdenu       NI	7440-47-3	Chromium	408	-	EN*	P
7439-89-6         Iron         NI           7439-92-1         Lead         NI           7439-95-4         Magnesium         NI           7439-96-5         Manganese         NI           7440-02-0         Nickel         NI           7782-49-2         Selenium         NI           7440-22-4         Silver         NI           7440-23-5         Sodium         NI           7440-62-2         Vanadium         NI           7440-66-6         Zinc         NI           Cyanide         NI           7439-98-7         Molybdenu         NI	7440-48-4	Cobalt		-		NR
7439-92-1       Lead       NI         7439-95-4       Magnesium       NI         7439-96-5       Manganese       NI         7440-02-0       Nickel       NI         7440-09-7       Potassium       NI         7782-49-2       Selenium       NI         7440-22-4       Silver       NI         7440-23-5       Sodium       NI         7440-62-2       Vanadium       NI         7440-66-6       Zinc       NI         Cyanide       NI         7439-98-7       Molybdenu       NI	7440-50-8	Copper		-		NR
7439-95-4       Magnesium         7439-96-5       Manganese         7449-97-6       Mercury         7440-02-0       Nickel         7440-09-7       Potassium         7782-49-2       Selenium         7440-22-4       Silver         7440-23-5       Sodium         7440-62-2       Vanadium         7440-66-6       Zinc         Cyanide       Ni         7439-98-7       Molybdenu	7439-89-6	Iron		-		NR
7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 7440-62-2 Vanadium 7440-66-6 Zinc Cyanide Molybdenu NI NI NI NI NI NI NI NI NI NI NI NI NI	7439-92-1	Lead		\ <u> </u>		NR
7440-02-0 Nickel NI 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver NI 7440-23-5 Sodium 7440-62-2 Vanadium 7440-66-6 Zinc Cyanide 7439-98-7 Molybdenu	7439-95-4	Magnesium		_		NR
7440-02-0       Nickel       NI         7440-09-7       Potassium       NI         7782-49-2       Selenium       NI         7440-22-4       Silver       NI         7440-23-5       Sodium       NI         7440-28-0       Thallium       NI         7440-62-2       Vanadium       NI         7440-66-6       Zinc       NI         Cyanide       NI         7439-98-7       Molybdenu       NI	7439-96-5	Manganese		IΞ		NR
7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 7440-28-0 Thallium 7440-66-6 Zinc Cyanide 7439-98-7 Molybdenu	7439-97-6	Mercury		_		NR
7782-49-2   Selenium	7440-02-0	Nickel				NR
7440-22-4 Silver N1 7440-23-5 Sodium N1 7440-28-0 Thallium N1 7440-62-2 Vanadium N1 7440-66-6 Zinc N1 Cyanide N1 7439-98-7 Molybdenu N1	7440-09-7	Potassium		<u> </u>		NR
7440-23-5 Sodium N1 7440-28-0 Thallium N1 7440-62-2 Vanadium N1 7440-66-6 Zinc N1 Cyanide N1 7439-98-7 Molybdenu N1	7782-49-2			[		NR
7440-28-0 Thallium N1 7440-62-2 Vanadium N1 7440-66-6 Zinc N1 Cyanide N1 7439-98-7 Molybdenu N1	7440-22-4	Silver				NR
7440-62-2 Vanadium N1 7440-66-6 Zinc N1 Cyanide N1 7439-98-7 Molybdenu N1	7440-23-5	Sodium				NR
7440-66-6 Zinc NI Cyanide NI 7439-98-7 Molybdenu NI	7440-28-0	Thallium_				NR
Cyanide Ni 7439-98-7 Molybdenu Ni	7440-62-2	Vanadium_				NR
7439-98-7 Molybdenu N	7440-66-6	Zinc				NR
	l	Cyanide		.[_		NR
HexaChrom N	7439-98-7	Molybdenu				NR
		HexaChrom			l	NR
				.]_		.l
						.\
\ \\				_		

Before: After:	BROWN	Clarity Clarity		Texture: Artifacts:	MEDIUM
SAMPLE_	ID:_A8406704-S LE_ID:_1506-S-			 	
 		FOR	M I - IN		

# 1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
--------	--------	----

			33
Lab Name: RECRA_LABN	ET_INC	Contract: NY97-209	
Lab Code: RECNY	Case No.: 7861	SAS No.:	SDG No.: S20
Matrix (soil/water):	SOIL	Lab Sampl	e ID: AD812899
Level (low/med):	LOW -	Date Rece	ived: 09/24/98
% Solids:	_88.2		

					_
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum				$\overline{NR}$
7440-36-0	Antimony		-		NR
7440-38-2	Arsenic	· <u> </u>	-		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		-		$N\overline{R}$
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	Molybdenu		-		NR
_	HexaChrom		-		NR
			-		Į.
			-		
			-	<del>_</del>	
			-		
			-		
			1-		
	·——	- <del></del>	· ' —	١	١ —

Before: After:	BROWN		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUN
SAMPLE_	ID:_A8406705-ST LE ID: 1506-S-3					
 <del>-</del>	<del></del>	FOR	M T - TN			

## INORGANIC ANALYSES DATA SHEET

					34	
Lab Name: RECRA_LABNE	T_INC	c	ontract: NY	97-209		
Lab Code: RECNY_	Case No.:	7861	SAS No.:		SDG No.: S20	
Matrix (soil/water):	SOIL_		•	Lab Sample	D: AD81259	<del>7</del> —
Level (low/med):	LOW		•	Date Recei	lved: 09/24/9	8
k Solids:	81.3					

CAS No.	Analyte	Concentration	С	Q	М
<del></del>			_		<del></del>
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_				NR
7440-38-2	Arsenic		['		NR
7440-39-3	Barium	 	_	<u> </u>	NR
7440-41-7	Beryllium		_		NR
7440-43-9	Cadmium		l		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		-	l — —	l NR
7440-02-0	Nickel	_ <del></del>	-		NR
7440-09-7	Potassium		<u> </u> –		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		-	ļ ———	NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium	l <del></del>	-	<del>-</del> -	NR
7440-62-2	Vanadium	l —-	-	] — —	NR
7440-66-6	Zinc	I <del></del>	1-		NR
7440 -00 -0	Cyanide	<del></del>	-	<del></del>	NR
7439-98-7	Molybdenu		1-	<del></del>	NR
1433-30-1_	HexaChrom		-	l——	NR
	Hexachrom	\ <del></del>	-	-	INK
	.		-		·
	. [		-}-		· —
	· — <del>-</del>		- -	\	
	.		-1-	<del></del>	.
	.}		. _	l	.
			1	1	1

 Before: After:	BROWN	Clarity Clarity		CLEAR	Texture: Artifacts:	MEDIUM
B_SAMPLE_	ID:_A8406706-STA LE_ID:_1506-S-34					
 		FOR	M T - TN			

### INORGANIC ANALYSES DATA SHEET

	35
Lab Name: RECRA LABNET INC. Contract: N	Y97-209
Lab Code: RECNY Case No.: 7861 SAS No.	: SDG No.: S20
- A 1 /13 /	T-1- G1- TD 10010500

Matrix (soil/water): SOIL_ Level (low/med): LOW___ % Solids:

Lab Sample ID: AD812598 Date Received: 09/25/98

_89.8

ı <del></del>					ТΙ
CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	4990	-	*	$\overline{NR}$
7440-36-0	Antimony	1.3	ਹ	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	<u>*</u>	NR
7440-47-3	Chromium	23.6		EN*	P
7440-48-4	Cobalt	3.6	$\overline{B}$	_ 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	์ ปี		CV
7440-02-0	Nickel	14.0	_	N	P_
7440-09-7	Potassium	1730	_	E	P_
7782-49-2	Selenium_	1.1	∣⊽		P_
7440-22-4	Silver	0.86	В	N	P_
7440-23-5	Sodium	851	В		NR
7440-28-0	Thallium_	1.3	U		P_
7440-62-2	Vanadium_	11.0	В		NR
7440-66-6	Zinc	61.7	l_	N	P_
	Cyanide		<u>ا</u> _		NR
7439-98-7	Molybdenu	0.86	B		P_
	HexaChrom		l_		NR
					.
					.
					. [

Before: After:	BROWN	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	FINE_
B_SAMPLE_	ID:_A8407601-CG LE_ID:_1506-S-3!					
 		FORI	M I - IN			

## INORGANIC ANALYSES DATA SHEET

NVCDDC	SAMPLE	NTO
NIODEC	SAMPLE	INC

					36	1
Lab Name: RECRA_LABNI	ET INC.	Con	tract: NY97	-209		l
Lab Code: RECNY_	Case No.:	7861	SAS No.:		DG No.: S	20
Matrix (soil/water):	SOIL	_	La	b Sample	ID: AD812	601
Level (low/med):	LOW_		Da	te Receiv	red: 09/25	/98
% Solids:	88.2					

					<del></del> -
CAS No.	Analyte	Concentration	С	Q	М
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		-	<del></del>	NR
7439-89-6	Iron —		-		NR
7439-92-1	Lead		-	[ <del></del>	NR
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese		-	<del></del> -	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 -		1-		NR
7440-66-6	Zinc -		_		NR
1	Cyanide		-		NR
7439-98-7	Molybdenu		1		NR
_	HexaChrom		1-	-	NR
			-		1
			!-		
			-		1-
			-		1
	<del></del>	<del></del>	-		1
			-		1-
	'	1	' -	· — —	· · —

Color Before: Color After:	BROWNYELLOW	Clarity Before: Clarity After:	CLEAR_	Texture: Artifacts:	MEDIUM
	ID:_A8407602- LE_ID:_1506-S				
		FORM I - IN			<del></del>

# 1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO

	37
Lab Name: RECRA_LABNET_INC Contract: NY97-209	
<del></del>	SDG No.: S20
	ID: AD812602
	red: 09/25/98
% Solids: _90.7	

1		-	· · · · · ·		· · ·
CAS No.	Analyte	Concentration	c	Q	М
	l		_	· ·	
7429-90-5	Aluminum_		_		NR
7440-36-0	Antimony_				NR
7440-38-2	Arsenic		<u> </u>		NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium_		1		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	Molybdenu		1-		NR
-	HexaChrom		-		NR
			-		
-		· <del></del> -	1-		<b> </b>
	1		-		
		<del>-</del>	1-	I —	·
			-	I	·
		<del></del>	- -		1-
<u> </u>	.	I	.	I	. I

	Before: After:	BROWN	Clarity Clarity		CLEAR_	Texture: Artifacts:	MEDIUN
LAI		ID:_A8407603-ST LE_ID:_1506-S-3					
			FORI	MI-IN			

10/95

#### NYSDEC-ASP

# 1 INORGANIC ANALYSES DATA SHEET

MICODIC	CAMPIE	370
NISDEC	SAMPLE	NO

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

88.2

% Solids:

					<del></del> -,
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum				$\overline{NR}$
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	<del></del>	-		NR
7439-89-6	Iron		_		NR
7439-92-1	Lead	<del></del>	-		NR
7439-95-4	Magnesium	<del></del>	[-		NR
7439-96-5	Manganese	<del></del>	-		NR
7439-97-6	Mercury		-	l	NR
7440-02-0	Nickel -	<del></del>	-		NR
7440-09-7	Potassium		-	<u> </u>	NR
7782-49-2	Selenium	<del></del>	-		NR
7440-22-4	Silver	- <del></del> -	-		NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium_		-		NR
7440-66-6	Zinc		-	·	NR
	Cyanide		-	l ———	NR
7439-98-7	Molybdenu		-	]	NR
	HexaChrom		-		NR
	1		-		
			-		
			-		1
			1-		
			1-		
	·   ——		1-		
	.	I	.	I	' <del></del>

Before: After:	BROWN	Clarity Clarity	Before: After:	Texture: Artifacts:	MEDIUM
SAMPLE :	ID:_A8407604-ST LE_ID:_1506-S-3			 	
 		FORI	M I - IN	 	

000026 000027NYSDEC SAMPLE NO.

### INORGANIC ANALYSES DATA SHEET

				3	19	
Lab Name: RECRA_LABN	ET INC	Cor	ntract: NY97	7-209 \		
Lab Code: RECNY_	Case No.	7861	SAS No.:	SDG	No.: S20	
Matrix (soil/water):	WATER	_	Lā	ab Sample ID	): AD812578	
Level (low/med):	LOW		Da	ate Received	l: 09/25/98	
Solids:	0.0					

	<del>-</del>				<u> </u>
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum		-		$\overline{NR}$
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	ט		P
7440-48-4	Cobalt		Ĭ		NR
7440-50-8	Copper	<del></del>	-	<del></del>	NR
7439-89-6	Iron —		-		NR
7439-92-1	Lead	-	-		NR
7439-95-4	Magnesium		-		NR
7439-96-5	Manganese	<del></del>	-		NR
7439-97-6	Mercury		-		NR
7440-02-0	Nickel	<del></del>	-		NR
7440-02-0	Potassium		-	\———	NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver				NR
7440-23-5	Sodium		-		NR
7440-23-3	Thallium	<del></del>		l ———	NR
	_		-	<u> </u>	
7440-62-2	Vanadium_		-		NR
7440-66-6	Zinc	<del></del>	-	l ————	NR
<del></del>	Cyanide		_	ì——	NR
7439-98-7_	Molybdenu		=		NR
	HexaChrom	17.0	ן ע	l	A_
			<b> </b> _		١
				l	l
		-	<b> </b> _		l
	.		<b> </b> _		
			_		\

olor Before: olor After:	COLORLESS COLORLESS	Clarity Befor Clarity After	Texture: Artifacts:	
ments:  LAB_SAMPLE  CLIENT_SAMP	ID: <u>A84</u> 07605 LE ID: 1506-8		 	
CDIENI_SAME				<u> </u>

10/95

### NYSDEC-ASP

	1		
INORGANIC	ANALYSES	DATA	SHEET

MVCDEC	SAMPLE	XT/
IN LOUDING.	SAMPLIC	1711

			40
Lab Name: RECRA_LABNE	ET_INC	Contract: NY97-209	
Lab Code: RECNY_	Case No.: 7861	_ SAS No.:	SDG No.: S20
Matrix (soil/wa $\overline{t}$ er):	SOIL_		le ID: AD812831
Le $\mathbf{v}$ el (low/med):	LOW	Date Rec	eived: 09/30/98

Matrix (soil/water): SOIL_ Level (low/med): LOW__ % Solids: _89.8

	_				Γ
CAS No.	Analyte	Concentration	С	Q	М
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		-	l ———	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	<u> </u>	-		NR
7440-09-7	Potassium		-		NR
7782-49-2	Selenium		-		NR
7440-22-4	Silver		-	l ———	NR
7440-23-5	Sodium		-		NR
7440-28-0	Thallium		-		NR
7440-62-2	Vanadium		-		NR
7440-66-6	Zinc		-		NR
1 7440 00 0	Cyanide		-		NR
7439-98-7	Molybdenu		-	i ————	NR
1439-30-1_	HexaChrom		-		NR
	Inexactition	<del>-</del>	-	l	1111
	l——	<del></del>	·	I	·
		<del></del>	-		·
	[	<del></del>	- -	1	·
<del></del>	l ————	<u> </u>	-1		·
	<u> </u>		-1-	I	-
	l			· I	. I

Before: After:	BROWNYELLOW	Clarity Clarity		CLEAR_	Texture: Artifacts:	MEDIUM
B SAMPLE	ID:_A8414601-ST LE ID: 1506-S-4					
 <del>-</del>		FOR	W T - TN			

# 1 INORGANIC ANALYSES DATA SHEET

NYSDEC	SAMPLE	NO
--------	--------	----

				4	11
Lab Name: RECRA LABNI	ET_INC	Con	tract: NY97	-209	
Lab Code: RECNY	Case No.:	7861	SAS No.:		3 No.: S20
Matrix (soil/water):	SOIL	_			D: AD812834
Level (low/med):	LOW		Dat	ce Received	1: 09/30/98
& Solids:	89.6				

CAS No.	Analyte	Concentration	c	Q	М
7429-90-5	Aluminum		-		NR
7440-36-0	Antimony -		-		NR
7440-38-2	Arsenic		-		NR
7440-39-3	Barium —	<del>_</del>	_		NR
7440-41-7	Beryllium		<del>-</del>		NR
7440-43-9	Cadmium		-		NR
7440-70-2	Calcium				NR
7440-47-3	Chromium	7.4		EN*	P
7440-48-4	Cobalt		-	<del>-</del> _	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		<u> </u>		NR
7440-02-0	Nickel				NR
7440-09-7	Potassium		$]^-$		NF
7782-49-2	Selenium		1		NF
7440-22-4	Silver		-	_	NF
7440-23-5	Sodium		-		NF
7440-28-0	Thallium		-		NF
7440-62-2	Vanadium		-		NF
7440-66-6	Zinc	_	-		NF
	Cyanide	<u> </u>	1		NF
7439-98-7	Molybdenu				NF
<del></del>	HexaChrom		-		NF
-			1		1
			-		- -
			-		- [ -
			-		-
			[-		- -
	·	<del></del>	1-	1	-1-

	Before: After:	BROWN	Clarity Before: Clarity After:	Texture: Artifacts:	MEDIUN
_ LA		ID:_A8414602-S LE_ID:_1506-S-		 	
_			FORM I - IN	 	



WENT WEND

### Committed To Your Success

January 4, 2000

Mr. Jeff Danzinger Day Environmental, Inc. 2144 Brighton-Henrietta Town Line Rd. Rochester, NY 14623

RE: Analytical Results

Dear Mr. Danzinger:

**Severn Trent Laboratories** 10 Hazelwood Drive Suite 106 Amherst, New York 14228

Tel: (716) 691-2600 Fax: (716) 691-7991 www.stl-inc.com

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.

roe Buckhout

Candace L. Fox Program Manager

san L. Tinsmith Laboratory Manager

CLF/SLT/mfg

I.D. #A99-7525 #NY8A7861

This report contains 455 pages which are individually numbered.

### Other Laboratory Locations:

Mobile, ALMonroe, CT

Enclosure

- Miramar, FL
- Pensacola, FL
- Tallahassee, FL
- Tampa, FL Savannah, GA University Park, it
- 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

Severa Front Services Inc.

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

1300-3-02 MID

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.



### **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."

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: <u>SEVERN TRENT LABORATORIES, INC.</u>

### USEPA Defined Inorganic Data Qualifiers:

E

interference.

В 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.

Indicates a value estimated or not reported due to the presence of

Ward Input QC Report File A997525

Page:

Rept: AN0208

Project: NY8A7861

1 Task:

Day Environmental - Former General Circuits Site

					No. of Tests No.		Error
Job No	Lab Sample	Client Sample ID	Test Grp	Description	in TestGrp TICS	Error	Severity
A99-7525	A9752501	1506-S-59	STA00242 CHROMIUM - TOTAL	<b>s</b>	1		
	A9752502	1506-S-60	STA00242 CHROMIUM - TOTAL	S	1		
	A9752503	1506-\$-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	\$	1		
	A9752505	1506-S-63	STA00242 CHROMIUM - TOTAL	s	1		
	A9752506	1506-\$-64	STA00242 CHROMIUM - TOTAL	S	1		
	A9752507	1506-\$-65	STA00242 CHROMIUM - TOTAL	. • S	1		
	A9752508	1506-S-66	STA00242 CHROMIUM - TOTAL	. <b>-</b> \$	1		
	A9752509	1506-S-67	STA00242 CHROMIUM - TOTAL	\$	1		
	A9752510	1506-S-68	STA00242 CHROMIUM - TOTAL	. <b>-</b> \$	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	\$	1		
	A9752515	Method Blank	STA00242 CHROMIUM - TOTAL	S	1		

# 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 NoS-59 _S-60 _S-61 _S-62 _S-62D _S-62S _S-63 _S-64 _S-65 _S-66 _S-67 _S-68 _S-69	Lab Sample IDAD920253 _AD920254 _AD920255 _AD920256 _AD920257/M _AD920258/M _AD920259 _AD920260 _AD920261 _AD920262 _AD920263 _AD920264 _AD920024	
Were ICP interelement corrections app	lied ?	Yes/No YES
Were ICP background corrections appli If yes - were raw data generated		Yes/No YES
application of background correc		Yes/No NO_
Comments:		
I certify that this data package is i conditions of the Protocol, both tech other than the conditions detailed ab in this hardcopy data package and in on diskette has been authorized by the designee, as verified by the following Signature:  Date:  Orlow/2000	nically and for complove. Release of the the computer-readable Laboratory Manager	eteness, for data contained e data submitted or the Manager's
Date: 01/04/2000	COVER DACE IN	_manayer

# INORGANIC ANALYSES DATA SHEET

יחושעת	SAMPLE	MO
DESTRINA	טבעב בעב	TAC

			S-59
Lalo Name: STL_BUFFALO	) C	ontract: NY97-209	
Lalo Code: STLNY_	Case No.: 7861_	SAS No.:	SDG No.: 150659
Matrix (soil/water):	SOIL_	Lab Sample	e ID: AD920253
Level (low/med):	LOW	Date Rece	ived: 11/10/99
% Solids:	_84.2		
<b>G</b>	and an Trade of Jane 17	/1	MO /TO

Concentration Units (ug/L or mg/kg dry weight): MG/KG

			_		
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		$\overline{NR}$
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		-	<del></del>	NR
7439-92-1	Lead		-		NR
7439-95-4	Magnesium		_		NR
7439-96-5	Manganese		_		NR
7439-97-6	Mercury		Ι_		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:	<del></del>	Texture:	MEDIUM
Color After:	YELLOW	Clarity	After:	CLEAR_	Artifacts:	
	ID:_A9752501-ST LE_ID:_1506-S-5					

# INORGANIC ANALYSES DATA SHEET

DAYENV	SAMPLE	NO
DUIDIN	O MUTE II III	MO.

Lab Name: STL BUFFAL	O Cor	ntract: NY97-209	S-60
Lab Code: STLNY_	Case No.: 7861_	SAS No.:	SDG No.: 150659
Matrix (soil/water):	SOIL_	Lab Sampl	e ID: AD920254
Level (low/med):	LOW	Date Rece	ived: 11/10/99
% Solids:	88.5		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

ı — — — — — — — — — — — — — — — — — — —					
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum		-		$\overline{\mathtt{NR}}$
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		Ľ	\	NR
7439-97-6	Mercury				NR
7440-02-0	Nickel		<u> </u>		NR
7440-09-7	Potassium		\ <u></u>		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_	<del></del>	-		NR
7440-66-6	Zinc		_		NR
	Cyanide		_		NR
					1

Color Before:	BROWN	Clarity	Before:		Texture:	MEDIUM
Color After:	YELLOW	Clarity	After:	CLEAR_	Artifacts:	
	ID:_A9752502-ST LE_ID:_1506-S-6					<u> </u>

DASCENTS	SAMPLE	NT/
DAIBNV	SHUPLE	MO

					S-61	
Lalo Name: STL_B	BUFFALO		Contract: NY	797-209		
Lab Code: STLNY	Cas	se No.: 786	SAS No.:		SDG No.: 1	.50659
Matrix (soil/wa	ter): SOIL	_		Lab Sampl	e ID: AD920	255
Gevel (low/med)	: LOW	_		Date Rece	eived: 11/10	)/99
& Solids:	_90.3	1				
Cor	ncentration	Units (ug,	/L or mg/kg dry	y weight):	MG/KG	
	CAS No.	Analyte	Concentration	c Q	M	
				\ <u>-</u>		
	7429-90-5	Aluminum_		_ _	NR	
	7440-36-0	Antimony_		_	NR	
	7440-38-2	Arsenic		-	NR	
	7440-39-3	Barium		]	NR	
		Beryllium	<del></del>	-	NR NR	
		Cadmium  Calcium		-	NR NR	
	li de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	Chromium	4.6	<u> -  </u>	P	
		Cobalt		-	NR	
-		Copper Copper		-	NR NR	
	7439-89-6	Iron		-	NR NR	
	7439-83-6	Lead		-	NR NR	
	7439-95-4	Magnesium		1-1	NR NR	
	7439-96-5	Manganese		-	NR	
	7439-97-6	Mercury		-	NR	
	7440-02-0	Nickel		-	NR	
		Potassium			NR	
		Selenium			NR	
	7440-22-4		\ <u></u>	1-1	NR	
	7440-23-5			-	NR	
	7440-28-0	Thallium		-	NR	
	7440-62-2	Vanadium		-	NR	
	7440-66-6	Zinc		-	NR	
		Cyanide_			NR	
		.	.	.	!	
Color Before:	BROWN	Clari	ty Before:	<del></del>	Texture:	MEDIUM
Color After:	YELLOW	Clari	ty After: CLE	AR_	Artifacts:	
Comments:  LAB_SAMPLE_  CLIENT_SAMP	ID:_A975250 LE_ID:_1506	3-STA00242 -S-61				

DAYENV	SAMPLE	NO 🚗
DUTTINA	OFFILE DIS	140 —

Lab Code: STLN Matrix (soil/w Level (low/med	ater): SOIL		SAS No.:	:		SDG No.: 1	50659
	_	_					_
evel (low/med	) • I.OW			La	b Sampi	le ID: AD920	256
	, . <u> </u>	_		Da	te Rec	eived: 11/10	/99
Solids:	_87.9	•					
Co	ncentration	Units (ug/	L or mg/kg dry	7 W	eight)	: MG/KG	
	CAS No.	Analyte	Concentration	С	Q	м	
	7429-90-5	Aluminum		-		$\left  \frac{1}{NR} \right $	
	7440-36-0	Antimony		-		NR NR	
	7440-38-0	Arsenic				NR NR	
	7440-38-2	Barium		\{		NR	
	7440-41-7			-		NR NR	
		Cadmium_		-		NR	
		Calcium		<b> -</b>		NR	
	7440-47-3	Chromium	6.9	-		P	-
	7440-48-4	Cobalt		-		NR	
	7440-50-8	Copper		-		NR	
	7439-89-6	Iron	<del></del>	1-1		NR	
	7439-92-1	Lead		-	-	NR	
	•	Magnesium	<del></del>	1-1	<del></del>	NR	
		Manganese		1-1		NR	
		Mercury	<del></del>	} <del>-</del>		NR	
	•	Nickel		<del></del>		NR	
	7440-09-7			-		NR	
		Selenium		-		NR	
	7440-22-4					NR	
	7440-23-5	Sodium				NR	
	7440-28-0	Thallium		1-		NR	
	7440-62-2	Vanadium		-		NR	
	7440-66-6	Zinc		-		NR	
		Cyanide		l_		NR	
				_	I	<u>                                     </u>	
Color Before:	BROWN	Clari	ty Before:		_	Texture:	MEDIUN
Color After:	YELLOW	Clari	ty After: CLE	AR_	_	Artifacts:	
Comments:  LAB_SAMPLE_  CLIENT_SAMP	ID:_A975250 LE_ID:_1506	4-STA00242 -S-62					<b>^</b>

DAVENU	SAMPLE	NO
DAIBN	OWALDE	INU.

•						S-63	
Lab Name: STL_I	BUFFALO		Contract: NY	797	-209		
Lab Code: STLN	Y_ Cas	se No.: 786	SAS No.:	: _		SDG No.:	150659
Matrix (soil/wa	ater): SOIL	-		La	b Samp	le ID: AD9	20259
Level (low/med)	): LOW	-		Da	te Rec	eived: 11/	10/99
% Solids:	_95.1	L					
Cor	ncentration	Units (ug,	/L or mg/kg dry	y w	eight)	: MG/KG	
	CAS No.	Analyte	Concentration	С		м	
				-	<del></del>		
	7429-90-5 7440-36-0	Antimony_		-		- NR	
		Arsenic	- <del></del>	-		- NR	
		Barium		-		NR	
		Beryllium	<u> </u>	-		NR	
		Cadmium	_	<u>-</u>		NR	
	7440-70-2	Calcium				NR	
	•	Chromium_	16.2			P_\	
		Cobalt		<b> </b>		NR	
		Copper		<b> </b> _		NR	
	7439-89-6	Iron	\ <u></u> -	<b> </b> _		NR	
	1	Lead		-		_ NR	
		Magnesium		-	ļ <del></del>	_  NR	
	7439-96-5 7439-97-6	Manganese Mercury		-	<del></del>	- NR	
		Nickel	·	-	— <del></del>	- NR	
	II.	Potassium		-	l ———	- NR	
		Selenium		-		NR	
	7440-22-4					NR	
		Sodium_		-		- NR	
	7440-28-0	Thallium		1		NR NR	
	7440-62-2	Vanadium_				NR	
	7440-66-6	Zinc				_  NR	
		Cyanide		- -		NR	
Color Before:	BROWN	Clari	ty Before:	·'—		Texture:	MEDIUM
Color After:	YELLOW	Clari	ty After: CLE	AR		Artifact	s:
Comments: LAB_SAMPLE_	ID:_A975250	5-STA00242	!				
CLIENT_SAME	LE_ID:_1506	-S-63					<del></del>

DAYENV	SAMPLE	NO -
--------	--------	------

b Name: STL_BU b Code: STLNY	IPPALO						
			Contract. M	70.7	200	S-64	
b Code: STLNY	TRALIO		Concract: Ni	. 5 /	-209	·	<del></del>
	Cas	se No.: 786	SAS No.:	_		SDG No.: 1	50659
trix (soil/wat	er): SOIL_	-		La	b Sampl	le ID: AD920	260
vel (low/med):	LOW	-		Da	te Rec	eived: 11/10	)/99
Solids:	_91.8	3					
Conc	entration	Units (ug/	'L or mg/kg dry	/ W	eight)	: MG/KG	
	CAS No.	Analyte	Concentration	С	Q	M	
]_						{	
		Aluminum_		_ .		NR	
	440-36-0	Antimony_				NR	
		Arsenic		1-1		NR	
L		Barium_	- <del></del>			NR     NR	
		Beryllium Cadmium		-		NR NR	
I		Calcium_		-	·	NR NR	
		Chromium	8.4			P	
I		Cobalt		]-[		NR	
1		Copper		-		NR	
,	7439-89-6	Iron		-		NR	
		Lead	<del></del>	-		NR	
		Magnesium		-		NR	
		Manganese		-		NR	
		Mercury		_\		NR	
7		Nickel		-		NR	
7	7440-09-7	Potassium		( <u> </u>		NR	
7	7782-49-2	Selenium_		-		NR	
7	7440-22-4	Silver		1_1		NR	
] 7	7440-23-5	Sodium		l_l		NR	
·	7440-28-0		 	]_[		NR	
	7440-62-2	Vanadium_		$l_{-l}$		NR	
7	7440-66-6	Zinc		1-1		NR	
-		Cyanide		<u> -</u>		NR	
olor Before: E	BROWN	Clari	ty Before:		_	Texture:	MEDIU
	YELLOW	Clari	ty After: CLE	AR		Artifacts:	

# 1 TNORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

_	I	NORGANIC A	NALYSES DATA S	HEET	, <del></del>	
ale Name : CITT I	OTTERNI O		Contract: NY	797 - 209	S-65	
_		_				I
ab Code: STLN	_ Cas	se No.: 786	SAS No.:	:	SDG No.:	150659
Matrix (soil/wa	ater): SOIL_	_		Lab Sam	ple ID: AD92	0261
sevel (low/med)	: LOW	_		Date Re	ceived: 11/1	0/99
Solids:	_89.4	l				
Cor	ncentration	Units (ug/	L or mg/kg dry	y weight	): MG/KG	
	CAS No.	Analyte	Concentration	C Q	M	
				_	_ _	
	7429-90-5			l <u></u> l	NR NR	
		Antimony_		l l	_ NR	
		Arsenic			_ NR	
		Barium		\ <u>-</u>	_ NR	
		Beryllium	<del></del>		_\NR	
		Cadmium		-	_ NR	
	1	Calcium		{_} <i>-</i>	_\NR\	
		Chromium_	29.9_	\ <b>-</b>	_ P_ NR	
—		Cobalt	l ————	<u></u>		
		Copper	<u> </u>		NR NR	
	7439-89-6 7439-92-1	Iron Lead		<del>-</del>	$- \frac{NR}{NR} $	
		Magnesium		1-1	- NR	
	7439-96-5	Manganese		-	$- \frac{NR}{NR} $	
		Mercury		-	- NR	
		Nickel	_ <del></del>		$- _{NR}^{NR} $	
		Potassium		-	$- \frac{NR}{NR} $	
		Selenium	ļ <del></del>	<u>  -  </u>	$- \frac{NR}{NR} $	
	7440-22-4			1-1	- NR	
		Sodium		\-I	$- \frac{NR}{NR} $	
	7440-28-0	Thallium		-	- NR	
	7440-62-2	Vanadium		-	$- _{NR}^{RR} $	
	7440-66-6	Zinc		1-1	- NR	
	, 113 33 3	Cyanide_	<del>-</del>	·   <del></del>	- NR	
Color Before:	BROWN	Clari	ty Before:		Texture:	MEDIU
Color After:	YELLOW	Clari	ty After: CLE	AR_	Artifacts:	
Comments:  LAB_SAMPLE  CLIENT_SAMP	ID:_A975250 LE_ID:_1506	-S-65				

# 1 INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO	V S	$\mathbf{Z} \mathbf{N}$	) <u> </u>
------------------	-----	-------------------------	------------

			S-66
Lab Name: STL_BUFFALO	O Con	tract: NY97-209	
Lab Code: STLNY_	Case No.: 7861_	SAS No.:	SDG No.: 150659
Matrix (soil/water):	SOIL_	Lab Sample	e ID: AD920262
Level (low/med):	LOW	Date Rece	ived: 11/10/99
% Solids:	_94.2		

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	<del></del>	-	<del></del>	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		Ľ		NR
7440-02-0	Nickel				NR
7440-09-7	Potassium		<u> </u>		NR
7782-49-2	Selenium_		l_		NR
7440-22-4	Silver		۱_	l	NR
7440-23-5	Sodium	<u></u>	1_		NR
7440-28-0	Thallium_		<u> </u>	<u> </u>	NR
7440-62-2	Vanadium_		_		NR
7440-66-6	Zinc		1_		NR
\	Cyanide		_	]	NR
					l

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	

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

Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron	Analyte	Control Limit	Sample (S	S) C	Duplicate (D)	С	RPD	Q	М
Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc	Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_	2.2090		.8944					NR NR NR NR NR NR NR NR NR NR

# Wet Chemistry Analysis

000016Client Sample No.

						1506-S-69			
Lab Name: STL Buffalo	Contract	Contract:					<del></del>		
Lab Code: RECNY	Case No.: <u>7861</u>	SAS No.:				5	SDG No.: <u>150659</u>		
Matrix (soil/water): V		Lab Samp	ol€	e ID:	<u>A9'</u>	752511			
% Solids: 0.0 Date Samp/Recv: 1					<u>11,</u>	/08/1999 <u>11</u>	/10/1999		
Parame	eter Name	Units of Measure	Result	С	Q	M	Method Number	Analyzed Date	
Hexavalent Chromium -	Total	MG/L	0.010	ט		Α	7196A	11/10/1999	

Committed To Your Succes (NYBA 786)		Address: 21  Rockets  Phone:	DEF Denzi Pay Empire 44 Brights Wen 116) 292	- Hen 2 -	tal, rieti Le 1090	1467	<u>n Li</u> n	e ed	Addres  Phone:	J: t: nny:	Sam							nternal Us	e Only			- Harrison
Project Name:  RI/F5  Project Location: 45 Mills Rodus  STL:  Sample No.	Real Blud. Date Rec	lumber: / 506 R. quired:		M ATR	1	Total Cr	Ha C+ W															
STL Sample No.	Sample ID	Date_	pling Time	x	B	746	10010			A PROPERTY OF								Additio	nal Ana	lyses /	Rema	rks
	1506-3-59	11/8/99			G			$\perp$			_		∔_				-					
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	1506-3-60	N/8/99			G		X	_		$\downarrow \downarrow$			<del> </del>			$\bot$	—					
Alicent Application	1506-3-61	11/8/99			6		4			1 1	_		<del> </del>				_					
	1506-3-62	11/8/99	_	5	G		4	_		++	_		╂—		_	-	M	<u>15/1</u>	<u>41)</u>			
	1506- 3-63	11/8/19		5	6		*			+	_	_	$\downarrow$		_		<u> </u>					
	1506-3-64	11/8/99	_	5	G		4	$\dashv$	-	++			┿-		_					_		
	1506-5-65	11/8/99	1040	2	G	7	4	_		$\bot \bot$	_+	-	-	$\vdash$		_	—-		•——			
	1506-3-66	11/8/99	1030	5	6	14	X	_		<b>↓</b>	$\perp$	_	<u> </u>		_		<b>↓</b>					
	1506-3-67	11/8/99	1035	5	G	*	K	$\perp$		$\sqcup$	_ _		_				<u> </u>					
15.7	1506-1-68	N/8/99			6	_	*				_						<u> </u>					
	1506-3-69	11/8/99	0945	W	6	*	*	_	_ _		$\perp$		$\perp$	$\square$								
A Comment	1706-5-10			<u> </u>				丄	$\perp$						$\bot$			·——				
REUNQUISHED BY	COMP	onmenta	DATE DATE	199		ME 1ME	0		16	EIVED BY	7	ه ا			COMP		<del></del>		DATE OF	)	TIME TIME	0
RELINQUISHED BY	COMPANY		DATE		1	IME			RECE	IVED BY				_	COMP	ANY			DATE		TIME	фо
Matrix Key  WW = Wastewater  W = Water  SL = Soil  SL = Sludge  MS = Miscellaneous Solids  OL = Oil  A = Air  O =	1. Plastic 2. VOA Vial 3. Sterile Pla 4. Amber Gla		Preservat 1. HCI, C 2. H2SO 3. HNO3 4. NaOH 5. NaOH 6. Cool to 7. None	ool to 4' 1, Cool to Cool to Cool to Zn Acet	to 4° 4° 4°	ool to	4°	_		MENT		s ⁻ C	-				-	Courier Bill of L	_			034

STI COC 10/98 Rev 0

# INORGANIC ANALYSES DATA SHEET

DAYENV	SAMPLE	NO.
1		<del></del> 1

Lab Name: STL_	RIIFFAI.O		Contract. NV	797-209		S-67	
Lab Code: STLN						SDG No.:	150659
Matrix (soil/w	ater): SOIL	_		Lab Sa	mple	ID: AD92	0263
Level (low/med	): LOW_	_		Date R	ecei	ved: 11/1	.0/99
% Solids:	_84.3	3					
Co.	ncentration	Units (ug,	/L or mg/kg dry	y weigh	t): 1	MG/KG	
	CAS No.	Analyte	Concentration	C Q	М		
	7429-90-5	Aluminum		-	$- _{\overline{\mathtt{N}}}$	<u>_</u>	
		Antimony_		-	$- _{N}$		
	7440-38-2	Arsenic			N	R	
		Barium		_	ı	R	
	7440-41-7			<b>_</b>  -		R	
	7440-43-9	Cadmium_		<b>-</b>		R	
	7440-70-2 7440-47-3	Calcium  Chromium	12.6	-	N	R	
	7440-48-4	Cobalt		-		R	
	7440-50-8	Copper_		-		R	
	7439-89-6	Iron		<u> </u>		R	
	7439-92-1	Lead			N	R	
	7439-95-4					R	
	7439-96-5					R	
	7439-97-6			[_		R	
	7440-02-0 7440-09-7			- -		R R	
	7782-49-2			-		R	
	7440-22-4	_		- -	t	R	
	7440-23-5		<u> </u>	-		R	
	7440-28-0					IR.	
	7440-62-2	_				rr.	
	7440-66-6	Zinc		<u>   _   </u>		IR	
		Cyanide	<u> </u>	- -	N	IR	
Color Before:	BROWN	Clari	ty Before:	.   _	 า	_' exture:	MEDIUM
Color After:	YELLOW		ty After: CLE	AR_		rtifacts	

FORM I - IN

Comments:

# 1 INORGANIC ANALYSES DATA SHEET

DAYENV SAMPLE NO.

Lab Name: STL_E	BUFFALO		Contract: NY	97-209	S-68	
Lab Code: STLNY					SDG No.: 1	.50659
Matrix (soil/wa	iter): SOIL_	-		Lab Sampl	e ID: AD920	264
Level (low/med)	: LOW	_		Date Rece	eived: 11/10	/99
% Solids:	_81.4	Ļ				
Cor	ncentration	Units (ug/	L or mg/kg dry	y weight):	MG/KG	
1	CAS No.	Analyte	Concentration	C Q	M	
	7429-90-5	Aluminum			NR	
	7440-36-0			-	NR	
	7440-38-2			-	NR	
	7440-39-3				NR	
!	7440-41-7				NR	
	7440-43-9			_	NR	
	7440-70-2				NR	
	7440-47-3		40.8	\-\	P_	
	7440-48-4				NR	
_	7440-50-8	Copper Iron		-	NR     NR	
	7439-89-6   7439-92-1			-	NR NR	
	7439-95-4	Magnesium		-	NR NR	
	7439-96-5	Manganese		-	NR	
	7439-97-6	Mercury		-	NR	
	7440-02-0	Nickel		-	NR	
	7440-09-7				NR	
	7782-49-2	Selenium			NR	
	7440-22-4	Silver		-	NR	
	7440-23-5	Sodium		_	NR	
	7440-28-0	Thallium_		. _]	NR	
	7440-62-2			.}_	NR	
	7440-66-6	Zinc		. _\	NR	
		Cyanide	\	. -	NR	
		l	l	.	.	
Color Before:	BROWN	Clari	ty Before:		Texture:	MEDIUM
Color After:	YELLOW	Clari	ty After: CLE	AR_	Artifacts:	
Comments:  LAB_SAMPLE_ CLIENT_SAMP	ID:_A975251 LE_ID:_1506	0-STA00242 -S-68				

# 1 INORGANIC ANALYSES DATA SHEET

DAYENVUSAMBLE NO	DAYEI	ATAMASON	NO
------------------	-------	----------	----

•				S-69 I
Lab Name: STL_BUFFALO		Contract: NY	797-209	
Lab Code: STLNY_ C	ase No.: 786	SAS No.:	:	SDG No.: 150659
Matrix (soil/water): WAT	ER		Lab Sampl	e ID: AD920024
Level (low/med): LOW			Date Rece	ived: 11/10/99
% Solids:0	.0			
Concentratio	n Units (ug/	/L or mg/kg dry	y weight):	UG/L_
CAS No.	Analyte	Concentration	C Q	м
7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-22-4 7440-23-5 7440-28-0	Arsenic_Barium_Beryllium Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium Manganese Mercury_Nickel_Potassium Selenium_Silver_	3.4	B	NR NR NR NR NR NR NR NR NR NR NR NR NR N

Color	Before:	COLORLESS	Clarity	Before:	CLEAR_	Texture:	
Color	After:	COLORLESS	Clarity	After:	CLEAR_	Artifacts: _	
Commer LAE CLI	SAMPLE_I	ID:_A9752511-STA LE_ID:_1506-S-69	A00273				_ _ _

7440-66-6

Zinc Cyanide

NR NR

NR



**Committed To Your Success** 

January 19, 2000

Mr. Jeff Danzinger Day Environmental, Inc. 2144 Brighton-Henrietta Town Line Rd. Rochester, NY 14623

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:

Ouote #: 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.

andace I Fox

Candace L. Fox

Program Manager

Susan L. Tinsmith Laboratory Manager

CLF/SLT/mfg **Enclosure** 

I.D. #A99-8821; A00-0007 #NY8A7861

312 pages which are individually numbered. This report contains

#### **Laboratory Locations:**

- Monroe, CT
- Pensacola, FL
- · University Park, IL
- Billerica, MA
- · Westfield, MA
- Edison NI
- 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** 10 Hazelwood Drive

Amherst, NY 14228

Tel: (716) 691-2600

Fax: (716) 691-7991

www.stl-inc.com

Scrota Transfervock hie

# SAMPLE DATA SUMMARY PACKAGE



# **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

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: <u>SEVERN TRENT LABORATORIES INC.</u>

# USEPA Defined Organic Data Qualifiers:

U	-	Indicates compound was analyzed for but not detected.
ī	_	Indicates an estimate value. This flag is used either when estimate

- 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.
- В 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.
- $\mathbf{D}$ This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- Т This flag is used when the analyte is found in the associated TCLP extraction blank as well as in the sample.
- Indicates presumptive evidence of a compound. This flag is only used N 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.

000005 Client No.

1506-17 (18.3-23')

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: <u>251SR</u> SAS No.: _____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A0000702

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: MB502.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>01/03/2000</u>

% 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 UNI		_
CAS NO.	COMPOUND	(ug/L or ug/Kg)	<u>ug/l</u>	Q
74-87-3	Chloromethane		200	ט
74-83-9	Bromomethane		200	lυ
75-01-4	Vinyl chloride		200	บ
	Chloroethane		200	ט
75-09-2	Methylene chloride		200	ט
67-64-1	Acetone		200	ט
75-15-0	Carbon Disulfide		200	ប
	1,1-Dichloroethene		200	U
75-34-3	1,1-Dichloroethane		200	ט
540-59-0	1,2-Dichloroethene (Total)		360	
67-66-3	Chloroform		200	ט
107-06-2	1,2-Dichloroethane		200	ប
	2-Butanone		200	ָ ע
71-55-6	1,1,1-Trichloroethane		200	ע ו
56-23-5	Carbon Tetrachloride		200	ע
75-27-4	Bromodichloromethane		200	ט
78-87-5	1,2-Dichloropropane		200	ַ
10061-01-5-	cis-1,3-Dichloropropene		200	ש
79-01-6	Trichloroethene		2600	
124-48-1	Dibromochloromethane		200	U
79-00-5	1,1,2-Trichloroethane		200	ט
71-43-2	Benzene		200	ט
10061-02-6-	trans-1,3-Dichloropropene		200	ប
75-25-2	Bromoform		200	ש
108-10-1	4-Methyl-2-pentanone		200	שׁ
591-78-6	2-Hexanone		200	ប
127-18-4	Tetrachloroethene		4100	E
108-88-3	Toluene		29	J
79-34-5	1,1,2,2-Tetrachloroethane		200	บิ
	Chlorobenzene		200	Ū
-	Ethylbenzene		200	บ
100-42-5			200	ប
	Total Xylenes		200	บ
L			<b>*</b>	

000006

Client No.

1506-17 (18.3-23',

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: <u>251SR</u> SAS No.: _____ SDG No.: <u>123099</u>

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: <u>502.2</u> ID: <u>0.25</u> (mm) Dilution Factor: <u>25.00</u>

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CAS NO.	COMPOUND	(ug/L or ug/Kg)		Q
74-87-3	Chloromethane		250	U
74-83-9	Bromomethane		250	ט
75-01-4	Vinyl chloride		250	ט
75-00-3	Chloroethane		250	ט
75-09-2	Methylene chloride		250	ן ט
67-64-1			250	ע
75-15-0	Carbon Disulfide		250	ן ט
75-35-4	1,1-Dichloroethene		250	ן ט
75-34-3	1,1-Dichloroethane		250	ן ט
540-59-0	1,2-Dichloroethene (Total)		250	D
	Chloroform		250	ט
107-06-2	1,2-Dichloroethane		250	ט
78-93-3	2-Butanone		250	ן ט
71-55-6	1,1,1-Trichloroethane		250	ט
56-23-5	Carbon Tetrachloride		250	ן ט
75-27-4	Bromodichloromethane		250	ן ט
78-87-5	1,2-Dichloropropane		250	ן ט
10061-01-5-	cis-1,3-Dichloropropene		250	ט
	Trichloroethene		1500	ם
124-48-1	Dibromochloromethane		1500	D
79-00-5	1,1,2-Trichloroethane		250	ן ט
71-43-2			250	ט ו
10061-02-6-	trans-1,3-Dichloropropene		250	ט ו
	Bromoform		250	ט
_	4-Methyl-2-pentanone		250	U
	2-Hexanone		250	ן ח
	Tetrachloroethene		2300	D
108-88-3			250	Ū
	1,1,2,2-Tetrachloroethane		250	บ็
	Chlorobenzene		250	บั
100-41-4	Ethylbenzene		<b>250</b>	U U
	Styrene		250 250	ן ט
	Total Xylenes		250 250	lu l
1230-20-7-	TOCAT VATCHES	<del></del>	۵۵0	

000007

Client No.

1506-17 (23-28')	
------------------	--

Lab Name: STL Buffalo Contract:

Lab Code: <u>RECNY</u> Case No.: <u>251SR</u> SAS No.: _____ SDG No.: <u>123099</u>

Matrix: (soil/water) <u>WATER</u> Lab Sample ID: <u>A0000701</u>

Sample wt/vol: ___5.00 (g/mL) ML Lab File ID: ___M3480.RR_____

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>01/03/2000</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/K	g) <u>UG/L</u>	Q
74-87-3	-Chloromethane		10	บ
74-83-9	Bromomethane		10	ט
75-01-4	Vinyl chloride		2	J
	-Chloroethane		10	ט
75-09-2	-Methylene chloride		10	ע
67-64-1			3	J
75-15-0	Carbon Disulfide		10	ע
75-35-4	-1,1-Dichloroethene		18	ľ
75-34-3	-1,1-Dichloroethane		5	J
540-59-0	-1,2-Dichloroethene (Total)_		660	E
67-66-3			10	U
107-06-2	1,2-Dichloroethane		10	ן ט
78-93-3			10	ן טן
1	1,1,1-Trichloroethane		10	ן טן
	Carbon Tetrachloride_		10	ן ט
	Bromodichloromethane		10	ן ט
	-1,2-Dichloropropane		10	ן טן
	-cis-1,3-Dichloropropene		10	ן טן
	Trichloroethene		1100	E
	-Dibromochloromethane		10	ן טן
79-00-5	1,1,2-Trichloroethane		10	ן טן
71-43-2			10	ן טן
10061-02-6	trans-1,3-Dichloropropene		10	ן ט
75-25-2			10	ן טן
108-10-1	4-Methyl-2-pentanone		10	ן ט
591-78-6	2-Hexanone		10	ט
127-18-4	Tetrachloroethene		1300	E
108-88-3	Toluene		57	1
79-34-5	1,1,2,2-Tetrachloroethane		10	ט
	Chlorobenzene		10	ט
100-41-4	Ethylbenzene		2	J
100-42-5	• — — — — — — — — — — — — — — — — — — —		10	บ
	Total Xylenes		15	

1506-17 (23-28')

### ASP 95 - VOLATILES ANALYSIS DATA SHEET

Client No.

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: <u>251SR</u> SAS No.: _____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A0000701DL

Sample wt/vol: ___5.00 (g/mL) ML Lab File ID: M3507.RR____

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>01/03/2000</u>

% Moisture: not dec. ____ Heated Purge: N Date Analyzed: 01/05/2000

GC Column: <u>502.2</u> ID: <u>0.25</u> (mm) Dilution Factor: <u>40.00</u>

Soil Extract Volume: ____ (uL) Soil Aliquot Volume: ____ (uL)

CAS NO. COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3Chloromethane		400	U
74-83-9Bromomethane		400	ן ט
75-01-4Vinyl chloride		400	ט
75-00-3Chloroethane		400	U
75-09-2Methylene chloride		400	ן ט
67-64-1Acetone		400	]ប
75-15-0Carbon Disulfide		400	ן ט
75-35-41,1-Dichloroethene		400	ן ט
75-34-31,1-Dichloroethane		400	U
540-59-01,2-Dichloroethene (Total	1)	460	D
67-66-3Chloroform		400	ן ט
107-06-21,2-Dichloroethane		400	ן ט
78-93-32-Butanone		400	ן ט
71-55-61,1,1-Trichloroethane		400	ן ט
56-23-5Carbon Tetrachloride		400	ט
75-27-4Bromodichloromethane		400	ט
78-87-51,2-Dichloropropane		400	ן ט
10061-01-5cis-1,3-Dichloropropene		400	ט
79-01-6Trichloroethene		2100	D
124-48-1Dibromochloromethane		400	ט
79-00-51,1,2-Trichloroethane		400	υ
71-43-2Benzene		400	ט
10061-02-6trans-1,3-Dichloropropend	e	400	ן ט
75-25-2Bromoform		400	ן ט
108-10-14-Methyl-2-pentanone		400	ט
591-78-62-Hexanone		400	บ
127-18-4Tetrachloroethene		2900	lo l
108-88-3Toluene		42	ا تما
79-34-51,1,2,2-Tetrachloroethane	e	400	υ
108-90-7Chlorobenzene		400	Ū
100-41-4Ethylbenzene		400	ן ט
100-42-5Styrene		400	ן מ
1330-20-7Total Xylenes		400	U I

Client No.

1506-17 (28-33)

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) <u>WATER</u> Lab Sample ID: <u>A9882107</u>

Level: (low/med) <u>IOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>12/30/1999</u>

% 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)	<u>UG/L</u>	Q
74-87-3	Chloromethane		10	บ
74-83-9	Bromomethane		10	U
75-01-4	Vinyl chlori <del>de</del>		7	J
75-00-3	Chloroethane		10	ע
75-09-2	Methylene chloride		10	ט
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
	Chloroform		10	ע
107-06-2	1,2-Dichloroethane		10	ט
	2-Butanone		10	ט
71-55-6	1,1,1-Trichloroethane		10	ט
56-23-5	Carbon Tetrachloride		10	ט
	Bromodichloromethane		10	ט
78-87-5	1,2-Dichloropropane		10	ט
10061-01-5	cis-1,3-Dichloropropene		10	ע
79-01-6	Trichloroethene		700	E
124-48-1	Dibromochloromethane		10	U
79-00-5	1,1,2-Trichloroethane		10	ט
71-43-2	Benzene		10	ט
10061-02-6	trans-1,3-Dichloropropene		10	ש
75-25-2	Bromoform		10	שׁ
108-10-1	4-Methyl-2-pentanone		10	ט
591-78-6	2-Hexanone		10	ט
127-18-4	Tetrachloroethene		510	E
108-88-3	Toluene		24	
79-34-5	1,1,2,2-Tetrachloroethane		10	ט
	Chlorobenzene		10	บ
	Ethylbenzene		10	บั
	Styrene		10	ט
	Total Xylenes		6	J

Client No.

_____

			1506-17	(28-33)
Iab	Name: STL Buffalo	Contract:		

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882107DL

Sample wt/vol: __5.00 (g/mL) ML Lab File ID: M3498.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>12/30/1999</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3	Chloromethane		200	ט
	Bromomethane		200	ប
75-01-4	Vinyl chloride		200	ប
	Chloroethane		200	ט
75-09-2	Methylene chloride		200	ן ט
67-64-1	Acetone		200	ן ט
75-15-0	Carbon Disulfide		200	ט
75-35-4	1,1-Dichloroethene		22	עם
75-34-3	1,1-Dichloroethane		200	ט !
540-59-0	1,2-Dichloroethene (Total)		3100	D
	Chloroform		200	ט ו
107-06-2	1,2-Dichloroethane		200	ט
	2-Butanone		200	ט ו
71-55-6	1,1,1-Trichloroethane		200	ן ט
	Carbon Tetrachloride		200	ן טן
75-27-4	Bromodichloromethane		200	ן ט
78-87-5	1,2-Dichloropropane		200	ט ו
10061-01-5	cis-1,3-Dichloropropene		200	ט
79-01-6	Trichloroethene		940	D
124-48-1	Dibromochloromethane		200	ט
79-00-5	1,1,2-Trichloroethane		200	ן ט
71-43-2			200	ן טן
10061-02-6-	trans-1,3-Dichloropropene		200	ן מן
	Bromoform		200	เบ
	4-Methyl-2-pentanone		200	ן ט
	2-Hexanone		200	โบ ไ
	Tetrachloroethene		610	D
108-88-3			200	ט ו
	1,1,2,2-Tetrachloroethane		200	ן ט
	Chlorobenzene	<del></del>	200	ט
	Ethylbenzene		200	ט
100-41-4	<del>-</del>		200	ן ט
			200	ן ט
1330-20-7	Total Xylenes		200	

Client No.

1506-17 (28-33) MS

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882107MS

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: MB499.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>12/30/1999</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/K		Q
74-87-3	-Chloromethane		200	ט
74-83-9	-Bromomethane		200	ע
75-01-4	-Vinyl chloride		200	ע
	-Chloroethane		200	ע
75-09-2	-Methylene chloride		200	ע
67-64-1			200	ע
	-Carbon Disulfide		200	ע
	-1,1-Dichloroethene		980	
	-1,1-Dichloroethane		200	ע
	-1,2-Dichloroethene (Total)		3500	
67-66-3			200	ע
107-06-2	-1,2-Dichloroethane		27	J
78-93-3			200	ע
71-55-6	-1,1,1-Trichloroethane		200	ע
56-23-5	Carbon Tetrachloride		200	ט
75-27-4	Bromodichloromethane		200	ט
78-87-5	-1,2-Dichloropropane		200	ע.
10061-01-5	-cis-1,3-Dichloropropene		200	ט
79-01-6	Trichloroethene		2100	
124-48-1	-Dibromochloromethane		200	ט
79-00-5	-1,1,2-Trichloroethane		200	ט
71-43-2	Benzene		1000	
10061-02-6	-trans-1,3-Dichloropropene		200	ט
75-25-2	Bromoform		200	ן ט
108-10-1	4-Methyl-2-pentanone		200	ט
591-78-6	2-Hexanone		200	ן ט
127-18-4	Tetrachloroethene		700	
108-88-3	Toluene		1000	
79-34-5	-1,1,2,2-Tetrachloroethane	<del> </del>	200	ט
	Chlorobenzene		980	
	Ethylbenzene		200	ט
100-42-5			200	บี
	Total Xylenes		200	บั

Client No.

1506-17 (28-33) SD

			1506-17 (28-33) SD
Lab Name:	SIL Buffalo	Contract:	

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882107SD

Sample wt/vol: ___5.00 (g/mL) ML Lab File ID: MB500.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>12/30/1999</u>

% 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)

(ug/L or ug/Kg	) <u>UG/L</u>	Q
	200	υ
	200	ן ט
	200	ן ט
	200	ן ט
	200	ប
	200	ט
	200	ט
	970	1 1
	200	ט
)	3000	
	200	ן ט
	25	J
	200	ן ט
	200	ប
	200	ט
	200	ע
	200	ן ט
	200	[ ט
	2000	1 1
	200	ט
	200	บ
	1000	1
:	200	ן ט
	200	ט
	200	ប
	200	ט
	<b>6</b> 30	
	1000	- ( )
	200	ט
	1000	
· · · · · · · · · · · · · · · · · · ·	200	ן מן
		บ
	200	บ
	(ug/L or ug/Kg	200 200 200 200 200 200 200 200 200 200

Client No.

1506-17 (33-37.5')

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>123099</u>

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)

CAS NO.	COMPOUND	(ug/L or ug/Kg		Q
	Chloromethane		10	บ
	Bromomethane		10	ש
	Vinyl chloride		120	
	Chloroethane		10	<b>ט</b>
	Methylene chloride		10	ע
	Acetone		3	J
	Carbon Disulfide		10	บ
75-35-4	1,1-Dichloroethene		34	
	1,1-Dichloroethane		7	J
540-59-0	1,2-Dichloroethene (Total)		1900	E
	Chloroform		10	ע
107-06-2	1,2-Dichloroethane		10	ט
	2-Butanone		10	ט
71-55-6	1,1,1-Trichloroethane		10	<b>ט</b>
56-23-5	Carbon Tetrachloride		10	ע
	Bromodichloromethane		10	ע
78-87-5	1,2-Dichloropropane		10	ע
10061-01-5	cis-1,3-Dichloropropene		10	ע
	Trichloroethene		190	1
124-48-1	Dibromochloromethane		10	ט
79-00-5	1,1,2-Trichloroethane		10	<b>U</b> .
71-43-2	Benzene		10	ש
10061-02-6	trans-1,3-Dichloropropene		10	ש
75-25-2	Bromoform		10	บ
108-10-1	4-Methyl-2-pentanone		3	J
591-78-6	2-Hexanone		10	ט
127-18-4	Tetrachloroethene		240	E
108-88-3	Toluene		1	J
79-34-5	1,1,2,2-Tetrachloroethane		10	บ
	Chlorobenzene		10	บ
	Ethylbenzene		1	Ĵ
1	Styrene		10	บ็
	Total Xylenes		3	J
			_	١

Client No.

1506-17 (33-37.5')

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882105DL

Sample wt/vol:  $\underline{5.00}$  (g/mL)  $\underline{\text{ML}}$  Lab File ID:  $\underline{\text{M3509.RR}}$ 

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/29/1999</u> <u>12/30/1999</u>

% 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)	<u>UG/L</u>	Q
	Chloromethane		400	U
	Bromomethane		400	ט
75-01-4	Vinyl chloride		70	M
	Chloroethane		400	ע
	Methylene chloride		400	ש
	Acetone		400	ַע
	Carbon Disulfide		400	ט
75-35-4	1,1-Dichloroethene		400	ַט
75-34-3	1,1-Dichloroethane		400	ש
540 <b>-</b> 59-0	1,2-Dichloroethene (Total)		4800	D
	Chloroform		400	ש
107-06-2	1,2-Dichloroethane		400	ט
78-93-3	2-Butanone		400	ט
71-55-6	1,1,1-Trichloroethane		400	ט
56-23-5	Carbon Tetrachloride		400	ש
	Bromodichloromethane		400	ט
78 <b>-8</b> 7-5	1,2-Dichloropropane		400	ט
10061-01-5	cis-1,3-Dichloropropene		400	ע
79-01-6	Trichloroethene		120	M
124-48-1	Dibromochloromethane		400	บ
79-00-5	1,1,2-Trichloroethane		400	บ
71-43-2	Benzene		400	ש
10061-02-6	trans-1,3-Dichloropropene		400	ט
75-25-2	Bromoform		400	ש
108-10-1	4-Methyl-2-pentanone		400	ט
591-78-6	2-Hexanone		400	ט
127-18-4	Tetrachloroethene		190	M
108-88-3	Toluene		400	שן
79-34-5	1,1,2,2-Tetrachloroethane		400	ט
	Chlorobenzene		400	υ
-	Ethylbenzene		64	עם
	Styrene		400	U
	Total Xylenes		220	M

000015

Client No.

				1206-5T	(TR
Lab Nam	e: <u>STL Buffalo</u>	Contract:	•		

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882104

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: M3485.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/29/1999</u> <u>12/30/1999</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/F	(g) <u>UG/L</u>	Q
74-87-3	-Chloromethane		10	υ
74-83-9	-Bromomethane		10	ן ט
75-01-4	-Vinyl chloride	•	4	J
75-00-3	-Chloroethane		10	ן ט
75-09-2	-Methylene chloride		10	ט
67-64-1			3	J
	-Carbon Disulfide		10	ע
75-35-4	-1,1-Dichloroethene		10	U
	-1,1-Dichloroethane		10	ע
540-59-0	-1,2-Dichloroethene (Total)		21	
67-66-3			10	ע
	-1,2-Dichloroethane		10	ע
78-93-3			10	ט
	-1,1,1-Trichloroethane		10	ט
	-Carbon Tetrachloride		10	ן ט
75-27-4	-Bromodichloromethane	·	10	ן ט
	-1,2-Dichloropropane	<del></del>	10	ט
10061-01-5	-cis-1,3-Dichloropropene		10	ט
	-Trichloroethene	<del></del> _	10	ן ט
	-Dibromochloromethane		10	ע
79-00-5	-1,1,2-Trichloroethane		10	ן ט
71-43-2	-Benzene		10	ן ט
10061-02-6	-trans-1,3-Dichloropropene		10	ן ט
75-25-2	Bromoform	<u>-</u>	10	ן ט
108-10-1	-4-Methyl-2-pentanone		10	ן ט
591-78-6			10	ן ט
127-18-4	-Tetrachloroethene		2	J
108-88-3	Toluene		6	J
	-1,1,2,2-Tetrachloroethane		10	ן ע
	Chlorobenzene		10	ט
	-Ethylbenzene		10	ן ט
100-42-5			10	Tu
	-Total Xylenes		11	
			L	

000018

Client No.

1506-21 (23-28')

Lab Name: STL Buffalo Contract:

Lab Code: <u>RECNY</u> Case No.: ____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882103

Sample wt/vol:  $\underline{5.00}$  (g/mL)  $\underline{\text{ML}}$  Lab File ID:  $\underline{\text{M3484.RR}}$ 

Level: (low/med) <u>IOW</u> Date Samp/Recv: <u>12/28/1999</u> <u>12/30/1999</u>

% 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)

CAS NO. COMPOUND	(ug/L or ug/Kg)	UG/L	Q
74-87-3Chloromethane		10	U
74-83-9Bromomethane		10	ט
75-01-4Vinyl chloride		4	J
75-00-3Chloroethane		10	ן ט
75-09-2Methylene chlori	de	10	ן ט
67-64-1Acetone		10	U
75-15-0Carbon Disulfide		10	ប
75-35-41,1-Dichloroethe		10	ן ט
75-34-31,1-Dichloroetha	ne	10	ן טן
540-59-01,2-Dichloroethe	ne (Total)	28	) 1
67-66-3Chloroform		10	ן ט
107-06-21,2-Dichloroetha	ne	10	ן ט
78-93-32-Butanone		10	ן ט
71-55-61,1,1-Trichloroe	thane	10	ן ט
56-23-5Carbon Tetrachlo		10	ן ט
75-27-4Bromodichloromet	hane	10	ט
78-87-51,2-Dichloroprop	ane	10	ן ט
10061-01-5cis-1,3-Dichloro	propene	10	ן ט
79-01-6Trichloroethene		10	ן ט
124-48-1Dibromochloromet	hane	10	ן ט
79-00-51,1,2-Trichloroe	thane	10	ט
71-43-2Benzene		10	ט
10061-02-6trans-1,3-Dichlo	ropropene	10	ט
75-25-2Bromoform		10	ט
108-10-14-Methyl-2-penta	none	10	ן מן
591-78-62-Hexanone		10	υ l
127-18-4Tetrachloroethen	ne	3	J
108-88-3Toluene		4	J
79-34-51,1,2,2-Tetrachl	oroethane	10	ן ע
108-90-7Chlorobenzene		10	Ū
100-41-4Ethylbenzene	<del></del>	2	J
100-42-5Styrene		10	ן מ
1330-20-7Total Xylenes		42	
1550-20-7Total Aylenes			

Client No.

1506-21 (28-33')

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) <u>WATER</u> Lab Sample ID: <u>A9882102</u>

Sample wt/vol: ____5.00 (g/mL) ML Lab File ID: ____M3483.RR______

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/28/1999</u> <u>12/30/1999</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/k	-	UG/L	Q
74-87-3	Chloromethane			10	ט
74-83-9	Bromomethane			10	U
75-01-4	Vinyl chloride			10	U
75-00-3	Chloroethane		ı	10	ប
75-09-2	Methylene chloride			10	U
67-64-1				10	U
75-15-0	Carbon Disulfide			10	U
	1,1-Dichloroethene			10	U
	1,1-Dichloroethane			10	U
540-59-0	1,2-Dichloroethene (Total)			11	
	Chloroform			10	U
107-06-2	1,2-Dichloroethane			10	U
	2-Butanone			10	U
71-55-6	1,1,1-Trichloroethane			10	U
	Carbon Tetrachloride			10	U
75-27-4	Bromodichloromethane			10	U
	1,2-Dichloropropane			10	U
	cis-1,3-Dichloropropene			10	U
79-01-6	Trichloroethene			10	ע
124-48-1	Dibromochloromethane			10	ע
79-00-5	1,1,2-Trichloroethane			10	<del>U</del>
71-43-2	Benzene			10	ן ט
10061-02-6	trans-1,3-Dichloropropene			10	ט
75-25-2	Bromoform			10	ן מן
108-10-1	4-Methyl-2-pentanone	_		10	ן מן
591-78-6	2-Hexanone			10	ן ט
127-18-4	Tetrachloroethene			7	J
108-88-3	Toluene			4	J
79-34-5	1,1,2,2-Tetrachloroethane			10	บื
	Chlorobenzene			10	บั
	Ethylbenzene			1	Ĵ
100-42-5		_		10	u l
	Total Xylenes			21	

Client No.


Lab Name: STL Buffalo Contract: ______

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882101

Sample wt/vol: __5.00 (g/mL) ML Lab File ID: M3496.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/28/1999</u> <u>12/30/1999</u>

% 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)

74-87-3	CAS NO.	COMPOUND	(ug/L or ug/K	(g) <u>UG</u>	<u>/L</u> Q
75-01-4Vinyl chloride 75-00-3	74-87-3	-Chloromethane		10	ט ט
75-00-3Chloroethane 75-09-2Methylene chloride 75-64-1Acetone 75-15-0Carbon Disulfide 75-35-41,1-Dichloroethene 10 U 75-35-41,1-Dichloroethene 10 U 75-34-31,1-Dichloroethane 10 U 75-66-3Chloroform 10 U 77-06-21,2-Dichloroethane 10 U 78-93-32-Butanone 10 U 71-55-61,1,1-Trichloroethane 10 U 75-27-4Bromodichloromethane 10 U 78-87-51,2-Dichloroethane 10 U 78-87-51,2-Dichloropropane 10 U 79-01-6Trichloroethene 10 U 79-01-6Trichloroethene 10 U 79-00-51,1,2-Trichloroethane 10 U 79-00-51,1,2-Trichloroethane 10 U 75-25-2Bromoform 10 U 75-25-2Bromoform 10 U 75-25-2Bromoform 10 U 75-25-2Bromoform 10 U 75-25-2	74-83-9	-Bromomethane		10	ן טן ס
75-09-2Methylene chloride	75-01-4	-Vinyl chloride		10	ן טן ס
67-64-1Acetone       10       U         75-15-0				10	ן טן ס
75-15-0Carbon Disulfide       10       U         75-35-41,1-Dichloroethene       10       U         75-34-31,1-Dichloroethane       10       U         540-59-01,2-Dichloroethene (Total)       13         67-66-3Chloroform       10       U         107-06-21,2-Dichloroethane       10       U         78-93-32-Butanone       10       U         71-55-61,1,1-Trichloroethane       10       U         75-27-4				10	ן טן ס
75-35-41,1-Dichloroethene       10       U         75-34-31,1-Dichloroethane       10       U         540-59-01,2-Dichloroethene (Total)       13         67-66-3Chloroform       10       U         107-06-21,2-Dichloroethane       10       U         78-93-32-Butanone       10       U         71-55-61,1,1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         1061-02-6trans-1,3-Dichloropropene       10       U         1061-02-6trans-1,3-Dichloropropene       10       U         107-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         107-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         108-90-7Ch				10	ן טן ס
75-34-31, 1-Dichloroethane       10       U         540-59-01, 2-Dichloroethene (Total)       13         67-66-3Chloroform       10       U         107-06-21, 2-Dichloroethane       10       U         78-93-32-Butanone       10       U         71-55-61, 1, 1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51, 2-Dichloropropane       10       U         10661-01-5cis-1, 3-Dichloropropene       10       U         109-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         19-00-51, 1, 2-Trichloroethane       10       U         10-43-2Benzene       10       U         10061-02-6trans-1, 3-Dichloropropene       10       U         108-10-14-Methyl-2-pentanone       10       U         107-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         108-88-3	75-15-0	Carbon Disulfide		10	ן טן ס
540-59-01, 2-Dichloroethene (Total)       13         67-66-3Chloroform       10       U         107-06-21, 2-Dichloroethane       10       U         78-93-32-Butanone       10       U         71-55-61, 1, 1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51, 2-Dichloropropane       10       U         10061-01-5cis-1, 3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51, 1, 2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1, 3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         107-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene	75-35-4	-1,1-Dichloroethene		10	ן ען ס
67-66-3Chloroform       10       U         107-06-21,2-Dichloroethane       10       U         78-93-32-Butanone       10       U         71-55-61,1,1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-5	75-34-3	-1,1-Dichloroethane		10	0  U
107-06-21,2-Dichloroethane       10       U         78-93-32-Butanone       10       U         71-55-61,1,1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         10061-02-6Bromoform       10       U         1061-02-6	540-59-0	-1,2-Dichloroethene (Total)		13	3
78-93-32-Butanone       10       U         71-55-61,1,1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         107-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	67-66-3	Chloroform		10	ן טן ס
71-55-61,1,1-Trichloroethane       10       U         56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         107-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	107-06-2	-1,2-Dichloroethane		10	0  U
56-23-5Carbon Tetrachloride       10       U         75-27-4Bromodichloromethane       10       U         78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U					
75-27-4	71-55-6	-1,1,1-Trichloroethane		10	ן ען ס
78-87-51,2-Dichloropropane       10       U         10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	56-23-5	Carbon Tetrachloride		10	
10061-01-5cis-1,3-Dichloropropene       10       U         79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	75-27-4	Bromodichloromethane		10	ן טן ס
79-01-6Trichloroethene       10       U         124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	78-87-5	-1,2-Dichloropropane		10	ן טן ס
124-48-1Dibromochloromethane       10       U         79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U				10	0  U
79-00-51,1,2-Trichloroethane       10       U         71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	79-01-6	Trichloroethene		10	0  U
71-43-2Benzene       10       U         10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	124-48-1	Dibromochloromethane		10	0  U
10061-02-6trans-1,3-Dichloropropene       10       U         75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	79-00-5	-1,1,2-Trichloroethane		10	0  U
75-25-2Bromoform       10       U         108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	71-43-2	-Benzene		10	ט ס
108-10-14-Methyl-2-pentanone       10       U         591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	10061-02-6	-trans-1,3-Dichloropropene		10	0  U
591-78-62-Hexanone       10       U         127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	75-25-2	Bromoform		10	ט ט
127-18-4Tetrachloroethene       10       U         108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	108-10-1	-4-Methyl-2-pentanone		10	0  U
108-88-3Toluene       10       U         79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	591-78-6	2-Hexanone	<del></del>	10	o  U
79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	127-18-4	Tetrachloroethene		1	0 U
79-34-51,1,2,2-Tetrachloroethane       10       U         108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U	108-88-3	Toluene		1.	ן ען ס
108-90-7Chlorobenzene       10       U         100-41-4Ethylbenzene       10       U				1	o lu l
100-41-4Ethylbenzene 10 U					
				_	- 1
					-
1330-20-7Total Xylenes				1	-

Client No.

1506-ER	_
---------	---

Lab Name: STL Buffalo Contract: _____

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882106

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>12/30/1999</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/Kg		Q
74-87-3	Chloromethane		10	U
74-83-9	Bromomethane		10	ט
75-01-4	Vinyl chloride		10	ט
	Chloroethane		10	ט
75-09-2	Methylene chloride		10	ע
67-64-1	Acetone		6	J
75-15-0	Carbon Disulfide		10	ט
	1,1-Dichloroethene		10	ט
	1,1-Dichloroethane		10	ן ט
	1,2-Dichloroethene (Total)		6	J
	Chloroform		10	ע
	1,2-Dichloroethane		10	<b>ט</b>
	2-Butanone		10	U
	1,1,1-Trichloroethane		10	U
	Carbon Tetrachloride		10	ប
75-27-4	Bromodichloromethane		10	ט
	1,2-Dichloropropane		10	U
	cis-1,3-Dichloropropene		10	ע
	Trichloroethene		10	ט
124-48-1	Dibromochloromethane		10	ט
79-00-5	1,1,2-Trichloroethane		10	ט י
71-43-2	Benzene		10	ע
10061-02-6	trans-1,3-Dichloropropene		10	ע
75-25-2	Bromoform		10	ט
108-10-1	4-Methyl-2-pentanone		10	ט
591-78-6	2-Hexanone		10	U
127-18-4	Tetrachloroethene		5	J
108-88-3	Toluene		10	ប
79-34-5	1,1,2,2-Tetrachloroethane	-	10	บิ
	Chlorobenzene		10	บ
	Ethylbenzene		10	Ū
	Styrene		10	ប
	Total Xylenes		10	ប

Client No.

TRIP BLANK				 _
	TRIP	BLANK		1

Lab	Name:	STL Buffalo	Contract:
	11011	<u>DIE BULLATO</u>	<u> </u>

Lab Code: <u>RECNY</u> Case No.: _____ SAS No.: ____ SDG No.: <u>123099</u>

Matrix: (soil/water) WATER Lab Sample ID: A9882108

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: MB478.RR

Level: (low/med) <u>LOW</u> Date Samp/Recv: <u>12/30/1999</u> <u>12/30/1999</u>

% 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)

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
	Chloromethane		10	U
74-83-9	Bromomethane		10	ן ט
75-01-4	Vinyl chloride		10	ן ט
	Chloroethane		10	ן טן
75-09-2	Methylene chloride		10	ע
67-64-1			10	ע
75-15-0	Carbon Disulfide		10	ע ן
75-35-4	1,1-Dichloroethene		10	ע)
75-34-3	1,1-Dichloroethane		10	ן ט
540-59-0	1,2-Dichloroethene (Total)		10	ן ט
	Chloroform		10	ן ט
107-06-2	1,2-Dichloroethane		10	U
78-93-3	2-Butanone		10	ט
71-55-6	1,1,1-Trichloroethane		10	ט
56-23-5	Carbon Tetrachloride		10	ט
	Bromodichloromethane		10	U
78-87-5	1,2-Dichloropropane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	ט
79-01-6	Trichloroethene		10	ט
124-48-1	Dibromochloromethane		10	U
79-00-5	1,1,2-Trichloroethane		10	ט
71-43-2			10	ט
10061-02-6	trans-1,3-Dichloropropene		10	ט
	Bromoform		10	ט
108-10-1	4-Methyl-2-pentanone		10	ט ו
	2-Hexanone		10	ן מן
127-18-4	Tetrachloroethene		10	ן ט
108-88-3			10	lυ
	1,1,2,2-Tetrachloroethane		10	lữ l
108-90-7	Chlorobenzene		10	υ
	Ethylbenzene	<del></del>	10	lŭ l
100-42-5			10	\u \u \u \u \u \u \u \u \u \u \u \u \u \
	Total Xylenes		10	บ็



	Report To:		Bo:		temal Use Only
Committed To Your Success	Company: DAY ENVI Address: 2144 Brighton Rochester, NY	FRONMENTAL INC. Harridh Tam Line Rl 14623	Company:  Address:  SAME		
	Phone: (716) 29 Fax: (716) 292-0		Phone:		
#NYBA786\	E-Mail:	<u> </u>	POI: Quote	:	
Sampler Name: Signature	<u> </u>				
JEFF DANZINGER	13/12	45-1(VC)			
Project Name: Project N	lumber:				
	506R-97				
	lud TAT	T G G			
STL Client Sample No. Sample ID	Sampling Date Time		ÉSERVATIVE BY USING KEY JÜNTAINER BY USING KEY I		Additional Analyses / Remarks
1506-21(33-37')	12/28/99 /255	WX		-	/ Mw-2/ (33-37')
1506-21(28.33)	2/28/99 1445	w x			1 MW-21 (28-31)
1566-21(23-28)	12/28/99 1664	WX			/ MW-2/ (23-281)
1506-21(18-23)	12/29/99 1045	WX			1 MW-21 (18-23')
/506-17(33-37.5')	12/24/99 1630	w x		-	/ MW-17 (33-37.51)
1506-ER	12/30/99 0840	w X		-	/ Equipment Rinsate
1506-17(28-33)	2/30/99 0920	wX		m	5/450 /MW-17 (28-33')
74					
Linda - May Com					
10.746.000 (3.64)					
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s					
RELINQUISHED BY COMPANY  DAY EM	DATE /2/30/4		RECOURTS	COMPANY  DAT EN	DATE TIME 1000
COMPANY DAY ENC	17/3d99	9 TIME 11:19	RECEIVED BY	COMPANY	13399 1119 S
ECINQUISHED BY COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE / TIME C
Matrix Key	stic 3. HNO3, 4. NaOH,	cool to 4* 4, Cool to 4* , Cool to 4* , Cool to 4* /Zn Acstate, Cool to 4*	COMMENTS:  MS/M3D on  6 40-mil  For this	1566-17(28-33) Vialo Collectal sample.	Courier:

Bill To: Internal Use Only Report To: Contact: _ JEFF DANZINGER Contact: Company: DAY ENVIRONMENTAL INC. Company: Address: 2144 Brighton-Henrichs Ten Lige But Address: AME #NY8A7861 Sampler Name: Signature: Jef Duzinger С 0 3 Project Number: App Р 1506R-9 Project Location: 95 Mf. Read Blod Rochester NY Date Required: G R INDICATE PRESERVATIVE BY USING KEY BELOW (Optional) Sampling te Time Client В . INDICATE CONTAINER BY USING KEY BELOW (Obligation) <u> Additional Analyses / Remarks</u> Sample No. Sample ID Date X W G 1/00 X W G 1256 COMPANY TIME DAY GUV 0900 DAY ENV. 0901 COMPANY Container Key Preservative Kev COMMENTS: Matrix Key Courier: 1. HCI. Cool to 4° Plastic Cooler 5°C 2. H2SO4. Cool to 4° W = Water 2. VOA Vial 3. HNO3. Cool to 4° S ≈ Soil Sterile Plastic 4. NaOH, Cool to 4* SL = Sludge Amber Glass Bill of Lading: 5. NaOH/Zn Acetate. Cool to 4° MS = Miscellaneous Solic Widemouth Glass 6. Cool to 4ª OL = Oil 6. Other 7. None A = Air



September 25, 2000

Mr. Jeff Danzinger
Day Environmental
2144 Brighton-Henrietta T.L. Rd
Rochester, NY 14623

SEP 2 6 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

andace L. Fox

Susan L. Tinsmith Laboratory Director

Swar Klusmit

CLF/SLT/csm

I.D. #A00-6097 #NY8A7861

This report contains pages which are individually numbered.

## 000001

## SAMPLE DATA SUMMARY PACKAGE



## 200000

## **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.





## **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

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.
- 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.

ontract:	NY97-2	09				SDG No.:	083000
ab Code:	STLBFLO	Case N	io.: 7861	_	_	SAS No.:	
	· · · · · · · · · · · · · · · · · · ·	_	<del>.</del>				<del></del>
			<u></u>				<del></del>
		Sample ID.		<u>Lab</u>	Sample No.		
		1506-S-70		<u>A060</u>	9701		
							•
_							
ere ICP	interel	ement corrections app	lied?			Yes/No	YES
ere ICP	backgro	und corrections appli	ed?			Yes/No	YES
	_	raw data generated b of background correct				Yes/No	NO
~PP		01 01000				•	
comments	3:						
<u>-</u>							
				-	<del></del> .		
			_		<del></del>		
·							
-		his data package is in echnically and for co	<del>-</del>				
		of the data contained					
		e data submitted on f anager's designee, as					Laboratory
,				_	, J	-	
-							
ignature	: <u></u>		Nam	e:	Susan L. Tinsmi	th	<del></del>
)a+o:					Laboratory Dire		

## DAY ENVIRONMENTAL, INC.

## INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.		
1506-S-70		

Contract: NY97-209

Lab Code: STLBFLO

Case No.: 7861

SAS No.:

SDG NO.: 083000

Matrix (soil/water):

SOIL

LOW

Lab Sample ID: AD014438

Date Received: 8/30/00

% Solids: 87.7

Level (low/med):

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	м
7440-47-3	Chromium	16.6			P

Color	Before:	BROWN	Clarity Before:		Texture:	MEDIUM -
Color	After:	AETTOM	Clarity After:	CLEAR	Artifacts:	
Conner	its:			<del>-</del>		
	_					

 $\begin{array}{c} 000007 \\ \text{Client Sample No.} \end{array}$ 

Lab we: <u>STL Buffalo</u> Contract: 1506-S-70

Lab Code: RECNY Case No.: ____ SAS No.: ____

SDG No.: <u>083000</u>

Matrix (soil/water): SOIL

Lab Sample ID: A0609701

% Solids:

<u>87.7</u>

Date Samp/Recv: <u>08/28/2000</u> <u>08/30/2000</u>

Parameter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/KG	1.1	ប			CLP-WC	09/20/2000

lom	ments:						
-	-	<u> </u>		-	 	 	
-					 		

		Report To:			_				Bill	Го:								Internal Us	e Only			
	٠	Contact:															_			e en alphanis	all E H	
Committed To Your Success		Company:					<u>د</u>		Compa								-			entire:	Same of the	
		Address: 2	144 Bright	n- He	enn's	# 1		ļ	Addres	ss: <u> </u>	A YW	<u>E</u> _					_	Selection State (1989)	E T			
Committed To Your Success		<u>Tour L</u>	ine Road,	Rochs	ster	MY	1462	13		_5	Δ!"						_	er erbare gar	ATT SEE	a <del>d</del> eser	e Artista	
		Phone:	16-297	L-11	090				Phone	:							_		and the second	certific e		
		Fax:716	- 292-	042	5				Fax: _								_	11.00 PM	40.00	1	1950 B. 195	
		E-Mail:ido	nzinger @	da	уща	مانا	<u>re</u> †		POI: _				Quote:	NY	BA7	861	-	ar garage				
Sampler Name:	Signature			Ţ			¥	7	丁	7			T	$\top$	Τ.	T	T					
Project Name: RI/FS	7/1	umber:	2~	ļ	C	,	څ		- [			, ,		ļ						1		
Project Name: OT /CS	Project N	umber:		1	M	3	25		-	1				1			}	100	43.5		1	
KL/F3	13	-06R-9	7	м	P	7	32	- 1					ŀ	j	- 1	1						
Project Location: 95 Mt. read blad	Date Req	uired:	<u>·                                      </u>	A		3	€§.	- 1		1		1	ł	-		1	ł			en en en	ar e	
Rachester, New Jule	Std X	ISP TAT		R	GR	101	₹	1				1	-	-		1		- 43				
Rachester, New York STL Clier Sample No Sample	nt ID	Samp Date	oling Time	×	A B	- 1	11.0	en en en en en en en en en en en en en e		e e c			ayan.				(4) (4)	Additio	nal Analys	os / Ro	marke	
467		8/28/00	1600	3	-	X							1					mw- 2			Her KS	1
1506-3-	10	PI - PIND	1000	-	9	^		_	+	†			1	+	$\top$	†	-	111W 2	6 (1-9			1
							7		1					7								7
				_	$\vdash$			_		†			_	+								1
<del></del>					-	$\dashv$				-	-+	- ±	_	+	1	╂	-					+
					1			<del>-  </del>	4_	_		$\neg$	-4-	4	4	↓	-					1
						_8	29	00	1						$\perp$	1						
		]		ہ ا				ļ		1		]				1						l
			12					7	$\neg$				Ţ	T		1						1
		1/2				$\neg \uparrow$	$\neg$		$\top$	1 1				+		1						1
and the same				_	-	$\dashv$	$\dashv$	_	+	+			+	+	+	+						$\frac{1}{2}$
		/			$\vdash$		$\dashv$	-+		┪┈┤			+	+-	+	+			<del></del>			ł
							-+		-	1			+	-	_	<del> </del>						4
																<u> </u>						
RELINQUISHED BY	OMPANY	6	0ATE 29/00			IME 100	,		REG	FIVED B	Y P	2			C	OMPAN	ΙΥ	4	Boloo	TIA / C	120	
RELINQUISHED BY RELINQUISHED BY	OMPANY		DATE			IME				EIVED B	7 F				C	OMPAN	Y		PATE /	TIM		-
	OMPANY		DATE		Ť	IME			REC	EIVED B	Ý				C	OMPAN	<u> </u>		DATE	9	Ē	-
Matrix Key	Contai	iner Key	Preservati	ve Kev					<u> </u>	MMEN	TS:		<del></del>	_			_	Courier		_ 2		7
WW = Wastewater 1.	Plastic VOA Vial		1. HCl, Co 2. H2SO4	ool to 4°					1	SP	Ci	trun	N 2	3 d	eli	Na	.bk	ير ا		ð		
s) = Soil 3.	Sterile Plas		3. HNO3,	Cool to	4°					02-1	1	-	7		d			 		<u>&amp;</u>		1
SL = Sludge MS = Miscellaneous Solic		ss Glass 402	4. NaOH, 5. NaOH/2	Zn Acet		ool to 4	r		]	POF	1 3	, ,	Ego	17 <del></del>	•			Bill of La	aaing:	<b>~</b>	<b>,</b> .	
OL = Oil A = Air	Other	_	6. Cool to 7. None	4*					'	MMEN SP Part			( )	øl.	57	_					,	
∩ ±			1						1				$\sim$	NW	•			J				•

0 *



STL Buffalo

10 Hazelwood Drive Suite 106

Amherst, NY 14228

Tel: 716 691 2600

Fax: 716 691 7991

www.stl-inc.com

September 27, 2000

Mr. Jeff Danzinger Day Environmental 2144 Brighton-Henrietta T.L. Rd Rochester, NY 14623

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

Indace Z. Fox

Susan L. Tinsmith Laboratory Director

CLF/SLT/csm

I.D. #A00-6097 #NY8A7861

 $\begin{array}{c} 000007 \\ \text{Client Sample No.} \end{array}$ 

1506-S-70	

La Name: STL Buffalo

Contract: _____

Lab Code: RECNY Case No.: ____

SAS No.: ____

SDG No.: <u>083000</u>

Matrix (soil/water): SOIL

Lab Sample ID: A0609701

% Solids:

<u>87.7</u>

Date Samp/Recv: 08/28/2000 08/30/2000

Parameter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/KG	1.1	U			CIP-WC	09/20/2000

Com	ments:		

Client Sample No.

1506-S-70	
-----------	--

Lab Name: STL Buffalo

Contract: ____

Lab Code: <u>RECNY</u> Case No.: ____

SAS No.: ____

SDG No.: 083000

Matrix (soil/water): SOIL

Lab Sample ID: A0609701

% Solids:

<u>87.7</u>

Date Samp/Recv: 08/28/2000 08/30/2000

Parameter Name	Units of Measure		С	Q	М	Method Number	Analyzed Date
Hexavalent Chromium - Total	MG/KG	1.1	U			CLP-WC	09/20/2000

Comm	ents:					
			 	 	-	
_		 		 		

000256

Client Sample No.

Li Name: <u>STL Buffalo</u>	Contract:	Contract:												
Lab Code: <u>RECNY</u> Case No.:	SAS No.:	SAS No.:												
Matrix (soil/water): <u>SOIL</u>	Lab Sa	Lab Sample ID: <u>A0B0744501</u>												
% Solids: <u>100.0</u>	Date S	Date Samp/Recv:												
Parameter Name	Units of Measure Result	С	Q	М	Method Number	Analyzed Date								
Hexavalent Chromium - Total	MG/KG 23	8			CLP-WC	09/20/2000								
Comments:														

Client Sample 0.0257

Lab Name: STL Buffal	Contract	:	L	Method Blank							
Lab Code: <u>RECNY</u>	Case No.:	SAS No.	33000								
Matrix (soil/water):		Lab Samp	ole	ID:	<u>A01</u>	B0744502					
% Solids:	Date Samp/Recv:										
Para	meter Name	Units of Measure	Result	С	Q	М	Method Number	Analyzed Date			
Hexavalent Chromium	ı - Total	MG/KG	1.0	U			CLP-WC	09/20/2000			
<u> </u>						•					

Date : 09/27/2000 13:10 ot: AN0364

SDG: 083000

Client Sample ID: Method Blank Lab Sample ID: A0B0744502

LCS A0B0744501

		Concenti	ration					
Analyte	Units of Measure	Blank Spike	Amount	% Recovery Blank Spike				
WET CHEMISTRY ANALYSIS HEXAVALENT CHROMIUM	MG/KG	23.80	40.0	59 *	82-118			

## WET CHEMISTRY METHOD BLANK SUMMARY

c19003199

Lab Name:	STL Buffalo	Contract: _		ethod Blank
Lab Code:	RECNY Case No.:	SAS No.:	s SI	OG No.: <u>083000</u>
Lab Sampl	e ID: <u>A0B0744502</u>	Lab E	File ID:	
Matrix: (	soil/water) <u>SOIL</u>	Instrument	ID (1):	
Date Anal	yzed (1): <u>09/20/2000</u>	Time Analyz	zed (1): <u>15:40</u>	<u>)</u>
	THIS METHOD BLANK APPLI	ES TO THE FOLI	LOWING SAMPLES	S, MS AND MSD:
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	TIME ANALYZED
1 2	1506-S-70 LCS	A0609701 A0B0744501	09/20/2000 09/20/2000	15:40

Comments:



A FULL SERVICE ENVIRONMENTAL LABORATORY

October 23, 2000

RECEIVED OCT 2 6 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

Janice Jaeger
Project Chemist

riojece chemib

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 _____ 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.



## CASE NARRATIVE

This report contains analytical results for the following samples: Submission #: R2004148

Lab ID

Client ID

414330

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.



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

**VOLATILE ORGANICS**METHOD 8260B TCL
Reported: 10/23/00

Day Environmental

SURROGATE RECOVERIES

4-BROMOFLUOROBENZENE

DIBROMOFLUOROMETHANE

TOLUENE-D8

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DI-1(001)

Date Sampled: 10/06/00 12:05 Order #: Date Received: 10/06/00 Submission #:		Sample Matrix: Analytical Run	
ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/12/00 ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 ט	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	5.0 บ 5.0 บ	UG/L UG/L <del>-</del>
DIBROMOCHLOROMETHANE 1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE 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 บ	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 Ŭ	UG/L
TETRACHLOROETHENE	5.0	5.0 Ŭ	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 บ	UG/L

QC LIMITS

(86 - 118 %)

- 115 %)

- 110 %)

(86

(88)

ક

왐

ş

106

95

117

## VOLATILE ORGANICS

METHOD 8260B TCL Reported: 10/23/00

## Project Reference:

Client Sample ID : METHOD BLANK

Date Sampled: Date Received:	Order Submission	#: 415754 #:	Sample Matrix: Analytical Run	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10, ANALYTICAL DILUTION:	/12/00 1.00			
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MI STYRENE 1,1,2,2-TETRACHLOROETHANE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE	BK)	20 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	20 U U U U U U U U U U U U U U U U U U U	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE		5.0 5.0 5.0 5.0	5.0 U 5.0 U 5.0 U 5.0 U	UG/L UG/L UG/L
SURROGATE RECOVERIES		LIMITS		
4-BROMOFLUOROBENZENE FOLUENE-D8 DIBROMOFLUOROMETHANE	(86 (88 (86	- 115 %) - 110 %) - 118 %)	103 99 109	ofe ofe ofe



Columbia 1 Mustard St., Suite 250, Rochester, NY 14609-6925 (716) 288-5380 • FAX (716) 288-8475

## CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

An Employee-Owned Company														_	E	ATE	10	16/	03		_ PAG	E	<u> </u>	OF	<u> </u>
PROJECT NAME PROJECT MANAGER/C COMPANY/ADDRESS	95 m	t. rew	1 Rocher	er								A	NAL	YSIS	RE	QU	EST	ΈD							
PROJECT MANAGER/C	ONTACT	Jeff '	Daninger	****								ے	Z ≠										PRE!	SERVA	ITIOI
COMPANY (ADDRESS	Day	Fullice	a metal 7			77 0 95-1	95-2	H	5.3	A's	o A's	Ĭ	ZATION D Ignit.		ŀ		1				}	1			_
Z144 BHTL	Duy	<u></u>	7		I SE			8	s 🗆	2	So d	300	S. ERI		哥	1	1	İ	1	1	l '	l	'		
3					Ž	12	25.5	1 %		[월달		1 <u>5</u> 0	P S	[₹_	ğ			•		[ '	[	j	j i		
TEL (716 ) 292-18	90	FAX ( 7	76) <u>292-01</u>	125	ĮŽ	OA's		9 0	ES/	ST	ISI	ES S	¥□	58	OSSO.		ļ	1					] !		
SAMPLER'S SIGNATURE	7/1	2-	2		OF CONTAINERS	GC/MS VOA'S	GC/MS SVOA's	GC VOA's □ 8021 □ 601/602	PETCH 88-	R'S L	R'S L	OA's	WASTE CHARACTERIZ	ALS, T BEL	METALS, DISSOLVED (LIST BELOW)								< 2.0	. 12	_
SAMPLE I.D.	DATE	TIME	FOR OFFICE USE CHLY LAB 1.D.	SAMPLE MATRIX	0#	© <b>X</b>	000	ပ္ပည္ဆ	E SE	STA	STA	ᅙᅼ	× □	MET (LIS	MET (LIS								F	PH.	Other
DI-1 (001)	10/6/00	1205	414230	water	3	×	1																		
	1 /-/																								
<del></del>	<del> </del>	<del> </del>			+-	<del>                                     </del>	<del>                                     </del>	_				-	-		<u> </u>		<del> </del>	├─	-				$\neg$	$\dashv$	
	<del> </del>						├	_					<b>-</b> -					-		$\vdash$	┟┈┥			_	
	ļ					ļ.,				/	, /,	<b>)</b> —						L		lacksquare	<b> </b>				
						<u> </u>				$d^4$	50														
				Ma						7															
<del></del>	† <del></del>			1/11-		1																$\neg \neg$	$\neg \uparrow$		
<del></del>				7-	<del> </del>								_									$\dashv$	$\neg \uparrow$	$\neg$	
-				<del></del>																	$\neg$	$\neg$	$\neg$	7	
RELINQUISHED B	٧.		RECEIVED BY:	TURN	AROUN	D REQ	UIREM	ENTS		PORT		REMEN	ITS		INVOI	CE INF	ORMA	TION:			SAN	IPLE F	RECEIP	T;	
11/2-		and	in Joon	ees -241	1r	48 hr.	<b>X</b> 50	day		Routine Routine		CACE			_ س	150	5R-	110N: 97		Ì	ng Via: _		1.	£	
Signature Jeff Danzin Printed Name Day Env.	,	Stripo	4100me	Star	ndard (1	0-1,5 wor	king day	/s)		Varrative		UNGL		P.U. #!	-5	ame		-				<u> </u>			
	716	High	00 177	Pro	vide Vert	bal Prelin	ninary A	iesults		EPA Lev /alidatat		ane	ł	Jii 10.						Shippin	ng #: rature: _		50		
Date/Time	40_	Date/Time	-00 14		vide FAX	Prelimir	nary Res	sults	4.1	N.J. Red	uced	•	.							Temper	alule				
RELINQUISHED B	Υ:	Bon	RECEIVED BY:	Reques	ted Repo	ort Date		- [	5. 1	Deliveral NY ASP/	CLP De	liverable	96						_	Submis	ssion No:	<u></u>	2		
Signature		Signature	avolte.							Site spec									1						
Printed Name			, , –,,,,		CIAL II	NSTRI	JCTIO	)NS/C	OMME	NTS:															
Firm  Date/Time	[	Firm/0/6 Date/Time	5/w /2	META	<u>LS</u>																				
	<b>Y</b> :		RECEIVED BY:	ORG	ANICS	X	TCL	□ PP	<u>L</u>	AE C	Only	□ BN	l Only		Specia	l List				<del></del> -					_
RELINQUISHED B		Signature	<del></del>																						
Printed Name		Printed Name	<del></del>	<del>-</del>				ì	)													!	<b>.</b>		
Firm	<del></del> [	Firm									_		_									- 1	<del></del>		
Detaffina		Nate/Time																							

# Columbia Analytical Services Inc. Cooler Receipt And Preservation Check Form

ject/Client	Duy	_		Subn	nission Number	12-4/48
Cooler received on	1-6-00 by: J	E	cc	OURIER: CÁS		$\sim$
<ol> <li>Were custody</li> <li>Did all bottle</li> <li>Did any VOA</li> <li>Were Ice or I</li> <li>Where did th</li> </ol>	y seals on outside of y papers properly filled arrive in good cond a vials have significant to packs present? The bottles originate? The cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon respect to the cooler(s) upon resp	ed out lition ( nt air l	i (ink, s (unbrol bubbles	ken)?	YES (YES) I YES (YES) I YES (CAS/R	NON/A
Is the temperate	re within 0° - 6° C?:		Y	es 🗆 Yes 🗆	Yes □	Yes 🗆 Yes 🗅
If No, Explain	Below		_	No D		No 🗆 No 🗅
	emperatures Taken:	-1	0-6-	<u>00 @ 12:</u>	:45	
Thermomete	rD: Ik-Guri	Те	mp Bla	ank Sample Bot	ttle Cooler Tem	p. (IR. Gun
If out of Temperature	, Client Approval to R	ton Sa	mples_			<u> </u>
Did all bottle  Were correct	tle labels complete (i.e. labels and tags agreet containers used for	e with the te	custoests indi	dy papers? icated?	YES	NO NO NO
Explain any discrepa		Intac	t (	Canisters Pressuriz	ed Tedlar® E	Bags Inflated (N/A)
		YES	t (	Sample I.D.	red Tedlar® E	Bags Inflated N/A  Vol. Added
Explain any discrepa	ncies:					
Explain any discrepa	ncies:					
Explain any discrepa	Reagent NaOH					
pH 12	Reagent NaOH HNO3 H ₂ SO ₄					
pH 12 2	Reagent NaOH HNO3 H ₂ SO ₄					
pH 12 2 Residual Chlorine (+/-) 5-9* YES = All samples OK	Reagent NaOH HNO3 H ₂ SO ₄ for TCN & Phenol P/PCBs (608 only) NO = Sampl	YES	NO			Vol. Added
pH  12  2  Residual Chlorine (+/-)  5-9*  YES = All samples OK  If pH adjustment is requ	Reagent NaOH HNO3 H ₂ SO ₄ for TCN & Phenol P/PCBs (608 only)	YES	NO	Sample I.D.	Reagent	Vol. Added
pH  12  2  Residual Chlorine (+/-)  5-9*  YES = All samples OK  If pH adjustment is requ	Reagent NaOH HNO3 H ₂ SO ₄ for TCN & Phenol  P/PCBs (608 only)  NO = Samplired, use NaOH and/or H ₂ OC Vial pH Verification (Tested after Analysis) Following Samples	YES	NO	Sample I.D.	Reagent	Vol. Added
pH  12  2  Residual Chlorine (+/-)  5-9*  YES = All samples OK  If pH adjustment is requ	Reagent NaOH HNO3 H ₂ SO ₄ for TCN & Phenol  P/PCBs (608 only)  NO = Samplired, use NaOH and/or H ₂ OC Vial pH Verification (Tested after Analysis) Following Samples	YES	NO	Sample I.D.	Reagent	Vol. Added

Other Comments:



#### A FULL SERVICE ENVIRONMENTAL LABORATORY

Maria de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya della companya

November 2, 2000

Mr. Jeff Danzinger Day Environmental 2144 Brighton Henrietta TL Rd. Rochester, NY 14623

PROJECT: 95 MT. READ, ROCHESTER Submission #:R2004387

υποιμισο1ΟΙΙ #:N2004507

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 | | 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 #: R2004387

<u>Lab ID</u>	Client ID
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: 401
CT ID # in Rochester: PHO
MA ID # in Rochester: M-I
OH EPA # in Rochester: VA

10145 PH0556 M-NY032 VAP NJ ID # in Rochester: 73004 RI ID # in Rochester: 158 NH ID # in Rochester: 294198-A

AIHA # in Rochester: 7889

## VOLATILE ORGANICS METHOD 8260B TCL Reported: 11/02/00

00004

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-1

Date Sampled: 10/25/00 09:28 O Date Received: 10/25/00 Submis			Sample Matrix: Analytical Run		
ANALYTE		PQL	RESULT	UNITS	
DATE ANALYZED : 10/27/00 ANALYTICAL DILUTION: 1.0	0				
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE VINYL CHLORIDE O-XYLENE		20 5.0 5.0 5.0 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	20 U U U U U U U U U U U U U U U U U U U	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L	
M+P-XYLENE	00 1 1	5.0	5.0 U	UG/L	
SURROGATE RECOVERIES  4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(88 -	MITS 	91 94 110	96 96 96	

## VOLATILE ORGANICS

METHOD 8260B TCL Reported: 11/02/00

00005

Day Environmental
Project Reference: 95 MT. READ, ROCHESTER
Client Sample ID: DS-2

Date Sampled: 10/25/00 09:32 Ord Date Received: 10/25/00 Submissi			Sample Matrix: Analytical Run	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00 ANALYTICAL DILUTION: 1.00				
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROMETHANE IBROMOCHLOROMETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE		20 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	20 U U U U U U U U U U U U U U U U U U U	UG/L
O-XYLENE M+P-XYLENE		5.0 5.0	5.0 U 5.0 U	•
SURROGATE RECOVERIES	QC LI	MITS		
TOLUENE-D8	88 -	115 %) 110 %) 118 %)	92 94 116	a6 a6 a6

## VOLATILE ORGANICS METHOD 8260B TCL

Reported: 11/02/00

30006

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER Client Sample ID: DS-3

Date Sampled: 10/25/00 09:37 Order #: 418507 Date Received: 10/25/00 Submission #: R2004387 Sample Matrix: WATER Analytical Run 57186

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00	<del></del>		<del></del>
ANALYTICAL DILUTION: 1.00			
ACETONE	20	20 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 Ŭ	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 Ŭ	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 Ŭ	UG/L
CHLOROFORM	5.0	5.0 Ŭ	UG/L
CHLOROMETHANE	5.0	5.0 Ŭ	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 Ŭ	UG/L
1,1-DICHLOROETHANE	5.0	5.0 Ŭ	UG/L
1,2-DICHLOROETHANE	5.0	5.0 Ŭ	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 Ŭ	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 บั	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 Ŭ	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
M+P-XILENE	5.0	3.0 0	0 <del>0</del> 7 L
SURROGATE RECOVERIES QC	LIMITS		
4-BROMOFLUOROBENZENE (86	- 115 %)	92	<b>%</b>
TOLUENE-D8 (88	- 110 %)	92	%
DIBROMOFLUOROMETHANE (86	- 118 %)	99	ફ

## 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 09:4  Date Received: 10/25/00 Sub			Sample Matrix: Analytical Run	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/27/ ANALYTICAL DILUTION:	'00 1.00			
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM CHLOROMETHANE IBROMOCHLOROMETHANE IBROMOCHLOROMETHANE 1,2-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE		20 5.0 5.0 10 10 5.0 10 5.0 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	20 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
SURROGATE RECOVERIES	QC L	IMITS		
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(88)	- 115 %) - 110 %) - 118 %)	93 94 111	8 8 8
				00007

## VOLATILE ORGANICS METHOD 8260B TCL Reported: 11/02/00

Day Environmental

Project Reference: 95 MT. READ, ROCHESTER

Client Sample ID : DS-5

SURROGATE RECOVERIES

4 -BROMOFLUOROBENZENE

DIBROMOFLUOROMETHANE

TOLUENE-D8

Date Sampled: 10/25/00 09:46 Order #: Date Received: 10/25/00 Submission #:		Sample Matrix: Analytical Run	
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	UĠ/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 Ŭ	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

QC LIMITS

(86 ~ 115 %)

(88 - 110 %)

(86 - 118 %)

80000

왕

é

왕

98

97

88

## 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 Orde Date Received: 10/25/00 Submissio				Sample Matrix: Analytical Run	
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 Ŭ	UG/L
CHLOROETHANE			5.0	5.0 U	UG/L
CHLOROFORM			5.0	5.0 U	UG/L UG/L
CHLOROMETHANE TBROMOCHLOROMETHANE			5.0 5.0	5.0 บ 5.0 บ	UG/L
*, 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 Ŭ	UG/L
TRANS-1,2-DICHLOROETHENE			5.0	5.0 ัั	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 บ	UG/L
ETHYLBENZENE			5.0	5.0 U	UG/L
2 - HEXANONE			10	10 U	UG/L
METHYLENE CHLORIDE			5.0	5.0 Ŭ	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 Ŭ	UG/L
TRICHLOROETHENE			5.0	5.0 U	UG/L
VINYL CHLORIDE			5.0		UG/L
O-XYLENE			5.0		UG/L
M+P-XYLENE			5.0	6.8	UG/L
SURROGATE RECOVERIES Q	C L	IMITS			
BROMOFLUOROBENZENE (8	6	- 115	%)	93	8
TOLUENE-D8 (8		- 110		94	§
DIBROMOFLUOROMETHANE (8		- 118		115	8

#### 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

	order #:	418511 R2004387	Sample Matrix: Analytical Run	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/27/00 ANALYTICAL DILUTION: 1.0	00			
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MIBK) STYRENE 1,1,2,2-TETRACHLOROETHANE TCTRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE M+P-XYLENE		20 5.0 5.0 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	20 U U U U U U U U U U U U U U U U U U U	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
SURROGATE RECOVERIES	QC LIN	MITS		
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(88 -	115 %) 110 %) 118 %)	9 <b>2</b> 92 107	ob ob ob

#### COLUMBIA ANALYTICAL SERVICES

#### VOLATILE ORGANICS

METHOD 8260B TCL Reported: 11/02/00

Project Reference: Client Sample ID : METHOD BLANK

Date Sampled : Date Received:	Order   Submission	#: 420639 #:	Sample Matrix: Analytical Run	
ANALYTE		PQL	RESULT	UNITS
DATE ANALYZED : 10/ ANALYTICAL DILUTION:	27/00 1.00			
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 1-DICHLOROETHANE 1,1-DICHLOROETHANE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MINSTYRENE 1,1,2,2-TETRACHLOROETHANE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE	вк)	20 5.0 5.0 5.0 10 10 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.	20 UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
M+P-XYLENE SURROGATE RECOVERIES	QC I	5.0 LIMITS	5.0 U	UG/L
4-BROMOFLUOROBENZENE COLUENE-D8 DIBROMOFLUOROMETHANE	(86 (88 (86	- 115 %) - 110 %) - 118 %)	93 93 97	96 96 96

#### COLUMBIA ANALYTICAL SERVICES

#### VOLATILE ORGANICS METHOD 8260B TCL

Reported: 11/03/00

Project Reference: Client Sample ID : METHOD BLANK

Date Sampled: Date Received:	Order Submission		421319	Sample Matrix: Analytical Run	
ANALYTE			PQL	RESULT	UNITS
DATE ANALYZED : 10/ ANALYTICAL DILUTION:	30/00				
ACETONE BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE 2-BUTANONE (MEK) CARBON DISULFIDE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE 1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE 2-HEXANONE METHYLENE CHLORIDE 4-METHYL-2-PENTANONE (MINSTYRENE 1,1,2,2-TETRACHLOROETHANE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE O-XYLENE	3K)		20 5.0 5.0 10 10 5.0 10 10 10 10 10 10 10 10 10 10 10 10 10	20 5.0 5.0 10 10 10 10 10 10 10 10 10 1	UG/L UG/L UG/L UG/L UG/L UG/L UG/L UG/L
M+P-XYLENE SURROGATE RECOVERIES	OC	LIMI	5.0	5.0 U	UG/L
4-BROMOFLUOROBENZENE TOLUENE-D8 DIBROMOFLUOROMETHANE	(86 (88 (86	- 1 - 1	115 %) 115 %) 110 %) 118 %)	98 97 88	ok olo olo



Columbia 1 Mustard St., Suite 250, Rochester, NY 14609-6925 And col (716) 288-5380 • FAX (716) 288-8475

# CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FOR

An Employee-Owned Company															D	ATE_		40	100		_ PAGI	E	,—— c	OF _L	_
PROJECT NAME	95 Mt.	Read ,	Rochester		L							A	NAL	YSIS	RE	QUE	EST	ED							•
PROJECT MANAGER/0		Jeff	Danzinger		1						s	عِ ا	S E						T				PRES	SERVA	ΙT.
COMPANY/ADDRESS	Day	Environ	mental, Inc		100	95-1	98-2	1	95-3	S.Y.C	O V	Ì	ZATION Ignit.							1					Γ
2144 BHTL	A /	_	•		Ä	1		802	S C	Y Y	20 S	S.Y.	S EH		LVE		1		-						
	-	•	'		CONTAINERS	A's 624	SVOA's	0 601/602	5/PC 608	180 75	782 77	TCLP   METALS   VOA'S   SVOA	188	ĬξS	DISSOLVED			1							
TEL (7/6 ) 242-1		1	16 ) <u>292-04</u>		NO.		S _C	l s o		LISI	LIS	<b>2</b> 0	불미	50	S. D.										
SAMPLER'S SIGNATUR	E	h d	-		A P	MS 260	MS 270	GC VOA's	84.C	ATS OTA	ATS OTA	PQ	STE	NATE BIS	METALS, I						1 1		< 2.0	> 12	ļ
SAMPLE I.D.	DATE	TIME	FOR OFFICE USE ONLY LAB I.D.	SAMPLE MATRIX	] #	S X	000	ပ္ပင္မ	H. C.	STAR'S LIST 8021 VOA'S	ST	걸	WASTE CHARACTERIZ		CLIS (CLIS		*	•					Æ	£	1
DS-1 (002)	10/25/00	0928	418505	Water	3	X											53.	40							
DS-2(003)	10/25/00	0932	106	Water	3	X											57.	30							
105-3 (004)	10/25/00	0937	07	Water	3	×											60.	85			$\Box$				
DS-4 (005)	10/25/00	0942	08	Water	3	×											67.	7							_
05-5 (006)	10/25/00	0946	09	Water	3	x											72.					$\neg$	$\neg$	$\neg \uparrow$	_
•	10/25/00		10	Water	3	×											 77:					$\neg$	1		_
D5-6(007)	10/00	0752	. / 11	Water	3	×										7	11.	-				$\dashv$	-	7	_
Trip-1	100		V II	water	3	^																$\dashv$	$\dashv$		_
	<del></del>	<del> </del>						-				-		$\neg \dashv$		-+						-+	$\dashv$	-	_
	<del> </del>	-					-						$\dashv$		{	+					+	+	-+	$\dashv$	_
<del></del>	<u> </u>			TURNA	ROUN	D REQ	UIREM	ENTS	REF	PORT R	FQUIF	REMEN	TS		INVOIC	E INFO	DRMA.	TION:	}		SAN	APLE R	ECEIPT		_
RELINQUISHED E	BY:	13	RECEIVED BY:			48 hr.		I	<u>_</u> X _{1.1}	Routine !	Report						_		]		<b></b>	- 1			
Signature JER Dan Zing	19	Signature	4 Toone			0-15 wor		- 1		Routine l Namative	•	CASE	j		151	06R-	97	,	1	, ,	ng Via: _	<u>۱۱) ا</u>	ent		_
Printed Name Day Env.		Printed Sum	<i>y</i>	Prov	ide Verl	oal Prelin	ninary A	esults		PA Levi			ļ	Bill To:	54	NC.			-1	Shippin	-	- Q	<del></del>		-
Date/Time	23	Date/Time	5-00 100		ide FAX	Prelimir	ary Res	ulta		/alidatab V.J. Red		age	j							Temper	ature: _				_
RELINQUISHED B	IY:	M	RECEIVED BY	Request	ed Rep	ort Date .		_		Deliverat NY ASP/			. ]							Submis	sion No:	K	2~	432	- <b>5</b>
Signature		elignature	Scaller Ville							Site spec															_
		Printed Name	57 MAN (2/14 CAS	SPEC	IAL I	NSTRI	JCTIO	NS/C	OMME	NTS:															
Printed Name		Firmy 0-2		META	ıs																				
Time / Time		Date/Time																							-
RELINQUISHED BY: RECEIVED BY: ORG				ORGA	NICS	: <u>X</u>	TCL_	<u>⊔</u> PP	L 🗆	AE O	nly	U BN	Only	0.5	Specia	List									-
Signature		Signature															<del></del> -								_
Printed Name		Printed Name			de	<u> 2th -</u>	to	mid	Ale	of	San	phor	_ KA	Car	wed	fr	om	ta	of of	سا	리( 2고	floor	<u>س کی</u>	rteci	2
Firm	}	Firm			, ,			.1		1	11	<u> </u>		_//	/	,		11							
Osta/Time		Date/Time			WH	res_	JAM	0 lers	11	13 TX	<u>I</u>	01		0/6	100	in	we	L L	$u\omega$	<u>~ 7</u>	<u> </u>				

# Cooler Receipt And Preservation Check Form

Project	/Client	Day	,			Subm	ission Number	<u>R2</u>	-438)
Cooler	received on 10	)-25-00 by:_/	48	cc	URIER	: CAS	UPS FED	EX CD&I	CLIENT
1. 2. 3. 4. 5. 6.	Were custody Did all bottles Did any VOA Were lee or I Where did the	y seals on outside of papers properly files arrive in good corticals have significate packs present? The bottles originate?	lled out adition ( ant air b	(ink, s (unbrol	ken)?	c.)?	TE TE TE	S (NO) S NO S NO S NO N/A S NO S (NO) CI	JENT
	Is the temperatu	re within 0° - 6° C?:		Y	ස 🛮	Yes 🖸	Yes 🗖	Yes 🗆	Yes □
	If No, Explain	Below		N	o <b>þ</b> ar	No 🗆	No 🗖	No □	No 🗆
	Date/Time Te	emperatures Taken	: <u>10</u>	~a5-	00	<u> 2010:</u>	35		
,	Thermometer	· ID:161		mp Bla	ank) Sa	mple Bot	tle Cooler T	emp. IR.	Gun
If out o	f Temperature,	Client Approval to	Run Sa	mples_	Tomp 0.	L. 4 ho	urkuk	,	
1 2.	Did all bottle	le labels complete ( labels and tags agr	ee with	custo	dy paper:			ES NO	
3. 4. Explai		containers used fo Cassettes / Tubencies:				Pressuriz	ed Tedlar	VES NO  ® Bags Infla	ted N/A
4.	Air Samples:	Cassettes / Tube					ed Tedlar	® Bags Infla	ted N/A
4.	Air Samples:	Cassettes / Tube	es Intac	t (	Canisters			® Bags Infla	
4.	Air Samples: n any discrepar	Cassettes / Tubencies:	es Intac	t (	Canisters			® Bags Infla	
4.	Air Samples: n any discrepar pH	Cassettes / Tubencies:	es Intac	t (	Canisters			® Bags Infla	
4.	Air Samples: n any discrepar pH	Cassettes / Tubencies:  Reagent NaOH	es Intac	t (	Canisters			® Bags Infla	Added
4. Explai	Air Samples: n any discrepar  pH  12	Cassettes / Tubencies:  Reagent NaOH HNO3	es Intac	t (	Canisters			® Bags Infla	Added
4. Explai	pH 12 2	Cassettes / Tuberncies:  Reagent NaOH HNO3 H ₂ SO ₄	es Intac	t (	Canisters			® Bags Infla	Added
4. Explai	pH 12 2 2 ual Chlorine (+/-) 5-9*	Cassettes / Tubencies:  Reagent NaOH HNO3 H ₂ SO ₄ for TCN & Phenol	YES Ples were	NO NO	Sample I	D.		® Bags Infla	Added
4. Explai	pH 12 2 2 ual Chlorine (+/-) 5-9* All samples OK adjustment is requi	Cassettes / Tuberncies:  Reagent NaOH HNO3 H ₂ SO ₄ for TCN & Phenol P/PCBs (608 only) NO = Sam	YES  Ples were	NO NO	Sample I	D.	Reagent	® Bags Infla	Added
4. Explai	pH 12 2 2 ual Chlorine (+/-) 5-9* All samples OK adjustment is requi	Cassettes / Tuberncies:  Reagent  NaOH  HNO ₃ H ₂ SO ₄ for TCN & Phenol  P/PCBs (608 only)  NO = Samred, use NaOH and/or HOC Vial pH Verification Tested after Analysis) Following Samples	YES  Ples were	NO NO	Sample I	D.	Reagent	® Bags Infla	Added
4. Explai	pH 12 2 2 ual Chlorine (+/-) 5-9* All samples OK adjustment is requi	Cassettes / Tuberncies:  Reagent  NaOH  HNO ₃ H ₂ SO ₄ for TCN & Phenol  P/PCBs (608 only)  NO = Samred, use NaOH and/or HOC Vial pH Verification Tested after Analysis) Following Samples	YES  Ples were	NO NO	Sample I	D.	Reagent	® Bags Infla	Added

Other Comments:

# 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 Bo8.7 feet
Screen Length: 10 feet

Screen Length: 10 feet Static Water Level: 7.8 decimal feet

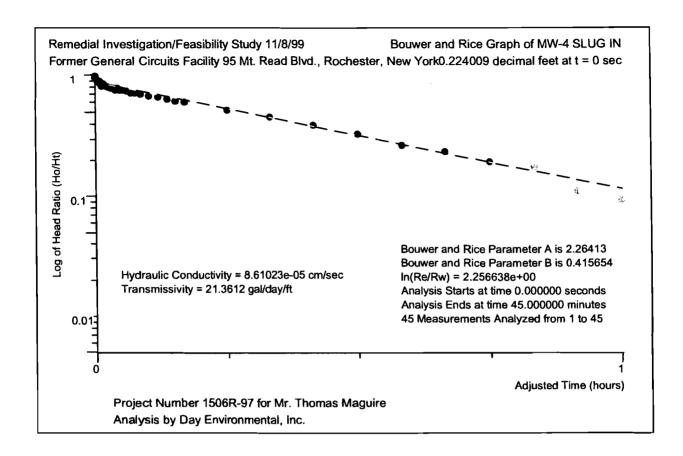
K ratio is not entered

There are 48 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
1	(seconds)	(seconds)	(decimal	fee(decimal	
2	0 3	0	7.57599	0.224009	1
3		3	7.58501	0.214987	0.959725
3 4	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
5 6 7	15	15	7.59699	0.203012	0.906269
/	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	0.137984	0.598117
39	900.003	900.003	7.68501	0.114988	
40	1200	1200	7.69899	0.114988	0.513318
41	1500	1500	7.71201		0.450929
42	1800	1800	7.72599	0.087987	0.392783
43	2100	2100	7.72599 7.74	0.0740113	
- <del>-</del>	2100	2100	1.14	0.0600021	l 0.267856

Trial	Time (seconds)	Adjusted Ti (seconds)		Head fee(decimal fe	Head Ratio eet)
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



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 Bo8.7 feet
Screen Length: 10 feet

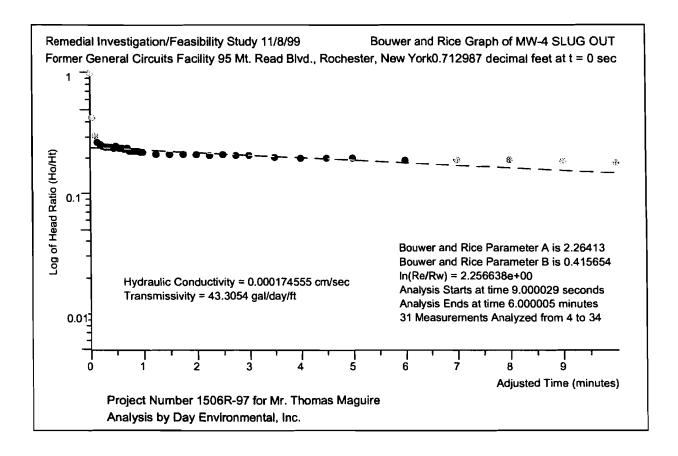
Static Water Level: 7.8 decimal feet

K ratio is not entered

There are 38 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti	mDrawdown	Head	Head Ratio
	(seconds)	(seconds)	(decimal		
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 6	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	0.173002	0.242642
11	30	30	7.97799	0.177987	0.242636
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
<b>2</b> 5	120	120	7.95499	0.154989	0.21738
26	135	135	7.95	0.150002	0.21738
27	150	150	7.95499	0.154989	0.21738
28	165	165	7.95	0.150002	0.21736
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	0.193543
38	600	600	7.929	0.129005	0.180936
	<del></del>			0.123003	0.100336



Data from file: C:\SUPERSLU\7SLIN.SLG

Title: Remedial Investigation/Feasibility Study

Site Name:

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York Location:

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 Bo37.64 feet Screen Length: 20 feet

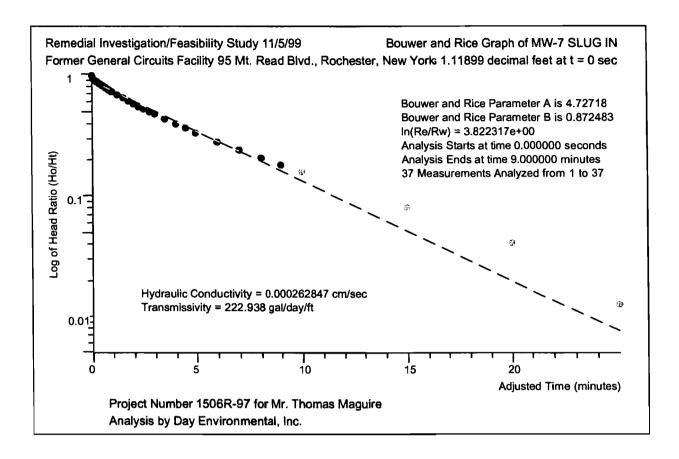
16.18 decimal feet Static Water Level:

K ratio is not entered

There are 41 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
1	(seconds)	(seconds)		fee(decimal	feet)
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	0.47633
31	240	240	15.739	0.440985	0.435225
32	270	270	15.772	0.408012	
33	300	300	15.806	0.37399	0.364624
34	360	360	15.862	0.317988	0.33422
35	420	420	15.912	0.267988	0.284173
36	480	480	15.949	0.231013	0.23949
37	540	540	15.977		0.206447
38	600	600		0.202994	0.181408
39	900.003	900.003	16.002	0.177995	0.159067
40	1200		16.09	0.0900035	
41	1500	1200	16.134	0.0460092	
<b>4</b>	1300	1500	16.166	0.0139874	0.0124999



Data from file: C:\SUPERSLU\7SLOUT.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: 11/5/99

Well Number: MW-7 SLUG OUT

Casing Radius: 2 inches
Effective Well Radius: 2 inches
Aquifer Thickness: 39.9998 feet
Water Table to Screen Bo37.64 feet
Screen Length: 20 feet

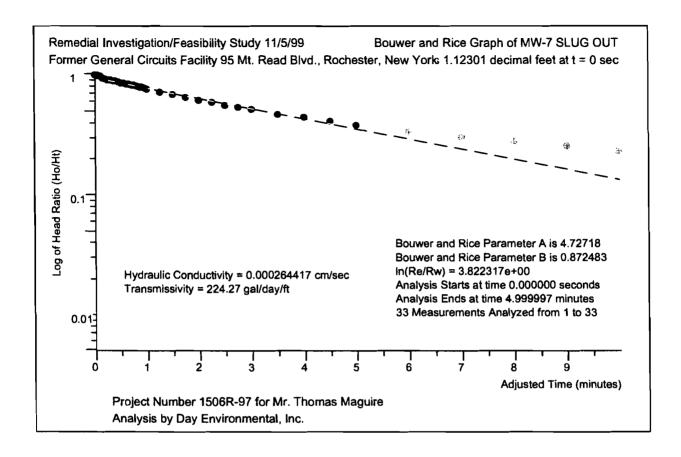
Static Water Level: 16.18 decimal feet

K ratio is not entered

There are 38 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
	(seconds)	(seconds)		fee(decimal	
1	0	0	17.303	1.12301	1
1 2 3	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 6	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	
35	420	420	16.521	0.340994	
36	480	480	16.494	0.313994	
37	540	540	16.466	0.286008	
38	600	600	16.443	0.26301	0.234201
			_0.113	0.20501	0.251251



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 Bo5.11 feet
Screen Length: 10 feet

Static Water Level: 8.49 decimal feet

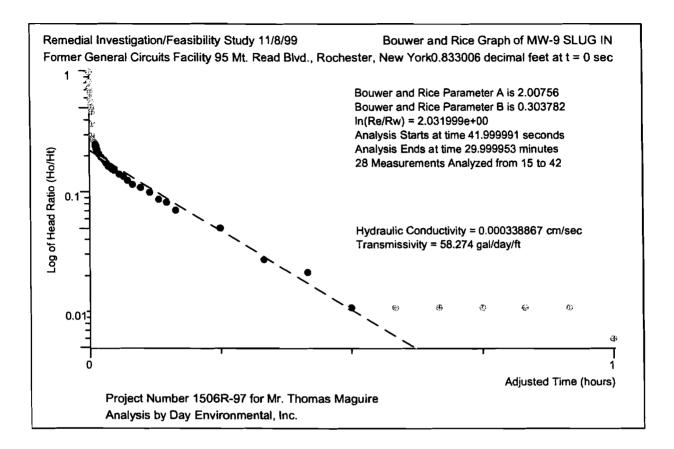
K ratio is not entered

There are 48 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
1	(seconds)	(seconds)	(decimal	fee(decimal	feet)
2	0	0	7.65699	0.833006	1
3	3 6	3	7.80299	0.68701	0.824736
3 4		6	7.88799	0.602005	0.72269
5	9.00003	9.00003	7.93399	0.556008	0.667472
6	12	12	7.994	0.496002	0.595437
7	15	15	8.03999	0.450006	0.540219
8	18	18	8.077	0.412998	0.495792
9	21 24	21	8.102	0.387998	0.46578
10		24	8.18599	0.30401	0.364955
10	27 30	27	8.24501	0.244989	0.294102
12	33	30	8.26201	0.227994	0.2737
13	35 36	33	8.26601	0.223991	0.268895
14		36	8.271	0.219005	0.262909
15	39	39	8.275	0.215002	0.258104
16	42	42	8.27999	0.210015	0.252117
17	45	45	8.285	0.204995	0.246091
18	48	48	8.28901	0.200993	0.241286
19	51	51	8.28901	0.200993	0.241286
20	54	54	8.29901	0.190986	0.229273
21	57	57	8.30302	0.186983	0.224468
22	60 75	60	8.30302	0.186983	0.224468
23		75	8.31699	0.173008	0.207691
24	90.0003	90.0003	8.32601	0.163985	0.196859
2 <del>4</del> 25	105	105	8.335	0.154996	0.186068
26	120	120	8.34501	0.144989	0.174055
26 27	135	135	8.352	0.138001	0.165666
	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 33	270	270	8.38399	0.106014	0.127266
	300	300	8.39301	0.0969917	
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	
42	1800	1800	8.481	0.0090000	
43	2100	2100	8.481	0.0090000	

Trial	Time (seconds)	Adjusted Ti (seconds)		Head fee(decimal fe	Head Ratio et)
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



Data from file: C:\SUPERSLU\9SLOUT.SLG

Title: Remedial Investigation/Feasibility Study

Site Name: Former General Circuits Facility

1506R-97

Location: 95 Mt. Read Blvd., Rochester, New York

Client: Mr. Thomas Maguire

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

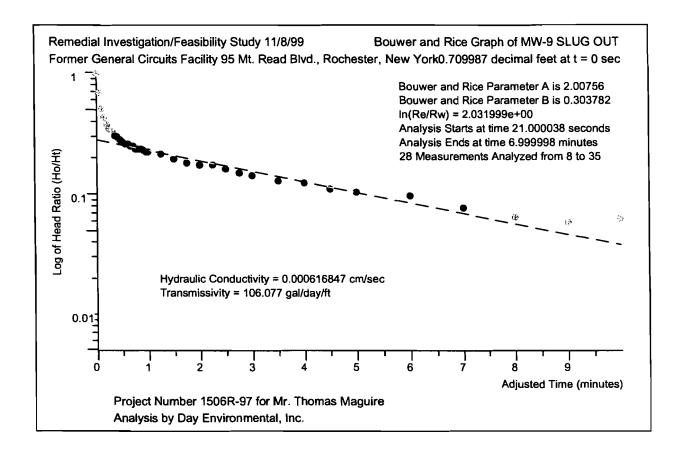
K ratio is not entered

Project Number:

There are 38 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
	(seconds)	(seconds)		fee(decimal	
1	0	0	9.19999	0.709987	1
2 3 4	3	3	8.97699	0.486991	0.685915
3	6	6	8.85399	0.363994	0.512677
	9.00003	9.00003	8.79399	0.303988	0.42816
5 6	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	0.092015	
31	240	240	8.57801	0.088012	8 0.123964
32	270	270	8.56801	0.078006	8 0.109871
33	300	300	8.564	0.074004	3 0.104233
34	360	360	8.55898	0.068984	1 0.0971625
35	420	420	8.54501	0.055007	7 0.0774771
36	480	480	8.53599	0.045985	8 0.0647699
37	540	540	8.53202	0.042016	1 0.0591787
38	600	600	8.53398	0.043984	9 0.0619517



Data from file: C:\SUPERSLU\16SLIN.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: 11/5/99

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 Bo22.28 feet
Screen Length: 20 feet

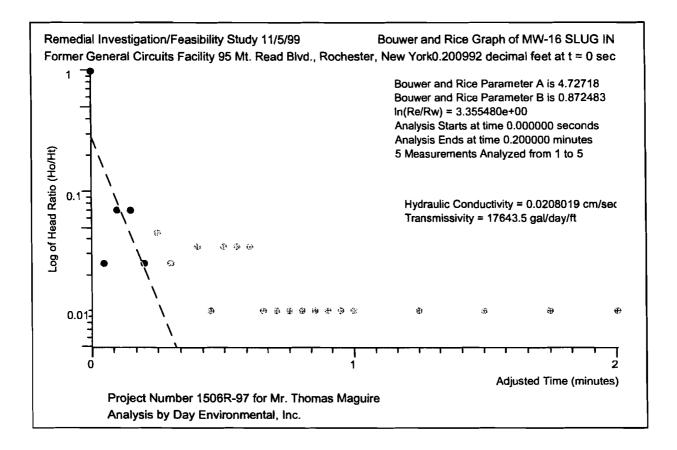
Static Water Level: 12.72 decimal feet

K ratio is not entered

There are 24 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted T	imDrawdown	Head	Head Ratio
	(seconds)	(seconds)	(decimal	fee(decimal fe	et)
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
<b>4</b> 5	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



Data from file: C:\SUPERSLU\16SLOUT.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: 11/5/99

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 Bo22.28 feet
Screen Length: 20 feet

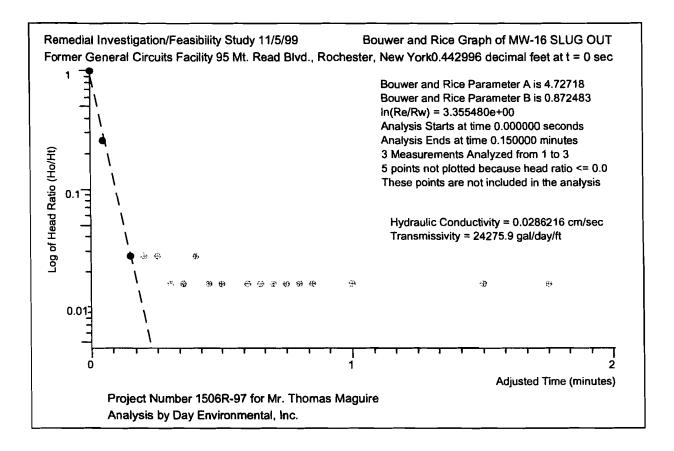
Static Water Level: 12.72 decimal feet

K ratio is not entered

There are 24 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti	mDrawdown	Head	Head Ratio	
	(seconds)	(seconds)	(decimal	fee(decimal feet)		
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	
4 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	5 <b>4</b>	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	<b>7</b> 5	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	



Data from file: C:\SUPERSLU\17SLIN.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: 11/5/99
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

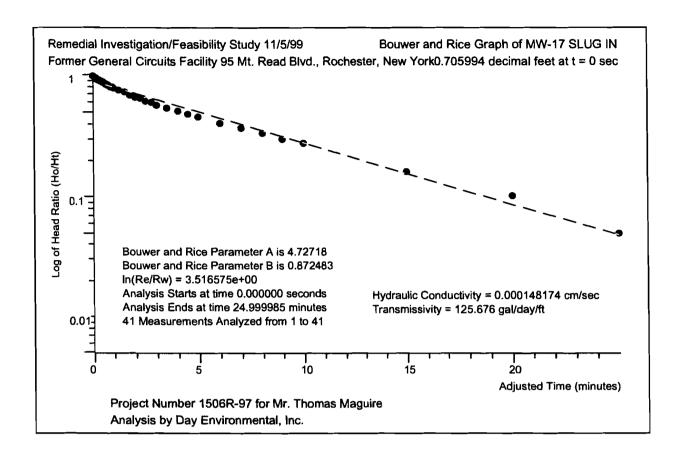
Static Water Level: 9.91999 decimal feet

K ratio is not entered

There are 41 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
1	(seconds)	(seconds)	(decimal	fee(decimal	feet)
1 2	0	0	9.214	0.705994	1
2	3	3	9.23299	0.686999	0.973094
3 4	6	6	9.24201	0.677977	0.960314
<del>4</del> 5	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	
39	900.003	900.003	9.805	0.193993	0.274779
40	1200	1200	9.84801		0.162878
41	1500	1500	9.88499	0.0719799	
= =	1000	1000	9.00433	0.0350052	0.0495828



Data from file: C:\SUPERSLU\17SLOUT.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: 11/5/99

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

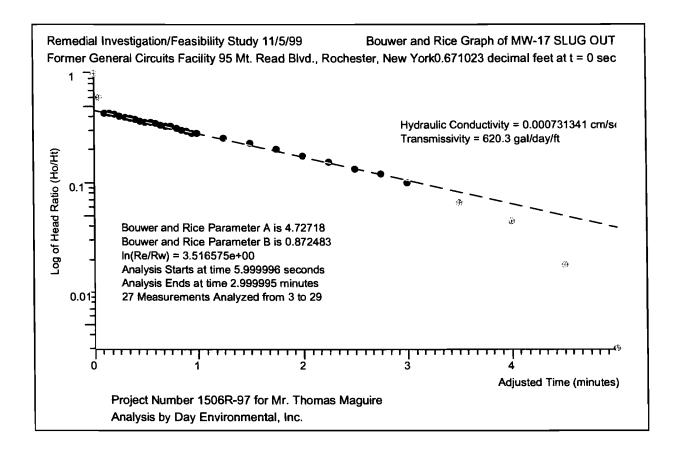
Static Water Level: 9.91999 decimal feet

K ratio is not entered

There are 33 time and drawdown measurements

Tests starts with trial 1

Trial	Time (seconds)	Adjusted Ti (seconds)		Head fee(decimal	Head Ratio
1	0	(seconds)	10.591	0.671023	1
2	3	3	10.324	0.403999	0.602064
3	6	6	10.324	0.288022	0.429229
4	9.00003	9.00003	10.208	0.288022	0.429229
5	12	12	10.201	0.281001	0.418765
4 5 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	
28	165	165	10.001	0.0810042	
29	180	180	9.98699	0.066995	0.0998401
30	210	210	9.96399	0.043996	
31	240	240	9.95001	0.030020	
32	270	270	9.932	0.012008	
33	300	300	9.92199	0.002002	44 0.00298416



Data from file: C:\SUPERSLU\18SLIN.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-18 SLUG IN
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

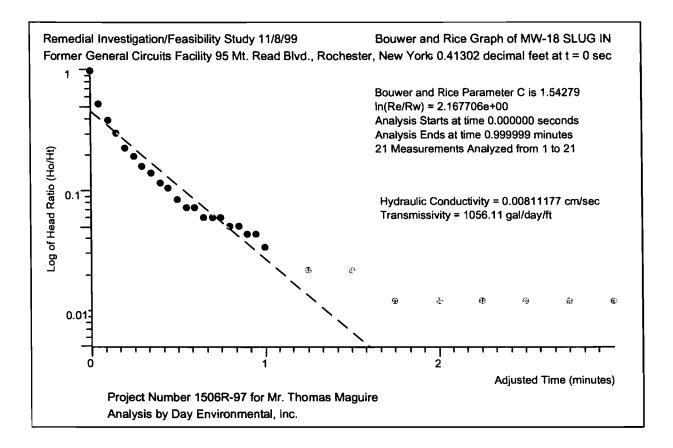
Static Water Level: 10.46 decimal feet

K ratio is not entered

There are 29 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti	.mDrawdown	Head	Head Ratio
	(seconds)	(seconds)	(decimal	fee(decimal fee	et)
1	0	0	10.047	0.413009	1
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
3 4 5 6 7 8	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



Data from file: C:\SUPERSLU\18SLOUT.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-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

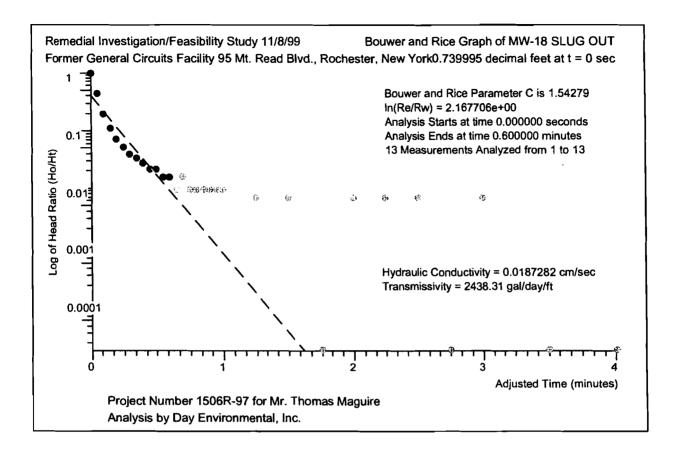
Static Water Level: 10.46 decimal feet

K ratio is not entered

There are 31 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Tim		Head	Head Ratio
	(seconds)	(seconds)		ee(decimal fee	et)
1	0	0	11.2	0.739995	1
2	3 6	3	10.79	0.329994	0.44594
3		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
1 2 3 4 5 6 7	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



Data from file: C:\SUPERSLU\19SLIN.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-19 SLUG IN

Casing Radius:

Effective Well Radius:
Aquifer Thickness:
Ww-19 SLUG IN
3 inches
1.5 inches
39.9998 feet
Water Table to Screen Bo26.75 feet
Screen Length:
20 feet

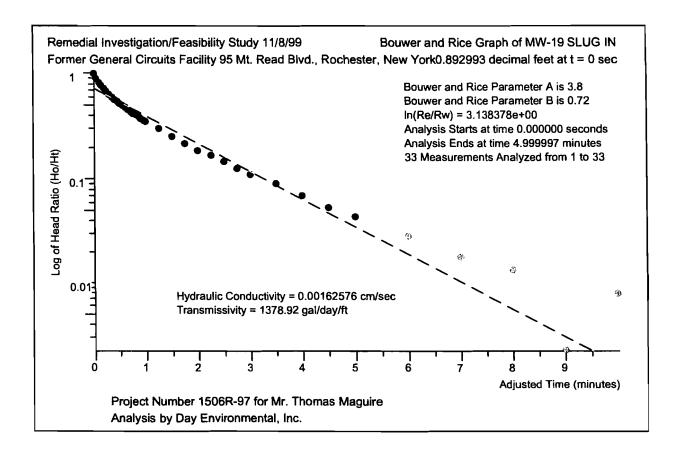
Static Water Level: 10.25 decimal feet

K ratio is not entered

There are 38 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti		Head	Head Ratio
	(seconds)	(seconds)		fee(decimal	
1 2 3	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 5 6	9.00003	9.00003	9.56301	0.686992	0.769314
5	12	12	9.60599	0.644014	0.721186
7	15	15	9.64801	0.601987	0.674123
,	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	
30	210	210	10.169	0.0809956	
31	240	240	10.188	0.0619998	
32	270	270	10.202	0.0479905	
33	300	300	10.211	0.039001	
34	360	360	10.225	0.0249922	
35	420	420	10.234	0.0160033	
36	480	480	10.238	0.012000	
37	540	540	10.248	0.001993	
38	600	600	10.243	0.0070132	24 0.00785363



Data from file: C:\SUPERSLU\19SLOUT.SLG

Title: Remedial Investigation/Feasibility Study

Site Name:

Former General Circuits Facility 95 Mt. Read Blvd., Rochester, New York Location:

Mr. Thomas Maguire Client:

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 Bo26.75 feet

Screen Length: 20 feet Static Water Level: 10.25 de

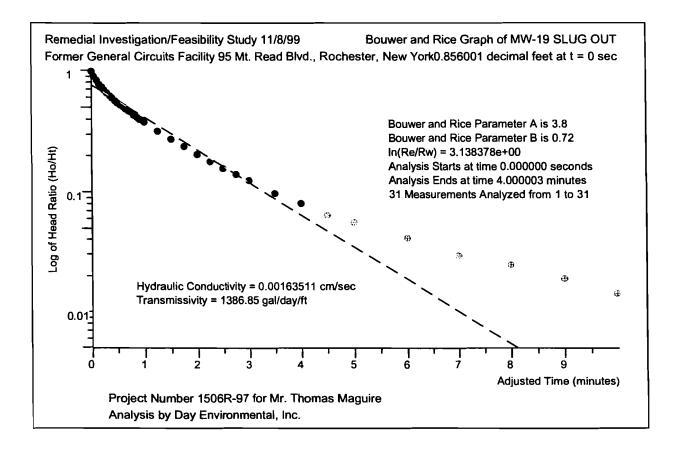
10.25 decimal feet

K ratio is not entered

There are 38 time and drawdown measurements

Tests starts with trial 1

Trial	Time	Adjusted Ti	mDrawdown	Head	Head Ratio
4	(seconds)	(seconds)		fee(decimal	feet)
1 2 3 4 5	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	<b>4</b> 5	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	
31	240	240	10.319	0.0690029	
32	270	270	10.305	0.0549936	
33	300	300	10.298	0.0480054	
34	360	360	10.285	0.0350138	
35	420	420	10.275	0.0250071	
36	480	480	10.271	0.0210045	
37	540	540	10.271	0.0210045	
38	600	600	10.262	0.013963	
<del>-</del>		330	10.202	0.0120146	0.0140358

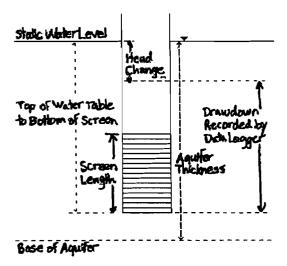


See Also:

**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 that 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 that 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:

 ${f k}$  = aquifer hydraulic conductivity

 $\Gamma_c$  = radius of the well casing

t = time since slug removal or injection

 $H_{\star}$  = head in the well at time t

 $H_{_{o}}$  = initial head change from static water level

 $R_{\rm e}$  = radius of influence of the test

 $T_{w}$  = effective radius of the well (radius of well and gravel pack

 $L_{\mathtt{scr}}$  = length of the well screen or open hole

In(Re/rw) 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

 ${f A}, {f B}$ , and  ${f C}$  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 (Ht/Ho) 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 Ho/Ht. All other methods and graphs (including the Bouwer and Rice graph) use a head ratio calculated as Ht/Ho.

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. Papadopulos (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.

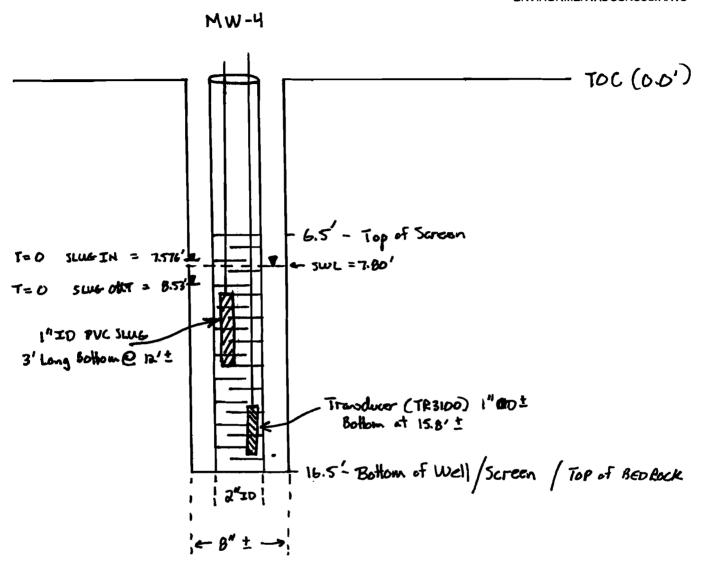
Kemblowski, M.W. and C.L. Klein. (1988) *An Automated Numerical Evaluation of Slug Test Data*, Ground Water, Vol. 26, No. 4.

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.

Papadopulos, 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.

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623

**ENVIRONMENTAL CONSULTANTS** 



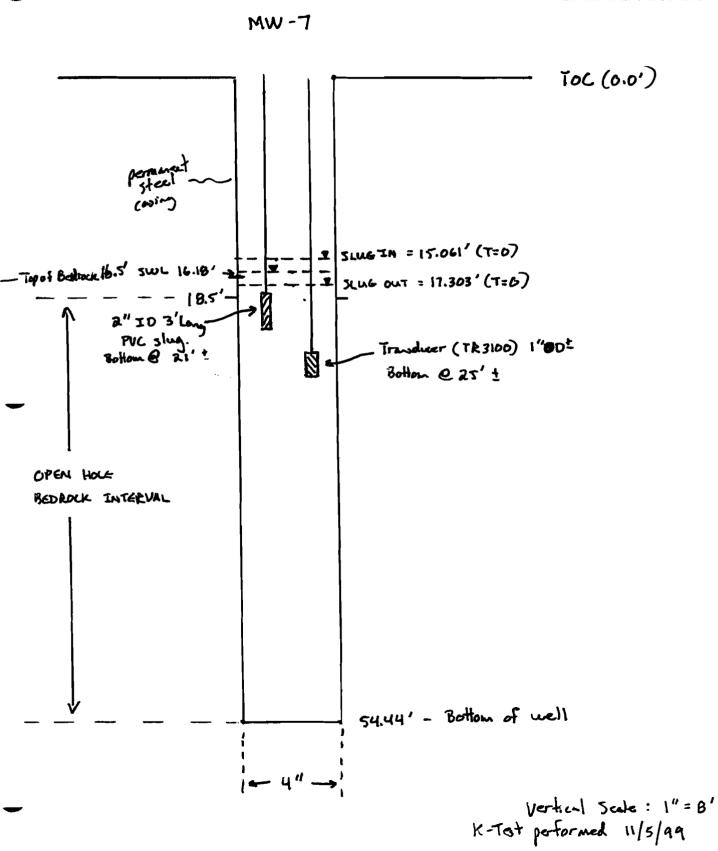
Vertical Scale = 1"=4' K-Test Performed 11/8/99

CALC. BY: JAD DATE: 11/23/99 PROJECT NO:: 1506R-97 | NYSDEC BZ8085

CHIKD BY: DATE: DESCRIPTION: MW-4 well diagram - K-TEST

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623

**ENVIRONMENTAL CONSULTANTS** 



CALC. BY: JAD DATE: 11/22/99 PROJECT NO.: 1506R-97 / NYSDEC 828085

CHIKO BY: DATE: DESCRIPTION: MW - 7 WELL diagram - K-TEST

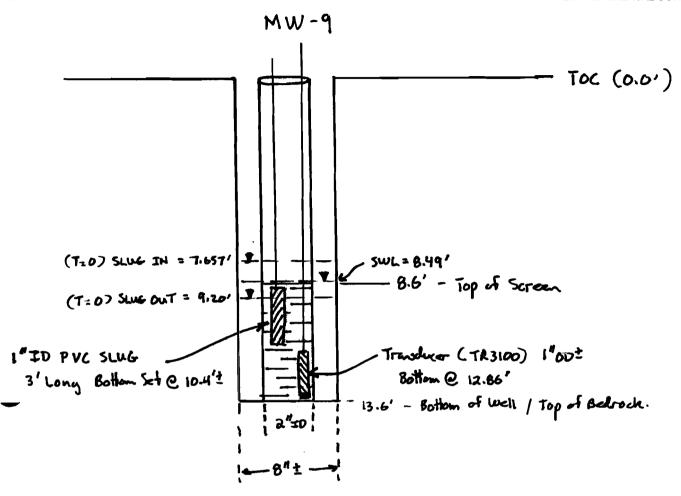


### DAY ENVIRONMENTAL, INC.

SHEET | OF |

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623

**ENVIRONMENTAL CONSULTANTS** 

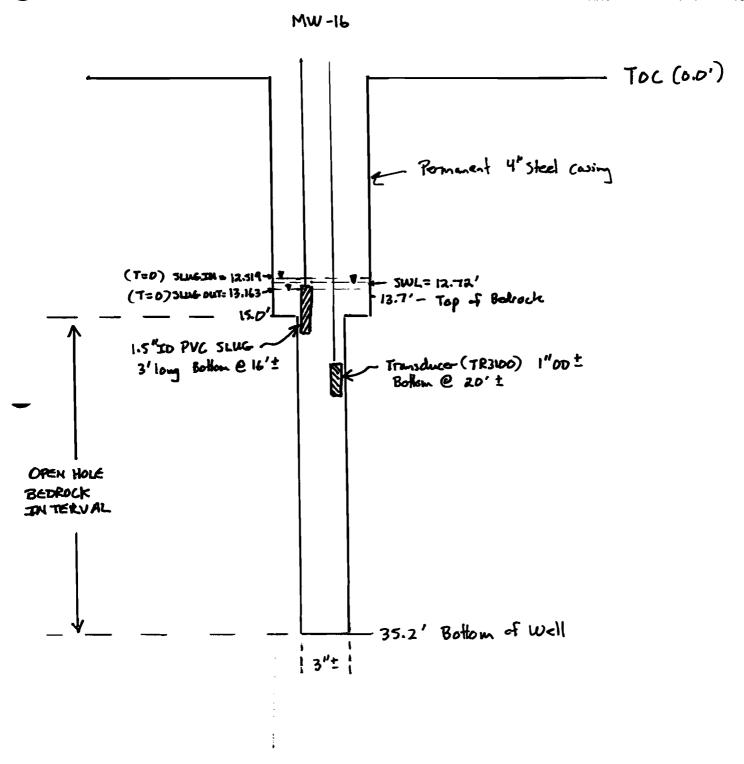


Vertical Scale: 1"=4' K-Test Performed 11/8/99

CALC. BY:	JAD DATE	11/23/99	PROJECT NO.: 1506R	-97	NYJDEC	8	ZB0B5
CH'KD BY:	DATI	E:	DESCRIPTION: WW-9	we	1 diagram	_	K-TEST

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623

**ENVIRONMENTAL CONSULTANTS** 



Vertical Scale: 1"=6" K-Test performed 11/5/99

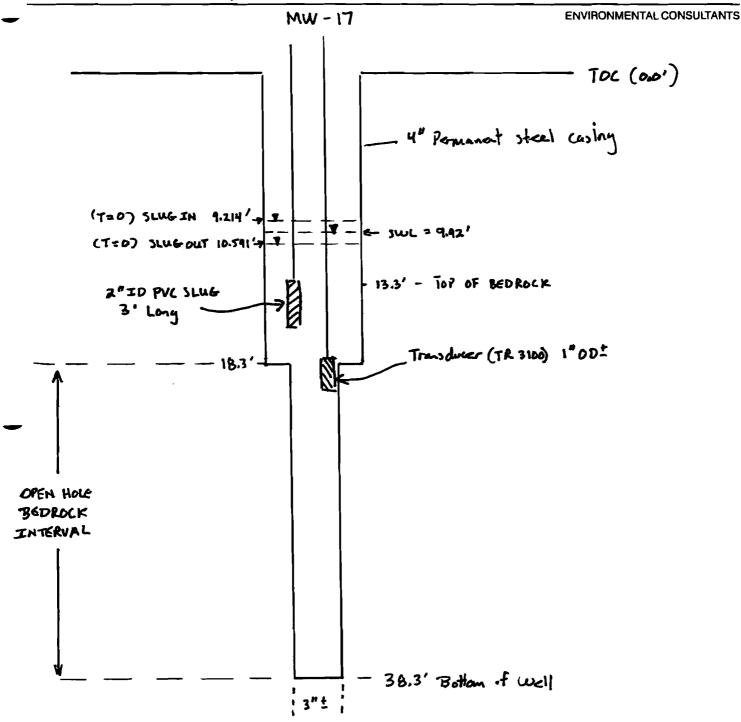
CALC. BY:	JAD	_DATE:_	11/23/99	PROJECT NO.:_	1506 R-	97 /	NTS D	if c 8	28085
CH'KD BY:		_DATE:_		DESCRIPTION:_					



## DAY ENVIRONMENTAL, INC.

SHEET___OF___

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623



Votical Scale: 1"=6' K-Test performed 11/5/99

CALC. BY:	JAD	DATE: 11/23/49	PROJECT NO.:_	1506R -	97	NYDOE	C 82808	5
CH'KD BY:		_DATE:	DESCRIPTION:_	MW-17	well o	lagram	K-TEST	

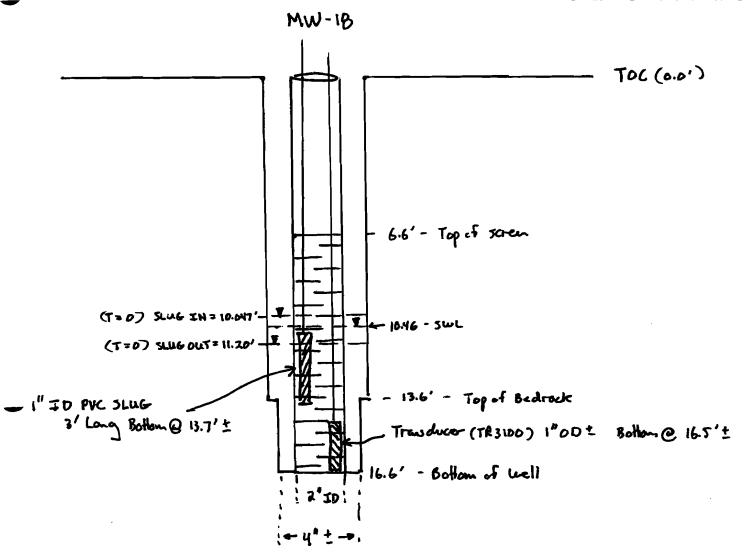


# DAY ENVIRONMENTAL, INC.

SHEET OF

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623

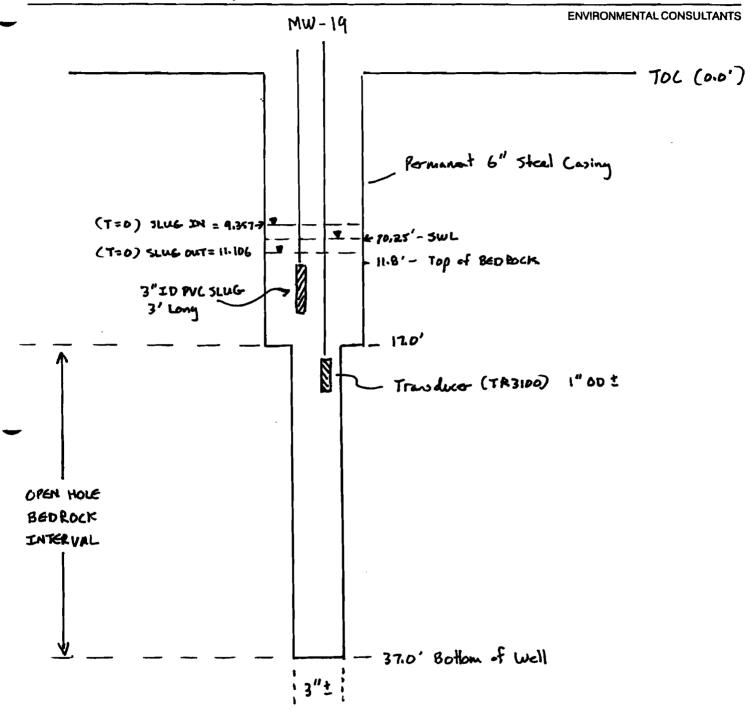
**ENVIRONMENTAL CONSULTANTS** 



Vertical Scale: 1"=4" K-Test Performed 11/8/99

CALC. BY: JAT	DATE: 11/23/99	PROJECT NO.: 1506R-97 /	NYSDEC BIBORS
CH'KD BY:	DATE:	DESCRIPTION: MW-18 well d	icarum K-TEST

2144 BRIGHTON-HENRIETTA TOWN LINE RD., ROCHESTER, NY 14623



Vortical Scale: 1"=6"

CALC. BY:	JAD DATE: 11/23/49	PROJECT NO.: 1506 R-97	1 NYSDEL 828085
CH'KD BY:	DATE:	DESCRIPTION: MW-19 We	