

932073

**PHASE 2
ENVIRONMENTAL SITE INVESTIGATION
FORMER NIAGARA MATERIALS SITE
NYSDEC SITE NUMBER 932073
LOCKPORT, NEW YORK**

EHC environmental
hydrogeology corp.

ROUTE 146, CLIFTON PARK, NEW YORK 12065 (518) 371-7621
28 MADISON STREET, RUTLAND, VERMONT 05701 (802) 775-3100

**PHASE 2
ENVIRONMENTAL SITE INVESTIGATION
FORMER NIAGARA MATERIALS SITE
NYSDEC SITE NUMBER 932073
LOCKPORT, NEW YORK**

PREPARED FOR:

**MR. ROBERT PASS
FRONTIER STONE
P.O. BOX 510, 400 HINMAN STREET
LOCKPORT, NEW YORK 14095**

PREPARED BY:

**ENVIRONMENTAL HYDROGEOLOGY CORPORATION
900 ROUTE 146
CLIFTON PARK, NEW YORK 12065**

DATE:

MAY 22, 1992

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JUN 4 1992

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DATE: June 2, 1992
TO: NYS Dept. of Environmental Conservation
600 Delaware Avenue
Buffalo, NY 14202-1073

ATTENTION Mr. Abul Barkat

PROJECT: Former Niagara Materials Site.

WE ARE TRANSMITTING THE FOLLOWING:

DESCRIPTION	COPIES	DATED
1 Copy of: Phase 2 Environmental Site Investigation, Former Niagara Materials Site, NYSDEC Site Number 932073, Lockport, New York.		

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EHC environmental
hydrogeology corp.
ROUTE 146, CLIFTON PARK, NY 12065
28 MADISON STREET, RUTLAND, VERMONT 05701 (802) 775-3100
(518) 371-7621

TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
1.0 INTRODUCTION.....	1
2.0 BACKGROUND.....	1
3.0 METHOD OF STUDY.....	3
3.1 Work Plan Introduction.....	3
3.2 Site Conditions.....	4
3.3 Monitoring Well Installation.....	5
3.3.1.1 Drilling Program.....	5
3.3.1.2 Sampling and Classification.....	7
3.3.1.3 Well Installation.....	7
3.3.1.4 Decontamination Procedures.....	9
3.3.1.5 Combustible Gas Screening Procedures.....	12
3.4 Water Level Measurements.....	13
3.5 Surveying.....	17
3.6 Groundwater Sampling.....	17
3.7 Soil Sampling.....	20
4.0 GEOLOGY.....	23
4.1 Surficial Geology.....	23
4.2 Bedrock Geology.....	23
5.0 HYDROLOGY.....	26
5.1 Surficial Hydrology.....	26
5.2 Hydrogeology.....	27
6.0 ANALYTICAL RESULTS.....	31
6.1 Introduction.....	31
6.2 Groundwater Quality Results.....	33
6.3 Soil Quality Results.....	40
6.3.1 Lagoon and Background Soil (TCLP).....	40
6.3.2 Above Ground Storage Tanks (AGST) and Railroad Bed Soil (TCL).....	42
7.0 DISCUSSION.....	54

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>
1	Site Location Map
2	Vicinity Map
3	Monitoring Well Location Map
4	Soil Sample Point Locations

LIST OF TABLES

<u>Table</u>	<u>Title</u>
1	Listing of Previous Reports
2	Monitoring Well Data Base
3	Observed Lower Explosive Limit (LEL) and HNu PID Values Obtained During Drilling of Monitoring Wells EHC-5 and EHC-6
4	Niagara Materials Company (NMC) Groundwater Level Data Base - 11/20/92
5	Niagara County Refuse Disposal District (NCRDD) Monitoring Well and Groundwater Level Data Base - 11/20/91
6	Groundwater Field Chemistry Instrumentation
7	Approximate Depth and Elevation of Individual Bedrock Strata Surfaces
8	Field Groundwater Chemistry Results - November 21 to 22, 1992
9	Groundwater Results for Specific Conductance (SC) and Sodium (Na)
10	Summary of TCL Quality Results for Groundwater
11	Summary of TCLP Quality Results for Lagoon and Background Soil Samples
12a	Summary of Inorganic and pH Target Compound List (TCL) Analytical Results for Soils
12b	Summary of Volatile, Semi-Volatile, Pesticides and PCB Target Compound List (TCL) Analytical Results for Soils

LIST OF APPENDICES

<u>Appendix</u>	<u>Title</u>
A	Previous Analytical Quality Data
B	Work Plan - July 18, 1991
C	Lithological Classification Soil Boring Logs
D	Monitoring Well Completion Logs
E	Soil Sampling Excavation Logs
F	Field Well Development Forms
G	Analytical TCL Groundwater Quality Results
H	Analytical TCLP Soil Quality Results
I	Analytical TCL Soil Quality Results

1.0 INTRODUCTION

Environmental Hydrogeology Corporation (EHC) has prepared this report to present findings from the completion of the July 18, 1991 work plan conducted at the former Niagara Materials site in Lockport, New York (See Figure 1). The work plan was approved by the New York State Department of Environmental Conservation (NYSDEC) and addresses the concerns raised during the April 25, 1991 scoping meeting and subsequent correspondence. The goal of this supplemental report combined with the initial October 10, 1989 report is to provide NYSDEC with sufficient information to perform a final evaluation and determination to delist the Niagara Materials Company (NMC) site from the inactive hazardous waste disposal list.

2.0 BACKGROUND

The NMC site is listed on the NYSDEC Inactive Hazardous Waste Disposal List as Site No. 932073 and is owned by Frontier Stone, Inc. The site has been listed since the first listing in June 1980. Reports have been prepared regarding the environmental integrity of the site and surrounding area. The reports specifically regarding the site are listed in Table 1. This report supplements EHC's October 10, 1989 report entitled

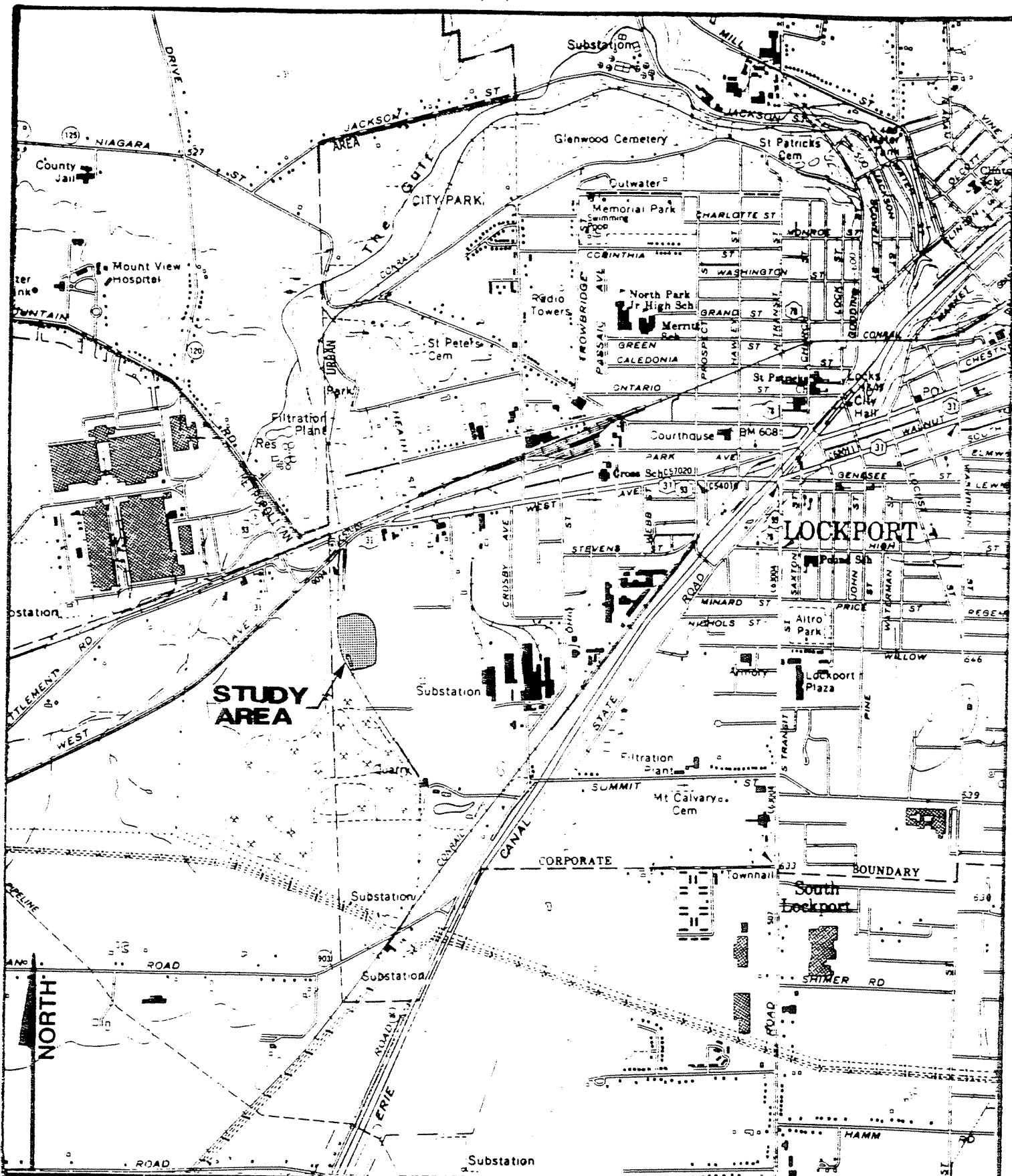


FIGURE 1

SITE LOCATION MAP

**NIAGARA MATERIALS COMPANY FOR
FRONTIER STONE INC.**

SCALE: 1:2400

SOURCE: DOT LOCKPORT QUADRANGLE

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CORPORATION**

800 ROUTE 140, CLIFTON PARK, NEW YORK 12005 (518)371-7040

WATER RESOURCES

ENVIRONMENTAL SITE ASSESSMENTS

CONTAMINANT HYDROGEOLOGY

GEOTECHNICAL ENGINEERING

TABLE 1
Listing of Previous Site Reports

- . Site Report on Niagara Materials Company West Avenue, Lockport, Niagara County, New York. Report by New York State Department of Environmental Conservation, Region 9, 1981.
- . Preliminary Investigation of the Niagara Materials Site, City of Lockport, Niagara County, New York. Phase 1 Summary Report by Ecological Analysis, Inc., September, 1984.
- . Draft Letter Report Regarding Soil Sampling Analysis at the Niagara Materials Site, City of Lockport, Niagara County, New York. Letter Report by Engineering Science, June, 1987.
- . Environmental Site Assessment, Former Niagara Materials Site, NYSDEC Inactive Hazardous Waste Disposal Site No. 932073. Frontier Stone, Lockport, New York. Report Environmental Hydrogeology Corporation (EHC), October 10, 1989.

"Environmental Site Assessment, Former Niagara Materials Site, NYSDEC Inactive Hazardous Waste Disposal Site No. 932073, Frontier Stone, Lockport, New York. A comprehensive description of the site background is presented in the above referenced report. In general, the site under investigation housed the NMC and is in close proximity to the Niagara County Refuse Disposal District (NCRDD). As described in the October 10, 1989 report, the facility reputedly manufactured abrasive wheels for approximately 2 years. Documentation from NMC regarding the types and quantities of waste generated is unavailable. However, reports have been submitted to the NYSDEC identifying hexachloride disiloxane, which degrades into hydrochloric acid and silicon - dioxide as part of the waste stream. Leachate from the NCRDD may have impacted the local groundwater system. A summary of past analytical data is presented in Appendix A as analyte versus analysis type and sample location.

3.0 METHOD OF STUDY

3.1 Work Plan Introduction

The scope of work conducted was the result of the NYSDEC approved work plan dated July 18, 1991. Methodologies of each step comprising the work plan is explained in the following sections. The work plan, which appears in Appendix B, is outlined below:

- . Follow appropriate health and safety procedures.
- . Install to 35 foot deep PVC monitoring wells and perform hydraulic conductivity tests.
- . Sample groundwater from all monitoring wells and analyze for complete TCL parameters following CLP QA/QC procedures.
- . Sample and analyze soils from the three lagoon areas and a background location by TCLP methods following CLP QA/QC procedures.
- . Sample and analyze soils from the reputed former above ground storage tank areas and railroad siding area for TCL parameters following CLP and QA/QC procedures.

3.2 Site Conditions

The site is located southwest of the newly constructed Lockport bypass in Lockport, Niagara County, New York. As seen on Figure 2, the site is bordered to the west by N/F Conrail Railroad easement. Across from the railroad lies a former quarry operated by Genstar, previous owner to Frontier Stone, Inc., in which a Construction and Demolition (C&D) landfill is presently under construction by NCRDD. South of the site, also within the former quarry, are two closed sanitary landfills which were operated by NCRDD. The NCRDD landfill is presently being evaluated by the consulting firm Goldberg, Zoino & Associates, Inc. (GZA) under NYSDEC supervision. Further south and southwest lies the active Frontier Stone, Inc. quarry operations.

3.3 Monitoring Well Installation

3.3.1 Drilling Program

The drilling and installation of two monitoring wells (EHC-5 and EHC-6) was performed on November 12, 1991. Each monitoring well was installed at the locations displayed in the work plan approved by the NYSDEC. The locations were verbally verified with Mr. Steve Perrigo, NYSDEC, prior to drilling on November 5, 1991. As seen on Figure 3, EHC-5 is located \pm 20 feet west of Lagoon 3, whereas EHC-6 is located in the southwest corner of Lagoon 2.

Air rotary techniques were used on both borings. The air supplied from the air compressor was reputedly free of petroleum contamination. Nothnagle Drilling of Scottsville, New York installed the borings with a truck mounted drill rig. Monitoring wells were drilled and installed as directed in the work scope under supervision by an EHC hydrogeologist. A summary of monitoring well construction appears in Table 2.

FORMER QUARRY
PROPOSED C & D LANDFILL

RAILROAD EASEMENT

FORMER R.R. SIDING

ABOVE GROUND
STORAGE TANK AREA
2

FORMER
BUILDING

ABOVE
GROUND
STORAGE
TANK
AREA 1

NORTH



A

B

C

LAGOON 3

LAGOON 2



LAGOON 1



LEGEND

- DENOTES RAILROAD TRACKS
- DENOTES QUARRY WALL
- DENOTES MONITORING WELL

EHC-1



CLOSED
NCRDD SANITARY
LANDFILL

SCALE: 1" = 100'

FIGURE 3

**MONITORING WELL
LOCATION MAP**

NIAGARA MATERIALS COMPANY FOR
FRONTIER STONE INC.

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900 ROUTE 146, CLIFTON PARK, NEW YORK 12066 (516)371-7949

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COMPUTER MODELING

ENVIRONMENTAL SITE ASSESSMENTS
GEOTECHNICAL ENGINEERING
INDUSTRIAL RESOURCE MINING

TABLE 2

Monitoring Well Database
Niagara Materials Site, Lockport, New York
(Depths are Relative to Grade)

<u>Well No.</u>	<u>Formation Screened</u>	<u>Well Depth ft</u>	<u>Boring Depth ft</u>	<u>Screen Elevation</u>	<u>Measuring Point Elevation (AMSL)</u>	<u>Grade Elevation</u>
EHC-5	Decew	35.0	35.5	567.76 to 557.76	595.52	592.76
EHC-6	Decew	35.0	36.6	567.17 to 557.17	594.23	592.17

3.3.2 Sampling and Classification

Grab samples, collected at five foot intervals during drilling were logged using both the modified Burmister and Unified Soil Classification system for soils and American Stratigraphic Institute classification for bedrock (See Appendix C for key). The samples were retained in glass jars sealed with aluminum foil lined screw top lids for organic vapor field screening (See Section 3.4.1). In accordance with American Standard Testing Methods (ASTM), the soil sample jars were labeled with the following information: job designation, boring number, sample number, depth of sample, penetration record and length of recovery. Soil boring logs describing subsurface materials encountered in the test borings are provided in Appendix C.

3.3.3 Well Installation

Installation of both monitoring wells was based on recommendations by the NYSDEC presented in the work plan and by verbal correspondence. It is EHC's understanding that the monitoring well depth of 35 feet was chosen to insure characterization of a possible shallow aquifer. The wells were to be installed at this depth even if water was not initially encountered during drilling to allow for slow groundwater

recharge. HNu PID values increased in both wells at 30 feet deep. The elevated values are within the screened portion of the well.

All wells were constructed of 2 inch flush joint, schedule 40 PVC riser pipe with a ten foot length of 0.010 inches slot screen set 25 to 35 feet below grade. With the well set at the appropriate depth, the sand pack was installed from the ground surface creating a sand pack extending to approximately one to two feet above the screen. The sand utilized for the monitoring wells consisted of clean #0 grade Morie silica sand. A bentonite pellet seal was installed above the sand pack to seal off the screened interval from remaining aquifers and to prevent any cross migration of possible contamination. The bentonite seal consisted of approximately 2 to 3 feet of bentonite pellets. The pellets were activated with clean water to form the seal.

At both locations, the remainder of the annular space was filled with a cement/bentonite grout. The grout was introduced from the surface. A lockable protective steel casing was placed over each well to prevent unauthorized access and provide protection for the wells. Detailed monitoring well completion logs are provided in Appendix D.

3.3.4 Decontamination Procedures

Prior to drilling the first boring, the equipment used in drilling and well installation was steam cleaned to remove possible contaminants encountered at previous sites. All equipment which came in contact with the soil was decontaminated between boring locations to prevent cross contamination. Decontamination with a high pressure steam cleaner occurred within a temporary decon pad located adjacent to the Frontier Stone maintenance garage. Uncontaminated water from Frontier Stone's water supply was used for decontamination procedures. Decon water was collected and stored in a 55 gallon New York State Department of Transportation (NYSDOT) approved drum.

3.4 Field Screening

3.4.1 Photoionization Screening Procedures

Ambient air as well as soil and bedrock samples were monitored for volatile organic hydrocarbons (VOC) by an HNu Model PI-101 photoionization device (PID) with a 10.2 ev and/or 11.7 ev lamp. The HNu PID is calibrated for direct reading in ppm of benzene. The calibration procedure, performed prior to its use, involves

the standardization of probe response using a calibration gas of a known organic concentration and adjacent known background conditions.

HNu PID screening with a 10.2 ev lamp was performed during drilling to monitor air quality for personnel safety and sample contamination with respect to depth. Continuous ambient air monitoring with an HNu PID provided data to base respiratory protection for VOC's on. Boring sample head spaces were monitored subsequent to a waiting period for sample equilibration. Sample contamination levels relative to depths are included in Table 3.

Measurements were obtained by removing the screw on lid and piercing the aluminum foil covering the top of each sample jar with the HNu PID probe. The head space was tested for the presence of VOC vapors. Results were recorded after five seconds (optimum response time indicated by manufacturer) of exposure.

Composite soil sample locations were monitored with an 11.7 ev lamp HNu PID. Each sample excavation site was evaluated immediately following sample extraction. The values obtained are presented in Appendix E.

TABLE 3

Observed Lower Explosive limit (LEL) and HNu PID Values
 Obtained During Drilling of Monitoring Wells EHC-5 and EHC-6
 (0.2 ppm Background)

Depth <u>in feet</u>	EHC-5				EHC-6			
	%LEL	<u>10.2 ev HNu Value (ppm)</u>		%LEL	<u>10.2 ev HNu Value (ppm)</u>			
	Value Exhaust	Drill	Exhaust	Value Exhaust	Drill	Exhaust		
	<u>Drilling Air</u>	<u>Sample</u>	<u>Drilling Air</u>	<u>Drilling Air</u>	<u>Sample</u>	<u>Drilling Air</u>		
0	0	0.2	0.2	0	N/A	0.2		
5	0	1.0	0.2	0	1.2	0.2		
10	0	0.4	0.2	0	1.6	0.2		
15	0	0.6	0.2	0	0.6	0.2		
20	0	0.6	0.2	0	1.2	0.2		
25	0	0.5	0.2	0	1.2	0.2		
30	0	3.0	0.2	0	2.0	0.2		
35	0	3.0	0.2	0	1.4	0.2		

The HNu PID operates on the principle of photoionization. Photoionization uses ultraviolet light to ionize many trace compounds (especially organics), and the HNu PID model PI-101 employs this principle to measure the concentration of trace gases. In the HNu PID, a chamber adjacent to the ultraviolet light source contains a pair of electrodes. When a positive potential is applied to one electrode, the field created drives any ions in the chamber to the collection electrode where the current is measured. The measured current is proportional to the concentration of organics sampled by the instrument's probe. For this process to be successful, the energy (electron voltage [eV]) of the ultraviolet lamp must be greater than the ionization potential of the sample. The useful range of the instrument is from 0.1 to 2000 ppm (for benzene or other VOC's with similar ionization potentials).

3.4.2 Combustible Gas Screening Procedures

The Mine Safety Applicants Company (MSA) Model 2A combustible gas indicator (explosimeter) was used to test ambient air and drilling exhaust for concentration of flammable gasses and explosive vapors. The air was periodically monitored to ensure 5% of the lower explosive limit (LEL) was not exceeded. LEL readings are included in Table 3.

The explosimeter operated by drawing an atmosphere sample over a heated catalytic filament which forms part of a balanced electrical circuit. Combustibles are burned on the filament which raises its temperature and causes an increase in the filaments resistance proportional to the concentration of combustibles. The resulting unbalance in the electrical circuit is displayed on the meter as percent of the lower explosive limit.

3.5 Water Level Measurements

Depth to groundwater measurements were collected on November 21, 1991 from each monitoring well on site. GZA gauged NCRDD wells on November 20, 1991. A Solinst water level meter Model 101 was used to measure depths to the nearest 0.01 foot at the NMC site monitoring wells. The raw depth data was converted to water level elevation relative to mean seal level (msl) and appears in Table 4. The collection of NCRDD site data was not supervised. GZA representatives reputedly acquired data in a similar manner. The NCRDD site data is presented in Table 5.

TABLE 4

NMC Groundwater Level Data Base
November 21, 1991

<u>Monitoring Well</u>	<u>Depth to Water</u>	<u>Measuring Point Elevation</u>	<u>Potentiometric Surface Elevation</u>
EHC-1	27.10	594.60	573.53
EHC-2	17.12	593.63	576.51
EHC-3	37.17	592.35	555.18
EHC-4	37.70	592.75	555.05
EHC-5	DRY	595.52	557.76
EHC-6	36.91	594.23	557.32

TABLE 5

NCRDD Monitoring Well & Groundwater Level Data Base
for 11/20/91 (in feet)

Moni- toring Well	Date	Time	Depth to Water from Measuring Point	Measuring Point Elevation	Potentiometric Surface Elevation	Total Depth of Boring	Grade Elevation	Geological Formation Screened
GZ 1D	11/20/91	10:00	23.87	594.2	570.33	54.2	591.50	Rochester Shale
GZ 2D	11/20/91	10:54	682	557.1	550.28	19.0	554.62	Rochester Shale
GZ 3D	11/20/91	13:00	45.07	619.4	574.33	80.0	618.12	Rochester Shale
GZ 4S	11/20/91	9:30	45.72	593.3	547.58	52.6	591.05	Undetermined
GZ 4D	11/20/91	9:20	38.25	593.9	555.65	100.0	591.05	Undetermined
GZ 5	11/20/91	10:20	7.40	558.2	550.80	27.0	N/A Filled	Undetermined
GZ 6	11/20/91	10:15	32.83	595.7	562.87	58.6	593.40	Undetermined
GZ 7S	11/20/91	14:55	5.23	559.5	554.27	21.6	557.50	Undetermined
GZ 7D	11/20/91	15:00	10.55	559.6	549.05	62.0	557.90	Undetermined
GZ 8S	11/20/91	12:40	30.27	592.0	561.73	54.0	590.33	Undetermined
GZ 8D	11/20/91	12:45	37.28	593.2	555.92	95.0	590.80	Rochester Shale
GZ 9S	11/20/91	13:30	63.88	598.7	534.82	62.1	596.65	Undetermined
GZ 10S	11/20/91	14:07	22.91	595.3	572.39	54.5	594.82	Undetermined
GZ 10D	11/20/91	14:05	41.81	597.7	555.89	103.0	595.60	Rochester Shale
GZ 11S	11/20/91	14:00	78.92	625.4	546.48	87.8	623.20	Undetermined
GZ 12	11/20/91	14:20	56.95	603.21	546.26	85.0	601.17	Lockport
GZ 13	11/20/91	14:30	+18.20	N/A	N/A	20.0	N/A	Lockport
GZ 14	11/20/91	14:35	7.89	554.02	546.13	20.0	553.30	Lockport

TABLE 5

NCRDD Monitoring Well & Groundwater Level Data Base
for 11/20/91 (in feet)
(Continued)

Moni- toring Well	Date	Time	Depth to Water from Measuring Point	Measuring Point Elevation	Potentiometric Surface Elevation	Total Depth of Boring	Grade Elevation	Geological Formation Screened
GZ 15	11/20/91	14:40	9.18	552.47	543.29	91.5	551.90	Lockport
GZ 16	11/20/91	14:45	32.88	577.27	544.39	51.5	575.80	Lockport
GZ 17	Grouted November 1991			N/A	N/A	N/A	N/A	N/A
GZ 18	11/20/91	13:25	67.38	*	N/A	67.0	593.74	N/A
GZ 19	11/20/91	11:00	9.24	*	N/A	21.5	*	N/A

* Elevations have not been surveyed.

3.6 Surveying

Surveying performed by Continental Placer, Inc. during December 1991 established measuring point elevations for the new monitoring wells and locations for both wells and soil sampling points. All survey points were referenced to a NYSDOT bench mark and previous points surveyed by Continental Placer, Inc. Survey data was compiled to provide a site map. Due to adverse weather conditions, three of the sampling points L3A1, L3B2 and L3C1 could not be located. Estimated location of these three points as well as the surveyed points were plotted on the soil sample point location map (Figure 4).

3.7 Groundwater Sampling

Groundwater samples were collected from monitoring wells EHC-3 and EHC-4 on November 21, 1991 and from EHC-1 and EHC-2 on November 22, 1992 following well development activities. Duplicate split samples collected by EHC from monitoring well EHC-2 were held with proper chain-of-custody at the Frontier Stone Office for pick up by the NYSDEC on November 22, 1991.

EHC delivered the remaining samples in iced coolers to CTM Analytical Laboratory on November 22, 1991 following proper

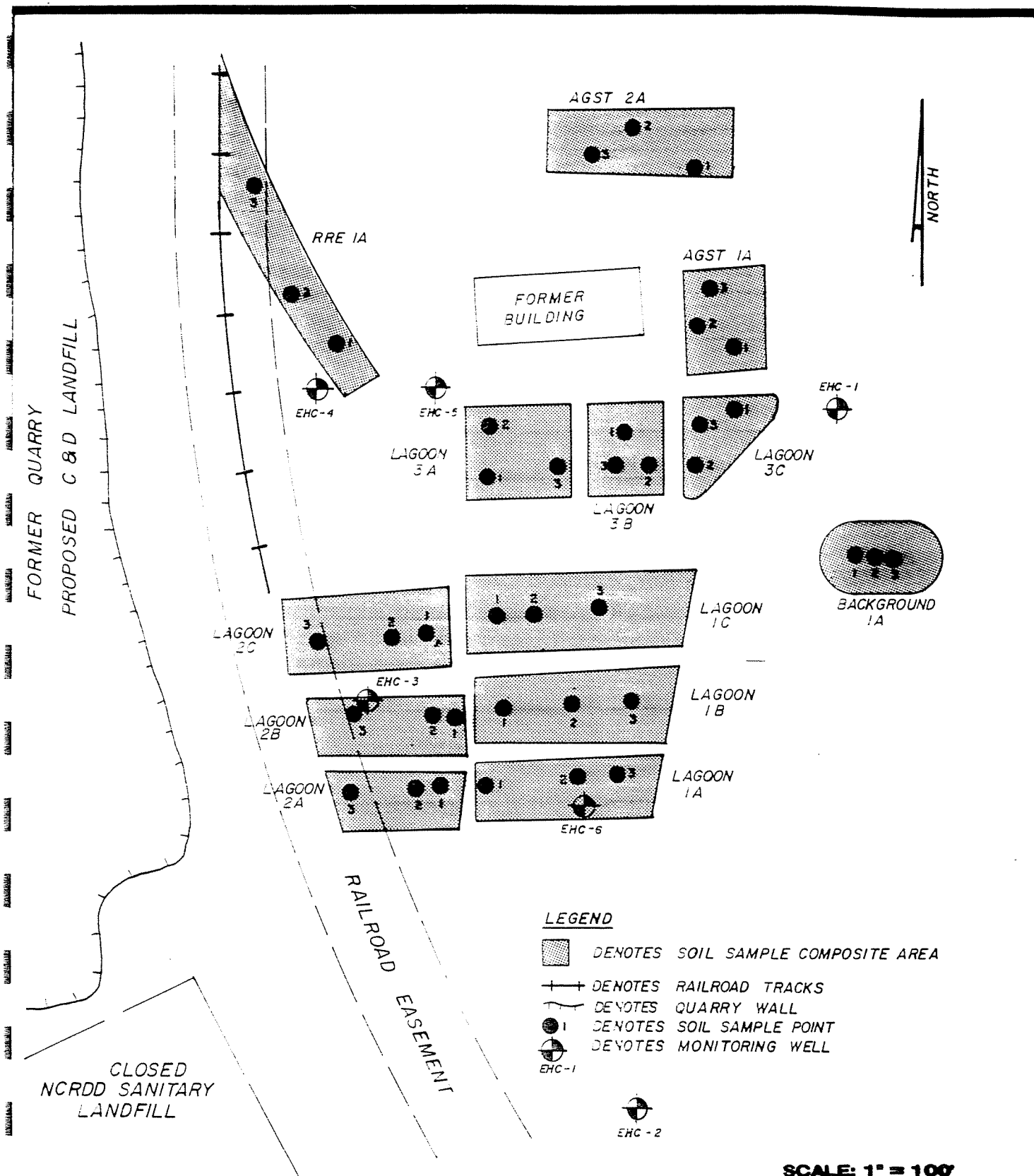


FIGURE 4

SOIL SAMPLE POINT LOCATIONS

NIAGARA MATERIALS COMPANY FOR FRONTIER STONE INC.

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808 ROUTE 148, CLIFTON PARK, NEW YORK 12065 (518)371-7940

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chain-of-custody procedures. The laboratory is certified by both the NYSDOH (ELAP No. 10358) and NYSDEC ASP. A full target compound list (TCL) analysis was conducted on the samples with Environmental Protection Agency (EPA) contract laboratory protocol (CLP) deliverable. CLP deliverables document each analysis performed on the samples, calibration of equipment, personnel involved and confidence of results. The CLP level of QA/QC promotes a high level of confidence that the laboratory results are correct, possible errors are identified, and the supplied documentation can defend the results.

Using dedicated PVC bailers, the monitoring wells were developed by evacuating groundwater until a minimum of three well volumes were removed and steady state groundwater field chemistry was observed. Concomitant with development, temperature, specific conductance, pH and turbidity were measured in the field. Physical characteristics of color and odor were also noted. Field equipment used to monitor field quality are listed in Table 6. Field development logs are presented in Appendix F.

Groundwater samples were collected from the monitoring wells utilizing 5 foot dedicated PVC bottom filling check valve bailer. Bailers were cleaned prior to being used in the field and wrapped

TABLE 6

Groundwater Field Chemistry Instrumentation

<u>Parameter Measured</u>	<u>Equipment and Model Used</u>
Temperature	Yellow Springs, Inc. Model 33 STC
Specific Conductance	Yellow Springs, Inc. Model 33 STC
pH	Hanna Instruments, Champ pH Meter
Turbidity	LaMotte Turbidimeter Model 2208

in individual plastic envelopes. The bailers were lowered into the well using clean nylon monofilament braided ropes.

Wells were developed with minimal agitation of the water column and, in turn, minimize volatilization of organic compounds and oxidation of metals. Analytical results of groundwater samples are provided in Appendix F and discussed in Section 6.2.

3.8 Soil Sampling

Composite soil samples for TCL and TCLP analysis were collected from the site on November 20 and 21, 1991, respectively. Each of the three sampling point locations used to create a composite sample was staked. The staked locations were surveyed and plotted by Continental Placer, Inc. Estimated locations of three stakes were made due to adverse weather conditions. The sample locations were based on directives received from NYSDEC.

A total of ten TCLP and three TCL composite samples were collected and analyzed. The sample vials were labeled with the date, time, job site, sample name, analysis required, preservatives and sampler. A complete chain-of-custody was kept

by EHC until delivery at CTM Analytical Laboratories on November 22, 1991. Sample analysis was conducted following the CLP level of QA/QC.

Three TCLP composite samples were collected from each of the three possible lagoon areas for a total of nine lagoon samples. The location of each sampling point combined to form a composite sample is displayed on Figure 4. Surficial contours indicate lagoon 1 and 2 are single lagoons whereas Lagoon 3 appears to be composed of three smaller lagoons. A composite sample was taken from each of the smaller lagoon 3 areas as seen in Figure 4. The background sample was taken 250 feet east of the north east corner of Lagoon 3.

Two of the three TCL composite samples were collected beneath the reported former above ground storage tanks. Several tank cradles were observed in Area 1 although no tank berms were seen. Soil was composited from three points among the tank cradles in Area 1. Possible berms and tank cradles were noted in Area 2. Two of the sample points were taken within the tank bermed area and one was taken from the berm itself. A composite sample was collected along the bed of the former railroad easement siding. The location of all sampling points is displayed in Figure 4.

The sampling procedure for both the TCL and TCLP samples was identical. Equal amounts of soil from each of the three sampling points was removed with a stainless steel scoop and combined in a stainless steel mixing bowl. Split samples were then placed into the pre-cleaned analytical sample vials. Sampling equipment was pre-cleaned and decontaminated with aalconox (detergent) wash, methanol rinse, distilled water/alconox wash and distilled water rinse.

A field log of each sampling point describing the soil type, depth of excavation and HNu PID (11.7 ev) reading is presented in Appendix E. In general, the soil type encountered was a brown coarse to fine sand with clayey silt and little gravel. The depth of excavation varied from 2 to 12 inches depending upon depth to bedrock. Elevated HNu PID readings were not observed.

A soil sample from above ground storage tank area two (AGSTA2) was collected by NYSDEC engineer, Mr. Abul Barkat, on November 21, 1991. The sample was collected with a clean stainless steel scoop from points sampled the previous day by EHC. Approximately equal amounts of soil was removed from each point and composited directly into the soil sampling vial. The analytical vials and sampling scoop were provided by EHC. Mr. Barkat delivered the samples to an analytical laboratory for analysis.

4.0 GEOLOGY

4.1 Surficial Geology

A detailed description of the site geology was presented in previous reports (EHC, 1989; NYSDEC, 1981). In brief, the site is covered by a thin layer of soil derived from glacial lodgement till. The main source material for this till was the lockport limestone. The soil belongs to the Farmington series and generally consists of coarse to fine sands with significant amounts of silt, clay and gravel.

4.2 Bedrock Geology

The 1989 EHC Report describes in detail the local bedrock geology. In general, the site is underlaid by the Lockport Formation.

As discussed in the 1968 Basin Planning Report ENB-3 "Groundwater Resources of the Erie - Niagara Basin, New York" by A.M. LaSala, Jr., the Lockport Formation contains mainly limestone and dolostone. Both types of rock contain relatively water soluble minerals. The soluble minerals are calcite, Dolomite, Gypsum and Halite (common salt). Groundwater in this formation has a

relatively high dissolved solid content. Particles composed of the sulfide minerals of zinc, lead, and iron are disseminated through the Lockport Formation. Richard H. Johnson states in the 1964 USGS Bulletin GW-53 titled "Groundwater in the Niagara Falls Area, New York, with emphasis on the water bearing characteristics of the bedrock" that hydrogen sulfide or "sulfur water" is found in about one third of the wells in the Lockport. One theory for its prevalence states that sulfate dissolved from the bedrock and methane gas combine to form hydrogen sulfide.

During the installation of EHC-5 and EHC-6, both the lockport and Clinton bedrock groups were encountered. The two members of the Lockport Formation encountered during drilling were the Goat Island and the Gasport. The DeCew member of the underlying Clinton group was also encountered. Due to the method of drilling used only approximate elevations of lithologic changes were noted. Based on the sampling frequency and method the expected margin of error is ± 5 feet. The approximate depths and elevation for the top of each strat is listed below in Table 7. In general, the local bedrock layers appear to dip to the southwest. However, regionally LaSala (1986) states that the lockport bedding plane dips to the south at 35 to 40 feet per mile.

TABLE 7

Approximate Depth and Elevation of Individual Bedrock Strata Surface
(in Feet)

<u>Strata</u>	<u>EHC-1</u> <u>Depth/Elevation</u>	<u>EHC-2</u> <u>Depth/Elevation</u>	<u>EHC-3</u> <u>Depth/Elevation</u>	<u>EHC-4</u> <u>Depth/Elevation</u>	<u>EHC-5</u> <u>Depth/Elevation</u>	<u>EHC-6</u> <u>Depth/Elevation</u>
Grade	593.5	591.54	589.33	590.33	592.76	592.17
Goat Island	2.0 / 591.5	2.0 / 589.54	0.0 / 589.33	1.0 / 589.33	0.0 / 592.76	0.4 / 591.77
Gasport	11.0 / 582.5	16.0 / 575.54	12.0 / 577.33	12.0 / 578.33	14.0 / 578.76	17.0 / 575.17
DeCew	24.5 / 569.0	28.0 / 563.54	21.0 / 568.33	23.0 / 567.33	22.0 / 570.76	23.0 / 569.17

Groundwater and fractures were not observed during the installation of EHC-5. The rock in EHC-5 drilled softer than EHC-6. Slight fractures were noted in EHC-6. The cuttings were dry in EHC-6 during drilling, but groundwater was noted entering the boring upon completion.

5.0 HYDROLOGY

5.1 Surficial Hydrology

The overall drainage on the site follows the primary surficial grade to the southwest. Flow from the site is blocked by the railroad bed which outlines the western boundary of the site causing a wet area during periods of heavy precipitation. The closest surficial body of water is an unnamed intermittent stream feeding the perennial stream named "The Gulf" which drains to the Erie Canal. "The Gulf" is located approximately \pm 3,500 feet to the north. The Erie Canal lies \pm 3,500 feet to the west. The Frontier Stone, Inc. siltation pond at a distance of \pm 3,100 feet is the closest standing body of water to the site.

5.2 Hydrogeology

Multiple water bearing zones exist beneath the NMC site. As described in the 1989 EHC report, groundwater was encountered in both the Lockport and Clinton Group. According to Johnson (1964), several major water bearing zones exist within the Lockport and Clinton Groups. In general, water bearing zones at this site are created by a combination of primary (bedding planes) and secondary (fractures, joints and solution channels) porosity zones. Aquifer characteristics are influenced by the extent of interconnection and/or isolation of the water bearing porosity zones. Assessment of the bedrock aquifer(s) is limited by the interconnection between the monitoring wells and the water bearing porosity zones. The prominent water bearing zones within the Lockport and Clinton Groups significant to the investigation are the Gasport - DeCew and DeCew - Rochester shale bedrock member bedding planes. Relatively little is known about the areal expanse or interconnection of the water bearing zones. The Lockport formation bedding planes dip to the south at 35 to 40 feet per mile (LaSala Jr. 1968) and may be in part responsible for observed semi-confined aquifer conditions observed at the site.

Two additional wells EHC-5 and EHC-6 were installed to assess the possibility of shallow water producing zones in the western portion of the site. Shallow water producing zones were not observed during the installation of monitoring wells EHC-3 and EHC-4. Several work stoppages occurred during installation to observe groundwater infiltration. EHC-5 did not intersect water producing fractures. The well was completed dry to allow low yielding fractures time to recharge the well if present. Although several small fractures were noted during the drilling of EHC-6, groundwater was not observed until the boring was completed when minor amounts of groundwater were noted. Both wells were completed at a depth of thirty five feet as directed by the approved NYSDEC work plan.

The cause for the lack of interconnection between a shallow bedrock water bearing zone and boring EHC-3, EHC-4 and well EHC-5 is unknown. Probable causes for the lack of shallow water in the borings are that the shallow water bearing zone is either non-existent, deeper, or not uniformly extensive in the western portion of the site. Johnson, 1968, states that many of the individual bedding joints tend to "pinch out" laterally and be replaced by adjacent joints in the same zone. Blasting effects from the quarry's operation west of the site may have altered the shallow bedrock adjacent to the quarry wall.

Based on the insufficient quantities of groundwater in the shallow zone, falling (slug) or rising (bail) head tests could not be conducted on monitoring wells EHC-5 and EHC-6. Determination of hydraulic conductivities could not be calculated due to the lack of available test data. The decision not to conduct the tests was discussed with and agreed to by NYSDEC representative Mr. Glenn May.

A potentiometric surface is defined as the level groundwater will rise in a well. In unconfined conditions the water table elevation is identical to the potentiometric surface elevation. The groundwater at the site is semi-confined. Under semi-confined conditions groundwater from water bearing zones will rise in a well equal to the confining pressure. Potentiometric surface elevations were calculated by subtracting depth to groundwater data from the surveyed measuring point elevation at each monitoring well. The resulting elevations are listed on Table 4. Elevations are similar to previously collected data (See EHC 1989). The potentiometric surface elevations in wells EHC-1 and EHC-2 are approximately 10 to 20 feet higher than in EHC-3, EHC-4 and EHC-6. Well EHC-5 was dry. The water bearing fractures at the location of EHC-5 are probably below the well base of 557.76 feet. Due to semi-confined

conditions, the potentiometric surface can rise above the existing well base. The variation in head can reflect either downward migration of groundwater, westward groundwater flow or a combination of both. As seen in Table 5 GZA cluster wells show both upward and downward migration of water. As a result of documented vertical flows and the different screen elevations between wells EHC-1, EHC-2 and EHC-6 to wells EHC-3 and EHC-4, the potentiometric surface elevations are more indicative of vertical migration than flow directions.

Data obtained from the NYSDEC regarding the NCRDD site suggest groundwater mounding and groundwater flow from the landfill areas. The mounding effects are most apparent within monitoring well screening the Lockport Formation. Although the landfills have been closed and covered, groundwater mounding is expected to remain for several years.

Regional groundwater flow direction and gradient has not been documented, however, the NYSDEC indicates probable flow toward the west (Erie Canal). Local groundwater flow has been altered by the landfill and quarry allowing local flow path different from the regional flow.

Off site migration of landfill leachate is probable. NCRDD reports include plumes of chlorides migrating northeast and southwest of the landfill. The northeast plume has extended from the landfill toward the NMC site. Other suspected landfill leachates are iron, chloride, sulfates, phenols, lead and manganese. The NYSDEC stated background groundwater conditions are not documented enough to determine what percentage of the analyzed compounds should be attributed to natural versus leachate sources.

6.0 ANALYTICAL RESULTS

6.1 Introduction

The analytical results are discussed in two sections based upon sample medium. TCL groundwater sample results are discussed in Section 6.2 where as TCL and TCLP soil results are addressed in Section 6.3.

Analytical results portray actual site conditions assuming the error is accountable or negligible and samples are representative. Precautions to insure accuracy of the analytical analysis and the samples were taken. CTM Analytical Laboratories performed the EPA CLP methodology for QA/QC to reduce and/or document possible laboratory error. Samples were collected as

outlined in the work plan. Methodologies to minimize sample contamination and increase site representation were chosen.

Three major possible sources of compounds identified in the samples are natural, disposal and error. If error in sampling, analysis and/or reporting was eliminated, the sample results would depict actual sample concentration. Samples must be collected carefully so that actual site conditions are represented.

Site conditions are influenced by natural and human induced factors. Natural conditions are the compounds concentrations which occur naturally and are considered indigenous to the site. Natural conditions can range greatly between geographic areas. In certain locations natural analyte concentrations have exceeded state and/or federal regulatory levels.

Disposal contamination can result from direct dumping or indirectly by on-site migration from contaminated groundwater or air borne pollution.

The analytical results represent the site's conditions assuming all sources of error are identified and corrected. Due to the site's complexity, exact distribution of analyzed compound

concentrations between natural, direct and indirect sources are not feasible. Possible sources of compounds detected in each of the samples will be discussed.

6.2 Groundwater Quality Results

Groundwater samples were collected from monitoring well EHC-3 and EHC-4 on November 21, 1991 and from EHC-1 and EHC-2 on November 22, 1991. Both field and laboratory analysis were conducted on the groundwater. Field test included pH, temperature, specific conductance and turbidity. Samples were analyzed for a full TCL scan at CTM Analytical Laboratories. Field testing and results will be present before discussing the TCL analysis.

Groundwater samples were not collected from either well EHC-5 or EHC-6. Monitoring well EHC-5 was dry and could not be sampled. Monitoring well EHC-6 contained approximately 0.52' of groundwater. Samples taken from EHC-6 would not be representative of the existing groundwater due to the inability to properly develop the well, the high turbidity, and the excessive agitation of groundwater during sampling. The decision not to sample wells EHC-5 and EHC-6 was discussed with and agreed to by NYSDEC representatives Mr. Glenn May and Mr. Abul Barkat.

A summary of field chemistry collected prior to sampling is presented in Table 8. Complete field chemistry results are included on the development forms in Appendix F.

Field quality results were within normal ranges with the exception of specific conductance. The elevated conductance values appear to be a result of landfill leachate influence (chlorides), road salts from the newly constructed bypass and/or error. The Lockport Formation has relatively high levels of halite (Johnson 1964, LaSale, Jr. 1968). The dissolving of halite (common salt) from the Lockport Formation may also cause high levels of sodium and chloride contributing to the high specific conductance values. The field specific conductance (sc) value obtained at EHC-1, EHC-2 and EHC-4 appear to be erroneously high (See Table 9). The sc value should reflect the laboratory sodium concentration result. The 1991 sodium values are comparable to the 1989 values with minor increases or decreases in concentrations. Field values should also exhibit similar concentration variations. EHC-3 sc and sodium results decreased from 1989 to 1991. The sc results for EHC-1, EHC-2 and EHC-4 appear to be ten times too high. If those values were reduced by a factor of ten, the resulting proposed value would correspond to 1989 field values with slight adjustments as observed in the sodium values. Interpretational error on the field instrument scale may have resulted in erroneously high recorded values.

TABLE 8

Field Groundwater Chemistry Results
November 21 to 22, 1991

Parameter	Monitoring Well Analyzed					
	<u>EHC-1</u>	<u>EHC-2</u>	<u>EHC-3</u>	<u>EHC-4</u>	<u>EHC-5</u>	<u>EHC-6</u>
pH (su)	6.5	7.0	7.0	7.0	N/A	N/A
Temperature (oC)	11.0	10.9	10.5	9.4	N/A	N/A
Specific Conductance (umohs/cm)	*1,500.0	*5,100.0	580.0	*7,990.0	N/A	N/A
Turbidity (ntu)	3.0	40.0	87.0	17.0	N/A	N/A

* Possible Field Error.

TABLE 9

Groundwater Results for Specific Conductance (sc) and Sodium (Na)

<u>Well Sampled</u>	1989 sc Results (<u>umoh/cm</u>)	1991 sc Results (<u>umoh/cm</u>)	Proposed 1991 sc Results (<u>umoh/cm</u>)	1989 Na Results (<u>ppm</u>)	1991 Na Results (<u>ppm</u>)
EHC-1	110	1500	150	88	118
EHC-2	600	5100	510	1600	1464
EHC-3	710	580	580	1800	1600
EHC-4	1000	7990	799	2500	2200

The EHC-3 turbidity value of 87 ntu was above the NYSDEC recommended value of 50 ntu due to the apparent excessive biological growth as opposed to sediments in the groundwater.

Groundwater samples sent to the laboratory were analyzed for a full TCL scan following CLP QA/AC protocol. The analytical results excluding the CLP deliverable are in Appendix G. The results including the QA/QC documentation are in a 12 volume addendum as part of this report.

A tabulated summary of the results, which includes all compounds detected in the analysis is presented in Table 10. Also presented in Table 10 are the NYS Part 5 drinking water and Part 703.5 water quality regulations for groundwater. Johnson, 1968, notes high levels of iron, manganese, sodium and sulfides are typically found in the groundwaters of the Lockport. Of the compounds regulated by Part 5 and Part 703.5, only manganese, acetone, iron, sodium and possibly xylene exceeded the standards. Magnesium is not regulated by Part 5, however, it exceeded the guideline value set by Part 703.5.

Acetone detection may have resulted from laboratory error. Acetone concentrations of 12 and 11 ppb were detected in samples EHC-3 and EHC-4, respectively. Acetone was detected below the

quantitative limits in samples EHC-1 and EHC-2. The blank had the highest reported acetone concentration of 13 ppb. The laboratory indicated acetone values in the EPA Methods 8240 Volatile Blank are attributed to laboratory artifacts. It is probable that the acetone detected in the samples should also be attributed to laboratory artifacts.

Groundwater standards of 5 ppb exist for individual xylene isomers. Analytical results indicate 5.5 ppb total xylene in EHC-3 and ND levels in EHC-1, EHC-2 and EHC-4. The concentration of xylenes were not quantitatively determined for each isomer. The individual xylene concentration can be within regulations even with a total xylene concentration of 5.5 ppb.

At the present time assuming the acetone is a laboratory artifact the observed concentration of these compounds do not appear to pose a health risk. The minimal exposure routes decrease the potential impact of possible groundwater contaminants. Community water system services located in the area eliminate the need of groundwater wells for portable water production water wells have not been recorded in the vicinity of the site (ES 1987, EA 1989). The closest reported drinking water supply wells are at a 2 mile radius in the southeast, northwest and west directions (Johnson

TABLE 10
Summary of TCL Quality Results for Groundwater
Results in mcg/l (ppb)

	<u>EHC-1</u>	<u>EHC-2</u>	<u>EHC-3</u>	<u>EHC-4</u>	<u>Blank</u>	<u>NYSDEC Part 5 Drinking Water</u>	<u>NYSDEC Part 703.5 GA</u>	<u>NYSDEC TCLP Hazardous Waste</u>
Manganese	1,740	76.5	200	49.0	ND	300	300	N/A
Bromomethane	D	D	D	ND	D		5	N/A
Methylene Chloride	D	D	D	D	D		5	N/A
Trans-1,2-Dichloroethene	D	ND	D	ND	D		5	N/A
1,2-Dichloropropane	D	ND	D	ND	ND		5	N/A
Bromodichlormethane	ND	ND	D	ND	ND		50	N/A
Cis-1,3-Dichloropropane	D	ND	D	ND	ND		5	N/A
Toluene	ND	ND	D	ND	ND		5	N/A
Chlorobenzene	D	ND	D	ND	ND		5	100,000
Iron	1,020	830	4,400	1,380	N/A	300	300	N/A
Ethylbenzene	ND	ND	D	ND	ND		5	N/A
Styrene	D	ND	D	ND	ND		5	N/A
Acetone	D	D	12	11	13		5	N/A
Xylene (total)	ND	ND	5.5	ND	ND		5 (individual)	N/A
Sodium	118,000	1,460,000	1,600,000	2,200,000	N/A	27,000	20,000	N/A
Phenol	D	D	D	ND	N/A		1	N/A
2-Chlorophenol	ND	D	D	ND	N/A		1	N/A
2-Nitrophenol	ND	D	D	ND	N/A		1	N/A
2,4-Dichlorophenol	ND	D	D	ND	N/A		1	N/A
Endosulfan Sulfate	0.052	0.03	0.09	0.03	N/A		N/A	N/A
Methoxychlor	0.029	0.06	ND	0.05	N/A		35	10,000
Aluminum	306	405	3,630	930	N/A		N/A	N/A
Calcium	153,000	367,000	159,000	166,000	N/A		N/A	N/A
Magnesium	58,200	129,000	74,200	106,000	N/A		35,000	N/A
Potassium	4,590	42,500	36,700	42,600	N/A		N/A	N/A
Vandium	20	25.1	24.1	28.1	N/A		N/A	N/A
Zinc	216	ND	45.8	45.8	N/A	5,000	300	N/A
Lead	4.5	ND	9.4	ND	N/A	50	25	N/A
pH	7.0	7.5	7.7	7.7	N/A	6.5 - 8.5	N/A	5,000

D= Concentration above minimum detection limit and below quantitative limit.

ND= Concentration below minimum detection limit.

N/A= Not Available.

TABLE 10
Summary of TCL Quality Results for Groundwater
Results in mcg/l (ppb)

	<u>EHC-1</u>	<u>EHC-2</u>	<u>EHC-3</u>	<u>EHC-4</u>	<u>Blank</u>	NYSDEC Part 5 <u>Drinking Water</u>	NYSDEC Part <u>703.5 GA</u>	NYSDEC TCLP Hazardous <u>Waste</u>
Manganese	1,740	76.5	200	49.0	ND	300	300	N/A
Bromomethane	D	D	D	ND	D		5	N/A
Methylene Chloride	D	D	D	D	D		5	N/A
Trans-1,2-Dichloroethene	D	ND	D	ND	D		5	N/A
1,2-Dichloropropane	D	ND	D	ND	ND		5	N/A
Bromodichlormethane	ND	ND	D	ND	ND		50	N/A
Cis-1,3-Dichloropropane	D	ND	D	ND	ND		5	N/A
Toluene	ND	ND	D	ND	ND		5	N/A
Chlorobenzene	D	ND	D	ND	ND		5	100,000
Iron	1,020	830	4,400	1,380	N/A	300	300	N/A
Ethylbenzene	ND	ND	D	ND	ND		5	N/A
Styrene	D	ND	D	ND	ND		5	N/A
Acetone	D	D	12	11	13		5	N/A
Xylene (total)	ND	ND	5.5	ND	ND		5 (individual)	N/A
Sodium	118,000	1,460,000	1,600,000	2,200,000	N/A	27,000	20,000	N/A
Phenol	D	D	D	ND	N/A		1	N/A
2-Chlorophenol	ND	D	D	ND	N/A		1	N/A
2-Nitrophenol	ND	D	D	ND	N/A		1	N/A
2,4-Dichlorophenol	ND	D	D	ND	N/A		1	N/A
Endosulfan Sulfate	0.052	0.03	0.09	0.03	N/A		N/A	N/A
Methoxychlor	0.029	0.06	ND	0.05	N/A		35	10,000
Aluminum	306	405	3,630	930	N/A		N/A	N/A
Calcium	153,000	367,000	159,000	166,000	N/A		N/A	N/A
Magnesium	58,200	129,000	74,200	106,000	N/A		35,000	N/A
Potassium	4,590	42,500	36,700	42,600	N/A		N/A	N/A
Vandium	20	25.1	24.1	28.1	N/A		N/A	N/A
Zinc	216	ND	45.8	45.8	N/A	5,000	300	N/A
Lead	4.5	ND	9.4	ND	N/A	50	25	N/A
pH	7.0	7.5	7.7	7.7	N/A	6.5 - 8.5	N/A	5,000

D= Concentration above minimum detection limit and below quantitative limit.

ND= Concentration below minimum detection limit.

N/A= Not Available.

QUANTITATIVE

1964). Groundwater seeps were not observed on the nearby Quarry during the December 1991 visit. Seeps were presented in a previous report as possible groundwater contact sites.

6.3 Soil Quality Results

6.3.1 Lagoon and Background Soil (TCLP)

Soil from the lagoon floor and background locations were sampled on November 21, 1991 as described in Section 3.8. Both field and laboratory analysis were conducted on the soil.

Field inspection of the soil noted no unusual odors or colors in the soils. Stressed vegetation was noted in areas of thin soil cover as would be expected. Elevated readings were not noted on the HNu PID (11.7 ev lamp) during sampling (See Appendix E).

Composite soil samples from the lagoon and background area were analyzed by TCLP analysis following CPL QA/QC protocol. The complete analytical results are in Appendix H. The results and CPL deliverable are presented in a separate 12 volume set.

As seen in the summary of compounds detected in Table 11, the results were below both NYS Part 5 drinking water and hazardous waste regulatory levels.

TABLE 11

Summary of TCLP Quality Results for Lagoon and Background Soil Samples
Results in mcg/l (ppb)

	<u>Lagoon 1</u>			<u>Lagoon 2</u>			<u>Lagoon 3</u>			<u>Background</u>	NYSDOH Part 5 Drinking Water	TCLP Regulatory levels for Hazardous Waste
	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>			
Barium	0.35	0.38	0.43	0.32	0.28	0.31	0.46	0.25	0.19	0.24	1000.0	100,000
Cadmium	0.017	ND	0.012	0.005	ND	0.01	0.014	0.006	0.007	ND	10.0	1,000
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	0.012	ND	50.0	5,000
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	0.013	0.21	10.0	1,000

ND= Concentrations Below Minimum Detection Limit

Based upon these results, the soils within the lagoon are below NYSDEC Hazardous Waste Regulatory Levels.

6.3.2 Above Ground Storage Tanks (AGST) and Railroad Bed Soil
(TCL)

Soil samples were collected from the former railroad siding bed (RREA1) and two areas which reputedly contained above ground storage tanks (AGSTA1 and AGSTA2). Field screening was conducted during sample collection on November 21, 1991 with an 11.7 ev HNu PID. Background (0 ppm) PID readings and apparent normal vegetation growth were observed during the soil sampling. The sampling methods and field observations are discussed in Section 3.8, Soil Sampling.

A composite soil sample, comprised of three sampling points, was taken from each area and analyzed for the TCL following CPL QA/QC protocol. The analytical results without deliverables are in Appendix I. The complete results (including deliverables) are presented in a separate 12 volume set. A summary of results for analytes detected are listed in Tables 12a and 12b. Table 12a depicts the inorganic and pH results whereas Table 12b presents the volatiles, semi-volatiles, pesticides and PCBS analytical results.

TABLE 12a
Summary of Inorganic and pH Target Compound List (TCL)
Analytical Results for Soils in mg/kg (ppm)

	NCHD					NJDEP
	<u>mean/high</u>	<u>RRE 1A</u>	<u>AGST 1A</u>	<u>AGST 2A</u>	<u>DEC 81</u>	<u>Unregulated</u> <u>Waste Limit</u>
Aluminum	N/A	15,700	16,300	18,200	N/A	-
Antimony	N/A	ND	ND	ND	<10	10
Arsenic	11.3/37	10	11.4	10.9	6.4	20
Barium	N/A	109	83.4	80.8	N/A	400
Beryllium	N/A	ND	ND	ND	<0.5	1
Cadmium	4.5/10	2.2	2.0	ND	4.7	3
Clacium	N/A	35,400	42,100	12,800	N/A	N/A
Chromium	37.8/124	24	40.6	113	70.0	100
Cobalt	N/A	ND	11	14.4	N/A	N/A
Copper	59.75/203	26.4	75.6	81	86.0	170
Iron	N/A	28,200	47,800	43,600	N/A	N/A
Lead	103.1/428	104	202	194	810.0	250
Mercury	0.55/2	ND	ND	ND	<0.3	1
Magnesium	N/A	31,400	20.80	7,560	N/A	N/A
Manganese	N/A	1,180	2,880	1,860	N/A	N/A
Potassium	N/A	1,890	1,990	2,150	N/A	N/A
Selenium	N/A	ND	ND	ND	<0.4	4
Silver	N/A	ND	ND	ND	<0.5	5
Thallium	N/A	ND	ND	ND	<5.0	1
Vanadium	N/A	33.8	50	70.0	N/A	100
Zinc	238/856	928	908	498	1600.0	350
pH (su)	N/A	7.9	7.7	7.6	7.6	N/A
Nickel	41.4/132	20.4	40.4	48.6	220.0	100
Sodium	N/A	ND	ND	ND	N/A	N/A
Cyanide	N/A	ND	ND	ND	N/A	12

D= Concentration above minimum detection limit and below quantitative limit.

ND= Concentration below minimum detection limit.

N/A= Not Available.

TABLE 12b
Summary of Volatile, Semi-Volatile, Pesticides and PCB Target Compound List (TCL)
Analytical Results for Soils in ug/kg (ppb)

<u>TCL Analytes</u>	Below NJDEP "Regulatory concern"	NYSDEC 1981	<u>EHC 1991 NMC</u>			<u>ES 1984 Bypass</u>					
	<u>Limits</u>	<u>NMC</u>	<u>RRE 1A</u>	<u>AGST 1A</u>	<u>AGST 2A</u>	<u>1S</u>	<u>1D</u>	<u>2S</u>	<u>2D</u>	<u>3S</u>	<u>3D</u>
<u>Volatile Compounds</u>											
Methylene Chloride	N/A	N/A	ND	D	ND	ND	ND	ND	ND	ND	ND
Acetone	N/A	N/A	25	ND	ND	ND	ND	ND	ND	ND	ND
Total	1,000	N/A	25	D	ND	ND	ND	ND	ND	ND	ND
<u>Semi-Volatile Compounds</u>											
*. Naphthalene	N/A	1,200	D	ND	D	ND	ND	ND	ND	ND	ND
*. Acenaphthene	N/A	1,000	D	ND	ND	ND	ND	ND	ND	ND	ND
*. Fluorene	N/A	150	D	ND	ND	ND	ND	ND	ND	ND	ND
*. Hexachlorobenzene	N/A	N/A	ND	D	ND	ND	ND	ND	ND	ND	ND
*. Phenanthrene	N/A	650	D	ND	ND	70	ND	ND	ND	ND	ND
*. Fluoranthene	N/A	880	1,500	ND	ND	100	ND	60	ND	3	ND
*. Pyrene	N/A	710	4,000	ND	ND	90	ND	ND	ND	2	ND
*. Acenaphthylene	N/A	200	ND	ND	ND	ND	ND	ND	ND	ND	ND
*. Benzo (a) Anthracene	N/A	180	ND	ND	ND	ND	ND	ND	ND	ND	ND
. Anthracene	N/A	30	D	ND	ND	100	ND	ND	ND	ND	ND
*. Benzo (a) Pyrene	N/A	130	ND	ND	ND	ND	ND	ND	ND	ND	ND
*. Benzo (b) Fluoranthene	N/A	270	ND	ND	ND	*	ND	ND	ND	ND	ND
*. Benzo (shi) Perylene	N/A	520	ND	ND	ND	70	ND	ND	ND	ND	ND
*. Benzo (k) Fluoranthene	N/A	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
*. Crysenes	N/A	300	ND	ND	ND	ND	ND	ND	ND	ND	ND
*. Dibenzo (a,h) Anthracene	N/A	200	ND	ND	ND	ND	ND	ND	ND	ND	ND
*. Indeno (1,2,3-cd) Pyrene	N/A	84	ND	ND	ND	ND	ND	ND	ND	ND	ND
. Bis(2-Ethylhexyl) Phthalate	N/A	N/A	ND	ND	ND	ND	1700	ND	ND	ND	ND
. Methyl Naphthalene	N/A	N/A	D	ND	D	ND	ND	ND	ND	ND	ND
. Dibenzofuran	N/A	N/A	D	ND	ND	ND	ND	ND	ND	ND	ND
. Benzoic Acid	N/A	N/A	ND	ND	ND	ND	ND	ND	80	9	ND
o Phenolics	N/A	1,800	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TCL Semi-Volatile		8,404	5,500	D	D	430	1700	60	80	14	ND
Total Priority Pollutant											
Base Neutrals	10,000	N/A	5,500	D	D						
Total TCL Polynuclear											
Aromatic Hydrocarbons (PNA)											
Polycyclic Aromatic											
Hydrocarbons (PAH)	10,000	6,604	5,500	ND	D	430	1700	60	ND	5	ND

TABLE 12b
Summary of Volatile, Semi-Volatile, Pesticides and PCB Target Compound List (TCL)
Analytical Results for Soils in ug/kg (ppb)
(Continued)

<u>TCL Analytes</u>	Below NJDEP	NYSDEC 1981	<u>EHC 1991 NMC</u>			<u>ES 1984 Bypass</u>					
	"Regulatory concern"		<u>RRE 1A</u>	<u>AGST 1A</u>	<u>AGST 2A</u>	<u>1S</u>	<u>1D</u>	<u>2S</u>	<u>2D</u>	<u>3S</u>	<u>3D</u>
	<u>Limits</u>										
<u>Pesticides</u>											
Delta - BHC	N/A	N/A	ND	4.0	ND						
Dieldrin	N/A	N/A	ND	13.0	5.2						
4,4DDE	N/A	N/A	ND	6.9	13.0						
4,4-DDD	N/A	N/A	ND	8.6	11.0						
4,4-DDT	1,000	N/A	5.4	33.0	44.0						
Methoxychlor	N/A	N/A	40	12.0	18.0						
Endrin Ketone	N/A	N/A	ND	ND	1.3						
Chlordane	1,000	N/A	ND	ND	ND						
Total	N/A	**	45.4	77.5	92.5						
PCB	1,000	N/A	ND	ND	ND	NA	NA	NA	NA	NA	

**= Site Dependent

*= Polynuclear Aromatic Hydrocarbon (PNA)

Polynuclear Aromatic Hydrocarbon (PAH)

o= Acid Extractable (AE)

.= Base Neutral (BN)

D= Concentration above minimum detection limit and below quantitative limit.

ND= Concentration below minimum detection limit.

N/A= Not Available.

Both NYSDEC and NJDEP have three soil categories based upon contaminant levels present in the soils. The three categories are:

- . hazardous waste (NYSDEC & NJDEP)
- . non-hazardous industrial waste (NYSDEC) or non-hazardous regulated waste (NJDEP)
- . unregulated waste (NYSDEC) & below regulatory concern (NJDEP)

NYSDEC Regulations do not exist for TCL (total matrix) soil quality. Total matrix soil results were compared to Niagara County Department of Health (NCDH) urban soil guidelines, New Jersey Department of Environmental Protection (NJDEP) Regulations, previous site data and other background information.

As seen in Table 12a and 12b, the soil contains several inorganic and organic compounds. The compounds can be derived from a combination of the following three sources: natural, on site migration and direct disposal. The composition of soils naturally varies between soil types and specific locations within the soil types. The soil on site is derived from glacial till created primarily from the Lockport Formation. The chemical composition of soil reflects the mineral composition of the parent material. Soils derived from the Lockport can be expected to contain elevated levels of sulfides, zinc, lead and iron. The soluble

minerals calcite (CaCO_3), dolomite ($\text{CaMg}(\text{CO}_3)_2$), gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) and Halite (NaCl) leach out over time. Soil quality is also effected by on site migration of possible air born contaminate particles. Due to the proximity of urban areas and industrial sites, soil quality at the Niagara Materials site should also reflect the industrial/urban surroundings. Soil quality may also be effected by disposal of materials on site either from past site use or unauthorized disposal.

The inorganic and organic results are discussed separately. Inorganic results for the NMC Soils were reviewed and are discussed below. Background soil data collected by the NCHD depict expected ranges of eight inorganic parameters. The NCHD has compiled guideline background total matrix metal concentrations for soils at urbanized sites within the Niagara Falls area. The Guideline lists both average and expected high concentrations. The average value was statistically determined by taking the mean of a set of results which were three standard deviations away from the average value for the entire result pool. The expected high and low value are three standard deviations from the mean Value.

Comparisons between the eight NCHD soil values and the corresponding concentrations analyzed at each of the three locations on the site were performed. As seen in Table 12a each concentration of the composite samples was below the expected high values with the exception of zinc at RRE1A and AGST1A. However, the geometric mean of 748.6 ppm for the three zinc composite samples is below the NCHD expected high guideline value of 856 ppm. Therefore, the site average zinc sample concentration is within expected urban background values as compiled by the NCHD.

The NJDEP has total matrix quality regulatory limits for soils classified as "below regulatory concern" whereas NYSDEC determinations are based on extraction concentrations. The NJDEP limits set for the sixteen regulated compounds (priority pollutant metals) appear in Table 12a. The total matrix TCL scan performed on the soil, analyzes 8 inorganic compounds in addition to the 16 priority pollutions required by the NJDEP. All priority pollutant metal analytes except chromium and zinc were below the NJDEP regulatory levels for "non-regulated soils". Chromium sample AGST2A at 113 ppm was above the 100 ppm limit.

The geometric mean of 47 ppm for the three chromium results is below the NJDEP non-regulated soil level. All three zinc concentrations were above the 350 ppm limit. Elevated zinc levels can be expected in soils derived from Lockport Formation.

The concentration of zinc and all other analytes were below the 1981 NYSDEC sample results with the exception of chromium in sample AGST2A. The geometric mean of the chromium sample is below the 1981 NYSDEC results. Chromium is used as a dye/pigment in paints, as an abrasive (chromic oxide) and in chrome alloys. Based on reputed site use the elevated chromium level detected in sample AGST2A may have resulted from one or a combination of above uses. Possible sources of chromium detected in the soil sample are paint chips from a tank, particles of chromic oxide from grinding wheel abrasives, and/or ground chrome alloy dislodged from a used grinding wheel. The 1981 report concluded at the site did not present a threat to health or the environmental and remedial action was not recommended at the present time.

The organic results which are summarized in Table 12b will be discussed in the following four groups; volatile compounds, semi-volatile compounds, pesticides and PCBs.

The results for the TLC volatile compounds analyzed indicate methylene chloride was detected at trace level and acetone was detected at 25 ppb as in the AGST1A sample. All other volatile compounds for the three samples were of non-detectable levels. Since Methylene Chloride and acetone were detected in the blank and attributed to laboratory artifacts the possibility exists for their detection in the soil sample to be whole or partially attributed to laboratory artifacts. The levels of volatiles with the soil is extremely low even if the analyzed concentration is representative of the soil quality. The total volatile compound concentration analyzed in the soil samples is below the NJDEP regulatory limit for "below regulatory concern". Methylene chloride is used a cleaner at CTM Analytical Laboratory and may have contaminated either the sample or the analytical equipment causing falsely elevated soil concentrations.

A total of ten different semi-volatile compounds were detected in the three soil samples. Only fluoranthene, 1,500 ppb and pyrene 4,000 ppb were detected above quantitative limits.

Three overlapping semi-volatile sub-groups will be addressed; base neutrals (BN), acid extractable (AE) and polynuclear aromatic hydrocarbons (PNA). The names PNA and polycyclic aromatic hydrocarbons (PAH) are interchangeable. As noted in

previous site report (ES 1987) background PAH concentrations range between 1,000 and 10,000 ppb. The total PAH concentration of samples RRE1A, AGST1A and AGST2A was 5,500, non detectable (ND) and detectable (D) respectively. Each fell within or below the normal background concentrations. The PAH compounds are highlighted with a "*" on Table 12b.

The three sample PAH concentrations were below the NJDEP 10,000 ppb non-regulatory limit for soils. The 1981 NYSDEC lagoon 3 soil sample PAH result of 6,604 ppb was also within normal background and NJDEP "below regulatory concern" limits. The PAH levels in the above ground storage tank areas are equivalent or below the levels from the Lockport bypass area which was determined as normal background conditions and required no treatment. The higher PAH levels present in the railroad siding bed sample are still within normal background conditions. Slightly elevated readings may be resultant from hydrocarbon combustion or release from trains, coke used as track ballast and/or cresol from railroad ties.

The base neutral sub group of the TCL contains several compounds in addition to the PAH compounds. The only base neutral compound detected which is not also a PAH was hexachlorobenzene. The total concentrations for base neutral is identical to PAH except

in sample AGST1A where hexachlorobenzene was detected below the quantitative limits. The total base neutral concentration for AGST1A was above the detection limits, but below the quantitative limits. In higher concentrations Hexachlorobenzene is used as a fungicide. All three samples were below the NJDEP non-regulatory limit of 10,000 ppb. Full base neutral scans were not performed on the NYSDEC 1981 sampling. Engineering science 1987 sampling report identified 1,700 ppb of the base neutral Bis(2-ethylhexyl) Phthalate in Sample ID. The base neutral concentration was identical to the PAH concentration in all other engineering science sample results.

The acid extractables results of the semi-volatile TCL analysis identified all acid extractables analyte concentrations as non-detectable.

Pesticides were analyzed as part of the TCL analysis. Seven stable components of technical grade pesticides were detected at low levels. The results are summarized on Table 12b. The NJDEP has "below regulatory concern" levels set for DDT at 1,000 ppb and chlordane at 1,000 ppb. The total pesticide concentration for samples RRE 1A, AGST 1A, AGST 2A are 45.4, 77.5 and 92.5 ppb, respectively. Each total concentration is significantly below the individual NJDEP level.

The pesticide compounds identified in the soil samples were derived from typical pesticides used on orchards and farmlands. The use of the following five pesticides which were developed in the 1940 to 1950's possibly resulted in the seven compounds detected:

<u>Pesticide</u>	<u>Metabolite</u> <u>(Compound Detected)</u>
BHC	Delta-BHC
Aldrin	Dieldrin
Endrin	Endrin Ketone
DDT	4,4 DDE
	4,4 DDD
	4,4 DDT
Methoxychlor	Methoxychlor

All of the compounds identified except methoxychlor do not break down. These compounds were all banned in New York State in the 1970's and 1980's with the exception of methoxychlor.

Representatives of the Pesticide Division of the NYSDEC indicated the levels of pesticides at the site were low. Levels

over 1,000 ppb depending upon the type of compound and projected human exposure may result in a potential environmental concern.

Non-detectable levels of PCB were also indicated in the TCL analysis.

7.0 DISCUSSION

Review of results from this supplemental investigation and previous site report indicate the NMC site does not contain gross levels of contamination and past disposal of significant quantities of hazardous materials appears unlikely. Additional data obtained since the original classification of the site warrant a review by the NYSDEC to determine if the site should remain on the Inactive Hazardous Waste Disposal Site List.

The Lockport formation is the upper most bedrock formations and is primarily composed of limestones and dolomite. Regionally, Lockport limestone contains sulfates of lead, zinc and iron in relatively elevated levels. The bedrock also contains the following soluble minerals: calcite, dolomite, gypsum and halite. This rock is one of the parent materials for soils on site and presence of these compounds can be expected in natural background conditions. Dissolved components of these minerals

are expected to be present in the groundwater system. Elevated dissolved levels have been documented in both Johnston, 1964 and LaSala, Jr. 1968.

The local groundwater flow is very complex due to both natural and man-made (quarry/landfill) conditions. Investigation at the NCRDD indicate groundwater mounding centered on the landfill with radial outward flow. Plumes are documented heading in the northeast and southwest directions. Elevated levels of chloride, iron, sulfates, phenols, lead and manganese have been reported in landfill leachate. The NYSDEC states at present there is insufficient information to determine what percent of the elevated compounds are derived from natural or artificial (landfill, industrial) sources. Additional sampling is scheduled for the NRCDD to clarify sources. The NMC lies in the path of the northeast plume. Groundwater flow conditions are not completely defined at the NMC site. Groundwaters at the NMC site appears to have been impacted by the NCRRD site.

Available analytical data regarding soil and groundwater quality was reviewed and compared to applicable NYSDEC regulations, NJDEP regulations, background data and surrounding site data. The following three types of tests were conducted at the site; TCL groundwater, TCLP soil and TCL soil.

Organic and inorganic compounds were detected in the TCL groundwater samples. Only acetone and possible xylene were above the recommended NYSDOH Part 5 standards. The detection of acetone was attributed to sample or analytical instrumentation contamination due to the high level detected in the blank. The regulation for xylenes is 5 ppb for each individual compound concentration. The analysis conducted represented total xylene concentration as 5.5 ppb. If the concentration reported is from a single xylene, the sample would be in violation. However, if individual xylene compounds with concentrations less than 5.0 ppb were totalized, the resultant concentration could be 5.5 ppb and within regulations.

Inorganic compounds detected above NYSDEC Part 703 groundwater regulations are manganese, Magnesium, sodium and iron. The above compounds also exceed NYSDOH Part 5 drinking water supplies regulations, except magnesium which is unregulated. The referenced compounds excluding magnesium can occur at naturally elevated levels in the groundwater system and have been documented at the NCRDD site.

Composite soil samples TCLP analytical results from each reported lagoon and background location was below both NYSDOH Part 5 drinking water and NYSDEC Part 703 groundwater standards.

TCL analysis of soil samples collected at former tank and railroad siding locations indicated elevated levels of zinc and chromium. The elevated zinc levels can be attributed to naturally high levels occurring in the bedrock, a source material for the soil. The chromium level was slightly high in one composite sample. This can be attributed to disposal or error rather than natural sources. Possible sources of chromium are pigments in paints chromic oxide abrasives, and chrome alloy.

The low levels of volatiles detected were attributed to laboratory artifacts. Semi-volatile compounds detected were within normal background levels. Pesticide concentrations were low and are expected in former farm fields and orchards.

Analytical results indicate groundwaters from the site should not be used as a source of potable water. Non-potable usage of site groundwaters may increase the rate of NCRDD landfill leachate migration toward the site. Due to the potential impact from the NCRDD, EHC does not recommend usage of site groundwater. The on site community water supply should be used as the source of water

on site if needed. Due to the elevated level of chromium in soils, EHC does not recommend usage of those soils where they will come in direct contact or will be ingested (i.e. garden, children's sandbox).

The results of this investigation indicated non-hazardous concentration of all compounds tested in the samples. EHC requests that the NYSDEC reevaluate the site's criteria for listing on the NYSDEC Inactive Hazardous Disposal Site List with respect to the presented data. It is EHC's opinion that the site does not exhibit sufficient contamination to be included on the Inactive Hazardous Disposal Site List and requests the NYSDEC evaluate the site for delisting.

APPENDIX A

Previous Analytical Quality Data

NYSDEC 1981		EHC 1989 Groundwater Samples										NYSDEC 1981	
Compound	ug/q Dry	ES 1987 Bypass Soil Samples								EHC 1989 Surface		Surface Water	
		SS-1S	SS-1D	SS-2S	SS-2D	SS-3S	SS-3D	EHC-1	EHC-2	EHC-3	EHC-4	Water Sample (same	Sample, Heavy
		Eptox Metals Results in ppb								analysis as EHC		Metals & Holo-	
										1989 Groundwater		genated Organics	
										Results in mg/l		Results in mg/l	
Antimony	<10.0	ND	ND	ND	ND	ND	ND	ND	<0.06	<0.06	<0.06	<0.06	<0.2
Arsenic	6.4	ND	ND	ND	ND	ND	ND	ND	0.02	0.13	0.08	0.10	17
Beryllium	<0.5	ND	ND	ND	ND	ND	ND	ND	<0.005	<0.005	<0.005	<0.005	<0.01
Cadmium	4.7	ND	ND	ND	ND	ND	ND	ND	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	70.0	ND	ND	ND	ND	ND	ND	ND	0.02	<0.01	<0.01	<0.01	<0.005
Copper	86.0	ND	ND	ND	ND	ND	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.006
Lead	810.0	ND	ND	ND	ND	ND	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.04
Mercury	<0.3	ND	ND	ND	ND	ND	ND	ND	<0.0004	<0.0004	<0.0004	<0.0004	<0.002
Nickel	220.0	ND	ND	ND	ND	ND	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.02
Selenium	<0.4	ND	ND	ND	ND	ND	ND	ND	0.1	<0.01	<0.01	0.02	<0.005
Silver	<0.5	ND	ND	ND	ND	ND	ND	ND	<0.005	<0.005	<0.005	<0.005	<0.01
Thallium	<5.0	ND	ND	ND	ND	ND	ND	ND	<0.1	<0.01	<0.01	<0.01	<0.116
Zinc	1600.0	ND	ND	ND	ND	ND	ND	ND	<0.10	0.01	<0.01	0.01	N/A
Sodium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	88	1600	1800	2500	14
Potassium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	41	47	50	6.7
Magnese	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	67	150	86	150	14
Iron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<0.05	0.06	<0.05	0.07	<0.05
Calcium	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	130	310	110	170	110
Aluminum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.16	0.16	0.23	0.26	0.19
Manganese	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.7	0.23	0.08	0.08	0.04
Dry Weight	57%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND	ND	ND	N/A
Phenolics	1.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND	ND	ND	<0.01
Halogenated	1.2 as C12												<0.01 ug/l as
Organic Scan	Lindane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND	ND	ND	ND
Standard	Standard	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND	ND	ND	ND
													C1s, Lindane
													Standard

N/A= Not Analyzed

ND= Below Detectable Limits (non-detectable)

Compound	NYSDEC 1981 Lagoon 3A Soil PAH Results in ug/q (ppm) Dry	Engineering Science 1987 Bypass Soil EPA 8240, EPA 8270 B/N & AE Results in ug/kg (ppm) Dry										NYSDEC 1981 Surface Water PAH Results in ug/l (ppb)	
		SS-1S	SS-1D	SS-2S	SS-2D	SS-3S	SS-3D	EHC-1	EHC-2	EHC-3	EHC-4		
		SS-1S	SS-1D	SS-2S	SS-2D	SS-3S	SS-3D	EHC-1	EHC-2	EHC-3	EHC-4		
Acenaphthene	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53	
Acenaphthylene	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	
Anthracene	0.030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.039	
Benzo(a) anthracene	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.073	
Benzo(a) pyrene	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
Benzo(b) fluoranthene	0.27	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020	
Benzo(g,h,i) perylene	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.94	
Benzo(k) fluoranthene	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.18	
Chrysene	0.30	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	
Dibenzo(a,h) anthracene	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.93	
Fluoranthene	0.88	100	ND	60	ND	3	ND	ND	ND	ND	ND	0.18	
Fluorene	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025	
Indeno(1,2,3-cd) pyrene	0.084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.058	
Naphthalene	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	
Phenanthrene	0.65	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.047	
Pyrene	0.71	90	ND	ND	ND	2	ND	ND	ND	ND	ND	0.29	
Benzoic Acid	N/A	ND	ND	ND	80	9	ND	ND	ND	ND	ND	NA	
Dry Weight	55.1%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzoic Acid	N/A	ND	ND	ND	80	9	ND	ND	ND	ND	ND	NA	
Di-N-Butylphthalate	N/A	ND	ND	ND	ND	ND	ND	4.0	ND	ND	ND	NA	
Bis-(2-ethyl-hexyl)													
Phthalate	N/A	ND	ND	ND	ND	ND	ND	ND	5.0	ND	ND	NA	
Carbon Disulfide	N/A	ND	ND	ND	ND	ND	ND	ND	17.4	71.8	4.8	NA	
Toluene	N/A	ND	ND	ND	ND	ND	ND	ND	ND	2.0	ND	NA	

N/A= Not Analyzed
ND= Below Detectable Limits (non-detectable)

APPENDIX B

July 18, 1992 Work Plan

July 18, 1991

Mr. Robert Pass, Vice President
Frontier Stone
P.O. Box 510/400 Henman St.
Lockport, NY 14095

RE: NYSDEC Supplemental Information Request, Niagara Material
Company Plant Site.

Dear Bob:

This work plan has been prepared to respond to the request for additional information made by the representatives of the New York State Department of Environmental Conservation (NYSDEC) during our recent April 25, 1991 scoping meeting. The scope of work and the cost estimates represent a level of effort considered necessary in responding to the issues raised by the NYSDEC (i.e., concerning the environmental quality of the aforementioned site).

The methods by which the site's quality will be addressed have been in part based on directives received from the NYSDEC. The primary objectives of this work plan will be to address the areas on site reputedly utilized for storage and/or disposal of liquid waste (i.e., lagoons, tank farm). The manner in which the chemical quality of the areas in question will be accomplished via surface soil sampling and acquisition of additional groundwater data. A more detailed narrative of the methods by which the site's quality will be further characterized are listed below by task.

- Task 1: Collect surface soil and sediment samples in, and adjacent to, three former lagoons. Utilize existing aerial photography and field observations (i.e., stressed vegetation) to establish soil sampling locations.
- Task 2: Install two 6 - inch diameter test borings, converting each to 2 - inch PVC monitoring wells. Subsequent groundwater and surface water sampling of proposed and existing monitoring wells; and existing surface waters.
- Task 3: Prepare a written report identifying the environmental conditions associated with the areas investigated, outlining methodologies, providing recommendations and conclusions with respect to the study area.

The following is a detailed description of the scope of work proposed for each of the three tasks of work.

environmental
hydrogeology corp.
EHG

TASK 1: Soil Quality Sampling

A comprehensive soil sampling program will be performed in select areas of the subject site. The current sampling locations under consideration are based on directives received by the NYSDEC and include the three lagoons, two above ground tank areas, a railroad easement and a background location (to be determined based on field conditions). A schematic diagram of the proposed soil sampling locations are illustrated on Figures 1 and 2.

A series of grab soil samples will be obtained from each of the aforementioned locations. All sampling will be performed utilizing stainless steel sampling equipment. All sampling equipment will be pre-cleaned prior to use according to the following protocol:

- . Methanol Rinse
- . Warm Detergent Wash
- . Tap Water Rinse
- . Distilled Water Rinse

Each sample will be obtained from the upper 12 inches of the soil horizon. A detailed field log of the soils encountered will be recorded at each location selected. Samples obtained will be visually examined and described using the Modified Burmister and Unified Soil Classification System. Additional field screening of select sampling location will occur utilizing an HNu Model PI-101 photoionization analyzer, a Mine Safety Appliance Co. (MSA) Model 2A explosimeter and Draeger colorimetric detector tubes.

Soil samples will be retained in pre-cleaned glass jars (provided by the analytical subcontractor) sealed with aluminum foil and/ or similar inert screw top lids. The headspace in the soil sample jars will be tested by piercing the aluminum foil with the HNu probe. The results of the HNu testing will be used to determine the presence and/or absence of volatile organics within the upper soil horizon. In compliance with ASTM methods, the sample jars will be labeled with the following information: job designation, project number, sample number and sampling interval. Three composite samples will be manufactured from nine sampling points in each target lagoon area and chemically analyzed for the parameters inclusive of the Toxicity Characteristic Leaching Procedure (TCLP). One composite sample will be manufactured from three sampling points in the designated background area and analyzed for the same TCLP extraction procedure.

Page 3
Mr. Robert Pass
July 18, 1991

One composite soil sample will be manufactured from three sampling locations adjacent to each of the former aboveground storage tanks and the railroad easement and chemically analyzed for the parameters inclusive of the Target Compound List (TCL).

The rationale for employing TCL versus TCLP methods results from the existence of total matrix soil quality within the lagoons and background areas. Additional headspace gas measurements will be obtained from the composite soil samples utilizing Draeger colorimetric detector tubes and the HNu photoionization meter.

Additional TCLP analytical work may be deemed necessary in the former storage tank and railroad areas pursuant to the TCL results.

All soil sampling will be performed by experienced EHC hydrogeologists. Samples requiring low temperature preservation (4° C) will be kept chilled in the field by commercially available (pre-frozen) "ice packs" and appropriate holding times will be followed. Chain-of-custody will be maintained throughout the shipment of samples to the laboratory and will comply with appropriate transportation regulations. Observations will be made and recorded regarding weather and surrounding air/water/ soil conditions and other pertinent field observations.

TASK 2: Test Boring/Monitoring Well Installation

Pursuant to the request of the NYSDEC, the installation of two additional monitoring well control points will be necessary for the groundwater quality characterization of the site.

Each test boring/monitoring well will be drilled and constructed at a predetermined location selected by the NYSDEC to provide additional data on the site's upper most groundwater bearing formation(s) as illustrated on Figure 1 (i.e., \pm 35 feet). Each test boring will be installed following standard drilling methods utilizing air rotary drilling techniques. Air rotary drilling techniques are considered applicable to this investigation as a result of the shallow nature of bedrock formations which underlie the site (i.e., \pm 2.0 feet). If possible, air filtration equipment will be installed on any air compressing equipment utilized to construct the proposed monitoring wells.

Grab soil and bedrock samples will be obtained at five foot intervals and/or at formational contacts within the Lockport

Page 4
Mr. Robert Pass
July 18, 1991

bedrock formation. All grab samples will be logged on site as they are extracted, utilizing the Modified Burminster/Unified Soil and Amstrat Bedrock Classification System. A detailed test boring log and monitoring well completion diagram will be completed for both locations.

Each test boring will be converted to a permanent monitoring well. Monitoring wells are composed of two basic components; the well screen and the riser or blank. Well screens are the intake portion of the monitoring well. The basic purpose of the riser is to provide storage and a connection to the surface from the well screen. Monitoring wells will be installed individually. The size and materials used in monitoring well construction will be determined on a site specific basis, as necessary.

Existing data suggests that the proposed monitoring wells will be constructed of 2 inch flush joints, schedule 40 PVC pipe with 10 feet of slotted well screen. Each monitoring well will be constructed to screen the upper most groundwater formation and/or at an appropriate depth for the hydrologic conditions at the site.

A tailpiece will be included below the screen to postpone silting of the well where finer grained materials are encountered. The annular space around and approximately two feet above the well screen will be filled with a clean filter pack material graded for the slot size of the well.

A two foot thick bentonite seal will be installed above the sand pack. The remainder of the borehole will be cement bentonite grouted to the surface. A steel protective casing will be cemented over each well to prevent unauthorized access and provide protection for the wells. The well identification number will be clearly painted on the outside of the protective casing. An experienced EHC geologist will supervise all aspects of the drilling and monitoring well installation programs and be responsible for detailed logging of all samples.

As part of the subsurface drilling program, EHC will perform periodic examinations of the ambient air space surrounding the work zone, and the open bore hole to evaluate the presence of volatile organic compounds and combustible gasses. An HNu Model PI-101 photoionization analyzer and a Mine Safety Appliances Company (MSA) Model 2A explosimeter will be used to facilitate the testing requirements. The information acquired will be used to determine the level of health and safety equipment necessary to accomplish the proposed work.

Decontamination Procedures

Prior to drilling the first boring, the equipment to be used in drilling and monitoring well installation will be cleaned to remove possible contaminants encountered during drilling at previous jobs. All equipment which is to come in contact with the soil or rock, as well as water tanks, drill tools, pumps and hoses will undergo the initial cleaning procedure. While working at the site, the drilling equipment will be decontaminated between wells to prevent cross-contamination. Decontamination will take place at a designated decon area. The cleaning process will involve the use of a steam cleaner or high pressure hot water. Uncontaminated water, collected off site, will be used for all decontamination procedures. All water which results from the decontamination process will be containerized in 55 gallon drums.

Well Development

All monitoring wells will be developed using either a modified air-lift technique or bailing. Well development is necessary for the following reasons:

- . to remove residual drilling mud and formational silt and clay, thereby preventing turbidity during sampling that could potentially interfere with chemical analysis; and,
- . to increase the hydraulic conductivity immediately around the well, which in turn, reduces the potential of the well yielding an insufficient volume of water during the sampling procedure.

All well development activities will be initiated approximately 24 to 48 hours subsequent to well completion. A modified air-lift method will be used for all well development, if possible. The basic air-lift method involves pumping compressed air into the well forcing out water containing undesirable fine silt and clay. The modified air-lift method, described below, is an adaption of the basic air-lift method and provides the following advantages over the basic method:

- . no air enters the well;
- . water is removed directly from the screened portion of the well; and,

Page 6
Mr. Robert Pass
July 18, 1991

The coalescer unit, which filters the air, reduces any possibility of introducing foreign substances into the well.

The actual modified air-lift method is described as follows. Five-foot sections of pre-cleaned one-inch diameter PVC pipe will be screwed together and lowered into the monitoring well until the end of the bottom-most section of pipe is positioned within the screened section. Attached to the bottom of the pipe are two one-way check valves separated by about three inches of one-inch PVC pipe. Both check valves close in a downward direction. Two air compressor hoses are used. One connects the air compressor to the coalescer, and the other one runs from the coalescer down the one-inch PVC pipe well development assembly until to approximately five feet above the upper check valve. The orientation of the check valve allows the pipe to fill with water. Activation of the air compressor momentarily shuts the upper check valve and forces the trapped column of water up and out of the pipe. The release of the water lowers the pressure on top of the check valve allowing water to again enter the pipe until the air pressure becomes sufficient to close the check valve and blow out the column of water. This process repeats itself if the water pressure (head) is capable of balancing the air pressure created by the compressor. In wells lacking adequately long water columns, the water pressure is incapable of reopening the check valve allowing a fresh column of water to enter. Manual control of the air pressure is necessary in these instances. The lower check valve assures that no air enters the monitoring well. To prevent cross-contamination between wells, the one-inch pipe is washed with uncontaminated water before introduction into each well.

In wells with short columns of water, the modified air-lift technique may prove ineffective, necessitating the alternative development method of hand-bailing. Bailers, to be used later for groundwater sampling, will be utilized for development purposes. The bailers will serve both as a surge-block device for loosening the fine-grained material from the well annulus, and as a mechanism to remove the water and sediment from the well. The surging is accomplished by rapidly raising and lowering the bailer within the screen section. Bailing will be continued until the water has sufficiently cleared or five well volumes of water has been removed. All waters resultant from the development procedure will be contained in 55 gallon drums and disposed of off site, as necessary, pursuant to the chemical results obtained from each monitoring well.

Page 7
Mr. Robert Pass
July 18, 1991

Hydraulic Conductivity Testing

Subsequent to 24 to 48 hours of well stabilization, both slug and bail tests will be used to estimate the hydraulic conductivity of the unconsolidated aquifer. In wells screened below the water table, slug tests will be conducted. In wells where the water table surface is intersected by the screen, bail tests will be performed. Testing will be performed in overburden monitoring wells after they have been developed. Both tests involve observing the recovery of water levels toward an equilibrium level after an initial perturbation. In each test, fluctuations of the water level within each monitoring well versus time is obtained for use in calculating the hydraulic conductivity.

Data obtained will be analyzed according to the method developed by Hvorslev. Results will be checked using a second analysis method as described by the U.S. Department of the Navy and described by Cedergren.

Groundwater/Surface Water Sampling and Analysis

Sampling Procedures

Prior to any water sample collection, static water levels will be measured to the nearest one-hundredth of a foot in all existing and proposed monitoring wells (including off site wells, as available). Then using either a five foot, bottom-fill PVC bailer or the aforementioned modified air lift technique, the wells will be exercised to dryness or three volumes of water (based on the volume of water in the casing) will be removed, depending on well depth/volume and recovery rates for groundwater recharge. Concomitant with the removal of three volumes of water, temperature, pH, specific conductance, and turbidity will be measured until these parameters show no change, indicating that fresh, representative groundwater is entering the well. Groundwater sampling will take place when a sufficient volume of water has recovered (following exercising to dryness or when fresh aquifer water has entered the well). Sampling will be performed by bottom filled, check valved PVC bailers using monofilament to lower and raise the bailer. Grab surface water samples will be obtained as possible at location(s) in, and/or proximal to the lagoon areas. Surface water samples will be collected by hand by lowering dedicated pre-cleaned sample bottles within the area of interest.

All sample containers and preservatives will be provided by the laboratory. All samples will be analyzed as total matrix. Field

Page 8
Mr. Robert Pass
July 18, 1991

quality measurements of pH, specific conductance, temperature and turbidity will be recorded prior to groundwater sampling. Samples requiring low temperature preservation (4° C) will be kept chilled in the field by wet ice or commercially available (pre-frozen) "ice-packs" and appropriate holding times will be followed.

All samples will be collected in such a manner as to minimize agitation and other disturbing conditions which may cause physio-chemical changes and bring about losses due to volatilization, adsorption, redox changes or degradation.

All sampling equipment will be cleaned according to the following protocol.

- . Warm detergent wash
- . Tap water rinse
- . Distilled water rinse

Groundwater and surface water samples collected will be analyzed for the parameters inclusive of the TCL. All sampling will be performed following 7 days of well stabilization (after well development and hydraulic conductivity testing), by an experienced EHC hydrogeologist. Chains of custody will be maintained throughout the shipment of samples to the laboratory and will comply with appropriate transportation regulations. Observations will be made and recorded regarding weather and surrounding air/water/soil conditions, non-aqueous components of well water (e.g. "floaters," surface sheens) and any other pertinent field conditions. Records are kept for calibration of all field equipment and will be made available, as necessary.

Monitoring Well Surveying

Monitoring well locations and elevations will be surveyed at each site. United States Geological Survey or Coast and Geodetic Survey datum will be used to determine ground level, and pipe collar elevations at each well installation. The wells will be located in relative positions to existing ground features such as paved roads, permanent structures, bench marks, and property lines.

TASK 3: Evaluation of Hydrogeologic Data/Report Preparation

Data collected using the methodologies described in Task 1 and 2 will be utilized along with data developed during previous work

performed by the NYSDEC and EHC, to interpret and describe the hydrogeologic conditions of the site. Evaluation of collected field data will be conducted by a team of highly qualified and experienced EHC hydrogeologists and industrial site specialists. Presentation of the evaluation will be clear and concise, providing an understanding of site conditions.

Test boring logs will be utilized to further define the geologic conditions at the site. Water-level measurements, taken prior to water quality sampling, will be used to determine the water table or potentiometric surface elevations. These elevations will be presented in contour form, allowing for determination of areal groundwater flow directions. Groundwater flow is perpendicular to the groundwater elevation contours.

Soil quality data will be utilized to define the areas on site effected by the use, storage and/or disposal of hazardous materials. Groundwater and surface water quality data will be used to further characterize the extent to which the historical commercial activities have effected the indigenous groundwater and surface water systems.

Results of the hydraulic conductivity testing will be utilized to evaluate the transmissive characteristics of aquifer material surrounding the wells. The use of hydraulic conductivity values, coupled with areal hydraulic gradients determined from the groundwater elevation contour maps, will allow for an estimation of groundwater velocities. This will aid in a more complete determination of the expected path of contamination transportation, as necessary.

Report Preparation

A final report will be prepared and submitted to Frontier Stone. It will document all investigatory activities. It will discuss the rationale and methods of the investigation selected. The final report will include all data, analysis and calculations, methodology, water quality results, chain-of-custody documentation as well as any field notes. All information will be presented in a clear and concise manner and substantiate conclusions and recommendations reached. The report will be designed to determine the presence and/or absence of hazardous waste within the areas selected by the NYSDEC. Based on the results of this investigation and the subsequent input received by the NYSDEC, information generated as a result of this investigation should be adequately comprehensive to identify the necessity for on site remediation and/or facilitate the necessary information typically required during real property transactions.

Cost Estimate

The total estimated cost for EHC to perform all the technical services outlined in this document assuming the assumptions outlined, are as follows:

TASK 1: Soil Quality Sampling Environmental Hydrogeology Corporation Services

- . Field Reconnaissance - Sample Acquisition.....
- . Health and Safety Field Supervisor.....
- . Sample Preparation - Delivery.....
- . Field Sampling/Health Safety
Equipment.....
(i.e., HNu Model PI-101, MSA Model 2A and
associated calibration gas)
- . Decontamination Supplies.....(estimated).
(i.e., Acetone, Methanol, Distilled
water, containment Drum)
- . Project Administration/Management.....

Laboratory Services Soil Quality

- . (9) Toxicity Characteristic
Leaching Procedure (TCLP).....
(assumes non QA/QC format vs.
QA/QC format)
- . (3) Target Compound List (TCL).....
(assumes non- contract lab (CLP)
QA/QC format vs. CLP QA/QC format)

TASK 2: Test Drilling/Monitoring Well Installation Environmental Hydrogeology Corporation Services

- . Field Supervision/Well Development.....
(assumes (2) 35 foot monitoring wells)
- . Groundwater/Surface Water Sample Acquisition..
(assumes 6 monitoring wells and 1 surface
water sample)
- . Health and Safety Field Supervisor.....
- . Field Quality/Health and
Safety Equipment.....
(i.e., HNu Model PI-101, MSA Model 2A,
YSI-STC Meter, Calibration Gas, pH and
Conductivity Standards, etc.)
- . Dedicated Sampling Equipment.....
(assumes (3) 5 foot PVC bailers)

Page 11
Mr. Robert Pass
July 18, 1991

- . Sample Preparation - Delivery.....
- . Decontamination Supplies.....(estimated).
(i.e., distilled water, containment
plastic, containment drums)
- . Project Administration.....

Laboratory Services

- . Groundwater/Surface Water Chemical
Analysis.....
(7) TCL - Non-CLP format vs. (7)
TCL CLP format)

Drilling Services (Estimated)

- . (2) 6 inch diameter/35 foot Test
Boring/Monitoring Wells.....
(See Attachment B)

Topographic Survey (Estimated)

- . (2) Man Field Crew (Assumes
2 Days @ \$95.00/hour).....

TASK 3: Data Assimilation/Report Preparation

- . Data Reduction/Synthesis.....
- . Report Preparation.....
- . Project Administration.....

The total cost estimates identified above are based on the time and services presumed necessary and outlined within this proposed work plan.

Prior to awarding any subcontracts, EHC will request written cost estimates for the anticipated work, in order to corroborate the outlined subcontractor cost estimates. We will need prior authorization for this project to obtain the necessary cost confirmations, in order to ensure availability of the necessary subcontractor. A written cost proposal has been provided by Nothnagle Drilling and is included for your review as Attachment B.

As identified during our recent telephone conversation the estimates provided are based on directives received from the involved NYSDEC authorities. I have provided several options in which data specific to site's groundwater and soil qualities can be derived. As identified in the cost estimates the option pursued will effect the ultimate costs incurred. As information

Page 12
Mr. Robert Pass
July 18, 1991

from each of the respective tasks of work is assimilated and refined, more accurate assessments for the anticipated costs for subsequent tasks of work can and will be provided.

No costs have been provided for either off site transportation and/or disposal of liquid and solid wastes which may be generated as a result of this investigation (i.e., decon water, development water, etc.) due to the uncertainty of the hazard and/or non-hazardous determination.

This cost estimate does not reflect the cost for road construction, or for meetings EHC will be required to support for this project work. Any additional services or modifications required by you or other such involved organizations will be invoiced at our standard hourly rates for the individuals involved. No additional work will be conducted without prior authorization.

At this time, it appears likely that one meeting between EHC and Frontier Stone should take place prior to the submission of this work plan to discuss the cost to information benefits of the options presented herein. Additionally, it is also realistic to assume that one meeting (possibly on site) will also become necessary with the representatives of the NYSDEC prior to the initiation of this work plan.

Environmental Hydrogeology Corporation invoices for services will be monthly for charges incurred during the month. Invoices are payable upon receipt and are due within 30 days. Environmental Hydrogeology Corporation imposes a 1-1/2% fee per month (18% per year) on all overdue invoices.

There is a 15% administration charge to cover subcontractors and there associated invoice bookkeeping. You may elect to process the invoices yourself to eliminate this charge.

The majority of the costs estimates provided assume OSHA Level "D" working conditions. Costs associated with higher levels of personal safety will be provided as necessary as a result of the hazard encountered. A general health and safety work plan has been included in this correspondence as Attachment C.

The intent of this proposal has been to outline the services to be provided, cost estimates, and invoicing procedures for the proposed services. If you have any questions about the services to be provided, or this proposal, please contact us. If you select Environmental Hydrogeology Corporation to provide the proposed services and find the terms and conditions as set forth acceptable, please issue a purchase order or endorse the

Page 13
Mr. Robert Pass
July 18, 1991

provided authorization release and return it to our offices in Clifton Park.

It has been our pleasure to provide this proposal and we look forward to being of service to your organization.

Very truly yours,
Environmental Hydrogeology Corporation


Jeffrey T. Wink
Senior Hydrogeologist/Principal

JTW/aw

AUTHORIZATION
RELEASE

DATE

ATTACHMENT A
Equipment Billing Rates

EQUIPMENT BILLING RATES

<u>Equipment</u>	<u>Price</u>
Air Purifying Resporator (APR) - Full Face.....	\$ 10.00 day
APR Combination Filter Cartridges.....	\$ 20.00 each
Brunton Compass.....	\$ 5.00 day
Colorimetric Detector Tubes.....	\$ 7.00 each
Clear Dedicated PVC Bailers (5 ft).....	\$ 35.00 each
Colowasa Sampler.....	\$100.00 day
Combustible Gas Indicator.....	\$ 75.00 day
Computer (Field).....	\$150.00 day
Computer (Office T-code 124).....	\$ 50.00 hour
DI/Distilled H ₂ O.....	\$ 2.00 gallon
Dedicated PVC Bailers (5 ft).....	\$ 30.00 each
Fifty Five (55) Gallon Containment Drum.....	\$ Cost + 25%
Faxcimilies.....	\$ 1.00 page
Fugi Pump.....	\$ 50.00 day
Hand Auger.....	\$ 10.00 day
HNu PI-101 Meter.....	\$100.00 day
Issco Composite Sampler.....	\$100.00 day
Locks.....	\$ 10.00 each
Mirror Stereo Scope.....	\$ 15.00 day
Nalgene Disposable Filter System.....	\$ 7.50 each
One Eight inch (1/8") Nylon Rope.....	\$ 25.00/100 ft
Outer Gloves.....	\$ 15.00 pair
pH Meter.....	\$ 5.00 sample

EQUIPMENT BILLING RATES
(Continued)

<u>Equipment</u>	<u>Price</u>
Plastic Drop Cloth.....	\$ Cost + 25%
Pocket Pentrometer/Torvane.....	\$ 5.00 day
Poly Gloves.....	\$ 25.00 box
Poly Tubing.....	\$.50 foot
Poly/Tyvex Coveralls.....	\$ 20.00 each
Sample Bags (Large).....	\$ 5.00 each
Sample Bags (Small).....	\$ 2.00 each
Steel/Fiberglass Tape.....	\$ 5.00 day
Stevens Strip Chart Recorder.....	\$100.00 day
Suzuki (4) Wheel ATV.....	\$100.00 day
Water Level Meter (Powers Box Type).....	\$ 5.00 day
Water Level Meter (Solonist Reel Type).....	\$ 6.00 day
Well Dev. Oil Filter System.....	\$ 40.00 day
YSI SCT-33 Meter.....	\$ 10.00 sample

ATTACHMENT B

Drilling Subcontractor Cost Estimate

NOTHNAGLE DRILLING

1821 Scottsville-Mumford Road
Scottsville, New York 14546
(716) 538-2328

July 11, 1991

Environmental Hydrogeology Corporation
900 Route 146
Clifton Park, New York 12065

RE: Drilling Services
Frontier Stone
Lockport, New York

ATTN: Jeffrey Wink

Dear Jeff:

Please find below applicable unit costs for the above referenced project.

	EST QTY	UNIT COST	EST. EXTENSION
1. Mobilization & Demobilization	1	LUMP SUM	\$ 300.00
2. 8" Bedrock Drilling	0.0 Ft	\$15.00/Ft	0.00
3. 6" Bedrock Drilling	70.0 Ft	\$8.00/Ft	560.00
4. 2" PVC Well-Installed	74.0 Ft	\$18.00/Ft	1,332.00
5. 2" Centralizers	4	\$20.00/Ea	80.00
6. 4" Locking Steel Protective Casing with Keyed Alike Lock	2	\$100.00/Ea	200.00
7. 500 Gallon Water Truck and Steam Cleaner Rental	1 Day	\$50.00/Day	50.00
8. Temporary Decontamination Pad	1	N.C.	0.00
9. Decontamination Time	2.0 Hr	\$130.00/Hr	260.00
10. Standby Time	0.0 Hr	\$130.00/Hr	0.00
TOTAL ESTIMATED COST:			\$2,782.00

We understand the scope to include two borings advanced with a six inch down hole hammer to thirty five feet. Each boring will receive a two inch PVC monitoring well, having ten feet of factory slotted screen. Both wells will be completed with a four inch locking steel protective casing and keyed alike lock.

All downhole equipment will be decontaminated between each bore hole.

We hope this proposal meets with your approval. If we can be of further service, please call at your convenience.

SAD:ge


Stephen A. DiLaura
Environmental Drilling Manager

ATTACHMENT C
Health and Safety Plan

HEALTH AND SAFETY PLAN

Activities: HNu field survey of project area, surface soil sampling (three lagoons, a railroad easement, and two former above ground tank areas), installation of the two test boring/monitoring wells along with groundwater (and surface water, if possible) sampling.

EHC Generic Occupational Health and Safety Plan (HASP)

The four levels of personnel protection which have been identified for use in the current project are summarized below.

Level A: Self-Contained Positive Resource Demand - Breathing apparatus with fully encapsulated suit.

Level B: Self-Contained Positive Resource Demand - Breathing apparatus (4 hour portable or line) with TYVEK-SARAN encapsulated disposable suit (with chemical splash suits as necessary), boots, and gloves (double NEOPRENE over VITON).

Level C: Air purifying respirator with chemical cartridge (standard organics/acid gasses/radionuclides/fumes/mists/dusts/particles), TYVEK-SARAN or poly laminated coveralls, safety boots, gloves (NEOPRENE over VITON), hard hats with integral face shield and goggles, and personal first aid kit.

Level D: Ibidem Level 3 except respirator use is optional. Respirators must be available at all times.

Level D is currently recommended for most activities proposed. Level C will be required for site specific soil sampling activities. Level C may be required for borings/monitoring well installation and groundwater sampling work, if significant dust/particulate conditions develop and/or HNu monitoring warrants. A more comprehensive assessment of HASP is as follows:

HAZARD ASSESSMENT: (toxic effects, including TLVs, IDLHs, reactivity, stability, flammability, and operational hazards with sampling, decontaminating, etc.):

Considering all health threatening quality data from the site is limited to soils, the EPA 40 CFR 50.6, 50.7 ASHRAE Standard 62-1989: Ventilation for acceptable indoor air quality standard of .075 mg/m³ have been used for potential dust accumulation. The standard indoor value for dust of 0.75 mg/m³ has been utilized to develop the level of health and safety.

	<u>Toxic Effects</u>	<u>TLV</u>	<u>IDLH</u>	<u>STGL</u>	<u>Comments</u>
Lead	Kidneys, Blood, Skin, GI Tract	.15 mg/m ³	N/A	N/A	Strong oxidizers
Zinc	Respiratory System	5 mg/m ³	N/A	N/A	Incompatible with Chlorinated rubber
Chromium	Respiratory System	.05 mg/m ³	500 mg/m ³	N/A	Strong oxidizers

SITE WORK ZONES: (designate exclusion zone, contamination reduction zone and support zone)-
Level D protection during most work unless HNu readings are + 5 ppm above background in breathing zone (See Figure 3).
Level C protection during actual site specific soil sampling work.

SITE ACCESS: (describe procedures to control site access)
List of authorized personnel to be used in case of evacuation and on site entrance activities.

MONITORING PROCEDURES: (if required by the Safety Officer)

Monitoring the site for identity and concentration of contamination in all media:
Work Area to be monitored with HNu and explosimeter, soil sampling locations to be randomly monitored with colorimetric detector tubes.

Medical procedures for evidence of personnel exposure i.e.,
analysis specific to site not covered in general EHC
physical:

Not applicable to subject site.

Personnel monitoring procedures:

Not applicable to subject site.

DECONTAMINATION AND DISPOSAL:

Decontamination Procedures: (contaminated personnel,
surfaces, materials,
instruments, equipment, etc.):

Soil Sampling Equipment - Methanol Rinse, Detergent Wash, Tap
Water Rinse, Distilled Water Rinse; Drilling Equipment - Steam
Clean. Groundwater sampling equipment - Detergent wash, tap
water rinse, distilled water rinse; Personnel - Soap and Water
Wash.

Disposal Procedures: (Contaminated equipment, supplies,
disposables, washwater):

Personnel Equipment - Bag Clothing, Return to Lab; Decon Waters-
Drummed on site until analytical results are obtained or if HNu
response less than 5 ppm in soil/rock spill on ground; Develop-
ment Waters - Drum on site until analytical results obtained.

EMERGENCY PROCEDURES:

In event of personnel exposure: (skin contact, inhalation,
ingestion, specific
procedures for specific
chemicals):

Skin Contact - Rinse with water and soap water wash.

In event of injury:
Perform Field First Aid; Activate EMS System if potential
serious injury exists.

In event of potential or actual fire or explosion:
Evacuate site (utilized authorized personnel list to ensure
everyone has left) and meet at designated check point (i.e.,
Access Road south of Support Zone 1)

In event of potential or actual ionizing radiation exposure:
Not applicable to subject site.

In event of environmental accident (spread of contamination
outside sites):
Notify EHC offices at (518) 371-7940
Contact: Eric Hanson - President/Jeff Wink - Senior Hydro-
geologist/Principal

EMERGENCY SERVICES (complete here or have separate list
available on site)

<u>Location</u>	<u>Telephone</u>
Emergency Medical Facility	
Lockport Memorial Hospital	(716) 434-9111
521 East Avenue	
Lockport, NY 14094	

Ambulance Service	
Niagara Ambulance Service	(746) 284-2228
2621 Lockport Road	(or 9 1 1)
Niagara Falls, NY 14303	
Frontier Ambulance (Same Address)	(716) 285-3663

Fire Department
City of Lockport - Fire Headquarters (716) 439-6611
Lockport, NY 14094
Jack Lyon - (716) 434-8111
Hazardous Materials Response Team ext. 318
Southcrockport - Fire Department (716) 236-2086
Lockport, NY 14094 (John Jones)

Police Department
Niagara County Sheriff (716) 439-9390
526 Niagara Street Ext.
Lockport, NY 14094

Poison Control Center
Childrens Hospital (800) 888-7655
219 Bryant Street (716) 878-7654
Buffalo, NY 14222

PERSONNEL POTENTIAL EXPOSED TO HAZARDOUS SUBSTANCES (As
Applicable)

Personnel Authorized to Enter Site (specific conditions of site would preclude not EHC trained persons from entering site and would allow only certain personnel, list here)

1. NYSDEC Representatives
2. EHC Employees
3. Drilling Subcontractors
4. Topographic Surveyors
5. (Specific Names to be provided on a daily basis pursuant to EHC's Tailgate Safety Materials, See Example).

ALTERNATIVE WORK PRACTICES

(Describe alternative work practices or instruments not specified in this room. Indicate work practices specified in the chapter for which proposed alternative work practices will serve as substitute.

Not Applicable.

TASK SPECIFIC LEVEL OF PROTECTION (attach table, as necessary
including specific description
of protective gear)

Most tasks will be performed under Level D HASP conditions
unless HNu response of + 5 ppm above background is obtained, in
which case Level C HASP conditions will be maintained. All site
specific soil sampling work will be performed utilizing Level C
protection (See Generic HASP Outline).

SITE MAP

(Attach a site map. Map should be properly scaled and
keyed to local landmarks.)

See Figure 3.

TRAINING

(Provide description of minimum training, reference OSHA
Sections).

2 - Person - 1910.120 e(2)

CPR

1 - Person - 1910.120 e(3)

EMT, Adv. First Aid, CPR

AFFIDAVIT

All personnel who enter site must sign attached affidavit.
EHC personnel must also read and comply with the enclosed
EHC's Generic HASP.

AFFIDAVIT

I, _____, (name) of _____
(company name) have read the Health and Safety Plan (HASP) for
the _____ (site description and
project description. I have also read the EHC's generic HASP.
I agree to conduct all on site work in conformity with the
requirements of both HASP's. In addition, I acknowledge that
failure to comply with the designated procedures in the Health
and Safety Plans may lead to my removal from the site.

Signed _____

Date _____

APPENDIX C

Lithological Classification
Soil Boring Logs



ENVIRONMENTAL
HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

TEST BORING LOG

BORING No. EHC-5

PROJECT Niagara Materials

SHEET 1 OF 2

CLIENT Frontier Stone

JOB No. 63035.001

DRILLING CONTRACTOR Nothnagle Drilling

MEAS. PT. ELEV.

PURPOSE Subsurface Investigation

GROUND ELEV. 592.76

DRILLING METHOD Air Rotary

SAMPLE

CORE

CASING

DATUM MSL

DRILL RIG TYPE

TYPE

Grab

N/A

N/A

DATE STARTED 11/12/91

GROUNDWATER DEPTH N/A

DIAM.

6 1/4"

N/A

N/A

DATE FINISHED 11/12/91

MEASURING POINT Grade

WEIGHT

N/A

DRILLER Don Du Boice

DATE OF MEASUREMENT 11/12/91

FALL

N/A

INSPECTOR L. Williams

DEPTH FT.	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
	S ₁				Dark Brown-Gray Dolostone, fine crystalline	No fossils noted
5	S ₂				Dr Gr Do fxtl (Goat Island Member)	DRY
10	S ₃				Same;	DRY Drilled easier than EHC-6, no large fractures noted.
15	S ₄				----- ± 14.0'	
					Lt Gray-Pinkish, massive uniform fossiliferous Dolostone (Gasport Member)	
20	S ₅					

PROJECT Niagara Materials

SHEET 2 OF 2

CLIENT	Frontier Stone
--------	----------------

JOB No. 63035.001

DEPTH FT.	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
20						
					- - - - - ± 22.0'	
25	S ₆				Dr Gray Dolostone, fine crystalline (DECEW MEMBER)	DRY
30	S ₇				Same;	DRY
35	S ₈				Same;	Completed DRY
					Total Depth of Boring @ 35.5'	
40	S ₉					
45	S ₁₀					

EHC ENVIRONMENTAL HYDROGEOLOGY CORPORATION RTE.146 CLIFTON PARK, N.Y. 371-7621				TEST BORING LOG			BORING No. EHC-6		
PROJECT Niagara Materials						SHEET 1 OF 2			
CLIENT Frontier Stone						JOB No. 63035.001			
DRILLING CONTRACTOR Nothnagle Drilling						MEAS. PT. ELEV.			
PURPOSE Subsurface Investigation						GROUND ELEV. 592.17'			
DRILLING METHOD Air Rotary				SAMPLE	CORE	CASING	DATUM MSL		
DRILL RIG TYPE		TYPE	Grab	N/A	N/A	DATE STARTED 11/12/91			
GROUNDWATER DEPTH 35.38'		DIAM.	6½"	N/A	N/A	DATE FINISHED 11/12/91			
MEASURING POINT Grade		WEIGHT	N/A			DRILLER Don Du Boice			
DATE OF MEASUREMENT 11/13/91		FALL	N/A			INSPECTOR L. Williams			

DEPTH FT.	SAMPLE NUMBER	BLOWS ON SAMPLE SPOON PER 6"	UNIFIED CLASSIFICATION	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
	S ₁				Brown fine SAND and Clayey Silt 0.4'	DRY
5	S ₂				Dark Gray Dolostone, fine crystalline No fossils noted (GOAT ISLAND MEMBER)	DRY
10	S ₃				Same;	DRY
					+ 13.0'	
15	S ₄				Lt to Dr Gr Do, Cxtl	
					+ 17.0'	
20	S ₅				(GASPORT MEMBER) Lt Gray-Pink, massive, uniform fossiliferous Dolostone	DRY

APPENDIX D

Monitoring Well Completion Logs
EHC-5 to EHC-6

MONITORING WELL COMPLETION LOG

WELL NO. EHC-5**EHC**ENVIRONMENTAL
HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621Project Niagara MaterialsClient Frontier StoneProject No. 63035.001Date Drilled 11/12/91

Date Developed _____

**WELL
CONSTRUCTION DETAIL**

M.P. EL. 595.52

GR. EL. 592.76

CEMENT/
BENTONITE
SEALBENTONITE
SEAL

FILTER PACK

SCREEN

BENTONITE
SEAL

0

-21.0'

-23.0'

-25.0'

-35.0'

-35.5'

-N/A

NOT TO SCALE

Inspector L. WilliamsDrilling Contractor Nothnagle DrillingType of Well Monitoring WellStatic Water Level DRY Date 11/12/91Measuring Point (M.P.) GradeTotal Depth of Well 35.0'Total Depth of Boring 35.9'

Drilling Method

Type Air Rotary Diameter 6 1/4"Casing N/A

Sample Method

Type Grab Diameter 6 1/4"Weight N/A Fall N/AInterval 5'

Riser Pipe left in Place

Material PVC Diameter 2"Length 27.0 Joint Type flush screen

Screen

Material PVC Diameter 2"Slot Size 10 Interval 25.0 - 35.0'

Stratigraphic Unit Screened _____

Filter Pack

Sand X Gravel _____ Natural _____Grade 0.0Amount 225 lbs Interval 23.0 - 35.9'

Seal(s)

Type Bentonite interval 21.0 - 23.0'Type Bentonite Cement interval 21.0 - 0.0

Type _____ interval _____

Locking Casing ☒ Yes ☐ No

Notes:

MONITORING WELL COMPLETION LOG

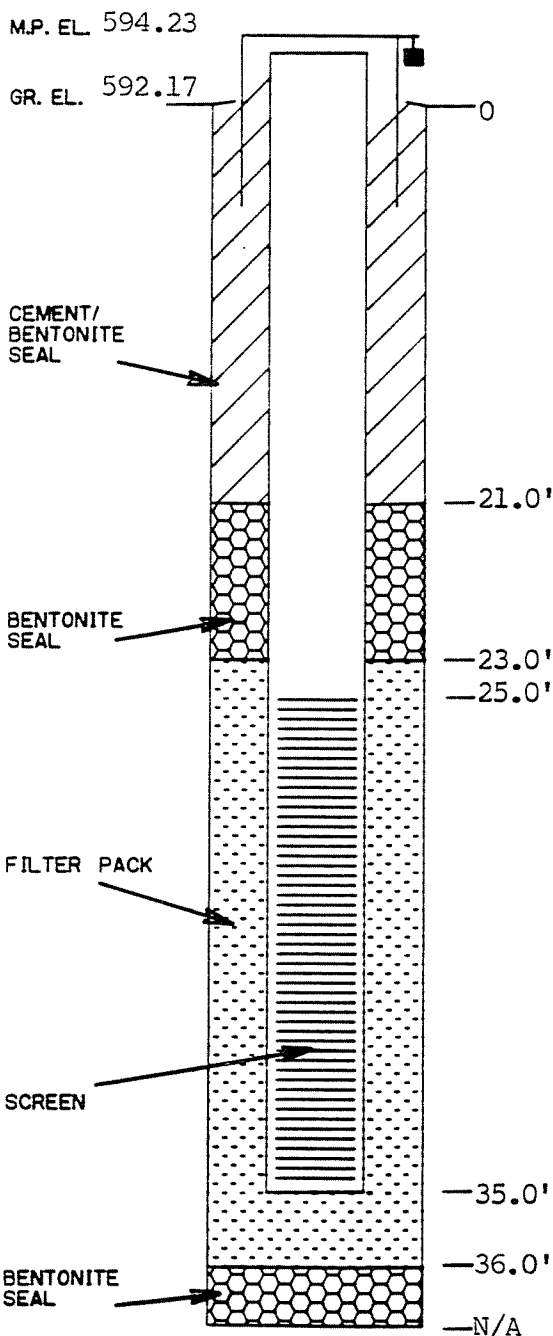
WELL NO. EHC-6

EHC

ENVIRONMENTAL
HYDROGEOLOGY CORPORATION
RTE.146 CLIFTON PARK, N.Y. 371-7621

Project Niagara Materials
Client Frontier Stone
Project No. 63035.001
Date Drilled 11/12/91
Date Developed _____

WELL CONSTRUCTION DETAIL



NOT TO SCALE

Inspector L. Williams
Drilling Contractor Nothnagle Drilling
Type of Well Monitoring Well
Static Water Level 35.38' Date 11/12/91
Measuring Point (M.P.) Grade
Total Depth of Well 35.0'
Total Depth of Boring 36.6'

Drilling Method
Type Air Rotary Diameter 6 1/4"
Casing N/A

Sample Method
Type Grab Diameter 6 1/4"
Weight N/A Fall N/A
Interval 5'

Riser Pipe left in Place
Material PVC Diameter 2"
Length 27.0 Joint Type flush screen

Screen
Material PVC Diameter 2"
Slot Size 10 Interval 25.0 - 35.0'
Stratigraphic Unit Screened _____

Filter Pack
Sand X Gravel _____ Natural _____
Grade 0.0
Amount 225 lbs Interval 23.0 - 36.6'

Seal(s)
Type Bentonite Interval 21.0 - 23.0'
Type Bentonite Cement Interval 21.0 - 0.0
Type _____ Interval _____

Locking Casing ☒ Yes ☐ No
Notes:

APPENDIX E

Soil Sampling Excavation Logs

<u>Soil Sampling Point</u>	<u>Date</u>	<u>Time</u>	<u>Depth Inches</u>	<u>HNu Pid ppm</u>	<u>Soil Description</u>
L1A1	11/21/91	6:40	12	0.0	Br m-f S a Cy\$
L1A2	11/21/91	6:47	*8	0.0	Br m-f S a Cy\$
L1A3	11/21/91	6:51	*8	0.0	Br m-f S a Cy\$
L1B1	11/21/91	6:56	*8	0.0	Br m-f S a Cy\$
L1B2	11/21/91	6:58	*7	0.0	Br m S a Cy\$
L1B3	11/21/91	7:00	10	0.0	Br f S
L1C1	11/21/91	7:06	*6	0.0	Br f S a \$
L1C2	11/21/91	7:09	*2	0.0	Br f S a \$yC
L1C3	11/21/91	7:12	*6	0.0	Br f S a \$yC
L2A1	11/21/91	5:45	*7	0.0	Or Br f S, s \$
L2A2	11/21/91	5:50	*8	0.0	Br Cy\$
L2A3	11/21/91	6:03	*5	0.0	Br f S a \$yC
L2B1	11/21/91	5:30	*4	0.0	Br f S
L2B2	11/21/91	5:32	*8	0.0	Br f S
L2B3	11/21/91	5:38	*8	0.0	Br f S
L2C1	11/21/91	5:12	*3	0.0	Br f S
L2C2	11/21/91	5:15	*8	0.0	Br f S
L2C3	11/21/91	5:17	*3	0.0	Lt Br f S
L3A1	11/21/91	4:28	*3	0.0	Br f S, s Cy\$
L3A2	11/21/91	4:26	*3	0.0	Br f S, s Cy\$
L3A3	11/21/91	4:31	*3.5	0.0	Br f S, s Cy\$
L3B1	11/21/91	4:42	*4	0.0	Br f S, s Cy\$
L3B2	11/21/91	4:46	*2	0.0	Br f S, s Cy\$
L3B3	11/21/91	4:48	*2	0.0	Br f S, s Cy\$
L3C1	11/21/91	4:56	*3	0.0	Br f S, a Cy\$, t organics
L3C2	11/21/91	4:58	*4.5	0.0	Br f S, a Cy\$, l organics
L3C3	11/21/91	5:00	*4.5	0.0	Br f S, s Cy\$, l organics
RRE1A1	11/21/91	6:25	12	0.0	Br f G a, f-c S, s \$yC, (fill)
RRE1A2	11/21/91	6:38	8	0.0	Br f G a, f-c S, s \$yC, (fill)
RRE1A3	11/21/91	6:50	10	0.0	Br f G a, f-c S, s \$yC, (fill)
AGST1A1	11/21/91	5:57	12	0.0	Br f-m S, lt Cy\$, t f G
AGST1A2	11/21/91	5:45	10	0.0	Br f-m S, lt Cy\$, t f G
AGST1A3	11/21/91	5:51	10	0.0	Br f-m S, lt Cy\$, t f G
AGST2A1	11/21/91	6:11	10	0.0	Br f-m S, lt Cy\$, t f G
AGST2A2	11/21/91	6:22	*7	0.0	Br f-m S, lt Cy\$, t f G
AGST2A3	11/21/91	6:17	12	0.0	Br f-m S, lt Cy\$, t f G
Background A1	11/21/91	8:00	*7	0.0	Br f S, s Cy\$
Background A2	11/21/91	7:52	*8	0.0	Br f S, s Cy\$
Background A3	11/21/91	7:55	*7	0.0	Br f S, s Cy\$

* Sampling depth was limited due to the presence of shallow bedrock.

APPENDIX F

Field Well Development Forms

DEC HW # 932073

Site: Nigra Materials/Frontier StJob #: 63035.001Well #: EHC-2Date: 11/22/91Personnel: C. WilliamsC. BablinWell InformationScreen I.D.: 2 inRiser Same? 2 inScreened Interval: 38.4 - 28.4 ftStratigraphic Unit: lockport limestone

Comments:

© 17/21' → 3.12 x 3 ~ 10 ft gal

Depth to Water: 17.10

Sand/Silt Accumulation?

Well Water Volume:

3.47 galDevelopment TechniqueBailer ☒Lift Pump ☐Air Lift ☐Submers. ☐Dedicated
Type: PVC bailerFlow Rate:Well-dedicated equipment: yes

Decontamination procedures:

alconox wash, distilled water rinse, methanol washObservationsTime began: 5:50Time finished: ± 9:15

Volume removed:

→ 10.5Water Characteristics - Beginning:Color - 100Turbidity - 50Odor - NoneTemperature - 10.1Water Characteristics - End:Color - v. lt GrayTurbidity - 40Odor - NoneTemperature - 10.19

Notes:

Bal	Time	Ph	Cond	TOC	Turb
0.5	5:50	7.5	1750	100	50
5	6:00	7.5	4350	100	50
10	6:15	7.0	5100	100	40

DEC HW# 932073
 lte: Frontier Stone/Niagara Materials Job #: 63035.001
 Well #: EHC - 3 Date: 11/21/91
 Personnel: L Williams
C Babbitt

Well Information

Screen I.D.: 2 in Riser Same? 2 in
 Screened Interval: 10.5 to 95'
 Stratigraphic Unit: Rochester Shale
 Comments:

Depth to Water: 37.12
 Sand/Silt Accumulation?
 Well Water Volume:

6.7 gal x 0.163 = 1.106 gal

Development Technique

Bailer ☒
 Lift Pump ☐
 Air Lift ☐
 Submers. ☐

Type: Dedicated PVC

Flow Rate:

Well-dedicated equipment: YES

Decontamination procedures:

Alconox wash, Distilled water rinse, methanol rinse

Observations

Time began: 10:50 12:00
 Volume removed:

Time finished: 3:52:00

3.5 gal

Water Characteristics - Beginning:

Color - Dark gray

Turbidity - Heavy

Odor - slightly sulfur 30 130

Temperature - 10.5°C 32.05

Water Characteristics - End: 32.71

Color - gray/brown

Turbidity - Med.

Odor - slight

Temperature - 10.5°C

Notes:

Suspended material in water
decrease w/ volume removed
appeared to be bacteria/slime

Gal.	Time	pH	Cond	T _{oc}	T _{oub}
5	12:15	7.5	550	10.5	>200
10	12:32	9.0	540	10.7	
15	12:57	8.0	600	10.7	
20	13:33	7.25	610	10.6	
25	13:55	7.0	600	10.3	130
30	14:22	7.0	590	10.5	130
31	14:26	-	-	-	10
32	14:30	-	-	-	10
35	14:55	7.0	580	10.5	87

DEC HW # 932073

Site: Niagara Materials/Front Street Job #: 63035,001
Well #: EHC-4 Date: 11/21/91
Personnel: L. Williams
C. Babin

Well Information

Screen I.D.: 2 in
Screened Interval: 93 to 103 ft
Stratigraphic Unit: Rockstar Shale
Comments:

Riser Same? 2 in

Depth to Water: 37.70'
Sand/Silt Accumulation?
Well Water Volume: $65.3' \times 0.163 = 10.64 \text{ gal}$

Development Technique

Bailer ☒
Lift Pump ☐
Air Lift ☐
Submers. ☐

Type: Dedicated PVC bailer

Flow Rate:

Well-dedicated equipment: yes

Decontamination procedures:

Alconox wash, distilled water rinse, methanol rinse

Observations

Time began: 9:00

Time finished: 10:50

Volume removed: ~ 30 gallons

Water Characteristics - Beginning:

Color - dk grey

Turbidity - mod

Odor - yes (smell like landfill) sulfur

Temperature - 10°C / 11 pH / 4530 μ mo

Water Characteristics - End:

Color - lt grey

Turbidity - 19 (slightly turbid)

Odor - sulfur

Temperature - 9.4°C / 7.0 pH / 7990 μ mo

Notes:

Gal	Time	PH	Cond	Te	Turb
5	9:25	8.5	7200	10°	mod
10	9:40	8.0	8000	10°	mod
15	9:55	7.0	8000	9.9°	mod
20	10:10	7.0	7900	9.9°	mod
25	10:25	7.0	7990	9.2°	mod clear

APPENDIX G

Analytical TCL Groundwater Quality Results

CTM ANALYTICAL LABS, LTD.
15 Century Hill Dr.
Latham, NY 12110
Phone: (518)786-7100 Fax: (518)786-7139

Laboratory Analysis Report
Prepared for: EHC
Project Number: 91.01401
Task Number: 911122R
24 DEC 1991

IMPORTANT - PLEASE NOTE

1. All results are calculated on a dry weight basis unless otherwise specified.
2. PQL = Practical Quantitation Limit.
3. A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358	MA: NY052	CT: PH-0551
NJ: 73581	PA: 68-402	NH: 199014-C

01912

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 07

Date Sampled: 11/22/91 Time: 8:20 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-1

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used		Results	PQL	Unit	Analyst Reference
TARGET COMPOUND LIST VOLATILES		COMPLETED			GCD 2:3 11/26
ACID DIGESTION - FURNACE	SW-846 3020	COMPLETED			D8:95 12/3
CHLOROMETHANE	SW-846 METHOD 8240	ND	10	MCG/L	MCD 2:3 11/26
MANGANESE	ICP, EPA METHOD 200.7	1,740	10.0	MCG/L	A4:18 12/11
VINYL CHLORIDE	SW-846 METHOD 8240	ND	10	MCG/L	MCD 2:3 11/26
BROMOMETHANE	SW-846 METHOD 8240	D	10	MCG/L	MCD 2:3 11/26
CHLOROETHANE	SW-846 METHOD 8240	ND	10	MCG/L	MCD 2:3 11/26
1,1-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
METHYLENE CHLORIDE	SW-846 METHOD 8240	D	5	MCG/L	MCD 2:3 11/26
MERCURY DIGESTION - AQUEOUS	EPA METHODS, 1979.245.1	COMPLETED			D8:104 12/5
TRANS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	D	5	MCG/L	MCD 2:3 11/26
CYANIDE, TOTAL W/ DISTILLATION	EPA 335.2 ; 335.3	ND	0.01	MG/L	JOC 12/3
CIS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
1,1-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
CHLOROFORM	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
1,1,1-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
CARBON TETRACHLORIDE	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
BENZENE	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
1,2-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	MCD 2:3 11/26
TRICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
1,2-DICHLOROPROPANE	SW-846 METHOD 8240	D	5	MCG/L	GCD 2:3 11/26
BROMODICHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
TRANS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
TOLUENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
CIS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	D	5	MCG/L	GCD 2:3 11/26
1,1,2-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
TETRACHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
DIBROMOCHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
CHLOROBENZENE	SW-846 METHOD 8240	D	5	MCG/L	GCD 2:3 11/26
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			EP 11/25
ETHYLBENZENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
BROMOFORM	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
EXTRACTION FOR TCL B/N		EXTRACTED			DO 11/26
1,1,2,2-TETRACHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
EXTRACTION FOR TCL - ACIDS		EXTRACTED			DO 11/26
STYRENE	SW-846 METHOD 8240	D	5	MCG/L	GCD 2:3 11/26

(CONTINUES ON NEXT PAGE)

REMARKS:

01934

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 07

Date Sampled: 11/22/91 Time: 8:20 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-1

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
--	---------	-----	------	-------------------

(CONTINUED FROM PREVIOUS PAGE)

ACETONE	SW-846 METHOD 8240	D	10	MCG/L	GCD 2:3 11/26
CARBON DISULFIDE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DO 11/27
2-HEXANONE	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
SODIUM	EPA METHODS, 1979.273.1	118,000	1,000	MCG/L	B5:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:99 12/16
NICKEL	ICP, EPA METHOD 200.7	ND	30.0	MCG/L	A4:18 12/11
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCG/L	CM L:103 12/19
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:103 12/19
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
N-NITROSO-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
ISOPHORONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:99 12/16
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16

(CONTINUES ON NEXT PAGE)

REMARKS:

01935

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 07

Date Sampled: 11/22/91 Time: 8:20 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-1

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	20	MCG/L	CM L:99 12/16
2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:99 12/16
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:99 12/16
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:99 12/16
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:99 12/16
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:99 12/16
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16

(CONTINUES ON NEXT PAGE)

REMARKS:

01936

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 07

Date Sampled: 11/22/91 Time: 8:20 AM

Date Received: 11/22/91

Sampled By : BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-1

Matrix: WATER

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

DI-N-OCTYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
INDENO-(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO-(G,H,I)-PERLYENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:99 12/16
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:22 12/7
ALPHA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
BETA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
DELTA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
GAMMA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
HEPTACHLOR	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
ALDRIN	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
DIELDRIN	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
4,4-DDE	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ENDRIN	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
4,4-DDD	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	.052J	.10	MCS/L	GCCLP A:22 12/7
4,4-DDT	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
METHOXYCHLOR	EPA METHOD 8080	.029J	.50	MCS/L	GCCLP A:22 12/7
ENDRIN KETONE	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
TOXAPHENE	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
PCB-1016	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1221	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1232	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1242	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1248	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7

(CONTINUES ON NEXT PAGE)

REMARKS:

01937

EHC CTM PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 07

Date Sampled: 11/22/91 Time: 8:20 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-1

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1254	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
PCB-1260	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
ALUMINUM	ICP, EPA METHOD 200.7	306	200	MCS/L	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 200.7	ND	60.0	MCS/L	A4:18 12/11
BARIUM	ICP, EPA METHOD 200.7	ND	50.0	MCS/L	A4:18 12/11
BERYLLIUM	ICP, EPA METHOD 200.7	ND	5.0	MCS/L	A4:18 12/11
CADMIUM	ICP, EPA METHOD 200.7	ND	5.0	MCS/L	A4:18 12/11
CALCIUM	ICP, EPA METHOD 200.7	153,000	200	MCS/L	A4:23 12/17
CHROMIUM	ICP, EPA METHOD 200.7	ND	10.0	MCS/L	A4:18 12/11
COBALT	ICP, EPA METHOD 200.7	ND	20.0	MCS/L	A4:18 12/11
COPPER	ICP, EPA METHOD 200.7	ND	25.0	MCS/L	A4:19 12/12
IRON	ICP, EPA METHOD 200.7	1,020	100	MCS/L	A4:18 12/11
MAGNESIUM	ICP, EPA METHOD 200.7	58,200	200	MCS/L	A4:18 12/11
MERCURY	EPA METHODS, 1979.245.1	ND	0.0002	MG/L	C4:76 12/11
POTASSIUM	EPA METHODS, 1979.258.1	4,590	1,000	MCS/L	B5:35 12/10
SILVER	ICP, EPA METHOD 200.7	ND	10.0	MCS/L	A4:18 12/11
VANADIUM	ICP, EPA METHOD 200.7	20	20.0	MCS/L	A4:18 12/11
ZINC	ICP, EPA METHOD 200.7	216	20.0	MCS/L	A4:19 12/12
ACID DIGESTION - FLAME/ICP	SW-846 3010	COMPLETED			D8:103 12/5
ARSENIC	EPA METHODS, 1979.206.2	ND	4.0	MCS/L	H6 A:722 12/13
THALLIUM	EPA METHODS, 1979.279.2	ND	10.0	MG/L	H6 A:709 12/5
LEAD	EPA METHODS, 1979.239.2	4.5	4.0	MCS/L	H6 A:720 12/13
SELENIUM	EPA METHODS, 1979.270.2	ND	10.0	MCS/L	H6 A:713 12/10
PH	STD. METH. 15TH ED.423	7.0		SUE190C	CC 12/4

REMARKS:

01938

LEGEND: < = LESS THAN, > = GREATER THAN, ND = NOT DETECTED

MG/KG=PPM, MCS/KG=PPB, MG/L=PPM, MCS/L=PPB, MCS/G=PPM

D = RESULT IS < PQL, BUT > MDL

EHC CTM PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 08

Date Sampled: 11/22/91 Time: 9:30 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-2

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used		Results	PQL	Unit	Analyst Reference
ACID DIGESTION - FURNACE	SW-846 3020	COMPLETED			D8:95 12/3
TARGET COMPOUND LIST VOLATILES		COMPLETED			GCD 2:3 11/27
CHLOROMETHANE	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
MANGANESE	ICP, EPA METHOD 200.7	76.5	10.0	MCG/L	A4:18 12/11
VINYL CHLORIDE	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
BROMOMETHANE	SW-846 METHOD 8240	D	10	MCG/L	GCD 2:3 11/26
CHLOROETHANE	SW-846 METHOD 8240	ND	10	MCG/L	GCD 2:3 11/26
1,1-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
METHYLENE CHLORIDE	SW-846 METHOD 8240	D	5	MCG/L	GCD 2:3 11/26
MERCURY DIGESTION - AQUEOUS	EPA METHODS, 1979.245.1	COMPLETED			D8:104 12/5
TRANS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
CYANIDE, TOTAL W/ DISTILLATION	EPA 335.2 ; 335.3	ND	0.01	MG/L	JOC 12/3
CIS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
1,1-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
CHLOROFORM	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/26
1,1,1-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
CARBON TETRACHLORIDE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
BENZENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
1,2-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
TRICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
1,2-DICHLOROPROPANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
BROMODICHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
TRANS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
TOLUENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
CIS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
1,1,2-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
TETRACHLOROETHENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
IRON	ICP, EPA METHOD 200.7	830	100	MCG/L	A4:18 12/11
DIBROMOCHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			EP 11/25
CHLOROBENZENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
ETHYLBENZENE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
BROMOFORM	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27
EXTRACTION FOR TCL B/N		EXTRACTED			DO 11/26
EXTRACTION FOR TCL - ACIDS		EXTRACTED			DO 11/26
1,1,2,2-TETRACHLOROETHANE	SW-846 METHOD 8240	ND	5	MCG/L	GCD 2:3 11/27

(CONTINUES ON NEXT PAGE)

REMARKS:

01939

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 08

Date Sampled: 11/22/91 Time: 9:30 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-2

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

STYRENE	SW-846 METHOD 8240	ND	5	MCG/L	BCD 2:3 11/27
ACETONE	SW-846 METHOD 8240	D	10	MCG/L	BCD 2:3 11/27
CARBON DISULFIDE	SW-846 METHOD 8240	ND	5	MCG/L	BCD 2:3 11/27
VINYL ACETATE	SW-846 METHOD 8240	ND	10	MCG/L	BCD 2:3 11/27
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DD 11/27
2-HEXANONE	SW-846 METHOD 8240	ND	10	MCG/L	BCD 2:3 11/27
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	5	MCG/L	BCD 2:3 11/27
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	10	MCG/L	BCD 2:3 11/27
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	10	MCG/L	BCD 2:3 11/27
SODIUM	EPA METHODS, 1979.273.1	1,460,000	1,000	MCG/L	B5:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:99 12/16
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCG/L	CM L:99 12/16
NICKEL	ICP, EPA METHOD 200.7	ND	30.0	MCG/L	A4:18 12/11
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCG/L	CM L:99 12/16
MERCURY	EPA METHODS, 1979.245.1	ND	0.0002	MS/L	C4:76 12/11
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
N-NITROSO-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
ISOPHORDONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCG/L	CM L:99 12/16
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:99 12/16
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCG/L	CM L:99 12/16
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16

(CONTINUES ON NEXT PAGE)

REMARKS:

01940

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 08

Date Sampled: 11/22/91 Time: 9:30 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-2

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	20	MCG/L	CM L:99 12/16
2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:99 12/16
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:99 12/16
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:99 12/16
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:99 12/16
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:99 12/16
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:99 12/16
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:99 12/16
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:99 12/16

(CONTINUES ON NEXT PAGE)

REMARKS:

01941

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 08

Date Sampled: 11/22/91 Time: 9:30 AM

Date Received: 11/22/91

Sampled By: BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-2

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
DI-N-OCTYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
INDENO -(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
BENZO-(G,H,I)-PERYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:99 12/16
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:99 12/16
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:22 12/7
ALPHA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
BETA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
DELTA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
GAMMA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
HEPTACHLOR	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
ALDRIN	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
DIELDRIN	EPA METHOD 8080	ND	0.10	MCS/L	GCCLP A:22 12/7
4,4-DDE	EPA METHOD 8080	ND	0.10	MCS/L	GCCLP A:22 12/7
ENDRIN	EPA METHOD 8080	ND	0.10	MCS/L	GCCLP A:22 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	0.10	MCS/L	GCCLP A:22 12/7
4,4-DDD	EPA METHOD 8080	ND	0.10	MCS/L	GCCLP A:22 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	.03J	0.10	MCS/L	GCCLP A:22 12/7
4,4-DDT	EPA METHOD 8080	ND	0.10	MCS/L	GCCLP A:22 12/7
METHOXYCHLOR	EPA METHOD 8080	.06J	.50	MCS/L	GCCLP A:22 12/7
ENDRIN KETONE	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
TOXAPHENE	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
PCB-1016	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1221	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1232	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7

(CONTINUES ON NEXT PAGE)

REMARKS:

01942

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001
Date Sampled: 11/22/91 Time: 9:30 AM
Sampled By: BABLIN
Sample Id: EHC-2
Location: FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 08
Date Received: 11/22/91
Collection Method: COMPOSITE
Matrix: WATER

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1242	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
PCB-1248	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
PCB-1254	EPA METHOD 8080	ND	1.0	MCG/L	GCCLP A:22 12/7
PCB-1260	EPA METHOD 8080	ND	1.0	MCG/L	GCCLP A:22 12/7
ALUMINUM	ICP, EPA METHOD 200.7	405	200	MCG/L	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 200.7	ND	60.0	MCG/L	A4:18 12/11
BARIUM	ICP, EPA METHOD 200.7	ND	50.0	MCG/L	A4:18 12/11
BERYLLIUM	ICP, EPA METHOD 200.7	ND	5.0	MCG/L	A4:18 12/11
CADMIUM	ICP, EPA METHOD 200.7	ND	5.0	MCG/L	A4:18 12/11
CALCIUM	ICP, EPA METHOD 200.7	367,000	200	MCG/L	A4:26 12/19
CHROMIUM	ICP, EPA METHOD 200.7	ND	10.0	MCG/L	A4:18 12/11
COBALT	ICP, EPA METHOD 200.7	ND	20.0	MCG/L	A4:18 12/11
COPPER	ICP, EPA METHOD 200.7	ND	25.0	MCG/L	A4:19 12/12
MAGNESIUM	ICP, EPA METHOD 200.7	129,000	200	MCG/L	A4:18 12/11
POTASSIUM	EPA METHODS, 1979.258.1	42,500	1,000	MCG/L	B5:35 12/10
SILVER	ICP, EPA METHOD 200.7	ND	10.0	MCG/L	A4:18 12/11
VANADIUM	ICP, EPA METHOD 200.7	25.1	20.0	MCG/L	A4:18 12/11
ZINC	ICP, EPA METHOD 200.7	ND	20.0	MCG/L	A4:19 12/12
ACID DIGESTION - FLAME/ICP	SW-846 3010	COMPLETED			D8:103 12/5
ARSENIC	EPA METHODS, 1979.206.2	ND	4.0	MCG/L	H6 A:723 12/14
THALLIUM	EPA METHODS, 1979.279.2	ND	10.0	MG/L	H6 A:709 12/5
LEAD	EPA METHODS, 1979.239.2	ND	4.0	MCG/L	H6 A:720 12/13
SELENIUM	EPA METHODS, 1979.270.2	ND	10.0	MCG/L	H6 A:713 12/10
PH	STD. METH. 15TH ED.423	7.5		SUR170C	CC 12/4

REMARKS:

01943

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) PQL

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 12

Date Sampled: 11/21/91 Time: 3:30 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-3

Matrix: WATER

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

CARBON DISULFIDE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
EXTRACTION FOR TCL B/N		EXTRACTED			DO 11/26
2-HEXANONE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DO 11/27
XYLENE (TOTAL)	SW-846 METHOD 8240	5.5	5	MCS/L	MC D:2-3 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
SODIUM	EPA METHODS, 1979.273.1	1,600,000	1,000	MCS/L	BS:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:100 12/17
NICKEL	ICP, EPA METHOD 200.7	ND	30.0	MCS/L	A4:18 12/11
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCS/L	CM L:100 12/17
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCS/L	CM L:100 12/17
MERCURY	EPA METHODS, 1979.245.1	ND	0.0002	MS/L	C4:76 12/11
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCS/L	CM L:100 12/17
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
N-NITROSD-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
ISOPHORONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCS/L	CM L:100 12/17
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCS/L	CM L:100 12/17
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	D	10	MCS/L	CM L:100 12/17
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCS/L	CM L:100 12/17

(CONTINUES ON NEXT PAGE)

REMARKS:

01951

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 12

Date Sampled: 11/21/91 Time: 3:30 PM

Date Received: 11/22/91

Sampled By: WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-3

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	20	MCS/L	CM L:100 12/17
2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCS/L	CM L:100 12/17
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCS/L	CM L:100 12/17
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCS/L	CM L:100 12/17
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCS/L	CM L:100 12/17
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCS/L	CM L:100 12/17
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCS/L	CM L:100 12/17
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCS/L	CM L:100 12/17
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17

(CONTINUES ON NEXT PAGE)

REMARKS:

01952

CTM ANALYTICAL LABS, LTD
Laboratory Analysis Report
24 DEC 1991

PAGE 41

EHC CTM PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 12

Date Sampled: 11/21/91 Time: 3:30 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-3

Matrix: WATER

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	POL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
DI-N-OCTYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
INDENO -(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
BENZO-(G,H,I)-PERLYENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:100 12/17
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:22 12/7
ALPHA-BHC	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
BETA-BHC	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
DELTA-BHC	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
GAMMA-BHC	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
HEPTACHLOR	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
ALDRIN	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	.05	MCG/L	GCCLP A:22 12/7
DIELDRIN	EPA METHOD 8080	ND	0.10	MCG/L	GCCLP A:22 12/7
4,4-DDE	EPA METHOD 8080	ND	0.10	MCG/L	GCCLP A:22 12/7
ENDRIN	EPA METHOD 8080	ND	0.10	MCG/L	GCCLP A:22 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	0.10	MCG/L	GCCLP A:22 12/7
4,4-DDD	EPA METHOD 8080	ND	0.10	MCG/L	GCCLP A:22 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	.09J	0.10	MCG/L	GCCLP A:22 12/7
4,4-DDT	EPA METHOD 8080	ND	0.10	MCG/L	GCCLP A:22 12/7
METHOXYCHLOR	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
ENDRIN KETONE	EPA METHOD 8080	ND	.10	MCG/L	GCCLP A:22 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
TOXAPHENE	EPA METHOD 8080	ND	1.0	MCG/L	GCCLP A:22 12/7
PCB-1016	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
PCB-1221	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
PCB-1232	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
PCB-1242	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7

(CONTINUES ON NEXT PAGE)

REMARKS:

01953

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 12

Date Sampled: 11/21/91 Time: 3:30 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-3

Matrix: WATER

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1248	EPA METHOD 8080	ND	.50	MCG/L	GCCLP A:22 12/7
PCB-1254	EPA METHOD 8080	ND	1.0	MCG/L	GCCLP A:22 12/7
PCB-1260	EPA METHOD 8080	ND	1.0	MCG/L	GCCLP A:22 12/7
ALUMINUM	ICP, EPA METHOD 200.7	3,630	200	MCG/L	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 200.7	ND	60.0	MCG/L	A4:18 12/11
BARIUM	ICP, EPA METHOD 200.7	ND	50.0	MCG/L	A4:18 12/11
BERYLLIUM	ICP, EPA METHOD 200.7	ND	5.0	MCG/L	A4:18 12/11
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			EP 11/26
CADMIUM	ICP, EPA METHOD 200.7	ND	5.0	MCG/L	A4:18 12/11
CALCIUM	ICP, EPA METHOD 200.7	159,000	200	MCG/L	A4:23 12/17
CHROMIUM	ICP, EPA METHOD 200.7	ND	10.0	MCG/L	A4:18 12/11
COBALT	ICP, EPA METHOD 200.7	ND	20.0	MCG/L	A4:18 12/11
COPPER	ICP, EPA METHOD 200.7	ND	25.0	MCG/L	A4:19 12/12
MAGNESIUM	ICP, EPA METHOD 200.7	74,200	200	MCG/L	A4:18 12/11
POTASSIUM	EPA METHODS, 1979.258.1	36,700	1,000	MCG/L	B5:35 12/10
SILVER	ICP, EPA METHOD 200.7	ND	10.0	MCG/L	A4:18 12/11
VANADIUM	ICP, EPA METHOD 200.7	24.1	20.0	MCG/L	A4:18 12/11
ZINC	ICP, EPA METHOD 200.7	80.4	20.0	MCG/L	A4:19 12/12
ACID DIGESTION - FLAME/ICP	SM-846 3010	COMPLETED			D8:103 12/5
ARSENIC	EPA METHODS, 1979.206.2	ND	4.0	MCG/L	H6 A:722 12/13
THALLIUM	EPA METHODS, 1979.279.2	ND	10.0	MG/L	H6 A:709 12/5
LEAD	EPA METHODS, 1979.239.2	9.4	4.0	MCG/L	H6 A:721 12/13
SELENIUM	EPA METHODS, 1979.270.2	ND	10.0	MCG/L	H6 A:713 12/10
PH	STD. METH. 15TH ED. 423	7.7		SUE170C	CC 12/4

REMARKS:

01954

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) HDL

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001
Date Sampled: 11/21/91 Time: 11:30 AM
Sampled By: WILLIAMS/BABLIN
Sample Id: EHC-4
Location: FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 13
Date Received: 11/22/91
Collection Method: COMPOSITE
Matrix: WATER

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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ACID DIGESTION - FURNACE	SW-846 3020	COMPLETED		D8:95 12/3
TARGET COMPOUND LIST VOLATILES		COMPLETED		MC D:2-3 11/26
MANGANESE	ICP, EPA METHOD 200.7	49.0	10.0	MCS/L A4:18 12/11
CHLOROMETHANE	SW-846 METHOD 8240	ND	10	MCS/L MC D:2-3 11/26
VINYL CHLORIDE	SW-846 METHOD 8240	ND	10	MCS/L MC D:2-3 11/26
BROMOMETHANE	SW-846 METHOD 8240	ND	10	MCS/L MC D:2-3 11/26
CHLOROETHANE	SW-846 METHOD 8240	ND	10	MCS/L MC D:2-3 11/26
1,1-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
MERCURY DIGESTION - AQUEOUS	EPA METHODS, 1979.245.1	COMPLETED		D8:104 12/5
METHYLENE CHLORIDE	SW-846 METHOD 8240	D	5	MCS/L MC D:2-3 11/26
CYANIDE, TOTAL W/ DISTILLATION	EPA 335.2 ; 335.3	ND	0.01	MG/L JOC 12/3
TRANS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
CIS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
1,1-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
CHLOROFORM	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
1,1,1-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
CARBON TETRACHLORIDE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
BENZENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
1,2-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
TRICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
1,2-DICHLOROPROPANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
BROMODICHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
TRANS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
TOLUENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
CIS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
1,1,2-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
TETRACHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
IRON	ICP, EPA METHOD 200.7	1,390	100	MCS/L A4:18 12/11
DIBROMOCHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
CHLOROBENZENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
ETHYLBENZENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
BROMOFORM	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
1,1,2,2-TETRACHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
EXTRACTION FOR TCL - ACIDS		EXTRACTED		DJ 11/26
STYRENE	SW-846 METHOD 8240	ND	5	MCS/L MC D:2-3 11/26
ACETONE	SW-846 METHOD 8240	11	10	MCS/L MC D:2-3 11/26

(CONTINUES ON NEXT PAGE)

REMARKS:

01955

EHC

900 ROUTE 146

CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

Date Sampled: 11/21/91 Time: 11:30 AM

Sampled By: WILLIAMS/BABLIN

Sample Id: EHC-4

Location: FRONTIER STONE/NIAGARA MAT.

CTM PROJECT #: 91.01401

CTM Task #: 911122R

CTM Sample No: 911122R 13

Date Received: 11/22/91

Collection Method: COMPOSITE

Matrix: WATER

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

CARBON DISULFIDE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DD 11/27
2-HEXANONE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
EXTRACTION FOR TCL B/N		EXTRACTED			DD 11/26
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
SODIUM	EPA METHODS, 1979.273.1	2,200,000	1,000	MCS/L	BS:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:100 12/17
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
NICKEL	ICP, EPA METHOD 200.7	ND	30.0	MCS/L	AA:18 12/11
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
MERCURY	EPA METHODS, 1979.245.1	ND	0.0002	MS/L	C4:76 12/11
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCS/L	CM L:100 12/17
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
N-NITROSO-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
ISOPHORONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCS/L	CM L:100 12/17
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCS/L	CM L:100 12/17

(CONTINUES ON NEXT PAGE)

REMARKS:

01956

CTM ANALYTICAL LABS, LTD
Laboratory Analysis Report
24 DEC 1991

PAGE 45

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 13

Date Sampled: 11/21/91 Time: 11:30 AM

Date Received: 11/22/91

Sampled By : WILLIAMS/BADLIN

Collection Method: COMPOSITE

Sample Id: EHC-4

Matrix: WATER

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	POL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	20	MCG/L	CM L:100 12/17
2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:100 12/17
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:100 12/17
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	50	MCG/L	CM L:100 12/17
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:100 12/17
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCG/L	CM L:100 12/17
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:100 12/17
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:100 12/17
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	50	MCG/L	CM L:100 12/17
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	20	MCG/L	CM L:100 12/17
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCG/L	CM L:100 12/17

(CONTINUES ON NEXT PAGE)

REMARKS:

01957

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 13

Date Sampled: 11/21/91 Time: 11:30 AM

Date Received: 11/22/91

Sampled By: WILLIAMS/BARLIN

Collection Method: COMPOSITE

Sample Id: EHC-4

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
DI-N-OCTYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
INDENO -(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
BENZO-(G,H,I)-PERYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	10	MCS/L	CM L:100 12/17
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	10	MCS/L	CM L:100 12/17
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:22 12/7
ALPHA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
BETA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
DELTA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
GAMMA-BHC	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
HEPTACHLOR	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
ALDRIN	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	.05	MCS/L	GCCLP A:22 12/7
DIELDRIN	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
4,4-DDE	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ENDRIN	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
4,4-DDD	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	.03J	.10	MCS/L	GCCLP A:22 12/7
4,4-DDT	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
METHOXYCHLOR	EPA METHOD 8080	.05J	.50	MCS/L	GCCLP A:22 12/7
ENDRIN KETONE	EPA METHOD 8080	ND	.10	MCS/L	GCCLP A:22 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
TOXAPHENE	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
PCB-1016	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1221	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1232	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1242	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7

(CONTINUES ON NEXT PAGE)

REMARKS:

01958

CTM ANALYTICAL LABS, LTD
Laboratory Analysis Report
24 DEC 1991

PAGE 47

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS CTM Task #: 911122R

Purchase Order Number: 63055.001 CTM Sample No: 911122R 13
Date Sampled: 11/21/91 Time: 11:30 AM Date Received: 11/22/91
Sampled By: WILLIAMS/BABLIN Collection Method: COMPOSITE
Sample Id: EHC-4 Matrix: WATER
Location: FRONTIER STONE/NIABARA MAT.

Parameters and Standard Methodology Used Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1248	EPA METHOD 8080	ND	.50	MCS/L	GCCLP A:22 12/7
PCB-1254	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
PCB-1260	EPA METHOD 8080	ND	1.0	MCS/L	GCCLP A:22 12/7
ALUMINUM	ICP, EPA METHOD 200.7	930	200	MCS/L	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 200.7	ND	60.0	MCS/L	A4:18 12/11
BARIUM	ICP, EPA METHOD 200.7	ND	50.0	MCS/L	A4:18 12/11
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			EP 11/26
BERYLLIUM	ICP, EPA METHOD 200.7	ND	5.0	MCS/L	A4:18 12/11
CADMIUM	ICP, EPA METHOD 200.7	ND	5.0	MCS/L	A4:18 12/11
CALCIUM	ICP, EPA METHOD 200.7	166,000	200	MCS/L	A4:23 12/17
CHROMIUM	ICP, EPA METHOD 200.7	ND	10.0	MCS/L	A4:18 12/11
COBALT	ICP, EPA METHOD 200.7	ND	20.0	MCS/L	A4:18 12/11
COPPER	ICP, EPA METHOD 200.7	ND	25.0	MCS/L	A4:19 12/12
MAGNESIUM	ICP, EPA METHOD 200.7	106,000	200	MCS/L	A4:18 12/11
POTASSIUM	EPA METHODS, 1979.258.1	42,600	1,000	MCS/L	B5:35 12/10
SILVER	ICP, EPA METHOD 200.7	ND	10.0	MCS/L	A4:18 12/11
VANADIUM	ICP, EPA METHOD 200.7	28.1	20.0	MCS/L	A4:18 12/11
ZINC	ICP, EPA METHOD 200.7	45.8	20.0	MCS/L	A4:19 12/12
ACID DIGESTION - FLAME/ICP	SW-846 3010	COMPLETED			D8:103 12/5
ARSENIC	EPA METHODS, 1979.206.2	ND	4.0	MCS/L	H6 A:722 12/13
THALLIUM	EPA METHODS, 1979.279.2	ND	10.0	MCS/L	H6 A:709 12/5
LEAD	EPA METHODS, 1979.239.2	ND	4.0	MCS/L	H6 A:721 12/13
SELENIUM	EPA METHODS, 1979.270.2	ND	10.0	MCS/L	H6 A:713 12/10
PH	STD. METH. 15TH ED. 423	7.7		SU@160C	CC 12/4

REMARKS:

01959

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCS/KG=PPB, MG/L=PPM, MCS/L=PPB, MCS/G=PPM
D = RESULT IS (PQL, BUT) PQL

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive
P.O. Box 727
Latham, NY 12110
518-786-7100
FAX 518-786-7139



GC/MS
GC
ICAP
Sampling Services

LABORATORY SERVICES
CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME ** 6035.006*
EHC \ Frontier Stone-Niagara Materials SAMPLERS: (Signature) *C. Boll*

CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
<i>91122K07</i>	<i>EHC - 1</i>	<i>11/21/91</i>	<i>5:20 P</i>	<i>GW</i>		<i>4</i>	<i>VOA</i>
			<i>A P</i>	<i>GW</i>		<i>3</i>	<i>BNA - TCL</i>
			<i>A P</i>	<i>GW</i>		<i>3</i>	<i>P/P - TCL</i>
			<i>A P</i>	<i>GW</i>		<i>1</i>	<i>Metals - TCL</i>
			<i>A P</i>	<i>GW</i>		<i>1</i>	<i>CN(-) - TCL</i>
<i>108</i>	<i>EHC-1 (Dup)</i>	<i>11/21/91</i>	<i>8:20 A</i>	<i>GW</i>		<i>1</i>	<i>Metals - TCL</i>
	<i>"</i>	<i>"</i>	<i>A P</i>	<i>GW</i>		<i>1</i>	<i>CN(-) - TCL</i>
<i>08</i>	<i>EHC-2</i>	<i>11/22/91</i>	<i>9:30 A</i>	<i>GW</i>		<i>4</i>	<i>VOA</i>
			<i>A P</i>	<i>GW</i>		<i>3</i>	<i>BNA - TCL</i>
			<i>A P</i>	<i>GW</i>		<i>3</i>	<i>P/P - TCL</i>
			<i>A P</i>	<i>GW</i>		<i>1</i>	<i>Metals - TCL</i>
			<i>A P</i>	<i>GW</i>		<i>1</i>	<i>CN(-) - TCL</i>

Relinquished by: (Signature) *C. Boll* Received by: (Signature) Date/Time

Relinquished by: (Signature) Received by: (Signature) Date/Time

Relinquished by: (Signature) Received by: (Signature) Date/Time

Relinquished by: (Signature) Received by Mobile Laboratory for field analysis: (Signature) Date/Time

Dispatched by: (Signature) *C. Boll* Date/Time *11/22/91 3:30 PM* Received for Laboratory by: *[Signature]* Date/Time *11/22/91 3:30 PM*

Method of Shipment:

Distribution: Orig. - Accompany Shipment

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive
P.O. Box 727
Latham, NY 12110
518-786-7100
FAX 518-786-7139



GC/MS
GC
ICAP
Sampling Services

LABORATORY SERVICES
CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME ** 63035.001*

SAMPLERS: (Signature) *C. Bohl*

EHC / Frontier Stone - Niagara Materials

Lauri Williams (EHC 3)

CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONTS	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
<i>91122K13</i>	<i>EHC - 3</i>	<i>11/21/91</i>	<i>3:30</i>	<i>A</i> <i>P</i> <i>GW</i>	<i>X</i>	<i>4</i>	<i>VOA</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>3</i>	<i>BNA - TCL</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>3</i>	<i>P/P - TCL</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>1</i>	<i>metals - TCL</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>1</i>	<i>CN⁽⁻⁾ - TCL</i>
<i>1314</i>	<i>EHC - 4</i>	<i>11/21/91</i>	<i>1:00</i>	<i>A</i> <i>P</i> <i>GW</i>	<i>X</i>	<i>4</i>	<i>VOA</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>3</i>	<i>BNA - TCL</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>3</i>	<i>P/P - TCL</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>1</i>	<i>METALS - TCL</i>
				<i>A</i> <i>P</i> <i>GW</i>		<i>1</i>	<i>CN⁽⁻⁾ - TCL</i>
				<i>A</i> <i>P</i>			
				<i>A</i> <i>P</i>			

Relinquished by: (Signature)

C. Bohl

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by Mobile Laboratory for field analysis: (Signature)

Date/Time

Dispatched by: (Signature)

C. Bohl

Date/Time

11/22/91 3:30

Received for Laboratory by:

[Signature]

Date/Time

11/22/91 3:30

Method of Shipment:

Distribution: Orig. - Accompany Shipment

1 Copy - Coordinator Field Files

01970

APPENDIX H

Analytical TCLP Soil Quality Results

CTM ANALYTICAL LABS, LTD.
15 Century Hill Dr.
Latham, NY 12110
Phone: (518)786-7100 Fax: (518)786-7139

Laboratory Analysis Report
Prepared for: EHC
Project Number: 91.01401
Task Number: 911122R
24 DEC 1991

IMPORTANT - PLEASE NOTE

1. All results are calculated on a dry weight basis unless otherwise specified.
2. PQL = Practical Quantitation Limit.
3. A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358
NJ: 73581

MA: NY052
PA: 68-402

CT: PH-0551
NH: 199014-C

01912

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 04

Date Sampled: 11/21/91 Time: 7:15 PM

Date Received: 11/22/91

Sampled By: WILLIAMS

Collection Method: COMPOSITE

Sample Id: LAGOON 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used		Results	PQL	Unit	Analyst Reference
MERCURY PREPARATION - TCLP	SW-846 METHOD 1311	COMPLETED			D8:104 12/5
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	EXTRACTED			ACH 12/1
BENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	51	MCS/L	MC C:152 12/6
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L	MC C:152 12/6
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	52	MCS/L	MC C:152 12/6
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L	MC C:152 12/6
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	53	MCS/L	CH L:103 12/19
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	94	MCS/L	CH L:103 12/19
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	47	MCS/L	CH L:103 12/19
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	49	MCS/L	CH L:103 12/19
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	114	MCS/L	CH L:103 12/19
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	51	MCS/L	CH L:103 12/19
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	60	MCS/L	CH L:103 12/19
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCS/L	CH L:103 12/19
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	48	MCS/L	CH L:103 12/19
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCS/L	CH L:103 12/19
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	55	MCS/L	CH L:103 12/19
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP)	SW-846 METHOD 8080	ND	2.0	MCS/L	GC3 C:119 12/12
ENDRIN (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
HEPTACHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
LINDANE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
METHOXYCHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
TOXAPHENE (TCLP)	SW-846 METHOD 8080	ND	4.0	MCS/L	GC3 C:119 12/12
HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
EXTRACTION FOR TCLP PESTICIDES	SW-846 METHOD 8080	EXTRACTED			ACH 12/6
2,4-D (TCLP)	SW-846 METHOD 8150	ND	0.20	MCS/L	GC3 C:14 12/12
2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD 8150	ND	0.20	MCS/L	GC3 C:14 12/12

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REMARKS:

01928

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 04

Date Sampled: 11/21/91 Time: 7:15 PM

Date Received: 11/22/91

Sampled By: WILLIAMS

Collection Method: COMPOSITE

Sample Id: LAGOON 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results

POL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED			ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.11	MG/L	A4:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.35	0.050	MG/L	A4:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.017	0.005	MG/L	A4:22 12/17
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.011	MG/L	A4:21 12/13
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D8:93 12/3
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.056	MG/L	A4:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004	MG/L	C4:76 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10	MG/L	A4:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012	MG/L	A4:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED			D8:117 12/11

REMARKS:

01929

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (POL, BUT) POL

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 05

Date Sampled: 11/21/91 Time: 7:20 PM

Date Received: 11/22/91

Sampled By: WILLIAMS

Collection Method: COMPOSITE

Sample Id: LAGOON 1-B

Matrix: SOIL

Location: FRONTIER STONE, NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
MERCURY PREPARATION - TCLP SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ZERO HEADSPACE EXTRACTION SW-846 METHOD 1311	EXTRACTED			ACM 12/1
BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCS/L	MC C:151 12/5
CARBON TETRACHLORIDE (TCLP) SW-846 METHOD 8240	ND	50	MCS/L	MC C:151 12/5
CHLOROBNZENE (TCLP) SW-846 METHOD 8240	ND	50	MCS/L	MC C:151 12/5
CHLOROFORM (TCLP) SW-846 METHOD 8240	ND	52	MCS/L	MC C:151 12/5
1,4-DICHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCS/L	MC C:151 12/5
1,2-DICHLOROETHANE (TCLP) SW-846 METHOD 8240	ND	50	MCS/L	MC C:151 12/5
1,1-DICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCS/L	MC C:151 12/5
METHYL ETHYL KETONE (TCLP) SW-846 METHOD 8240	ND	100	MCS/L	MC C:151 12/5
TETRACHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	53	MCS/L	MC C:151 12/5
TRICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	54	MCS/L	MC C:151 12/5
VINYL CHLORIDE (TCLP) SW-846 METHOD 8240	ND	100	MCS/L	MC C:151 12/5
O-CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	55	MCS/L	CM L:103 12/19
PENTACHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	95	MCS/L	CM L:103 12/19
2,4,5-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	40	MCS/L	CM L:103 12/19
2,4,6-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	47	MCS/L	CM L:103 12/19
M & P CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	118	MCS/L	CM L:103 12/19
HEXACHLOROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCS/L	CM L:103 12/19
HEXACHLOROBUTADIENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	49	MCS/L	CM L:103 12/19
PYRIDINE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	73	MCS/L	CM L:103 12/19
2,4-DINITROTOLUENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	42	MCS/L	CM L:103 12/19
HEXACHLOROETHANE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCS/L	CM L:103 12/19
NITROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCS/L	CM L:103 12/19
EXTRACTION FOR TCLP ACID/EXT. SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP B/N SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP) SW-846 METHOD 8080	ND	2.0	MCS/L	GC3 C:119 12/12
ENDRIN (TCLP) SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
HEPTACHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
LINDANE (TCLP) SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
METHOXYCHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
TOXAPHENE (TCLP) SW-846 METHOD 8080	ND	4.0	MCS/L	GC3 C:119 12/12
HEPTACHLOR EPOXIDE (TCLP) SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:119 12/12
EXTRACTION FOR TCLP PESTICIDES SW-846 METHOD 8080	EXTRACTED			ACM 12/6
2,4-D (TCLP) SW-846 METHOD 8150	ND	0.20	MCS/L	GC3 C:121 12/12
2,4,5-TP (SILVEX) (TCLP) SW-846 METHOD 8150	ND	0.20	MCS/L	GC3 C:121 12/12

(CONTINUES ON NEXT PAGE)

REMARKS:

01930

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 05

Date Sampled: 11/21/91 Time: 7:20 PM

Date Received: 11/22/91

Sampled By : WILLIAMS

Collection Method: COMPOSITE

Sample Id: LAGOON 1-B

Matrix: SOIL

Location : FRONTIER STONE.NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED		ACM 12/11	
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.11	MG/L	AA:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.38	0.050	MG/L	AA:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.025	MG/L	AA:22 12/17
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			DB:93 12/3
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.011	MG/L	AA:21 12/13
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.062	MG/L	AA:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004	MG/L	CA:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10	MG/L	AA:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012	MG/L	AA:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED			DB:117 12/11

REMARKS:

01931

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) HGL

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 06

Date Sampled: 11/21/91 Time: 7:25 PM

Date Received: 11/22/91

Sampled By: WILLIAMS

Collection Method: COMPOSITE

Sample Id: LAGOON 1-C

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

	Results	PQL	Unit	Analyst Reference
MERCURY PREPARATION - TCLP SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ZERO HEADSPACE EXTRACTION SW-846 METHOD 1311	EXTRACTED			ACH 12/1
BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CARBON TETRACHLORIDE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CHLORO BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CHLOROFORM (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,4-DICHLORO BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,2-DICHLOROETHANE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,1-DICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
METHYL ETHYL KETONE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:151 12/5
TETRACHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
TRICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
VINYL CHLORIDE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:151 12/5
O-CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	50	MCG/L	CM L:103 12/19
PENTACHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	84	MCG/L	CM L:103 12/19
2,4,5-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	42	MCG/L	CM L:103 12/19
2,4,6-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	46	MCG/L	CM L:103 12/19
M & P CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	108	MCG/L	CM L:103 12/19
HEXACHLORO BENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCG/L	CM L:103 12/19
HEXACHLOROBUTADIENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCG/L	CM L:103 12/19
PYRIDINE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	75	MCG/L	CM L:103 12/19
2,4-DINITROTOLUENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	43	MCG/L	CM L:103 12/19
HEXACHLOROETHANE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	54	MCG/L	CM L:103 12/19
NITROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	52	MCG/L	CM L:103 12/19
EXTRACTION FOR TCLP ACID/EXT. SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP B/N SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP) SW-846 METHOD 8080	ND	2.0	MCG/L	GC3 C:119 12/12
ENDRIN (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
HEPTACHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
LINDANE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
METHOXYCHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
TOXAPHENE (TCLP) SW-846 METHOD 8080	ND	4.0	MCG/L	GC3 C:119 12/12
HEPTACHLOR EPOXIDE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
EXTRACTION FOR TCLP PESTICIDES SW-846 METHOD 8080	EXTRACTED			ACH 12/6
2,4-D (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12
2,4,5-TP (SILVEX) (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12

(CONTINUES ON NEXT PAGE)

REMARKS:

01932

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 06

Date Sampled: 11/21/91 Time: 7:25 PM

Date Received: 11/22/91

Sampled By : WILLIAMS

Collection Method: COMPOSITE

Sample Id: LAGOON 1-C

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results POL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED			ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.13	MG/L	A4:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.43	0.050	MG/L	A4:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.012	0.005	MG/L	A4:22 12/17
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.014	MG/L	A4:21 12/13
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D8:93 12/3
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.070	MG/L	A4:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004	MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10	MG/L	A4:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012	MG/L	A4:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED			D8:117 12/11

REMARKS:

01933

LEGEND: < = LESS THAN, > = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (POL, BUT) POL

ENC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001
Date Sampled: 11/21/91 Time: 6:05 PM
Sampled By: WILLIAMS/BABLIN
Sample Id: LASOON 2-A
Location: FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 09
Date Received: 11/22/91
Collection Method: COMPOSITE
Matrix: SOIL

Parameters and Standard Methodology Used

	Results	PQL	Unit	Analyst Reference
MERCURY PREPARATION - TCLP SW-846 METHOD 1311	COMPLETED			D8:104 12/5
ZERO HEADSPACE EXTRACTION SW-846 METHOD 1311	EXTRACTED			ACH 12/1
BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CARBON TETRACHLORIDE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CHLOROFORM (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
EXTRACTION FOR TCLP PESTICIDES SW-846 METHOD 8080	EXTRACTED			ACH 12/6
1,4-DICHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,2-DICHLOROETHANE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,1-DICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
METHYL ETHYL KETONE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:151 12/5
TETRACHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	51	MCG/L	MC C:151 12/5
TRICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	51	MCG/L	MC C:151 12/5
VINYL CHLORIDE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:151 12/5
O-CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	53	MCG/L	CM L:103 12/19
PENTACHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	92	MCG/L	CM L:103 12/19
2,4,5-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	47	MCG/L	CM L:103 12/19
2,4,6-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	47	MCG/L	CM L:103 12/19
M & P CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	114	MCG/L	CM L:103 12/19
HEXACHLOROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	46	MCG/L	CM L:103 12/19
HEXACHLOROBUTADIENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	49	MCG/L	CM L:103 12/19
PYRIDINE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	77	MCG/L	CM L:103 12/19
2,4-DINITROTOLUENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	40	MCG/L	CM L:103 12/19
HEXACHLOROETHANE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	59	MCG/L	CM L:103 12/19
NITROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	55	MCG/L	CM L:103 12/19
EXTRACTION FOR TCLP B/N SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP ACID/EXT. SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP) SW-846 METHOD 8080	ND	2.0	MCG/L	GC3 C:119 12/12
ENDRIN (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
HEPTACHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
LINDANE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
METHOXYCHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
TOXAPHENE (TCLP) SW-846 METHOD 8080	ND	4.0	MCG/L	GC3 C:119 12/12
HEPTACHLOR EPOXIDE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:119 12/12
2,4-D (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12
2,4,5-TP (SILVEX) (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12

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REMARKS:

01944

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 09

Date Sampled: 11/21/91 Time: 6:05 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: LAGOON 2-A

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED		ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.14 MG/L	A4:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.32	0.050 MG/L	A4:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.005	0.005 MG/L	A4:22 12/17
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.013 MG/L	A4:21 12/13
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED		D8:93 12/3
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.069 MG/L	A4:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004 MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10 MG/L	A4:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012 MG/L	A4:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED		D8:117 12/11

REMARKS:

01945

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) ND

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 10

Date Sampled: 11/21/91 Time: 5:45 PM

Date Received: 11/22/91

Sampled By: WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: LAGOON 2-B

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

MERCURY PREPARATION - TCLP	SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	COMPLETED			DO 12/3
BENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
EXTRACTION FOR TCLP PESTICIDES	SW-846 METHOD 8080	EXTRACTED			ACH 12/6
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	51	MCG/L	MC C:151 12/5
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCG/L	MC C:151 12/5
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	100	MCG/L	MC C:151 12/5
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	53	MCG/L	MC C:151 12/5
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	53	MCG/L	MC C:151 12/5
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	100	MCG/L	MC C:151 12/5
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	51	MCG/L	CM L:103 12/19
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	85	MCG/L	CM L:103 12/19
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	44	MCG/L	CM L:103 12/19
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	45	MCG/L	CM L:103 12/19
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	115	MCG/L	CM L:103 12/19
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	45	MCG/L	CM L:103 12/19
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	46	MCG/L	CM L:103 12/19
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	51	MCG/L	CM L:103 12/19
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	40	MCG/L	CM L:103 12/19
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCG/L	CM L:103 12/19
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	52	MCG/L	CM L:103 12/19
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP)	SW-846 METHOD 8080	ND	2.0	MCG/L	GC3 C:120 12/12
ENDRIN (TCLP)	SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
HEPTACHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
LINDANE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
METHOXYCHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
TOXAPHENE (TCLP)	SW-846 METHOD 8080	ND	4.0	MCG/L	GC3 C:120 12/12
HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
2,4-D (TCLP)	SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12
2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12

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REMARKS:

01946

EHC
900 ROUTE 146
CLIFTON PARK

NY 12065

CTM PROJECT #: 91.01401

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

Date Sampled: 11/21/91 Time: 5:45 PM

Sampled By : WILLIAMS/BABLIN

Sample Id: LAGOON 2-B

Location : FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 10

Date Received: 11/22/91

Collection Method: COMPOSITE

Matrix: SOIL

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED			ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.15	MG/L	AA:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.28	0.050	MG/L	AA:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.007	MG/L	AA:22 12/17
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.013	MG/L	AA:21 12/13
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D8:99 12/4
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.073	MG/L	AA:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004	MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10	MG/L	AA:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012	MG/L	AA:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED			D8:117 12/11

REMARKS:

01947

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) HDL

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001
Date Sampled: 11/21/91 Time: 5:20 PM
Sampled By: WILLIAMS/BABLIN
Sample Id: LAGOON 2-C
Location: FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 11
Date Received: 11/22/91
Collection Method: COMPOSITE
Matrix: SOIL

Parameters and Standard Methodology Used

	Results	PQL	Unit	Analyst Reference
MERCURY PREPARATION - TCLP SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ZERO HEADSPACE EXTRACTION SW-846 METHOD 1311	COMPLETED			DO 12/3
BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
CARBON TETRACHLORIDE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
CHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
EXTRACTION FOR TCLP PESTICIDES SW-846 METHOD 8080	EXTRACTED			ACH 12/6
CHLOROFORM (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
1,4-DICHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
1,2-DICHLOROETHANE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
1,1-DICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
METHYL ETHYL KETONE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:152 12/6
TETRACHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
TRICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
VINYL CHLORIDE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:152 12/6
O-CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	51	MCG/L	CM L:104 12/19
PENTACHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	90	MCG/L	CM L:104 12/19
2,4,5-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	42	MCG/L	CM L:104 12/19
2,4,6-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	45	MCG/L	CM L:104 12/19
M & P CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	110	MCG/L	CM L:104 12/19
HEXACHLOROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	44	MCG/L	CM L:104 12/19
HEXACHLOROBUTADIENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	48	MCG/L	CM L:104 12/19
PYRIDINE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	87	MCG/L	CM L:104 12/19
2,4-DINITROTOLUENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	40	MCG/L	CM L:104 12/19
HEXACHLOROETHANE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCG/L	CM L:104 12/19
NITROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	54	MCG/L	CM L:104 12/19
EXTRACTION FOR TCLP ACID/EXT. SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP B/N SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP) SW-846 METHOD 8080	ND	2.0	MCG/L	GC3 C:121 12/12
ENDRIN (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:121 12/12
HEPTACHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:121 12/12
LINDANE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:121 12/12
METHOXYCHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:121 12/12
TOXAPHENE (TCLP) SW-846 METHOD 8080	ND	4.0	MCG/L	GC3 C:121 12/12
HEPTACHLOR EPOXIDE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:121 12/12
2,4-D (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12
2,4,5-TP (SILVEX) (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:121 12/12

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REMARKS:

01948

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 11

Date Sampled: 11/21/91 Time: 5:20 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: LAGOON 2-C

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED		ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.14 MG/L	A4:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.31	0.050 MG/L	A4:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.010	0.005 MG/L	A4:22 12/17
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED		D8:99 12/4
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.014 MG/L	A4:21 12/13
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.081 MG/L	A4:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004 MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10 MG/L	A4:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.015 MG/L	A4:21 12/13
ACID DIGESTION ON TCLP EXTRACTS	SW-846 3010	COMPLETED		D8:117 12/11

REMARKS:

01949

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) HDL

CTM ANALYTICAL LABS, LTD
Laboratory Analysis Report
24 DEC 1991

PAGE 38

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 12

Date Sampled: 11/21/91 Time: 3:30 PM

Date Received: 11/22/91

Sampled By: WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: EHC-3

Matrix: WATER

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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ACID DIGESTION - FURNACE	SW-846 3020	COMPLETED		DB:95 12/3
TARGET COMPOUND LIST VOLATILES		COMPLETED		MC D:2-3 11/26
MANGANESE	ICP, EPA METHOD 200.7	200	10.0	MCB/L A4:18 12/11
CHLOROMETHANE	SW-846 METHOD 8240	ND	10	MCB/L MC D:2-3 11/26
VINYL CHLORIDE	SW-846 METHOD 8240	ND	10	MCB/L MC D:2-3 11/26
BROMOMETHANE	SW-846 METHOD 8240	D	10	MCB/L MC D:2-3 11/26
CHLOROETHANE	SW-846 METHOD 8240	ND	10	MCB/L MC D:2-3 11/26
1,1-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
MERCURY DIGESTION - AQUEOUS	EPA METHODS, 1979.245.1	COMPLETED		DB:104 12/5
METHYLENE CHLORIDE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
CYANIDE, TOTAL W/ DISTILLATION	EPA 335.2 ; 335.3	ND	0.01	MS/L JOC 12/3
TRANS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
CIS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
1,1-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
CHLOROFORM	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
1,1,1-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
CARBON TETRACHLORIDE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
BENZENE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
1,2-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
TRICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
1,2-DICHLOROPROPANE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
BROMODICHLOROMETHANE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
TRANS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
TOLUENE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
CIS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
1,1,2-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
IRON	ICP, EPA METHOD 200.7	4,400	100	MCB/L A4:18 12/11
TETRACHLOROETHENE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
DIBROMOCHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
CHLOROBENZENE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
ETHYLBENZENE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
BROMOFORM	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
EXTRACTION FOR TCL - ACIDS		EXTRACTED		DO 11/26
1,1,2,2-TETRACHLOROETHANE	SW-846 METHOD 8240	ND	5	MCB/L MC D:2-3 11/26
STYRENE	SW-846 METHOD 8240	D	5	MCB/L MC D:2-3 11/26
ACETONE	SW-846 METHOD 8240	12	10	MCB/L MC D:2-3 11/26

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REMARKS:

01950

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 14

Date Sampled: 11/21/91 Time: 4:35 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: LAGOON 3-A

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

MERCURY PREPARATION - TCLP	SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	COMPLETED			DD 12/4
BENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
EXTRACTION FOR TCLP PESTICIDES	SW-846 METHOD 8080	EXTRACTED			ACH 12/6
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L	MC C:152 12/6
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC C:152 12/6
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L	MC C:152 12/6
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	56	MCS/L	CM L:100 12/17
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	93	MCS/L	CM L:104 12/19
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	44	MCS/L	CM L:104 12/19
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	48	MCS/L	CM L:104 12/19
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	120	MCS/L	CM L:104 12/19
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	49	MCS/L	CM L:104 12/19
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	48	MCS/L	CM L:104 12/19
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	62	MCS/L	CM L:104 12/19
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	45	MCS/L	CM L:104 12/19
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	61	MCS/L	CM L:104 12/19
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	58	MCS/L	CM L:104 12/19
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			DD 12/6
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			DD 12/6
CHLORDANE (TCLP)	SW-846 METHOD 8080	ND	2.0	MCS/L	GC3 C:120 12/12
ENDRIN (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:120 12/12
HEPTACHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:120 12/12
LINDANE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:120 12/12
METHOXYCHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:120 12/12
TOXAPHENE (TCLP)	SW-846 METHOD 8080	ND	4.0	MCS/L	GC3 C:120 12/12
HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	GC3 C:120 12/12
2,4-D (TCLP)	SW-846 METHOD 8150	ND	0.20	MCS/L	GC3 C:121 12/12
2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD 8150	ND	0.20	MCS/L	GC3 C:121 12/12

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REMARKS:

01960

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 14

Date Sampled: 11/21/91 Time: 4:35 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: LAGOON 3-A

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED		ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.14 MG/L	A4:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.46	0.050 MG/L	A4:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.014	0.005 MG/L	A4:22 12/17
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED		D8:99 12/4
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.013 MG/L	A4:21 12/13
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.072 MG/L	A4:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004 MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10 MG/L	A4:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012 MG/L	A4:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED		D8:117 12/11

REMARKS:

01961

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) HDL

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001
Date Sampled: 11/21/91 Time: 4:50 PM
Sampled By: WILLIAMS/BABLIN
Sample Id: LAGOON 3-B
Location: FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 15
Date Received: 11/22/91
Collection Method: COMPOSITE
Matrix: SOIL

Parameters and Standard Methodology Used

	Results	PQL	Unit	Analyst Reference
MERCURY PREPARATION - TCLP SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ZERO HEADSPACE EXTRACTION SW-846 METHOD 1311	COMPLETED			DO 12/4
BENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
CARBON TETRACHLORIDE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
CHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
CHLOROFORM (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
EXTRACTION FOR TCLP PESTICIDES SW-846 METHOD 8080	EXTRACTED			ACH 12/6
1,4-DICHLOROBENZENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
1,2-DICHLOROETHANE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
1,1-DICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
METHYL ETHYL KETONE (TCLP) SW-846 METHOD 8240	ND	100	MCG/L	MC C:152 12/6
TETRACHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	51	MCG/L	MC C:152 12/6
TRICHLOROETHYLENE (TCLP) SW-846 METHOD 8240	ND	50	MCG/L	MC C:152 12/6
VINYL CHLORIDE (TCLP) SW-846 METHOD 8240	ND	105	MCG/L	MC C:152 12/6
O-CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	52	MCG/L	CM L:104 12/19
PENTACHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	86	MCG/L	CM L:104 12/19
2,4,5-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	43	MCG/L	CM L:104 12/19
2,4,6-TRICHLOROPHENOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	45	MCG/L	CM L:104 12/19
M & P CRESOL (TCLP) SW-846 METHOD 8270 ACID FRACTION	ND	112	MCG/L	CM L:104 12/19
HEXACHLOROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCG/L	CM L:104 12/19
HEXACHLOROBUTADIENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCG/L	CM L:104 12/19
PYRIDINE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	51	MCG/L	CM L:104 12/19
2,4-DINITROTOLUENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	41	MCG/L	CM L:104 12/19
HEXACHLOROETHANE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCG/L	CM L:104 12/19
NITROBENZENE (TCLP) SW-846 METHOD 8270 BASE/NEUTRALS	ND	53	MCG/L	CM L:104 12/19
EXTRACTION FOR TCLP B/N SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP ACID/EXT. SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP) SW-846 METHOD 8080	ND	2.0	MCG/L	GC3 C:120 12/12
ENDRIN (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
HEPTACHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
LINDANE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
METHOXYCHLOR (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
TOXAPHENE (TCLP) SW-846 METHOD 8080	ND	4.0	MCG/L	GC3 C:120 12/12
HEPTACHLOR EPOXIDE (TCLP) SW-846 METHOD 8080	ND	0.20	MCG/L	GC3 C:120 12/12
2,4-D (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:122 12/12
2,4,5-TP (SILVEX) (TCLP) SW-846 METHOD 8150	ND	0.20	MCG/L	GC3 C:122 12/12

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REMARKS:

01962

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 15

Date Sampled: 11/21/91 Time: 4:50 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: LAGOON 3-B

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED		ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.11 MG/L	A4:21 12/13
BARIUM, BY TCLP	SW-846 METHOD 1311	0.25	0.050 MG/L	A4:21 12/13
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.006	0.006 MG/L	A4:22 12/17
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.011 MG/L	A4:21 12/13
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED		D8:99 12/4
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.058 MG/L	A4:21 12/13
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004 MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	ND	0.10 MG/L	A4:27 12/19
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012 MG/L	A4:21 12/13
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED		D8:117 12/11

REMARKS:

01963

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCS/KG=PPB, MG/L=PPM, MCS/L=PPB, MCS/G=PPM
D = RESULT IS (PQL, BUT) HQL

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS CTM Task #: 911122R

Purchase Order Number: 63055.001 CTM Sample No: 911122R 16
Date Sampled: 11/21/91 Time: 5:05 PM Date Received: 11/22/91
Sampled By: WILLIAM/BABLIN Collection Method: COMPOSITE
Sample Id: LAGOON 3-C Matrix: SOIL
Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used Results PQL Unit Analyst Reference

MERCURY PREPARATION - TCLP	SW-846 METHOD 1311	COMPLETED			DB:104 12/5
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED			DB:128 12/16
BENZENE (TCLP)	SW-846 METHOD 8240	ND	51	MCS/L	MC D:1 12/6
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
EXTRACTION FOR TCLP PESTICIDES	SW-846 METHOD 8080	EXTRACTED			ACM 12/6
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L	MC D:1 12/6
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L	MC D:1 12/6
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	102	MCS/L	MC D:1 12/6
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	52	MCS/L	CM L:104 12/19
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	84	MCS/L	CM L:104 12/19
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	42	MCS/L	CM L:104 12/19
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	45	MCS/L	CM L:104 12/19
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	110	MCS/L	CM L:104 12/19
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	44	MCS/L	CM L:104 12/19
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCS/L	CM L:104 12/19
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	75	MCS/L	CM L:104 12/19
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	40	MCS/L	CM L:104 12/19
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	56	MCS/L	CM L:104 12/19
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	53	MCS/L	CM L:104 12/19
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED			DO 12/6
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED			DO 12/6
CHLORDANE (TCLP)	SW-846 METHOD 8080	ND	2.0	MCS/L	6C3 C:122 12/12
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	COMPLETED			DO 12/4
ENDRIN (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	6C3 C:120 12/12
HEPTACHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	6C3 C:120 12/12
LINDANE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	6C3 C:120 12/12
METHOXYCHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	6C3 C:120 12/12
TOXAPHENE (TCLP)	SW-846 METHOD 8080	ND	4.0	MCS/L	6C3 C:120 12/12
HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L	6C3 C:120 12/12
2,4-D (TCLP)	SW-846 METHOD 8150	ND	0.20	MCS/L	6C3 C:122 12/12

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REMARKS:

01964

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 16

Date Sampled: 11/21/91 Time: 5:05 PM

Date Received: 11/22/91

Sampled By : WILLIAM/BABLIN

Collection Method: COMPOSITE

Sample Id: LASOON 3-C

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD 8150	ND	0.20	MCS/L	6C3 C:122 12/12
EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED			ACM 12/11
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.12	MG/L	A4:22 12/17
BARIUM, BY TCLP	SW-846 METHOD 1311	0.19	0.050	MG/L	A4:22 12/17
CADMIUM, BY TCLP	SW-846 METHOD 1311	0.007	0.005	MG/L	A4:22 12/17
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETED			D8:99 12/4
CHROMIUM, BY TCLP	SW-846 METHOD 1311	0.012	0.010	MG/L	A4:22 12/17
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.058	MG/L	A4:22 12/17
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004	MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	0.13	0.10	MG/L	A4:25 12/18/91
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.012	MG/L	A4:22 12/17

REMARKS:

01965

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCS/KG=PPB, MG/L=PPM, MCS/L=PPB, MCS/G=PPM
D = RESULT IS (PQL, BUT) PQL

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PAGES

Purchase Order Number: 63055.001

CTM Sample No: 911122R 17

Date Sampled: 11/21/91 Time: 8:10 PM

Date Received: 11/22/91

Sampled By: WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: BACKGROUND 1

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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MERCURY PREPARATION - TCLP	SW-846 METHOD 1311	COMPLETED		D8:104 12/5
TCLP EXTRACTION	SW-846 METHOD 1311	COMPLETE		DOM
ACID DIGESTION ON TCLP EXTRACT	SW-846 3010	COMPLETED		D8:128 12/16
BENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
CARBON TETRACHLORIDE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
CHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
CHLOROFORM (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
EXTRACTION FOR TCLP PESTICIDES	SW-846 METHOD 8080	EXTRACTED		ACH 12/6
1,4-DICHLOROBENZENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
1,2-DICHLOROETHANE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
1,1-DICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
METHYL ETHYL KETONE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L MC D:1 12/6
TETRACHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
TRICHLOROETHYLENE (TCLP)	SW-846 METHOD 8240	ND	50	MCS/L MC D:1 12/6
VINYL CHLORIDE (TCLP)	SW-846 METHOD 8240	ND	100	MCS/L MC D:1 12/6
O-CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	51	MCS/L CM L:104 12/19
PENTACHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	88	MCS/L CM L:104 12/19
2,4,5-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	42	MCS/L CM L:104 12/19
2,4,6-TRICHLOROPHENOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	44	MCS/L CM L:104 12/19
M & P CRESOL (TCLP)	SW-846 METHOD 8270 ACID FRACTION	ND	110	MCS/L CM L:104 12/19
HEXACHLOROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	43	MCS/L CM L:104 12/19
HEXACHLOROBUTADIENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	47	MCS/L CM L:104 12/19
PYRIDINE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	62	MCS/L CM L:104 12/19
2,4-DINITROTOLUENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	40	MCS/L CM L:104 12/19
HEXACHLOROETHANE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	53	MCS/L CM L:104 12/19
NITROBENZENE (TCLP)	SW-846 METHOD 8270 BASE/NEUTRALS	ND	53	MCS/L CM L:104 12/19
EXTRACTION FOR TCLP B/N	SW-846 METHOD 8270	COMPLETED		DO 12/6
EXTRACTION FOR TCLP ACID/EXT.	SW-846 METHOD 8270	COMPLETED		DO 12/6
CHLORDANE (TCLP)	SW-846 METHOD 8080	ND	2.0	MCS/L GC3 C:120 12/12
ZERO HEADSPACE EXTRACTION	SW-846 METHOD 1311	COMPLETED		DO 12/4
ENDRIN (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L GC3 C:120 12/12
HEPTACHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L GC3 C:120 12/12
LINDANE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L GC3 C:120 12/12
METHOXYCHLOR (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L GC3 C:120 12/12
TOXAPHENE (TCLP)	SW-846 METHOD 8080	ND	4.0	MCS/L GC3 C:120 12/12
HEPTACHLOR EPOXIDE (TCLP)	SW-846 METHOD 8080	ND	0.20	MCS/L GC3 C:120 12/12

(CONTINUES ON NEXT PAGE)

REMARKS:

01966

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 17

Date Sampled: 11/21/91 Time: 8:10 PM

Date Received: 11/22/91

Sampled By : WILLIAMS/BABLIN

Collection Method: COMPOSITE

Sample Id: BACKGROUND 1

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

2,4-D (TCLP)	SW-846 METHOD 8150	ND	0.20	MCB/L	GC3 C:122 12/12
2,4,5-TP (SILVEX) (TCLP)	SW-846 METHOD 8150	ND	0.20	MCB/L	GC3 C:122 12/12
EXTRACTION FOR TCLP HERBICIDES	SW-846 METHOD 8150	EXTRACTED			ACM 12/6
ARSENIC, BY TCLP	SW-846 METHOD 1311	ND	0.12	MG/L	A4:22 12/17
BARIUM, BY TCLP	SW-846 METHOD 1311	0.24	0.050	MG/L	A4:22 12/17
CADMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.006	MG/L	A4:22 12/17
CHROMIUM, BY TCLP	SW-846 METHOD 1311	ND	0.011	MG/L	A4:22 12/17
LEAD, BY TCLP	SW-846 METHOD 1311	ND	0.065	MG/L	A4:22 12/17
MERCURY, BY TCLP	SW-846 METHOD 1311	ND	0.0004	MG/L	C4:77 12/11
SELENIUM, BY TCLP	SW-846 METHOD 1311	0.21	0.10	MG/L	A4:25 12/18/91
SILVER, BY TCLP	SW-846 METHOD 1311	ND	0.013	MG/L	A4:22 12/17

REMARKS:

01967

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCB/KG=PPB, MG/L=PPM, MCB/L=PPB, MCB/G=PPM
D = RESULT IS (PQL, BUT) MDL

EHC
900 ROUTE 146
CLIFTON PARK NY 12065
Attention: LAURIE WILLIAMS/BOB PASS
Purchase Order Number: 63055.001
Date Sampled: 11/20/91 Time: 00:00
Sampled By: CTM
Sample Id: TRANSPORT BLANK
Location: CTM
CTM PROJECT #: 91.01401
CTM Task #: 911122R
CTM Sample No: 911122R 18
Date Received: 11/22/91
Collection Method: GRAB
Matrix: WATER

Parameters and Standard Methodology Used

		Results	PQL	Unit	Analyst Reference
TARGET COMPOUND LIST VOLATILES		COMPLETED			MC D:2-3 11/26
CHLOROMETHANE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
VINYL CHLORIDE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
BROMOMETHANE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
CHLOROETHANE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
1,1-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
METHYLENE CHLORIDE	SW-846 METHOD 8240	D	5	MCS/L	MC D:2-3 11/26
TRANS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	D	5	MCS/L	MC D:2-3 11/26
CIS 1,2-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
1,1-DICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
CHLOROFORM	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
1,1,1-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
CARBON TETRACHLORIDE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
BENZENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
1,2-DICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
TRICHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
1,2-DICHLOROPROPANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
BROMODICHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
TRANS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
TOLUENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
CIS-1,3-DICHLOROPROPENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
1,1,2-TRICHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
TETRACHLOROETHENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
DIBROMOCHLOROMETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
CHLOROBENZENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
ETHYLBENZENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
BROMOFORM	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
1,1,2,2-TETRACHLOROETHANE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
STYRENE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
ACETONE	SW-846 METHOD 8240	13	10	MCS/L	MC D:2-3 11/26
CARBON DISULFIDE	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
2-HEXANONE	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	5	MCS/L	MC D:2-3 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	10	MCS/L	MC D:2-3 11/26

REMARKS:

AUTHORIZED FOR RELEASE:

Tom Intend

01968

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED

MG/KG=PPM, MCS/KG=PPB, MG/L=PPM, MCS/L=PPB, MCS/G=PPM

D = RESULT IS (PQL, BUT) MDL

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive
P.O. Box 727
Latham, NY 12110
518-786-7100
FAX 518-786-7139



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LABORATORY SERVICES

CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME <i>* 63035.001</i>					SAMPLERS: (Signature) <i>Karen L. Walker</i>				
<i>EHC - FRONTIER STONE - Niagara materials</i>									
CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED		
				MATRIX	COMP GRAB				
<i>911/22/04</i>	<i>Lagoon 1 - A</i>	<i>11/21/91</i>	<i>7:15</i>	<i>A</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>	
<i>↓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>A</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>	
<i>↓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>A</i>				<i># metals</i>	
<i>05</i>	<i>Lagoon 1 - B</i>	<i>11/21/91</i>	<i>7:20</i>	<i>A</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>	
<i>↓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>A</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>	
<i>↓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>A</i>				<i># metals</i>	
<i>06</i>	<i>Lagoon 1 - C</i>	<i>11/21/91</i>	<i>7:25</i>	<i>A</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>	
<i>↓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>A</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>	
<i>↓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>A</i>				<i># metals</i>	
				<i>A</i>					
				<i>P</i>					
				<i>A</i>					
				<i>P</i>					
				<i>A</i>					
				<i>P</i>					
				<i>A</i>					
				<i>P</i>					

Relinquished by: (Signature) <i>Karen L. Walker</i>	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) <i>Karen L. Walker</i>	Date/Time <i>11/22/91 3:30</i>	Received for Laboratory by: <i>[Signature]</i>
Method of Shipment:		Date/Time <i>11/22/91 3:30</i>

Distribution: Orig. - Accompany Shipment
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CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME				SAMPLERS: (Signature)			
EHC \ Frontier Stone - Niagara Materials				Hann. C. Williams C. Behl			
CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
122K09	Lagoon 2-A	11/21/91	1300	Soil	X	2	VOA
↓	"	"	"	A	X	2	(TCCLP) BNA, P/H
				P			# Metals
10	Lagoon 2-B	11/21/91	1730	Soil	X	2	VOA
↓	"	"	"	A	X	2	(TCCLP) BNA, P/H
				P			# Metals
113	Lagoon 3-C	11/21/91	1720	Soil	X	2	VOA
↓	"	"	"	A	X	2	(TCCLP) BNA, P/H
				P			# Metals
				A			
				P			
				A			
				P			
				A			
				P			

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	
Hann. C. Williams			
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time	
Dispatched by: (Signature)	Date/Time	Received for Laboratory by	Date/Time
Hann. C. Williams	11/22/91 330		11/22/91
Method of Shipment:			

Distribution: Orig. - Accompany Shipment

01971

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive
P.O. Box 727
Latham, NY 12110
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FAX 518-786-7139



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LABORATORY SERVICES
CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME *# 63035.001*

SAMPLERS: (Signature)

EHC / Frontier Stone - Niagara Materials

David C. Bell

CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
<i>911</i>	<i>Lagoon 3 - A</i>	<i>11/21/91</i>	<i>16:35</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i># metals</i>
<i>15</i>	<i>Lagoon 3 - B</i>	<i>11/21/91</i>	<i>16:50</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i># metals</i>
<i>16</i>	<i>Lagoon 3 - C</i>	<i>11/21/91</i>	<i>17:05</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i># metals</i>
<i>17</i>	<i>BACKGROUND A</i>	<i>11/21/91</i>	<i>20:10</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>(TCLP) BNA, P/H</i>
<i>✓</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i># metals</i>

Relinquished by: (Signature)

David C. Bell

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by Mobile Laboratory for field analysis: (Signature)

Date/Time

Dispatched by: (Signature)

C. Bell

Date/Time

11/21/91 3:30

Received for Laboratory by:

[Signature]

Date/Time

11/24/91 3:30

Method of Shipment:

Distribution: Orig. - Accompany Shipment

1 Copy - Coordinator Field File

01969

APPENDIX I

Analytical TCL Soil Quality Results

CTM ANALYTICAL LABS, LTD.
15 Century Hill Dr.
Latham, NY 12110
Phone: (518)786-7100 Fax: (518)786-7139

Laboratory Analysis Report
Prepared for: EHC
Project Number: 91.01401
Task Number: 911122R
24 DEC 1991

IMPORTANT - PLEASE NOTE

1. All results are calculated on a dry weight basis unless otherwise specified.
2. PQL = Practical Quantitation Limit.
3. A result with a "D" means that the result was "Detected" below the Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).

CERTIFICATIONS:

NYS E.L.A.P. ID NO: 10358 MA: NY052 CT: PH-0551
NJ: 73581 PA: 68-402 NH: 199014-C

01912

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 01

Date Sampled: 11/20/91 Time: 7:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: RR EASEMENT 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
TARGET COMPOUND LIST VOLATILES	COMPLETED			JB E:90 11/26
CYANIDE, TOTAL W/ DISTILLATION EPA 335.2 ; 335.3	ND	0.89	MG/KG	JOC 12/3
CHLOROMETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
VINYL CHLORIDE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
BROMOMETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
CHLOROETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
1,1-DICHLOROETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
MERCURY PREPARATION - SOLID SW-846 METHOD 7471	COMPLETED			D8:104 12/5
METHYLENE CHLORIDE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
TRANS 1,2-DICHLOROETHENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
CIS 1,2-DICHLOROETHENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
1,1-DICHLOROETHENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
CHLOROFORM SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
ACID DIGESTION - FURNACE SW-846 METHOD 3050	COMPLETED			D8:95 12/4
ACID DIGESTION - FLAME/ICP SW-846 3050	COMPLETED			D8:103 12/5
1,1,1-TRICHLOROETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
CARBON TETRACHLORIDE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
BENZENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
NICKEL ICP, EPA METHOD 6010	20.4	8.4	MG/KG	A4:18 12/11
1,2-DICHLOROETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
TRICHLOROETHENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
1,2-DICHLOROPROPANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
BROMODICHLOROMETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
TRANS-1,3-DICHLOROPROPENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
TOLUENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
CIS-1,3-DICHLOROPROPENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
1,1,2-TRICHLOROETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
TETRACHLOROETHENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
DIBROMOCHLOROMETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
CHLOROBENZENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
ETHYLBENZENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
BROMOFORM SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
1,1,2,2-TETRACHLOROETHANE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26
EXTRACTION FOR TCL B/N	COMPLETED			D0 11/27
EXTRACTION FOR TCL - ACIDS	COMPLETED			D0 11/27
STYRENE SW-846 METHOD 8240	ND	7.2	MCG/KG	JB E:90 11/26

(CONTINUES ON NEXT PAGE)

REMARKS:

01913

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 01

Date Sampled: 11/20/91 Time: 7:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: RR EASEMENT 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

ACETONE	SW-846 METHOD 8240	25	14	MCS/KG	JB E:90 11/26
CARBON DISULFIDE	SW-846 METHOD 8240	ND	7.2	MCS/KG	JB E:90 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	14	MCS/KG	JB E:90 11/26
2-HEXANONE	SW-846 METHOD 8240	ND	14	MCS/KG	JB E:90 11/26
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DD 11/27
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	7.2	MCS/KG	JB E:90 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	14	MCS/KG	JB E:90 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	14	MCS/KG	JB E:90 11/26
SODIUM	EPA METHODS, 1979.273.1	ND	280	MG/KG	BS:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:96 12/15
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCS/KG	CM L:96 12/15
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
N-NITROSO-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
ISOPHORONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,700	MCS/KG	CM L:96 12/15
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCS/KG	CM L:96 12/15
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCS/KG	CM L:96 12/15
4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCS/KG	CM L:96 12/15
HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCS/KG	CM L:96 12/15
4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	1,900	MCS/KG	CM L:96 12/15

(CONTINUES ON NEXT PAGE)

REMARKS:

01914

EHC CTH PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTH Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63053.001

CTH Sample No: 911122R 01

Date Sampled: 11/20/91 Time: 7:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: RR EASEMENT 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCG/KG	CM L:96 12/15
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCG/KG	CM L:96 12/15
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,700	MCG/KG	CM L:96 12/15
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:96 12/15
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCG/KG	CM L:96 12/15
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,700	MCG/KG	CM L:96 12/15
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCG/KG	CM L:96 12/15
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCG/KG	CM L:96 12/15
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCG/KG	CM L:96 12/15
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:96 12/15
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,700	MCG/KG	CM L:96 12/15
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,700	MCG/KG	CM L:96 12/15
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCG/KG	CM L:96 12/15
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	940	MCG/KG	CM L:96 12/15
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	1,500	940	MCG/KG	CM L:96 12/15
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	4,000	940	MCG/KG	CM L:96 12/15
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:96 12/15
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
DI-N-OCTYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15

(CONTINUES ON NEXT PAGE)

REMARKS:

01915

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001
Date Sampled: 11/20/91 Time: 7:00 PM
Sampled By: BABLIN/WILLIAMS
Sample Id: RR EASEMENT 1-A
Location: FRONTIER STONE/NIAGARA MAT.

CTM Sample No: 911122R 01
Date Received: 11/22/91
Collection Method: COMPOSITE
Matrix: SOIL

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
INDENO-(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
BENZO-(G,H,I)-PERYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	940	MCG/KG	CM L:96 12/15
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	940	MCG/KG	CM L:96 12/15
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:23 12/7
ALPHA-BHC	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
BETA-BHC	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
DELTA-BHC	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
GAMMA-BHC	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
HEPTACHLOR	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
ALDRIN	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	4.8	MCG/KG	GCCLP A:23 12/7
DIELDRIN	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
4,4-DDE	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
ENDRIN	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
4,4-DDD	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
4,4-DDT	EPA METHOD 8080	5.4J	10	MCG/KG	GCCLP A:23 12/7
METHOXYCHLOR	EPA METHOD 8080	40J	48	MCG/KG	GCCLP A:23 12/7
ENDRIN KETONE	EPA METHOD 8080	ND	10	MCG/KG	GCCLP A:23 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
TOXAPHENE	EPA METHOD 8080	ND	96	MCG/KG	GCCLP A:23 12/7
PCB-1016	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
PCB-1221	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
PCB-1232	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
PCB-1242	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
PCB-1248	EPA METHOD 8080	ND	48	MCG/KG	GCCLP A:23 12/7
PCB-1254	EPA METHOD 8080	ND	96	MCG/KG	GCCLP A:23 12/7

(CONTINUES ON NEXT PAGE)

REMARKS:

01916

EHC CTM PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 01

Date Sampled: 11/20/91 Time: 7:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: RR EASEMENT 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1260	EPA METHOD 8080	ND	96	MG/KG	GCCLP A:23 12/7
% SOLIDS	CLP SOW 4/89	69	1	%	CC 12/3
ALUMINUM	ICP, EPA METHOD 6010	15,700	56.0	MG/KG	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 6010	ND	16.8	MG/KG	A4:18 12/11
ARSENIC	SW-846 7060	10.0	1.1	MG/KG	H6 A:722 12/13
BARIUM	ICP, EPA METHOD 6010	109	14.0	MG/KG	A4:18 12/11
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			JOC 11/27
BERYLLIUM	ICP, EPA METHOD 6010	ND	1.4	MG/KG	A4:18 12/11
CADMIUM	ICP, EPA METHOD 6010	2.2	1.4	MG/KG	A4:18 12/11
CALCIUM	ICP, EPA METHOD 6010	35,400	28.0	MG/KG	A4:26 12/19
CHROMIUM	ICP, EPA METHOD 6010	24.0	2.8	MG/KG	A4:18 12/11
COBALT	ICP, EPA METHOD 6010	ND	5.6	MG/KG	A4:18 12/11
IRON	ICP, EPA METHOD 6010	28,200	28.0	MG/KG	A4:18 12/11
COPPER	ICP, EPA METHOD 6010	26.4	7.0	MG/KG	A4:18 12/11
LEAD	ICP, EPA METHOD 6010	104	14.0	MG/KG	A4:18 12/11
MERCURY	SW-846 7471	ND	0.14	MG/KG	C4:76 12/11
MAGNESIUM	ICP, EPA METHOD 6010	31,400	56.0	MG/KG	A4:18 12/11
MANGANESE	ICP, EPA METHOD 6010	1,180	2.8	MG/KG	A4:18 12/11
POTASSIUM	EPA METHODS, 1979.258.1	1,890	288	MG/KG	B5:35 12/10
SELENIUM	SW-846 7740	ND	1.4	MG/KG	H6 A:713 12/10
SILVER	ICP, EPA METHOD 6010	ND	2.8	MG/KG	A4:18 12/11
THALLIUM	SW-846 7840	ND	2.7	MG/KG	H6 A:709 12/5
VANADIUM	ICP, EPA METHOD 6010	33.8	5.6	MG/KG	A4:18 12/11
ZINC	ICP, EPA METHOD 6010	928	5.6	MG/KG	A4:18 12/11
PH	STD. METH. 15TH ED.423	7.9		SU	CC 12/4

REMARKS:

01917

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED

MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM

D = RESULT IS (PQL, BUT) NDL

EHC CTM PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 02

Date Sampled: 11/20/91 Time: 6:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	POL	Unit	Analyst Reference
CYANIDE, TOTAL W/ DISTILLATION EPA 335.2 ; 335.3	ND	0.89	MG/KG	JOC 12/3
TARGET COMPOUND LIST VOLATILES	COMPLETED			JB E:90 11/26
CHLOROMETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
VINYL CHLORIDE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
BROMOMETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
CHLOROETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
1,1-DICHLOROETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
MERCURY PREPARATION - SOLID SW-846 METHOD 7471	COMPLETED			DB:104 12/5
METHYLENE CHLORIDE SW-846 METHOD 8240	D	7.3	MCG/KG	JB E:90 11/26
TRANS 1,2-DICHLOROETHENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
CIS 1,2-DICHLOROETHENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
1,1-DICHLOROETHENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
ACID DIGESTION - FURNACE SW-846 METHOD 3050	COMPLETED			DB:95 12/4
CHLOROFORM SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
ACID DIGESTION - FLAME/ICP SW-846 3050	COMPLETED			DB:103 12/5
1,1,1-TRICHLOROETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
CARBON TETRACHLORIDE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
BENZENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
NICKEL ICP, EPA METHOD 6010	40.4	8.2	MG/KG	AA:18 12/11
1,2-DICHLOROETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
TRICHLOROETHENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
1,2-DICHLOROPROPANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
BROMODICHLOROMETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
TRANS-1,3-DICHLOROPROPENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
TOLUENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
CIS-1,3-DICHLOROPROPENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
1,1,2-TRICHLOROETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
TETRACHLOROETHENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
DIBROMOCHLOROMETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
CHLOROBENZENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
ETHYLBENZENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
BROMOFORM SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
EXTRACTION FOR TCL B/N	COMPLETED			DO 11/27
EXTRACTION FOR TCL - ACIDS	COMPLETED			DO 11/27
1,1,2,2-TETRACHLOROETHANE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
STYRENE SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26

(CONTINUES ON NEXT PAGE)

REMARKS:

01918

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 02

Date Sampled: 11/20/91 Time: 6:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

ACETONE	SW-846 METHOD 8240	112	14	MCG/KG	JB E:90 11/26
CARBON DISULFIDE	SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
2-HEXANONE	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DO 11/27
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	7.3	MCG/KG	JB E:90 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
SODIUM	EPA METHODS, 1979.273.1	ND	275	MG/KG	BS:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:97 12/15
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:97 12/15
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
N-NITROSO-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
ISOPHORONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:97 12/15
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:97 12/15
HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	1,900	MCG/KG	CM L:96 12/15

(CONTINUES ON NEXT PAGE)

REMARKS:

01913

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS CTM Task #: 911122R

Purchase Order Number: 63055.001 CTM Sample No: 911122R 02
Date Sampled: 11/20/91 Time: 6:00 PM Date Received: 11/22/91
Sampled By: BABLIN/WILLIAMS Collection Method: COMPOSITE
Sample Id: AGST AREA 1-A Matrix: SOIL
Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,700	MCG/KG	CM L:97 12/15
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,700	MCG/KG	CM L:97 12/15
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,800	MCG/KG	CM L:96 12/15
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCG/KG	CM L:96 12/15
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:97 12/15
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,800	MCG/KG	CM L:96 12/15
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	960	MCG/KG	CM L:97 12/15
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,800	MCG/KG	CM L:96 12/15
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,900	MCG/KG	CM L:97 12/15
BENZOTA) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15
DI-N-OCTYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCG/KG	CM L:97 12/15

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REMARKS:

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EHC
900 ROUTE 146
CLIFTON PARK

NY 12065

CTM PROJECT #: 91.01401

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63055.001

CTM Sample No: 911122R 02

Date Sampled: 11/20/91 Time: 6:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

BENZO(B) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCS/KG	CM L:97 12/15
BENZO(K) FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCS/KG	CM L:97 12/15
BENZO(A) PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCS/KG	CM L:97 12/15
INDENO -(1,2,3)-(C,D)-PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCS/KG	CM L:97 12/15
DIBENZO-(A,H)-ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCS/KG	CM L:97 12/15
BENZO-(G,H,I)-PERLYENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	960	MCS/KG	CM L:97 12/15
2,4,6-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	960	MCS/KG	CM L:96 12/15
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:24 12/7
ALPHA-BHC	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
BETA-BHC	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
DELTA-BHC	EPA METHOD 8080	4.0J	4.8	MCS/KG	GCCLP A:24 12/7
GAMMA-BHC	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
HEPTACHLOR	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
ALDRIN	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	4.8	MCS/KG	GCCLP A:24 12/7
DIELDRIN	EPA METHOD 8080	13	10	MCS/KG	GCCLP A:24 12/7
4,4-DDE	EPA METHOD 8080	6.9J	10	MCS/KG	GCCLP A:24 12/7
ENDRIN	EPA METHOD 8080	ND	10	MCS/KG	GCCLP A:24 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	10	MCS/KG	GCCLP A:24 12/7
4,4-DDD	EPA METHOD 8080	8.6J	10	MCS/KG	GCCLP A:24 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	ND	10	MCS/KG	GCCLP A:24 12/7
4,4-DDT	EPA METHOD 8080	33	10	MCS/KG	GCCLP A:24 12/7
METHOXYCHLOR	EPA METHOD 8080	12J	48	MCS/KG	GCCLP A:24 12/7
ENDRIN KETONE	EPA METHOD 8080	ND	10	MCS/KG	GCCLP A:24 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
TOXAPHENE	EPA METHOD 8080	ND	97	MCS/KG	GCCLP A:24 12/7
PCB-1016	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
PCB-1221	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
PCB-1232	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
PCB-1242	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
PCB-1248	EPA METHOD 8080	ND	48	MCS/KG	GCCLP A:24 12/7
PCB-1254	EPA METHOD 8080	ND	97	MCS/KG	GCCLP A:24 12/7

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REMARKS:

01921

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 02

Date Sampled: 11/20/91 Time: 6:00 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 1-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1260	EPA METHOD 8080	ND	97	MG/KG	ECCLP A:24 12/7
% SOLIDS	CLP SOW 4/89	69	1	%	CC 12/3
ALUMINUM	ICP, EPA METHOD 6010	16,300	55.0	MG/KG	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 6010	ND	16.4	MG/KG	A4:18 12/11
ARSENIC	SW-846 7060	11.4	1.1	MG/KG	HG A:722 12/13
BARIUM	ICP, EPA METHOD 6010	83.4	13.8	MG/KG	A4:18 12/11
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			JDC 11/27
BERYLLIUM	ICP, EPA METHOD 6010	ND	1.4	MG/KG	A4:18 12/11
CADMIUM	ICP, EPA METHOD 6010	2.0	1.4	MG/KG	A4:18 12/11
CALCIUM	ICP, EPA METHOD 6010	42,100	55.0	MG/KG	A4:23 12/17
CHROMIUM	ICP, EPA METHOD 6010	40.6	2.8	MG/KG	A4:18 12/11
COBALT	ICP, EPA METHOD 6010	11.0	5.4	MG/KG	A4:18 12/11
COPPER	ICP, EPA METHOD 6010	75.6	5.4	MG/KG	A4:18 12/11
IRON	ICP, EPA METHOD 6010	47,800	27.4	MG/KG	A4:18 12/11
LEAD	ICP, EPA METHOD 200.7	202	13.8	MG/KG	A4:18 12/11
MAGNESIUM	ICP, EPA METHOD 6010	20,800	55.0	MG/KG	A4:18 12/11
MERCURY	SW-846 7471	ND	0.14	MG/KG	C4:76 12/11
MANGANESE	ICP, EPA METHOD 6010	2,880	2.8	MG/KG	A4:18 12/11
POTASSIUM	EPA METHODS, 1979.258.1	1,990	292	MG/KG	B5:35 12/10
SELENIUM	SW-846 7740	ND	1.4	MG/KG	HG A:713 12/10
SILVER	ICP, EPA METHOD 6010	ND	2.8	MG/KG	A4:18 12/11
THALLIUM	SW-846 7840	ND	2.8	MG/KG	HG A:709 12/5
VANADIUM	ICP, EPA METHOD 6010	50.0	5.4	MG/KG	A4:18 12/11
ZINC	ICP, EPA METHOD 6010	908	5.4	MG/KG	A4:18 12/11
PH	STD. METH. 15TH ED.423	7.7		SU	CC 12/4

REMARKS:

01922

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED

MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM

D = RESULT IS (PQL, BUT) MDL

EHC CTM PROJECT #: 91.01401

900 ROUTE 146

CLIFTON PARK NY 12065

CTM Task #: 911122R

Attention: LAURIE WILLIAMS/BOB PASS

Purchase Order Number: 63053.001

CTM Sample No: 911122R 03

Date Sampled: 11/20/91 Time: 6:30 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 2-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
CYANIDE, TOTAL W/ DISTILLATION EPA 335.2 ; 335.3	ND	0.84	MG/KG	JOC 12/3
TARGET COMPOUND LIST VOLATILES	COMPLETED			JB E:90 11/26
CHLOROMETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
VINYL CHLORIDE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
BROMOMETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
CHLOROETHANE SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
1,1-DICHLOROETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
MERCURY PREPARATION - SOLID SW-846 METHOD 7471	COMPLETED			DB:104 12/5
METHYLENE CHLORIDE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
TRANS 1,2-DICHLOROETHENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
CIS 1,2-DICHLOROETHENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
1,1-DICHLOROETHENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
ACID DIGESTION - FURNACE SW-846 METHOD 3050	COMPLETED			DB:95 12/4
CHLOROFORM SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
ACID DIGESTION - FLAME/ICP SW-846 3050	COMPLETED			DB:103 12/5
1,1,1-TRICHLOROETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
CARBON TETRACHLORIDE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
BENZENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
NICKEL ICP, EPA METHOD 6010	48.6	8.0	MG/KG	A4:18 12/11
1,2-DICHLOROETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
TRICHLOROETHENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
1,2-DICHLOROPROPANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
BROMODICHLOROMETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
TRANS-1,3-DICHLOROPROPENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
TOLUENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
CIS-1,3-DICHLOROPROPENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
1,1,2-TRICHLOROETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
TETRACHLOROETHENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
DIBROMOCHLOROMETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
CHLOROBENZENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
ETHYLBENZENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
BROMOFORM SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
EXTRACTION FOR TCL B/N	COMPLETED			DD 11/27
1,1,2,2-TETRACHLOROETHANE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
EXTRACTION FOR TCL - ACIDS	COMPLETED			DD 11/27
STYRENE SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26

(CONTINUES ON NEXT PAGE)

REMARKS:

01923

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 03

Date Sampled: 11/20/91 Time: 6:30 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 2-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

ACETONE	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
CARBON DISULFIDE	SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
VINYL ACETATE	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
2-HEXANONE	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
EXTRACTION FOR TCL PEST/PCB	EPA METHOD 8080	EXTRACTED			DD 11/27
XYLENE (TOTAL)	SW-846 METHOD 8240	ND	6.8	MCG/KG	JB E:90 11/26
4-METHYL-2-PENTANONE (MIBK)	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
2-BUTANONE (MEK)	SW-846 METHOD 8240	ND	14	MCG/KG	JB E:90 11/26
SODIUM	EPA METHODS, 1979.273.1	ND	268	MG/KG	BS:39 12/11
TARGET COMPOUND LIST	BASE/NEUTRAL/ACID EXTRACTABLES	COMPLETED			CM L:97 12/15
PHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
BIS-(2-CHLOROETHYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2-CHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
1,3-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
1,4-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BENZYL ALCOHOL	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,800	MCG/KG	CM L:97 12/15
1,2-DICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
BIS-(2-CHLOROISOPROPYL)-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
4-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
N-NITROSO-DIPROPYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
HEXACHLOROETHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
NITROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
ISOPHORONE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
2,4-DIMETHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
BENZOIC ACID	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,400	MCG/KG	CM L:97 12/15
BIS-(2-CHLOROETHOXY)-METHANE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2,4-DICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
1,2,4-TRICHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
NAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	890	MCG/KG	CM L:97 12/15
4-CHLOROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,800	MCG/KG	CM L:97 12/15
HEXACHLOROBUTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
4-CHLORO-3-METHYLPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	1,800	MCG/KG	CM L:97 12/15

(CONTINUES ON NEXT PAGE)

REMARKS:

01924

EHC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 03

Date Sampled: 11/20/91 Time: 6:30 PM

Date Received: 11/22/91

Sampled By : BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 2-A

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used	Results	PQL	Unit	Analyst Reference
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(CONTINUED FROM PREVIOUS PAGE)

2-METHYLNAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	D	890	MCG/KG	CM L:97 12/15
HEXACHLOROCYCLOPENTADIENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2,4,5-TRICHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
2-CHLORONAPHTHALENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,400	MCG/KG	CM L:97 12/15
% SOLIDS	CLP SON 4/89	73	1	%	CC 12/3
DIMETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
ACENAPHTHYLENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2,6-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
3-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	4,400	MCG/KG	CM L:97 12/15
ACENAPHTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2,4-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,400	MCG/KG	CM L:97 12/15
4-NITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
DIBENZOFURAN	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2,4-DINITROTOLUENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
DIETHYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
4-CHLOROPHENYL-PHENYL-ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
FLUORENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
4-NITROANILINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,800	MCG/KG	CM L:97 12/15
2-METHYL-4,6-DINITROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,400	MCG/KG	CM L:97 12/15
N-NITROSODIPHENYLAMINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
4-BROMOPHENYL-PHENYL ETHER	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
HEXACHLOROBENZENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
PENTACHLOROPHENOL	SW-846 METHOD 8270 ACID EXTRACTABLES	ND	4,400	MCG/KG	CM L:97 12/15
PHENANTHRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
DI-N-BUTYLPHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
FLUORANTHENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
PYRENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BUTYL-BENZYL PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
3,3-DICHLOROBENZIDINE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	1,800	MCG/KG	CM L:97 12/15
BENZO(A) ANTHRACENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
CHRYSENE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BIS-(2-ETHYL-HEXYL) PHTHALATE	SW-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15

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REMARKS:

01925

EHC CTM PROJECT #: 91.01401
900 ROUTE 146
CLIFTON PARK NY 12065

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63055.001

CTM Sample No: 911122R 03

Date Sampled: 11/20/91 Time: 6:30 PM

Date Received: 11/22/91

Sampled By: BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 2-A

Matrix: SOIL

Location: FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results PQL Unit Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

DI-N-OCTYL PHTHALATE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BENZO(B) FLUORANTHENE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BENZO(K) FLUORANTHENE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BENZO(A) PYRENE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
INDENO-(1,2,3)-(C,D)-PYRENE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
DIBENZO-(A,H)-ANTHRACENE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
BENZO-(G,H,I)-PERYLENE	SM-846 METHOD 8270 BASE/NEUTRALS	ND	890	MCG/KG	CM L:97 12/15
2,4,6-TRICHLOROPHENOL	SM-846 METHOD 8270 ACID EXTRACTABLES	ND	890	MCG/KG	CM L:97 12/15
TARGET COMPOUND LIST	PESTICIDES AND PCB'S	COMPLETED			GCCLP A:24 12/7
ALPHA-BHC	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
BETA-BHC	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
DELTA-BHC	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
GAMMA-BHC	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
HEPTACHLOR	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
ALDRIN	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
HEPTACHLOR EPOXIDE	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
ENDOSULFAN I	EPA METHOD 8080	ND	4.4	MCG/KG	GCCLP A:24 12/7
DIELDRIN	EPA METHOD 8080	5.2J	4.4	MCG/KG	GCCLP A:24 12/7
4,4-DDE	EPA METHOD 8080	13	4.4	MCG/KG	GCCLP A:24 12/7
ENDRIN	EPA METHOD 8080	ND	8.8	MCG/KG	GCCLP A:24 12/7
ENDOSULFAN II	EPA METHOD 8080	ND	8.8	MCG/KG	GCCLP A:24 12/7
4,4-DDD	EPA METHOD 8080	11	8.8	MCG/KG	GCCLP A:24 12/7
ENDOSULFAN SULFATE	EPA METHOD 8080	ND	8.8	MCG/KG	GCCLP A:24 12/7
4,4-DDT	EPA METHOD 8080	44	8.8	MCG/KG	GCCLP A:24 12/7
METHOXYCHLOR	EPA METHOD 8080	18J	44	MCG/KG	GCCLP A:24 12/7
ENDRIN KETONE	EPA METHOD 8080	1.3J	8.8	MCG/KG	GCCLP A:24 12/7
ALPHA-CHLORDANE	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7
GAMMA-CHLORDANE	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7
TOXAPHENE	EPA METHOD 8080	ND	88	MCG/KG	GCCLP A:24 12/7
PCB-1016	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7
PCB-1221	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7
PCB-1232	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7
PCB-1242	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7
PCB-1248	EPA METHOD 8080	ND	44	MCG/KG	GCCLP A:24 12/7

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REMARKS:

01928

ENC
900 ROUTE 146
CLIFTON PARK NY 12065

CTM PROJECT #: 91.01401

Attention: LAURIE WILLIAMS/BOB PASS

CTM Task #: 911122R

Purchase Order Number: 63053.001

CTM Sample No: 911122R 03

Date Sampled: 11/20/91 Time: 6:30 PM

Date Received: 11/22/91

Sampled By : BABLIN/WILLIAMS

Collection Method: COMPOSITE

Sample Id: AGST AREA 2-A

Matrix: SOIL

Location : FRONTIER STONE/NIAGARA MAT.

Parameters and Standard Methodology Used

Results

PQL

Unit

Analyst Reference

(CONTINUED FROM PREVIOUS PAGE)

PCB-1254	EPA METHOD 8080	ND	88	MG/KG	GCCLP A:24 12/7
PCB-1260	EPA METHOD 8080	ND	88	MG/KG	GCCLP A:24 12/7
ALUMINUM	ICP, EPA METHOD 6010	18,200	53.4	MG/KG	A4:18 12/11
ANTIMONY	ICP, EPA METHOD 6010	ND	16.0	MG/KG	A4:18 12/11
ARSENIC	SW-846 7060	10.9	1.1	MG/KG	H6 A:722 12/13
CYANIDE DISTILLATION	STD. METH. 15TH ED. 412B	COMPLETED			JOC 11/27
BARIUM	ICP, EPA METHOD 6010	80.8	13.4	MG/KG	A4:18 12/11
BERYLLIUM	ICP, EPA METHOD 6010	ND	1.3	MG/KG	A4:18 12/11
CADMIUM	ICP, EPA METHOD 6010	ND	1.3	MG/KG	A4:18 12/11
CALCIUM	ICP, EPA METHOD 6010	12,800	53.4	MG/KG	A4:18 12/11
CHROMIUM	ICP, EPA METHOD 6010	113	2.6	MG/KG	A4:18 12/11
COBALT	ICP, EPA METHOD 6010	14.4	5.3	MG/KG	A4:18 12/11
IRON	ICP, EPA METHOD 6010	43,600	26.8	MG/KG	A4:18 12/11
COPPER	ICP, EPA METHOD 6010	81.0	6.6	MG/KG	A4:18 12/11
LEAD	ICP, EPA METHOD 6010	194	13.4	MG/KG	A4:18 12/11
MAGNESIUM	ICP, EPA METHOD 6010	7,560	53.4	MG/KG	A4:18 12/11
MERCURY	SW-846 7471	ND	0.14	MG/KG	C4:76 12/11
MANGANESE	ICP, EPA METHOD 6010	1,860	2.6	MG/KG	A4:18 12/11
POTASSIUM	EPA METHODS, 1979.258.1	2,150	273	MG/KG	B5:35 12/10
SELENIUM	SW-846 7740	ND	1.4	MG/KG	H6 A:713 12/10
SILVER	ICP, EPA METHOD 6010	ND	2.6	MG/KG	A4:18 12/11
THALLIUM	SW-846 7840	ND	2.7	MG/KG	H6 A:709 12/5
VANADIUM	ICP, EPA METHOD 6010	70.0	5.4	MG/KG	A4:18 12/11
ZINC	ICP, EPA METHOD 6010	498	5.4	MG/KG	A4:18 12/11
PH	STD. METH. 15TH ED.423	7.6		SU	CC 12/4

REMARKS:

01927

LEGEND: (= LESS THAN,) = GREATER THAN, ND = NOT DETECTED
MG/KG=PPM, MCG/KG=PPB, MG/L=PPM, MCG/L=PPB, MCG/G=PPM
D = RESULT IS (PQL, BUT) NIL

CTM Analytical Laboratories, Ltd.

15 Century Hill Drive
P.O. Box 727
Latham, NY 12110
518-786-7100
FAX 518-786-7139



GC/MS
GC
ICAP
Sampling Services

LABORATORY SERVICES

CHAIN OF CUSTODY RECORD

CLIENT AND PROJECT NAME <i>* 63035-001</i> <i>EHC / Frontier Stone - Niagara Material</i>	SAMPLERS: (Signature) <i>C. Belli</i> <i>Karl L. Wilton (RRE-1A)</i>
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CTM SAMPLE NUMBER	SAMPLE IDENTIFICATION & LOCATION	DATE	TIME A = a.m. P = p.m.	SAMPLE TYPE		NUMBER OF CONT'S	ANALYSIS REQUIRED
				MATRIX	COMP GRAB		
<i>91122R0</i>	<i>RR easment - 1-A</i>	<i>11/20/91</i>	<i>6:30</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
	<i>RRE-1A</i>		<i>7:00</i>	<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) BNA, P/P</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) Metals</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) CN(-)</i>
<i>02</i>	<i>AGST area 1-A</i>	<i>11/20/91</i>	<i>6:30</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) BNA, P/P</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) Metals</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) CN(-)</i>
<i>03</i>	<i>AGST area 2-A</i>	<i>11/20/91</i>	<i>6:30</i>	<i>Soil</i>	<i>X</i>	<i>2</i>	<i>VOA</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) BNA, P/P</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) Metals</i>
				<i>Soil</i>	<i>X</i>	<i>1</i>	<i>(TCL) CN(-)</i>

Relinquished by: (Signature) <i>C. Belli</i>	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Dispatched by: (Signature) <i>Karl L. Wilton</i>	Date/Time <i>11/22/91 3:30</i>	Received for Laboratory by: (Signature) <i>Jose R. Vaz</i>
Method of Shipment:		Date/Time <i>11/24/91 1:00 PM</i>

Distribution: Orig. - Accompany Shipment
1 Copy - Coordinator Field Files