

# ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

40.

## PHASE I INVESTIGATION

Lancaster Reclamation  
Town of Lancaster

Site No. 915069  
Erie County

Date: January 1986



Prepared for:  
**New York State**  
**Department of**  
**Environmental Conservation**

50 Wolf Road, Albany, New York 12233  
Henry G. Williams, *Commissioner*

Division of Solid and Hazardous Waste  
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By:  
**ENGINEERING-SCIENCE**  
In Association With  
**DAMES & MOORE**

ENGINEERING INVESTIGATIONS AT  
INACTIVE HAZARDOUS WASTE SITES  
IN THE STATE OF NEW YORK  
PHASE I INVESTIGATIONS

LANCASTER RECLAMATION, INC.

NYS SITE NUMBER 915069

TOWN OF LANCASTER

ERIE COUNTY

NEW YORK STATE

For

DIVISION OF SOLID AND HAZARDOUS WASTE  
NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
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LANCASTER RECLAMATION, INC.

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## SECTION I

### EXECUTIVE SUMMARY

#### LANCASTER RECLAMATION, INC.

This report, prepared for the New York State Department of Environmental Conservation (NYSDEC), presents the results of the Phase I investigation of the Lancaster Reclamation, Inc., site (NYS Site Number 915069, EPA Site Number D000513911), located in the Town of Lancaster, Erie County, New York (see Figure I-1).

#### SITE BACKGROUND

The 13-acre Lancaster Reclamation site was purchased in 1976 by Lancaster Reclamation, Inc. (owned by John Ferry) from Rose Pietruszewski. Ferry Construction Company, also owned by Mr. Ferry, aided in the initial permitting of the site; however, Ferry Construction Company never held any ownership interest in the site.

Since 1976, the site, consisting of four surface impoundments, has been used for the in-situ dewatering and land disposal of various sludges and solid wastes, including bentonite clay slurry, foundry sand and foundry sand slurry, cement, asbestos and glass fiber slurry, surface print waste, prepaste polymer, prepaste alkali, shot blast steel castings, and dirt and sludge from bus garage catch basins (Ferry, 1985). Approximately 52,000 cubic yards of waste are estimated to have been disposed of at the site. Leachate analyses of these wastes have indicated the presence of heavy metals and some organics (phenols and PCBs). Limited analyses of groundwater and surface water have shown the presence of phenols.

## ASSESSMENT

In an attempt to quantify the risk associated with this site, the Hazard Ranking Scoring system (HRS) was applied as currently being used by the NYSDEC to evaluate abandoned hazardous waste sites in New York State. This system takes into account the types of wastes at the site, receptors, and transport routes to apply a numerical ranking of the site. As stated in 40 CFR Subpart H Section 300.81, the HRS scoring system was developed to be used in evaluating the relative potential of uncontrolled hazardous disposal facilities to cause health or safety problems or ecological or environmental damage. It is assumed by the EPA that a uniform application of the ranking system in each state will permit EPA to identify those releases of hazardous substances that pose the greatest hazard to humans or the environment.

Under the HRS, three numerical scores are computed for each site, to express the relative risk or danger from the site, taking into account the population at risk, the potential for contamination of drinking water supplies, for direct human contact, and for destruction of sensitive ecological systems and other appropriate factors. The three scores are:

- o  $S_M$  reflects the potential for harm to humans or the environment from migration of a hazardous substance away from the facility by routes involving groundwater, surface water or air. It is a composite of separate scores for each of the three routes ( $S_{GW}$  = groundwater route score,  $S_{SW}$  = surface water route score, and  $S_A$  = air route score).
- o  $S_{FE}$  reflects the potential for harm from substances that can explode or cause fires.
- o  $S_{DC}$  reflects the potential for harm from direct contact with hazardous substances at the facility (i.e., no migration need be involved).

The preliminary HRS score was:

$S_M$	=	3.75	$S_A$	=	0
$S_{GW}$	=	4.08	$S_{FE}$	=	0
$S_{SW}$	=	5.04	$S_{DC}$	=	25.0

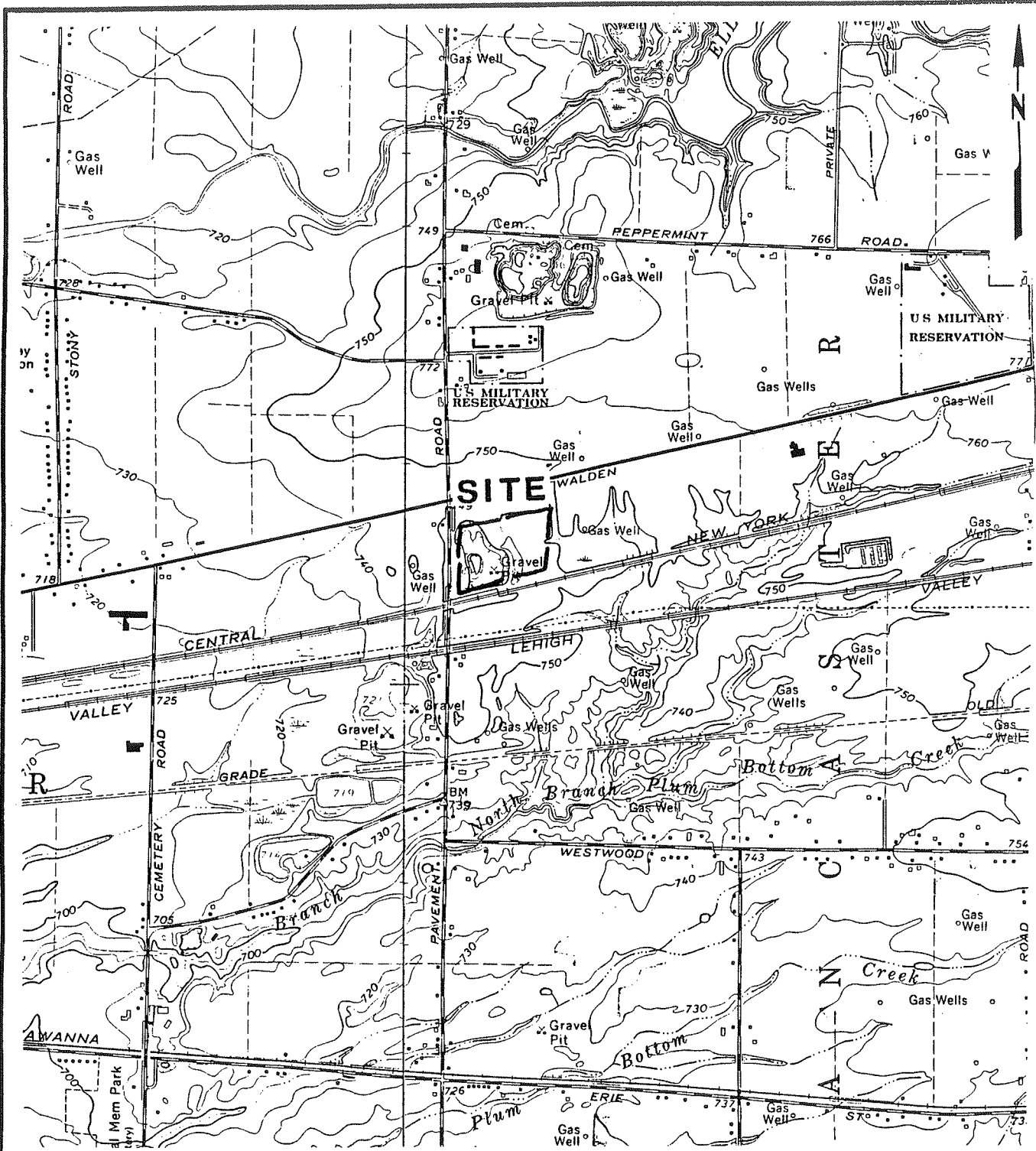
These scores reflect the potentially toxic nature of the wastes disposed on the site and the permeability of the natural site soils. Also, the high direct contact score is due to the open and uncovered nature of the waste lagoons.

#### RECOMMENDATIONS

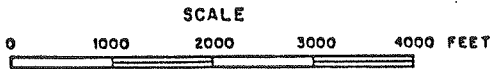
The following recommendations are made for the completion of Phase II:

- o Geophysical study consisting of electrical resistivity survey.
- o Groundwater monitoring system consisting of one upgradient and three downgradient wells.
- o Surface water and sediment monitoring system consisting of two monitoring stations.
- o Sampling of pooled water in two of the surface impoundments.
- o Sample analyses to include priority pollutants.

The estimated man-hour requirements to complete Phase II are 864, while the estimated cost is \$58,188.



LATITUDE: 42°55'18"  
 LONGITUDE: 78°37'30"

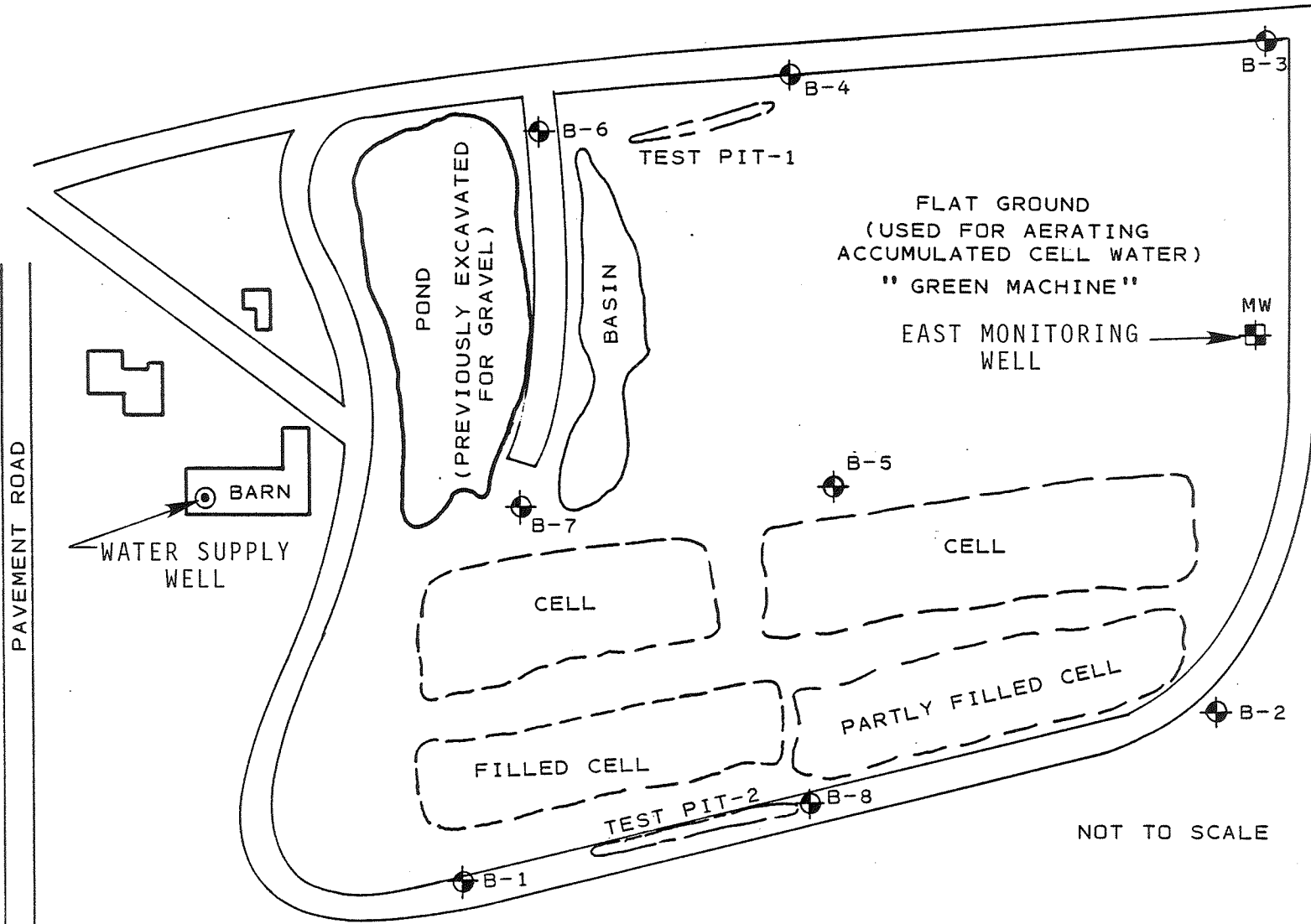


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

SITE LOCATION MAP  
 LANCASTER RECLAMATION

REFERENCE: U.S.G.S. 7.5' Topographic Map  
 Clarence, NY (1965) Quadrangle

FIGURE I-1



EXPLANATION:

-  TEST BORING; DRILLED 1984
-  MONITORING WELL (1977)
-  WATER SUPPLY WELL

NOT TO SCALE

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PLOT PLAN  
LANCASTER RECLAMATION

FIGURE I-2



## SECTION II

### PURPOSE

The purpose of the Phase I investigation at the Lancaster Reclamation, Inc. site was to assess the hazard to the environment caused by the present condition of the site. This assessment is based on the Hazard Ranking System, which involves the compilation and rating of numerous geological, toxicological, environmental, chemical, and demographic factors and the calculation of an HRS score. Details of HRS implementation are included in Section V. During the initial portion of the investigation, available data and records, combined with information collected from a site inspection, were reviewed and evaluated. The investigation at this site focused on the disposal of various sludges and solid wastes on-site. Based on this initial evaluation of the Lancaster Reclamation, Inc. site, a Phase II Work Plan has been prepared for collecting any additional data needed to complete the HRS score. In addition, a cost estimated for the recommended Phase II work is provided.

### SECTION III

#### SCOPE OF WORK

The scope of work for the New York State Inactive Site Investigation Program (Phase I) was to collect and review all available information necessary for the documentation and preparation of a Hazard Ranking System score and a Phase II work plan and cost estimate if required. The work activities performed included data collection and review, a site inspection, and interviews with knowledgeable individuals of past and present disposal activities at the site.

The sources contacted during this Phase I investigation included government agencies (federal, state and local), present site owners and operators, and any other individuals that may have knowledge of the site, as identified during the performance of the investigation. These sources are listed in Appendix A. The intent of the list is to identify all persons, departments, and/or agencies contacted during the third round of the Phase I investigations even though useful information may not have been collected from each source contacted.

## SECTION IV

### SITE ASSESSMENT

#### SITE HISTORY

The 13-acre Lancaster Reclamation, Inc. site, consisting of four surface impoundments, has been owned by Lancaster Reclamation, Inc. since May 1976. Prior to 1976, the site was the property of Rose Pietruszewski. Initial paper work for the construction of the site (e.g., permit application and permit to construct) was in the name of Ferry Construction Co., Inc.; however, Ferry Construction never actually owned the site. Both companies (Ferry Construction and Lancaster Reclamation, Inc.) are owned by Mr. John Ferry.

From 1976 to the present, Lancaster Reclamation, Inc. has used the site for land disposal of several types of industrial wastes including bentonite clay slurry, cement and asbestos slurry, foundry sand, wall-paper production wastes, and oily sludge, as discussed below.

In October, 1975, Ferry Construction began land disposal operations. Industrial wastes disposed of on-site include, bentonite clay slurry and foundry sand generated by Dresser Industries located in the Village of Depew, New York. In 1976, Ferry Construction disposed of clay slurry and foundry sand in an on-site surface impoundment (Permit #15508). The bentonite slurry, containing approximately 90% water, was dewatered by the introduction of air to promote evaporation. Once the liquid content reached 20%, the remaining material was leveled and the method repeated (Wendel Engineers, 1976).

In January 1978, Lancaster Reclamation, Inc. was given permission by the NYSDEC to dispose of foundry sand slurry consisting of fine sand, bentonite clay, metal oxides, coke ash and carbon at the Lancaster site (NYSDEC, 1978). The waste was generated by the Chevrolet Motor Division of General Motors (Tonawanda, NY); Ken Staub Jr. Trucking Company was the waste hauler. This slurry was also dewatered prior to landfilling by evaporation.

In January 1979, the NYSDEC agreed to allow Lancaster Reclamation, Inc. to landfill on-site, a slurry produced by Fabritron (Alden, NY), which contained cement, asbestos fibers, and glass fibers (NYSDEC, 1979). However, as a result of objections raised by the Town of Lancaster, the disposal of asbestos wastes on-site was curtailed in June 1979 (Wendel Engineers, 1979).

In October 1979, the NYSDEC renewed an operating permit (#2021) for a restricted use landfill on the provision that a monitoring well be installed at the site (NYSDEC, 1979). By February 1980, the installation of a well in the eastern section of the site had been completed (Wendel Engineers, 1980). This new well, in addition to an existing well, are periodically monitored and analytical results are submitted to the NYSDEC. Both wells are installed in bedrock, however, it is believed that the east well only monitors surface water recharge (Wendel Engineers, 1984).

In October 1979, the NYSDEC granted a modification to Permit #2021 (#2290) to allow the landfilling of residual dust from shot blast collector systems (NYSDEC, 1980) at the Lancaster site. The Town of Lancaster also granted a zoning compliance certificate to allow the disposal of shot blast dust at the Lancaster facility (Town of Lancaster, 1980). The shot blast dust was generated by Dresser Industries and Ferry Construction Company was the waste hauler.

In June 1981, the NYSDEC modified the landfill operation permit #2021 to allow the acceptance of wallpaper production waste at the site. The Town of Lancaster also approved the waste in a certificate of zoning

compliance dated 24 June 1981. The wallpaper waste consists of surface print waste, prepaste alkali and prepaste polymer. Reed Holdings, Inc. (Buffalo, NY) generated the wastes and contracted Lancaster Reclamation, Inc. to transport the wastes to the Lancaster site (NYSDEC, 1981).

In 1982 and 1983, Lancaster Reclamation, Inc. received permission from the NYSDEC to dispose on-site, oily sludges removed from bus garage catch basins (NYSDEC, 1982).

In June 1984, Lancaster Reclamation, Inc. proposed to abandon the east monitoring well due to possible contamination of the well water by surface waters. Two new monitoring wells were proposed to monitor groundwater quality and establish groundwater flow patterns on the site (Wendel Engineers, 1984). In August 1984, Buffalo Drilling Company submitted a proposal for a groundwater monitoring system (Buffalo Drilling Company, 1984). In November 1984, the NYSDEC requested additional groundwater data before granting a renewal of the Lancaster Reclamation, Inc. Permit (NYSDEC, 1984). As a result, the Lancaster Reclamation site has not received waste in the recent past.

#### SITE TOPOGRAPHY

Lancaster Reclamation, Inc. is located in the Town of Lancaster, Erie County, New York State. The original ground surface was relatively flat; however, excavation in the northeastern quadrant of the site (used as a gravel quarry) has resulted in a large double pond in that area. Four disposal cells exist in the southwest and southeast quadrants of the site. The southwestern-most of these cells is completely filled with waste materials. The southeastern-most is partially filled and, along with two remaining open cells, contains ponded water. The northeast quadrant of the site remains a natural ground surface and is used for aerating accumulated pond water (called "green machine" area by site owner).

East of the site is the Lancaster private airport. South of the site are AMTRAK train tracks. West of the site is Pavement Road. On

the site is the residence of one of the site owners. There is a deep well in the barn of this residence.

#### Local Sensitive Environments

There are no nearby wetlands nor critical habitats for endangered species.

#### SITE HYDROLOGY

This summary of site hydrology is based on information from USGS Topographic Maps, NYS Museum and Science Service Bedrock Geology Map and Quaternary Geology Map, recent site visit (1985), and subsurface information from J. Barron (1984).

#### Regional Geology and Hydrology

The site is located in the Erie-Ontario lowlands physiographic province. The bedrock of this region is predominantly limestone, dolostone, and shale. Most of the rocks are deep aquifers with regional flow to the south.

In the recent past, most of New York State, including the site, has been repeatedly covered by a series of continental ice sheets. The activity of the glacier widened preexisting valleys and deposited widespread accumulations of till. The melting of ice, ending approximately 12,000 years ago, produced large volumes of meltwater; this water subsequently shaped channels and deposited thick accumulations of stratified, granular sediments.

As glacial ice retreated from the region, meltwater formed lakes in front of the ice margin. The Erie County region is covered by lake sediments; the most recent being from Lake Warren (a larger predecessor to Lake Ontario and Lake Erie). The sediments consist of blanket sands and beach ridges which are occasionally underlain by lacustrine silts and clays (indicating quiet, deeper water deposition).

Granular deposits in this region frequently act as shallow aquifers, whereas lacustrine clays, as well as tills, often inhibit groundwater movement. However, fine-grained, water-lain sediments, such as silts and clays, frequently contain horizontal laminations and sand seams. These internal features facilitate lateral groundwater movement through otherwise low permeability materials.

#### Site Hydrogeology

Bedrock beneath the site is expected to be the lower part of the Onondaga Limestone, occurring at an elevation of approximately 682 feet (MSL). This places the top-of-rock surface at approximately 50 feet below the natural ground surface.

Overlying the bedrock surface there is a thin layer of dense glacial till which, in turn, is overlain by a thick sequence of stratified sands, gravels, and clays. These water-lain deposits are a combination of typical stagnant ice and outwash materials. The geographic location of the site also suggests these origins for this sediment, as it occurs along a theoretical eastern extension of the Buffalo moraine.

Prior to excavation on the site, there may have been numerous water-bearing soil layers, each isolated from the others by interbedded clay and silt layers. Since excavation and waste disposal, pathways for interconnection between soil aquifers have probably been created.

Additionally, if excavation extended to the bedrock surface, then a connection between soil and bedrock aquifers may also exist. For HRS scoring, the permeability of the unsaturated zone has been estimated to range from  $10^{-3}$  cm/sec to  $10^{-5}$  cm/sec.

## SITE CONTAMINATION

The 13-acre Lancaster Reclamation, Inc. site has been used as an industrial waste landfill since 1976. The waste types and quantities of waste disposed at the site are presented in Table IV-1. Also shown are hazardous constituents of concern. A detailed constituent analysis of each waste is given in the Appendix.

Beginning in 1976, Lancaster Reclamation, Inc. landfilled on-site, bentonite clay slurry and foundry sand in four excavated lagoons on the southern portion of the site (see Figure IV-1). The bentonite slurry contained 90% water (Frontier Chemicals, 1976); 96,000 cubic yards were placed in the lagoons and dewatered by evaporation prior to burial. Foundry sand was also used to thicken the slurry. In the 1980's the clay slurry was thickened before landfilling (Ferry, 1985). Analytical data on filtrate (i.e., water fraction) of the slurry indicates the presence of zinc, chlorides and TOC (see Appendix) (Chevrolet Central Labs, 1976). The concentration of zinc exceeds the limits for discharge to groundwaters in New York State. A leachate test also found significant concentrations of phenol in the foundry sand that was landfilled with the clay slurry. Both the bentonite slurry and the foundry sand wastes were generated by Dresser Industries (Wendel Engineers, 1976).

Beginning in 1978, approximately 1.7 million gallons of foundry sand slurry were placed in the lagoon (Ferry, 1985). The slurry consisted of sand fines produced from foundry wastewater treatment at the Chevrolet Division of General Motors in Tonawanda, New York. The slurry contained 65% water and dewatering was accomplished by (1) injecting air into the waste to promote evaporation, or (2) decanting the liquid and applying it on the land by spray irrigation (Wendel Engineers, 1979). An analysis of several waste streams contained in the slurry found significant amounts of oil (up to 21,000 ppb) and detectable amounts of PCBs. Leachate tests also revealed concentrations of selenium, cadmium, and lead in excess of New York State's discharge limits to groundwaters; however, concentrations in leachate did not exceed the levels established for EP toxicity.



Beginning in January 1979, an asbestos-containing waste slurry consisting of 20% portland cement, 5% asbestos, 10% glass fibers and 65% water was pumped into the waste lagoons (Fabritron, 1979). The slurry was dewatered using the same techniques described for the bentonite and foundry sand slurries. Aware that the spray irrigation and air sparging methods could potentially increase the potential for airborne entrainment of asbestos, the Town Board of the Town of Lancaster restricted the disposal of the asbestos slurry in June 1979. By then, a total of 7,000 gallons of the asbestos slurry had been disposed at the facility (Ferry, 1985).

In October 1980, Lancaster Reclamation, Inc. began accepting shot blast dust generated from steel casting operations at Dresser Industries. Prior to disposal, the shot blast was mixed with foundry sand. The estimated quantity of this shot blast dust is included in the estimated for the foundry sand presented in Table IV-1. A leachate analysis of the shot blast dust found concentrations of phenol in excess of NYS limits for discharge to groundwaters (J-Labs, 1980).

Starting in June 1981, Lancaster Reclamation, Inc. received 120,000 gallons of wallpaper production wastes from Reed Holdings, Inc. (Ferry, 1985). The wastes included surface print waste, prepaste polymer and prepaste alkali (ARO, 1981). A description of the composition of each waste type is presented in the Appendix. EP Toxicity tests were also conducted on each waste and results of the tests show that the contaminants analyzed for were below the test limits. However, other organic pollutants which may be present (e.g., solvents) in these wastes were not tested for.

In 1982, an unknown quantity of foundry sands and sludge wastes from the McGraw-Edison Company were disposed at the Lancaster Reclamation Landfill. These wastes contained concentrations of phenols of 1.60 and 8.83, respectively (Worthington, 1984).

In 1982 and 1983, Lancaster Reclamation, Inc. disposed 9,000 cubic yards of oil sludge from bus garage catch basins (Ferry, 1985). These

sludges were received from the Sweet Home Central School and Ormsby Vocational School bus garages. The oil and grease content of the Sweet Home Central School sludge was 3.07% (ARO, 1982). To prevent oil from leaching from the waste, the NYSDEC requested that Lancaster Reclamation, Inc. mix the oily sludge with diatomaceous earth (NYSDEC, 1982).

Since 1980, Lancaster Reclamation, Inc. has conducted semi-annual water analyses of surface water and groundwater. Surface waters from the southeast lagoon and an aerated basin in the northeast portion of the site called the "green machine" were included. During these sampling efforts, groundwater samples were collected from a monitoring well in the eastern portion of the site and a deep water supply well located in an on-site barn. Samples were sent to ARO Corporation Environmental Laboratory for analysis of conductivity, pH, phenols, TOC and iron.

Presented in Table IV-2 are the analytical results for phenol and TOC of the groundwater monitoring conducted at the Lancaster Reclamation site from January 1980 until March 1984. The concentrations of phenols in the west well are below the water quality standards for Class GA groundwater standards with the exception of one sampling event conducted in February 1981 (0.003 mg/l). However, the west well occurs in the deep bedrock aquifer which may not be hydraulically connected to the lagoon waters containing higher concentrations of phenols (Wendel Engineers, 1984) (see Table IV-3).

The concentrations of phenol in the east well are higher as compared to the west well. Phenol concentrations have exceeded the Class GA groundwater standards for all but one of the sampling events over the same period of time. However, the east well occurs in a shallow aquifer which is more likely to be hydraulically connected to the contaminated cell and surface waters. Therefore, it is uncertain if the phenol contamination in the west well is attributable to the Lancaster Reclamation site.

Presented in Table IV-3 are the results for phenols and TOC of surface water monitoring conducted at the Lancaster Reclamation site.

As indicated in the table, the concentration of phenols in some of the surface impoundments has exceeded the water quality standards for Class GA waters in New York State on several of the sampling events. However, with the exception of these excursions, the concentrations of phenols are low. TOC concentrations are also generally found at insignificant concentrations in the surface impoundments.

The presence of several priority pollutants (i.e., selenium, lead, and PCBs) in the test leachates of on-site wastes suggests a potential for surface water and groundwater contamination by these constituents. However, the current monitoring program does not include priority pollutant analyses other than phenols.

HNU meter readings were taken during a recent site inspection (ES and D&M, 1985) and all measurements were less than 1 ppm, indicating a lack of potential air contamination.

TABLE IV-1  
SUMMARY OF WASTES DISPOSED OF AT THE LANCASTER RECLAMATION, INC. SITE

Date Permit Approved	Generator	Waste Type	Quantity Disposed <sup>a</sup>	Constituents of Concern
5/11/76	Dresser Transportation Equipment Division	Bentonite Clay Slurry	76,000 cu.yd. prior to thickening; 165 after thickening.	Leachate: zinc
1/24/78	Chevrolet Division, General Motors	Foundry Sand Slurry	1.7 million gallons	Pit: oil Pit Leachate: selenium, cadmium Mixture: oil, PCB Mixture leachate: cadmium, lead
1/4/79	Fabritron	Cement, asbestos, and glass fiber slurry	7,000 gallons	Asbestos
5/11/76	Dresser Transportation Equipment Division	Foundry Sand	2,200 cu.yd.	Leachate: phenols
6/16/81	Reed Holdings,	Surface print waste, pre-paste polymer, prepast alkali	120,000 gallons	----
10/29/80	Dresser Transportation Equipment Division	Shot blast of steel castings	Mixed with foundry sand	Leachate: phenols
5/27/82	Sweet Home Central School Bus Garage	Dirt and sludge from catch basin	See below	Sluge: oil
7/7/83	Ormsby Vocational School Bus Garage	Dirt and sludge from catch basin	9,000 cu.yd., includes Sweet Home	Heavy metals and oil and grease

<sup>a</sup> Based on telephone interview with J. Ferry of Lancaster Reclamation, Inc., 4/25/85.

TABLE IV-2

SUMMARY OF GROUNDWATER DATA FOR SELECTED PARAMETERS  
FOR THE LANCASTER RECLAMATION SITE

Parameter (mg/l)	Groundwater Quality Standards <sup>a</sup>	East Well	West Well
<u>March 1984</u>			
Phenol	0.001	< 0.09	< 0.001
TOC	---	18.8	13.2
<u>June 1983</u>			
Phenol	0.001	0.010	< 0.001
TOC	---	8.4	9.1
<u>July 1983</u>			
Phenol	0.001	< 0.001	< 0.001
TOC	---	7.9	3.7
<u>April 1982</u>			
Phenol	0.001	0.040	< 0.001
TOC	---	11.2	3.8
<u>August 1981</u>			
Phenol	0.001	< 0.001	< 0.001
TOC	---	1.0	16.5
<u>February 1981</u>			
Phenol	0.001	0.010	0.003
TOC	---	6.5	3.0
<u>October 1981</u>			
Phenol	0.001	0.044	< 0.001
TOC	---	6.1	3.4
<u>June 1980</u>			
Phenol	0.001	0.068	< 0.001
TOC	---	8.0	3.4
<u>January 1980</u>			
Phenol	0.001	0.125	< 0.001
TOC	---	8.7	22.6

SOURCE: ARO Corporation, Analytical Results for Lancaster Reclamation

<sup>a</sup> Water Quality Standards for Class GA Groundwater for the State of New York.

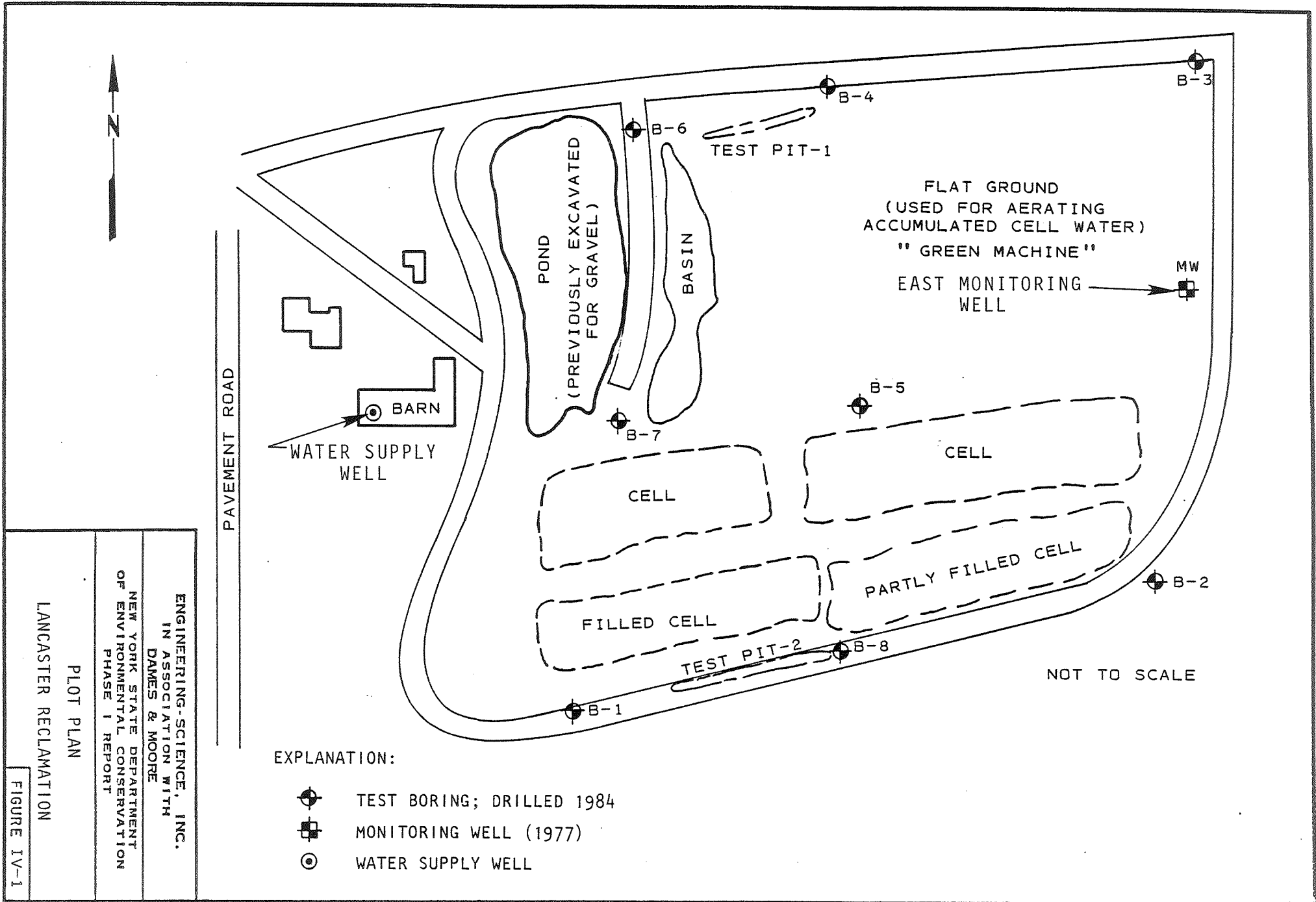
TABLE IV-3

SUMMARY OF SURFACE WATER DATA FOR SELECTED PARAMETERS  
FOR THE LANCASTER RECLAMATION SITE

Parameter (mg/l)	Groundwater Quality Standards <sup>a</sup>	Final Pond	Southeast Cell	Green Machine
<u>March 1984</u>				
Phenol	0.002	< 0.001	0.023	< 0.001
TOC	---	14.4	15.5	22.9
<u>June 1983</u>				
Phenol	0.002	< 0.001	0.001	< 0.001
TOC	---	5.2	4.8	2.4
<u>July 1983</u>				
Phenol	0.002	< 0.001	< 0.001	< 0.001
TOC	---	3.7	32	7.9
<u>April 1982</u>				
Phenol	0.002	< 0.001	< 0.001	0.003
TOC	---	7.8	11.2	7.8
<u>August 1981</u>				
Phenol	0.002	< 0.001	< 0.001	< 0.001
TOC	---	5.0	5.0	14.0
<u>February 1981</u>				
Phenol	0.002	0.005	0.086	0.018
TOC	---	< 0.5	2.0	6.5
<u>October 1981</u>				
Phenol	0.002	< 0.001	< 0.001	< 0.001
TOC	---	9.6	6.7	2.1
<u>June 1980</u>				
Phenol	0.002	< 0.001	< 0.001	< 0.001
TOC	---	5.0	13.0	14.0
<u>January 1980</u>				
Phenol	0.002	< 0.001	< 0.001	< 0.001
TOC	---	30.0	24.5	27.8

SOURCE: ARO Corporation, Analytical Results for Lancaster Reclamation

<sup>a</sup> Water Quality Standards for Class GA Groundwater for the State of New York.



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PLANT PLAN

LANCASTER RECLAMATION

FIGURE IV-1

## PRELIMINARY APPLICATION OF HAZARD RANKING SYSTEM

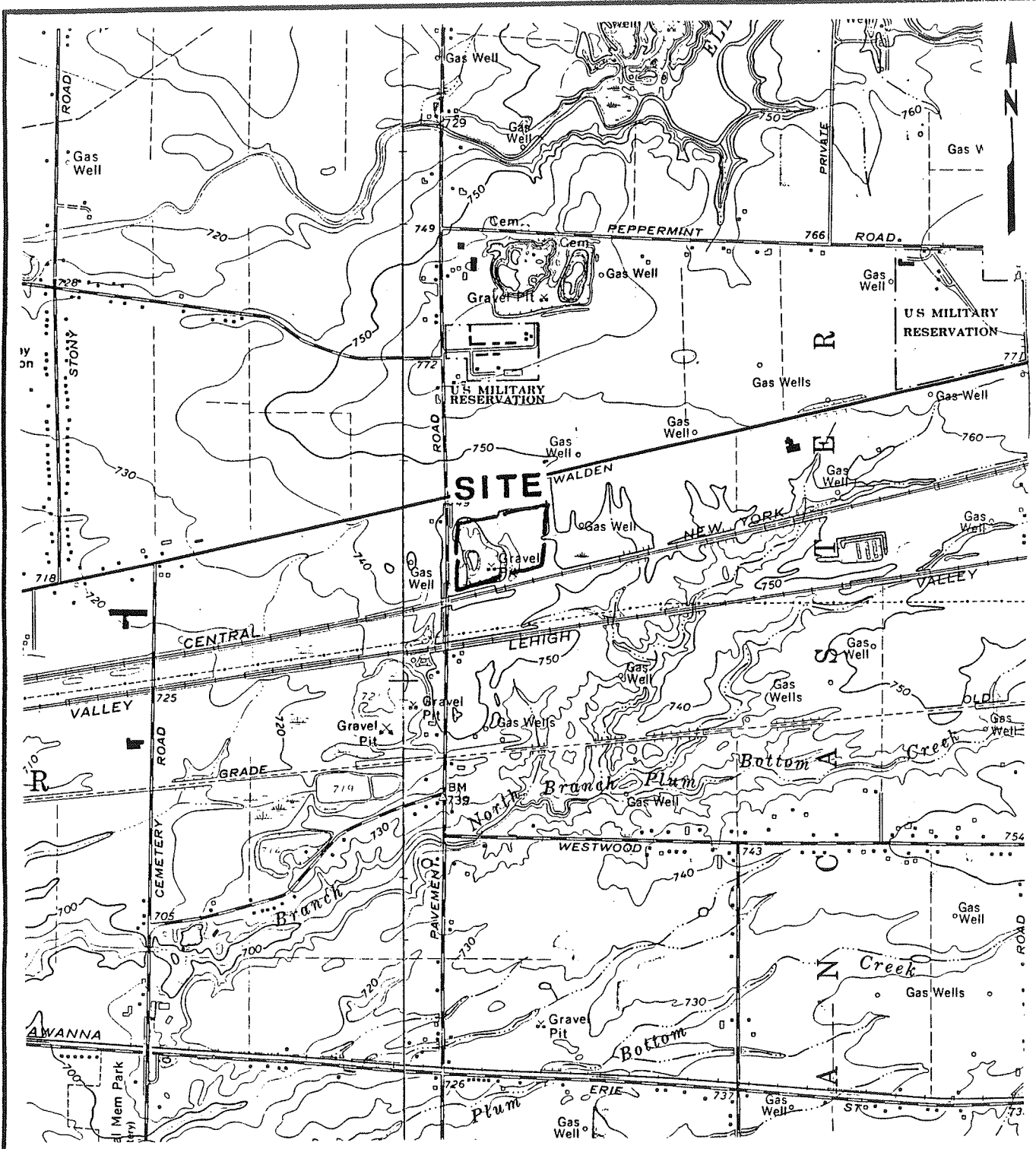
### NARRATIVE SUMMARY

The 13-acre Lancaster Reclamation, Inc. site is located in the Town of Lancaster, Erie County, New York. In 1976, the site was purchased from Rose Pieturzewski by Lancaster Reclamation, Inc., owned by John Ferry. The initial permit to construct was issued to the Ferry Construction Company, also owned by John Ferry; however, Ferry Construction never actually owned the site. The site has received waste since 1976 and is still active. Since 1976, the facility has been used for in-situ dewatering and land disposal of bentonite clay slurry; foundry sand and foundry sand slurry; cement, asbestos and glass fiber slurry; surface print waste, prepaste polymer, and prepaste alkali; shot blast steel castings; and dirt and sludge from garage catch basins (Ferry, 1985). Wastes are placed in on-site lagoons, dewatered by air sparging and/or decanting of the liquid fraction, which is then disposed on-site by spray irrigation (Wendel Engineers, 1979). The total amount of waste disposed is estimated at 52,000 cubic yards (ES and D&M Site Inspection, 1985).

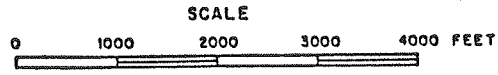
Leachate analyses of wastes disposed at the facility have shown the presence of heavy metals (cadmium, lead, selenium, zinc) and some organics (oil, PCBs, and phenols) at measureable levels. Semi-annual groundwater sampling (specific conductivity, TOC pH, phenols, and iron) indicated the presence of phenols in the east well which occurs in the shallow groundwater aquifer. Phenol concentrations in the west well which occur in the deep bedrock do not exceed Class GA water quality standards with the exception of one sampling event. In general, surface water samples showed lower concentrations of phenols (below detection limits) in most cases. Groundwater is encountered within 8 to 10 feet of the surface and ponded water has been observed on the site, suggesting a perched water table.

HNu sampling conducted at the site did not show the presence of volatile organics above levels of 1 ppm (ES and D&M Site Inspection, 1985).





LATITUDE: 42°55'18"  
 LONGITUDE: 78°37'30"



ENGINEERING-SCIENCE, INC. IN ASSOCIATION WITH DAMES & MOORE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT
SITE LOCATION MAP LANCASTER RECLAMATION
FIGURE ii-1

REFERENCE: U.S.G.S. 7.5' Topographic Map  
 Clarence, NY (1965) Quadrangle

HRS COVER SHEET

Facility Name: Lancaster Reclamation, Inc.

Location: 403 Pavement Rd., Town of Lancaster, Erie County, New York

EPA Region: II

Person(s) in charge of the facility: J. Ferry, Managing Engineer

Name of Reviewer: S. Robert Steele, II Date: 4/26/85

General Description of the facility:

The Lancaster Reclamation, Inc., site has been in operation since 1976 for the in-situ dewatering and land disposal of various industrial wastes. An estimated 52,000 cubic yards of slurry wastes have been disposed on-site. Leachate analyses of wastes disposed on-site indicate the presence of heavy metals (cadmium, lead, selenium, zinc) and organics (oils, PCBs and phenols). Semi-annual groundwater sampling has detected the presence of phenols in the shallow on-site well. Low concentrations of phenols have been detected in both the surface water (surface impoundments) and the on-site deep groundwater monitoring well. However, no upgradient/downgradient water quality comparisons can be made with the existing wells on-site.

Scores:  $S_M = 3.75$  ( $S_{gw} = 4.08$   $S_{sw} = 5.04$   $S_a = 0$ )  
 $S_{FE} = 0$   
 $S_{DC} = 25.00$

Facility Name: Lancaster Reclamation Date: 5/23/85

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
<b>1</b> Observed Release	(0) 45	1		45	3.1
If observed release is given a score of 45, proceed to line <b>4</b> . If observed release is given a score of 0, proceed to line <b>2</b> .					
<b>2</b> Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	0 1 (2) 3	1	2	3	
Permeability of the Unsaturated Zone	0 1 (2) 3	1	2	3	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			13	15	
<b>3</b> Containment	0 1 2 (3)	1	3	3	3.3
<b>4</b> Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	12	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
Total Waste Characteristics Score			20	26	
<b>5</b> Targets					3.5
Ground Water Use	0 (1) 2 3	3	3	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			3	49	
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b>			2,340		
If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>				57,330	
<b>7</b> Divide line <b>6</b> by 57,330 and multiply by 100			$s_{gw} = 4.08$		

# GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multiplier	Score	Max. Score	Ref. (Section)	
<b>1</b> Observed Release	(0) 45	1	0	45	4.1	
If observed release is given a value of 45, proceed to line <b>4</b> . If observed release is given a value of 0, proceed to line <b>2</b> .						
<b>2</b> Route Characteristics					4.2	
Facility Slope and Intervening Terrain	(0) 1 2 3	1	0	3		
1-yr. 24-hr. Rainfall	0 1 (2) 3	1	2	3		
Distance to Nearest Surface Water	0 1 (2) 3	2	4	6		
Physical State	0 1 2 (3)	1	3	3		
Total Route Characteristics Score			9	15		
<b>3</b> Containment	0 1 2 (3)	1	3	3	4.3	
<b>4</b> Waste Characteristics					4.4	
Toxicity/Persistence	0 3 6 9 (12) 15 18	1	12	18		
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8		
Total Waste Characteristics Score			20	26		
<b>5</b> Targets					4.5	
Surface Water Use	0 1 (2) 3	3	6	9		
Distance to a Sensitive Environment	(0) 1 2 3	2	0	6		
Population Served/Distance to Water Intake Downstream	(0) 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40		
Total Targets Score			6	55		
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b> If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>			3240	64,350		
<b>7</b> Divide line <b>6</b> by 64,350 and multiply by 100			$S_{sw} = 5.04$			

# SURFACE WATER ROUTE WORK SHEET

Facility Name: Lancaster Reclamation Date: 5/23/85

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
<b>1</b> Observed Release	0      45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line <b>1</b> is 0, the $S_a = 0$ . Enter on line <b>5</b> .					
If line <b>1</b> is 45, then proceed to line <b>2</b> .					
<b>2</b> Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
<b>3</b> Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
Total Targets Score				39	
<b>4</b> Multiply <b>1</b> x <b>2</b> x <b>3</b>			0	35,100	
<b>5</b> Divide line <b>4</b> by 35,100 and multiply by 100			$S_a = 0$		

## AIR ROUTE WORK SHEET

Facility Name: Lancaster Reclamation Date: 5/23/85

Worksheet for Computing  $S_M$

	s	s <sup>2</sup>
Groundwater Route Score ( $S_{gw}$ )	4.08	16.65
Surface Water Route Score ( $S_{sw}$ )	5.04	25.40
Air Route Score ( $S_a$ )	0.0	
$S_{gw}^2 + S_{sw}^2 + S_a^2$		42.05
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		6.49
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		3.75

**WORK SHEET FOR COMPUTING  $S_M$**

Fire and Explosion Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi-plier	Score	Max. Score	Ref. (Section)
<b>1</b> Containment	1	3	1		3	7.1
<b>2</b> Waste Characteristics						7.2
Direct Evidence	0	3	1		3	
Ignitability	0	1 2 3	1		3	
Reactivity	0	1 2 3	1		3	
Incompatibility	0	1 2 3	1		3	
Hazardous Waste Quantity	0	1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score					20	
<b>3</b> Targets						7.3
Distance to Nearest Population	0	1 2 3 4 5	1		5	
Distance to Nearest Building	0	1 2 3	1		3	
Distance to Sensitive Environment	0	1 2 3	1		3	
Land Use	0	1 2 3	1		3	
Population Within 2-Mile Radius	0	1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0	1 2 3 4 5	1		5	
Total Targets Score					24	
<b>4</b> Multiply <b>1</b> x <b>2</b> x <b>3</b>					1,440	
<b>5</b> Divide line <b>4</b> by 1,440 and multiply by 100				$S_{FE} = 0$		

# FIRE AND EXPLOSION WORK SHEET

Facility Name: Lancaster Reclamation Date: 5/23/85

Direct Contact Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)	
<b>1</b> Observed Incident	<b>0</b> 45	1	0	45	8.1	
If line <b>1</b> is 45, proceed to line <b>4</b> If line <b>1</b> is 0, proceed to line <b>2</b>						
<b>2</b> Accessibility	0 1 2 <b>3</b>	1	3	3	8.2	
<b>3</b> Containment	0 <b>15</b>	1	15		8.3	
<b>4</b> Waste Characteristics Toxicity	0 1 2 <b>3</b>	5	15	15	8.4	
<b>5</b> Targets					8.5	
Population Within 1-Mile Radius	0 1 <b>2</b> 3 4 5	4	8	20		
Distance to a Critical Habitat	<b>0</b> 1 2 3	4	0	12		
Total Targets Score			8	32		
<b>6</b> If line <b>1</b> is 45, multiply <b>1</b> x <b>4</b> x <b>5</b>			5400			
If line <b>1</b> is 0, multiply <b>2</b> x <b>3</b> x <b>4</b> x <b>5</b>				21,600		
<b>7</b> Divide line <b>6</b> by 21,600 and multiply by 100			$S_{DC} = 25.00$			

## DIRECT CONTACT WORK SHEET



DOCUMENTATION RECORDS  
FOR  
HAZARD RANKING SYSTEM

FACILITY NAME: Lancaster Reclamation, Inc.

LOCATION: Pavement Rd., Town of Lancaster, Erie County, New York

## GROUNDWATER ROUTE

### 1. OBSERVED RELEASE

Contaminants detected (5 maximum):

Phenol detected at concentrations exceeding the water quality standards for Class GA waters in the State of New York.

Rationale for attributing the contaminants to the facility:

Contaminants not attributed to site due to the lack of upgradient/downgradient water quality comparison of the site. The east and west wells are thought to be monitoring different water bearing zones. The west well, a water supply well, is located in the bedrock aquifer; while the east well is located in a shallow aquifer. Therefore, for HRS scoring purposes, the groundwater data cannot be used to score an observed release.

\* \* \*

### 2. ROUTE CHARACTERISTICS

#### Depth to Aquifer of Concern

Name/description of aquifer(s) in concern:

Outwash aquifer of interbedded sand and gravel at 8 to 10 feet (ECDEP, Memo from C. O'Connor to D. Campbell, 11/81).

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Approximately 8 feet (based on current topography) (Wendel Engineers, June, 1979). Note that this measurement was at a well in a topographically lower section of the property. Therefore, depth to the highest seasonal water could be as much as 8 to 12 feet.

Depth from the ground surface to the lowest point of waste disposal/storage:

Approximately 20 feet (ES and D&M Site Visit, 3/21/85). The depth of the on-site lagoons is estimated to be 20 feet. Two of the four lagoons are presently filled with the various waste materials. The two remaining lagoons contained water when the site visit was conducted. Therefore, it can be assumed that the wastes are filled at or below the highest seasonal water table.

Net Precipitation

(US Department of Commerce, National Climatic Center, Climatic Atlas of the United States, 1979)

Mean annual or seasonal precipitation (list months for seasonal):

Mean annual precipitation is 36".

Mean annual lake or seasonal evaporation (list months for seasonal):

Mean annual lake evaporation is 27".

Net precipitation (subtract the above figures):

9" (36" - 27" = 9").

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Site was originally a gravel pit. The soils remaining are generally silt, sands and gravels interbedded with clays (ECDEP, Memo from C. O'Connor to D. Campbell, 11/81).

Permeability associated with soil type

1. Silty sand:  $10^{-3}$  to  $10^{-5}$  cm/sec.
2. Clay:  $10^{-7}$  cm/sec.

(Freeze, R.A., and Cherry, J.A. Groundwater, 1979).

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

Liquid (NYSDEC Registry Sheet, 12/83).

### 3. CONTAINMENT

#### Containment

Method(s) of waste or leachate containment evaluated:

Open, unlined lagoon (ES and D&M Site Visit, 1985).

Method with highest score:

Open, unlined lagoon - 3 (ES and D&M Site Visit, 1985).

### 4. WASTE CHARACTERISTICS

#### Toxicity and Persistence

Compound(s) evaluated:

Oil, PCBs, phenols, 1,1,1-trichloroethane (suspected), cadmium, lead, selenium, zinc, and asbestos. Data were evaluated for several of the wastes from various sources including ARO Corporation, 1981; Chevrolet Central Laboratories, 1980; Fabritron, 1979; Frontier Chemical Waste Process, Inc., 1976; J-Labs, Inc.; and applications submitted to the NYSDEC from Lancaster Reclamation for the disposal of industrial or hazardous wastes (see appendix).

Compound with highest score:

Phenols - 12; ARO Corporation. Note: phenols have been detected in groundwater and surface water samples collected from the site. The other compounds evaluated are suspected but have not been analyzed for in samples collected at the Lancaster Reclamation site and cannot be used for HRS scoring purposes.

#### Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

An estimated 52,000 cubic yards of solid material (after dewatering) containing various hazardous waste constituents (including phenol) have been disposed on-site.

Basis of estimating and/or computing waste quantity:

Lancaster Reclamation, Inc. records (Interview with J. Ferry, Lancaster Reclamation, Inc., 4/26/85; and NYSDEC Application for Treatment or Disposal of an Industrial or Hazardous Waste Stream, 1978 through 1984; and Letter from J. Ferry to R. Mitrey of NYSDEC, 9/30/80; and estimated dewatering capabilities as presented in the Wendel Engineers Report, 1976).

NOTE: A summary of waste disposal at the Lancaster Landfill as provided by Mr. J. Ferry, is presented in Section IV.

5. TARGETS

Ground Water Use

Uses(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Not used, but usable (Municipal water available to all residents in the Town of Lancaster (Telephone Interview of R. Thill, Town of Lancaster, 1/17/86).

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Not applicable; municipal water is used by town residents (Telephone Interview of R. Thill, Town of Lancaster, 1/17/86).

Distance to above well or building:

Not applicable; see above reference.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

None within 3 miles (NYS Atlas of Community Water System Sources, 1982).

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

Not applicable.

Total population served by ground water within a 3-mile radius:

None within 3 miles (NYS Atlas of Community Water System Sources, 1982; Telephone Interview of R. Thill, Town of Lancaster, 1/17/86).

## SURFACE WATER ROUTE

### 1. OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

Low concentrations of phenols have been detected in the surface impoundments on-site.

Rationale for attributing the contaminants to the facility:

Not an observed release. No upgradient/downgradient water quality comparisons have been made and the surface waters are not migrating off-site.

### 2. ROUTE CHARACTERISTICS

(USGS Topographic Maps: Clarence NY - 1965; Lancaster, NY - 1965 Quadrangles)

#### Facility Slope and Intervening Terrain

Average slope of facility in percent:

Less than 1.0%.

Name/description of nearest downslope surface water:

North Branch Plum Bottom Creek.

Average slope of terrain between facility and above-cited surface water body in percent:

1.0%.

Is the facility located either totally or partially in surface water?

No (USGS Topographic Map: Clarence, NY Quadrangle, 1965).

NOTE: Water is ponded in two of the on-site lagoons. The lagoon water could be from groundwater infiltrating into the lagoons or from surface water and has no potential to migrate from the site via the surface water pathway. For HRS scoring, the lagoon water is not a surface water body.

Is the facility completely surrounded by areas of higher elevation?

No (USGS Topographic Map: Clarence, NY Quadrangle, 1965).

1-Year 24-Hour Rainfall in Inches

2.1" (U.S. Department of Commerce Technical Paper No. 40).

Distance to Nearest Downslope Surface Water

1/3 mile (USGS Topographic Map: Clarence, NY Quadrangle, 1965).

Physical State of Waste

Liquid (NYSDEC Registry Sheet, 12/83).

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

Open, unlined lagoons (ES and D&M Site Visit, 1985).

Method with highest score:

Open, unlined lagoons (ES and D&M Site Visit, 1985).

#### 4. WASTE CHARACTERISTICS

##### Toxicity and Persistence

Compound(s) evaluated:

Oil, PCBs, phenols, 1,1,1-trichloroethane (suspected), cadmium, lead, selenium, zinc, and asbestos. Data were evaluated for several of the wastes from various sources including ARO Corporation, 1981; Chevrolet Central Laboratories, 1980; Fabritron, 1979; Frontier Chemical Waste Process, Inc., 1976; J-Labs, Inc.; and applications submitted to the NYSDEC from Lancaster Reclamation for the disposal of industrial or hazardous wastes (see appendix).

Compound with highest score:

Phenols - 12; ARO Corporation. Note: phenols have been detected in groundwater and surface water samples collected from the site. The other compounds evaluated above are suspected but have not been analyzed for in samples collected at the Lancaster Reclamation site. Therefore, the data cannot be used for HRS scoring purposes.

##### Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

An estimated 52,000 cubic yards of solid material (after dewatering) containing various hazardous waste constituents have been disposed on-site.

Basis of estimating and/or computing waste quantity:

Lancaster Reclamation, Inc. records (Interview with J. Ferry, Lancaster Reclamation, Inc., 4/26/85; and NYSDEC Application for Treatment or Disposal of an Industrial or Hazardous Waste Stream, 1978 through 1984; and Letter from J. Ferry to R. Mitrey of NYSDEC, 9/30/80; and estimated dewatering capabilities as presented in the Wendell Engineers Report, 1976).

NOTE: A summary of waste disposal at the Lancaster Landfill as provided by Mr. J. Ferry is presented in Section IV. Information from on-site interview of Mr. Ferry is presented in the USEPA Site Inspection Form 2070-13.

\* \* \*

#### 5. TARGETS

##### Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

Recreation (ECDOH, Telephone Interview with R. Koczaja, 1/16/86).



Is there tidal influence?

No.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None within 2 miles (western NYS not a coastal area).

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None within 1 mile (NYS Wetlands Maps).

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

None within 1 mile (NYSDEC Region 9, Division of Fish & Wildlife Files).

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

None within specified distances (NYS Atlas of Community Water System Sources, 1982).

Computation of land area by above-cited intake(s) and conversion to population (1.5 people per acre):

Not applicable; no surface water intakes exist within 3 miles of the site (NYS Atlas of Community Water System Sources, 1982).

Total population served:

Not applicable (see above).

Name/description of nearest of above water bodies:

North Branch Plum Bottom Creek is located approximately 1/3 mile from the site (USGS Topographic Maps: Clarence, NY, 1965; Lancaster, NY, 1965 Quadrangles).

Distance to above-cited intakes, measured in stream miles:

Not applicable; no surface water intakes exist within 3 miles of the site.

AIR ROUTE

1. OBSERVED RELEASE

Contaminants detected:

No volatile organics were detected above concentrations of 1 ppm.

Date and location of detection of contaminants:

ES and D&M site visit, 3/27/85.

Methods used to detect the contaminants:

HNu meter.

Rationale for attributing the contaminants to the site:

Not applicable.

\* \* \*

2. WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Not applicable; reactive and incompatible wastes are not known to be disposed on-site.

Most incompatible pair of compounds:

Not applicable; no incompatible compounds are known to be disposed on-site.

Toxicity

Most toxic compound:

Not applicable.

Hazardous Waste Quantity

Total quantity of hazardous waste:

An estimated 52,000 cubic yards of solid material containing various hazardous waste constituents have been disposed on-site. These wastes are known to contain phenols. However, HNu meter readings taken on-site during the ES and D&M site visit were not above background levels. Therefore, no wastes are documented to be on-site which impact the air pathway.

Basis of estimating and/or computing waste quantity:

Lancaster Reclamation, Inc. records (Interview with J. Ferry, Lancaster Reclamation, Inc., 4/26/85; and NYSDEC Application for Treatment or Disposal of an Industrial or Hazardous Waste Stream, 1978 through 1984; and Letter from J. Ferry to R. Mitrey of NYSDEC, 9/30/80; and estimated dewatering capabilities as presented in the Wendell Engineers Report, 1976).

NOTE: A summary of waste disposal at the Lancaster Landfill as provided by Mr. J. Ferry is presented in Section IV. Information from on-site interview of Mr. Ferry is presented in the USEPA Site Inspection Form 2070-13.

\* \* \*

3. TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

(0 to 4 mi)            0 to 1 mi            0 to 1/2 mi            0 to 1/4 mi

33,163 people (Complied from 1980 US Bureau of the Census Data).

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

None within 2 miles (western NYS not a coastal area).

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

None within 1 mile (NYS Wetlands Maps).

Distance to critical habitat of an endangered species, if 1 mile or less:

None within 1 mile (NYSDEC Region 9, Division of Fish & Wildlife Files).

Land Use

(ES and D&M Site Visit, 1985)

Distance to commercial/industrial area, if 1 mile or less:

More than 1 mile.

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

More than 2 miles.

Distance to residential area, if 2 miles or less:

More than 2 miles.

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Approximately 0.5 mile.

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Unknown.

Is a historic or landmark site (National Register of Historic Places and National Natural Landmarks) within view of the site?

No.

## FIRE AND EXPLOSION

### 1. CONTAINMENT

Hazardous substances present:

No records were found during the Phase I investigation which indicate that a past or present fire and explosion hazard exists at the site.

Type of containment, if applicable:

\* \* \*

### 2. WASTE CHARACTERISTICS

#### Direct Evidence

Type of instrument and measurements:

No measurements for fire or explosion were taken during the Phase I study.

#### Ignitability

Compound used:

Not applicable, no ignitable compounds are known to have been disposed on-site.

#### Reactivity

Most reactive compound:

Not applicable, no reactive compounds are known to have been disposed on-site.

#### Incompatibility

Most incompatible pair of compounds:

Not applicable, no incompatible compounds are known to be disposed on-site.

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Not applicable, no wastes which have the potential for creating a fire or explosion hazard are known to exist on-site.

Basis of estimating and/or computing waste quantity:

For purposes of HRS scoring, a waste must have the potential for impacting the pathway being scored. No wastes are known to be disposed on-site which has the potential to create a fire or explosion hazard.

\* \* \*

3. TARGETS

Distance to Nearest Population

The distance to the nearest residential area is more than 2 miles (ES and D&M Site Visit, 1985).

Distance to Nearest Building

The on-site barn is within 1/2 mile from the lagoons (ES and D&M Site Visit, 1985).

Distance to Sensitive Environment

Distance to wetlands:

None within 1 mile (NYS Wetlands Maps).

Distance to critical habitat:

None within 1 mile (NYSDEC Region 9, Division of Fish and Wildlife Files).

Land Use

Distance to commercial/industrial area, if 1 mile or less:

More than 1 mile (ES and D&M Site Visit, 1985).

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

More than 2 miles (ES and D&M Site Visit, 1985).

Distance to residential area, if 2 miles or less:

More than 2 miles (ES and D&M Site Visit, 1985).

Distance to agricultural and in production within past 5 years, if 1 mile or less:

Approximately 0.5 miles (ES and D&M Site Visit, 1985).

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Unknown.

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

No.

Population within 2-Mile Radius

3,586 (US Census Data, 1980).

Buildings Within 2-Mile Radius

944 buildings (USGS Topographic Maps: Clarence and Lancaster, NY Quadrangles, 1965).



DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

No information was found during the Phase I study which indicates that a direct contact incident occurred at the Lancaster Reclamation site from past on-site disposal activities.

\* \* \*

2. ACCESSIBILITY

Describe type of barrier(s):

None = 3 (ES/D&M Site Visit).

\* \* \*

3. CONTAINMENT

Type of containment, if applicable:

Open, unlined lagoon - 3 (ES/D&M Site Visit, 1985).

\* \* \*

4. WASTE CHARACTERISTICS

Toxicity

Compounds evaluated:

Oil, PCBs, phenols, 1,1,1-trichloroethane (suspected), cadmium, lead, slenium, zinc, and asbestos. Data were evaluated for several of the wastes from various sources including ARO Corporation, 1981; Chevrolet Central Laboratories, 1980; Fabritron, 1979; Frontier Chemical Waste Process, Inc., 1976; J-Labs, Inc.; and applications submitted to the NYSDEC from Lancaster Reclamation for the disposal of industrial or hazardous wastes (see appendix).

Compound with highest score:

Phenols - 12; ARO Corporation. Note: phenols have been detected in groundwater and surface water samples collected from the site. The other compounds evaluated above are suspected but have not been analyzed for in samples collected at the Lancaster Reclamation site. Therefore, the data cannot be used for HRS scoring purposes.

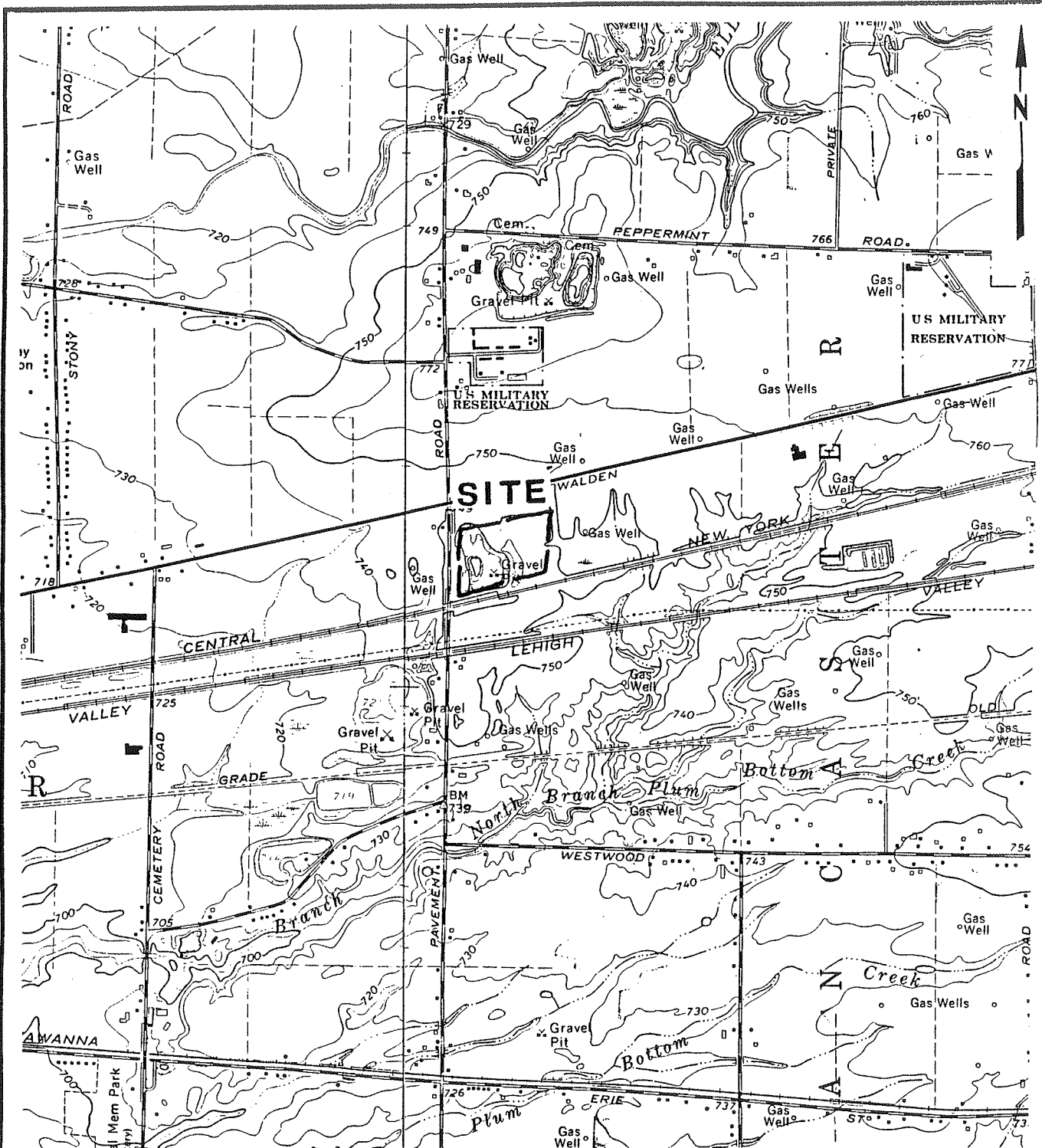
5. TARGETS

Population within one-mile radius

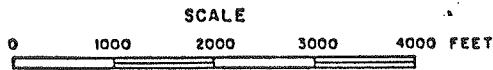
946 (US Census Data, 1980).

Distance to critical habitat (of endangered species)

None within one mile (NYSDEC, Region 9).

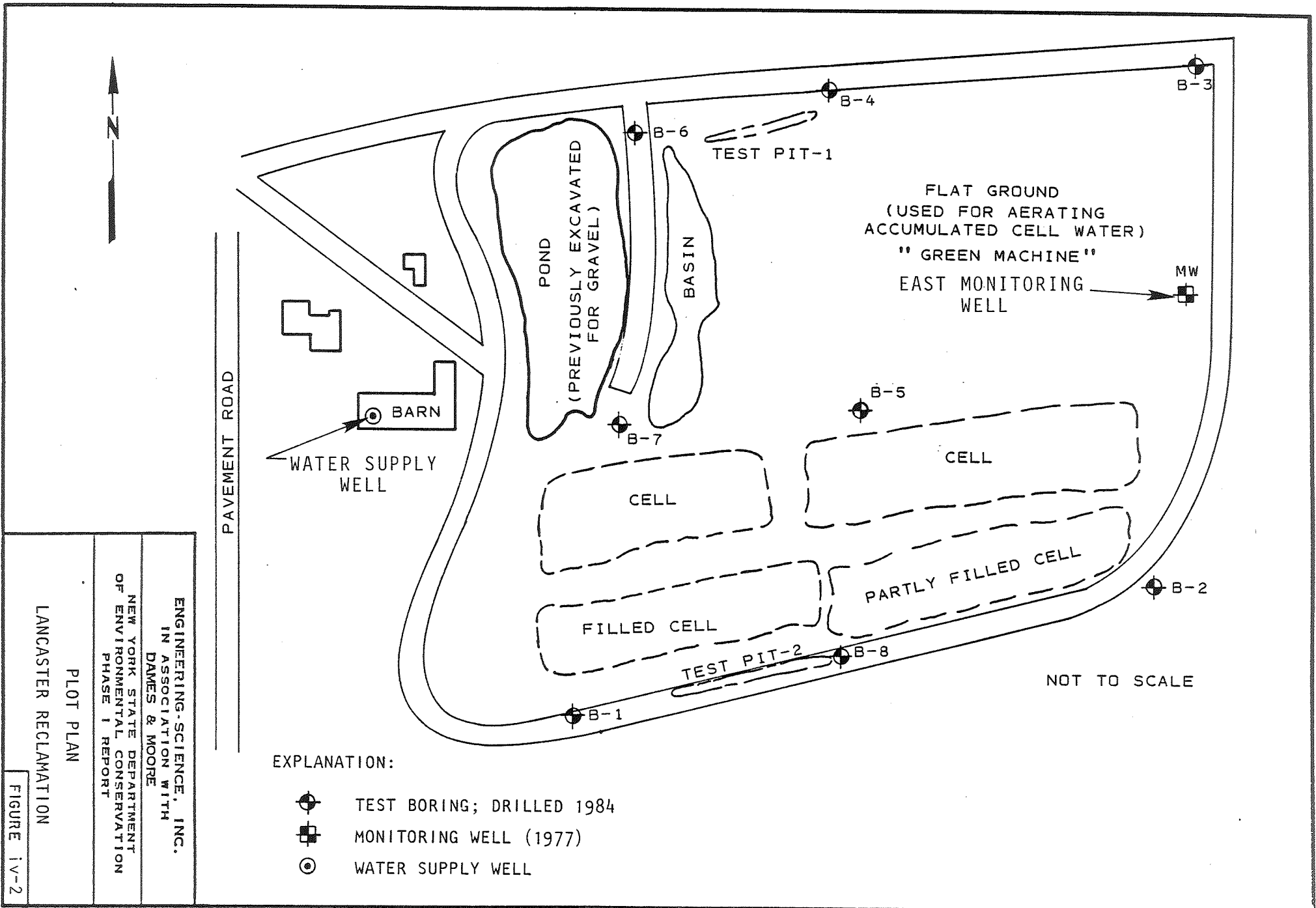


LATITUDE: 42°55'18"  
 LONGITUDE: 78°37'30"






ENGINEERING-SCIENCE, INC. IN ASSOCIATION WITH DAMES & MOORE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT
SITE LOCATION MAP LANCASTER RECLAMATION
FIGURE iv-1

REFERENCE: U.S.G.S. 7.5' Topographic Map  
 Clarence, NY (1965) Quadrangle



EXPLANATION:

-  TEST BORING; DRILLED 1984
-  MONITORING WELL (1977)
-  WATER SUPPLY WELL

ENGINEERING-SCIENCE, INC.  
 IN ASSOCIATION WITH  
 DAMES & MOORE  
 NEW YORK STATE DEPARTMENT  
 OF ENVIRONMENTAL CONSERVATION  
 PHASE I REPORT

PLOT PLAN

LANCASTER RECLAMATION

FIGURE 1-V-2

HRS REFERENCES  
LANCASTER RECLAMATION

1. ARO Corporation, Analytical Results, 6/8/82 and 3/11/81.
2. Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, 1979.
3. ECDEP, Memo from C. O'Connor to D. Campbell, 11/17/81.
4. ECDOH, Telephone Interview with Ron Koczaja, 1/16/86.
5. Freeze, R.A., and Cherry, J. A., Groundwater, 1979.
6. NYS Atlas of Community Water System Sources, NYSDOH, 1982.
7. NYSDEC Registry Sheet, 12/83.
8. NYSDEC, Region 9, Division of Fish and Wildlife Files.
9. NYSDEC, Letter from R. Mitrey to J. Ferry, Ferry Construction Company, 12/9/81.
10. Town of Lancaster, Telephone Interview with R. Thill, 1/17/86.
11. U.S. Department of Commerce Technical Paper No. 40.
12. U. S. Census Data, 1980.
13. USGS Topographic Maps: Clarence, NY Quadrangle, 1965.
14. Wendel Engineers, Lancaster Reclamation, Restricted Use Landfill Permit Update Report, 6/22/84.



REF-1

ENVIRONMENTAL LABORATORY  
 ANALYTICAL RESULTS

Customer Reed Holdings, Inc.  
 ARO Laboratory Number 20,028 W-2435 Customer P.O. # 2682  
 Date: Collected 2/26/81 Received 2/26/81 Reported 3/11/81  
 Sampling Point/Description Prepaste Polymer

The above referenced material has been classified as

Non-hazardous  Hazardous

as a result of testing for the following characteristics according to the procedures and protocols in 40CFR261.

Ignitability:  ignitable  non-ignitable  not tested  
 Corrosivity:  corrosive  non-corrosive  not tested  
 Reactivity:  reactive  non-reactive  not tested  
 EP Toxicity:  toxic  non-toxic  not tested

Hazardous Constituents (per 40CFR 261; Appendix VII)

1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_

RESULTS OF EP TOXICITY TEST

Contaminant	Allowed(mg/L)	Found (mg/L)	Contaminant	Allowed (mg/L)	Found (mg/L)
Arsenic	5.0	< 0.001	Silver	5.0	< 0.001
Barium	100.0	0.012	Endrin	0.02	< 0.00005
Cadmium	1.0	< 0.001	Lindane	0.40	< 0.00001
Chromium	5.0	0.003	Methoxychlor	10.0	< 0.00002
Lead	5.0	0.010	Toxaphene	0.5	< 0.0005
Mercury	0.2	< 0.0002	2,4-D	10.0	< 0.0001
Selenium	1.0	< 0.001	2,4,5-TP	1.0	< 0.0001

The above characteristics have been determined in accordance with 40CFR 261 and the EPA manual Test Methods for the Evaluation of Solid Waste; SW-846, Revision A; August 8, 1980.

*Bernard J. Gruzca*  
 Bernard J. Gruzca, Director  
 Environmental Laboratory



ENVIRONMENTAL LABORATORY  
 ANALYTICAL RESULTS

Customer Reed Holdings, Inc.  
 ARO Laboratory Number 20,028 W-2434 Customer P.O. # 2682  
 Date: Collected 2/26/81 Received 2/26/81 Reported 3/11/81  
 Sampling Point/Description Prepaste Alkali

The above referenced material has been classified as

Non-hazardous  Hazardous

as a result of testing for the following characteristics according to the procedures and protocols in 40CFR261.

Ignitability:  ignitable  non-ignitable  not tested  
 Corrosivity:  corrosive  non-corrosive  not tested  
 Reactivity:  reactive  non-reactive  not tested  
 EP Toxicity:  toxic  non-toxic  not tested

Hazardous Constituents (per 40CFR 261; Appendix VII)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

RESULTS OF EP TOXICITY TEST

Contaminant	Allowed(mg /L)	Found (mg /L)	Contaminant	Allowed (mg /L)	Found (mg /L)
Arsenic	5.0	0.016	Silver	5.0	0.002
Barium	100.0	0.034	Endrin	0.02	< 0.00005
Cadmium	1.0	< 0.001	Lindane	0.40	< 0.00001
Chromium	5.0	0.010	Methoxychlor	10.0	< 0.00002
Lead	5.0	0.009	Toxaphene	0.5	< 0.0005
Mercury	0.2	< 0.0002	2,4-D	10.0	< 0.0001
Selenium	1.0	0.005	2,4,5-TP	1.0	< 0.0001

The above characteristics have been determined in accordance with 40CFR 261 and the EPA manual Test Methods for the Evaluation of Solid Waste; SW-846, Revision A; August 8, 1980.

*Bernard J. Grueza*  
 Bernard J. Grueza, Director  
 Environmental Laboratory



ENVIRONMENTAL LABORATORY  
 ANALYTICAL RESULTS

Customer Reed Holdings, Inc.  
 ARO Laboratory Number 20,028 W-2433 Customer P.O. # 2682  
 Date: Collected 2/26/81 Received 2/26/81 Reported 3/11/81  
 Sampling Point Description Surface Print Waste

The above referenced material has been classified as  
 Non-hazardous  Hazardous  
 as a result of testing for the following characteristics according to the procedures and protocols in 40CFR261.

Ignitability:  ignitable  non-ignitable  not tested  
 Corrosivity:  corrosive  non-corrosive  not tested  
 Reactivity:  reactive  non-reactive  not tested  
 EP Toxicity:  toxic  non-toxic  not tested

Hazardous Constituents (per 40CFR 261; Appendix VII)

1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_

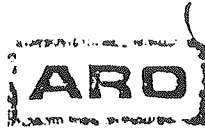
RESULTS OF EP TOXICITY TEST

Contaminant	Allowed (mg /L)	Found (mg /L)	Contaminant	Allowed (mg /L)	Found (mg /L)
Arsenic	5.0	< 0.001	Silver	5.0	< 0.001
Barium	100.0	0.028	Endrin	0.02	< 0.00005
Cadmium	1.0	< 0.001	Lindane	0.40	< 0.00001
Chromium	5.0	0.008	Methoxychlor	10.0	< 0.00002
Lead	5.0	< 0.001	Toxaphene	0.5	< 0.0005
Mercury	0.2	< 0.0002	2,4-D	10.0	< 0.0001
Selenium	1.0	< 0.001	2,4,5-TP	1.0	< 0.0001

The above characteristics have been determined in accordance with 40CFR 261 and the EPA manual Test Methods for the Evaluation of Solid Waste; SW-846, Revision A; August 8, 1980.

*Bernard J. Gueza*  
 Bernard J. Gueza, Director  
 Environmental Laboratory





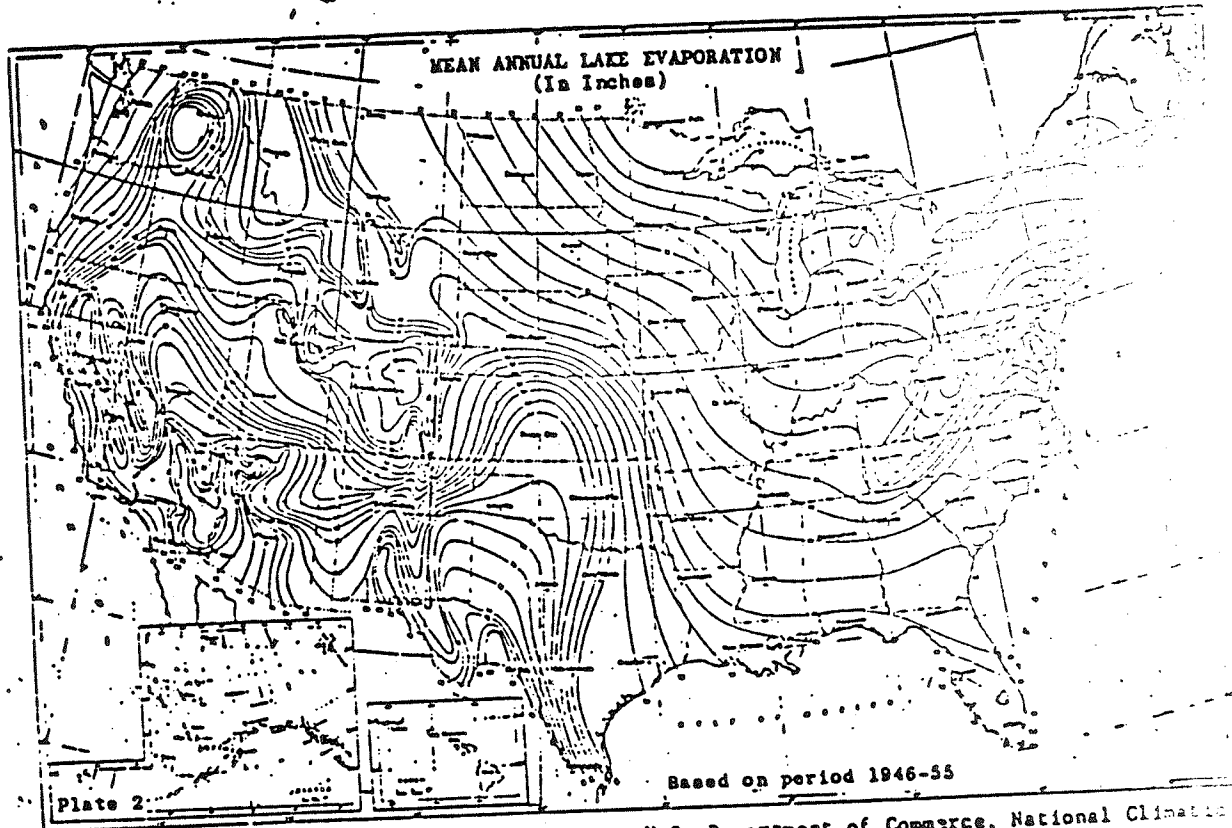
ANALYTICAL RESULTS

Customer: HICKMAN, COWARD & WATTLES 125 Gardenville, Cheektowaga N.Y.  
 DATE: COLLECTED: ? RECEIVED: 6/4/82 COMPLETED: 6/8/82  
 P.O. NO. ARO W.O. 20,472W-5103

TEST	Sludge Tank - Bottom				
Oil & Grease	30.66 gm/Kg (3.07%)				
	NOTE: Sample dewatered and airdried prior to extraction (soxhelt)				

*Bernard J. Grueza*  
 Bernard J. Grueza, Ph.D.  
 Director, Environmental Laboratory

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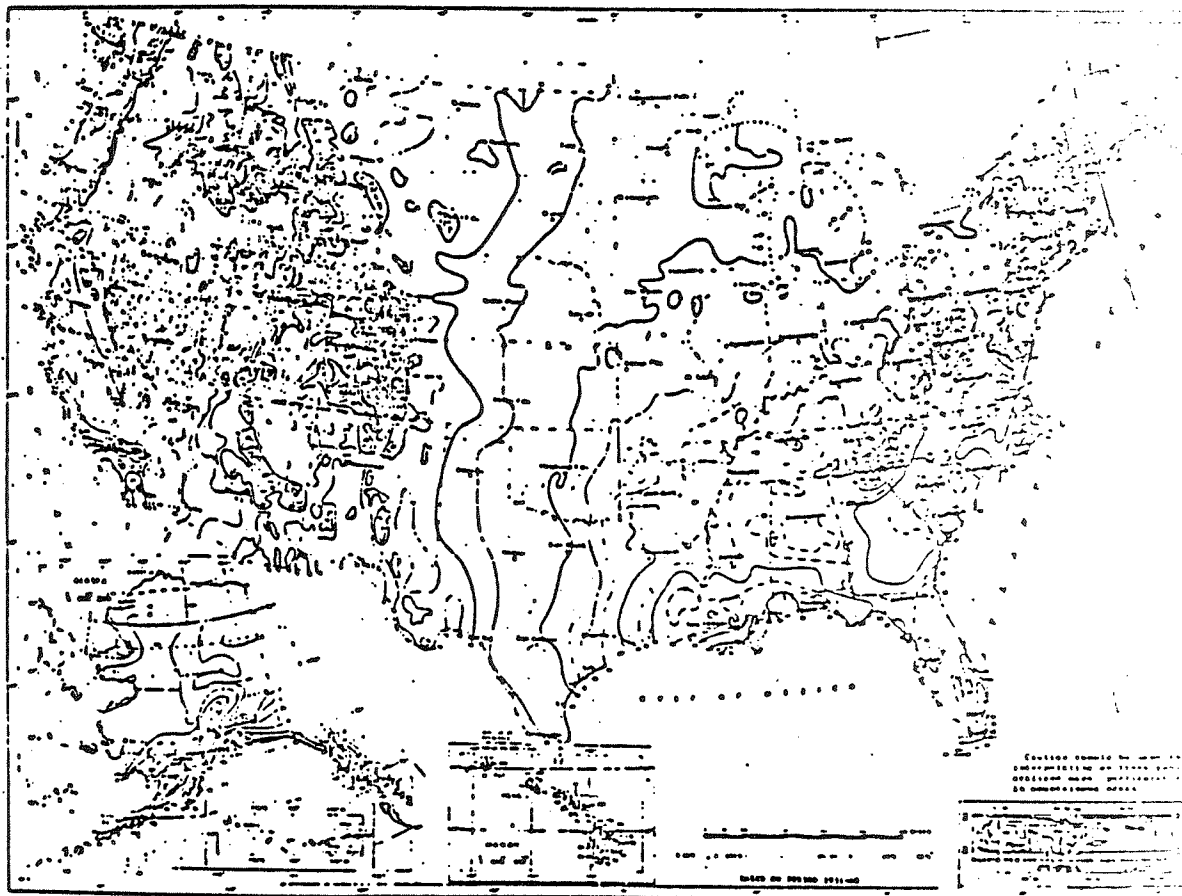


Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Asheville, N.C., 1979.

Figure 4  
Mean Annual Lake Evaporation (In Inches)

REF-2

677



Source: Climatic Atlas of the United States, U.S. Department of Commerce, National Climatic Center, Asheville, N.C., 1979.

Figure 5  
Normal Annual Total Precipitation (inches)

COUNTY OF ERIE  
DEPARTMENT OF ENVIRONMENT & PLANNING  
DIVISION OF ENVIRONMENTAL CONTROL

REF-3

21 100

15508

MEMORANDUM

FROM CAMERON O'CONNOR DATE November 17, 1991  
TO DONALD CAMPBELL  
SUBJECT Lancaster Reclamation - Underlying Geology - Pavement Road - Town of Lancaster

The surficial geology beneath the above site is described as glacial outwash deposits consisting of interbedded sand and gravel. These deposits are thin and overlie lake deposits.

The lake deposits in the vicinity of the landfill are Schoharie and Odessa soil units. Both of these soils are described as nearly level, deep, clayey soils with a seasonally high perched water table. The Odessa unit is poorly drained while the Schoharie unit is well drained. Water movement (permeability) in both soil units are slow or very slow.

The consolidated layer (bedrock) is reported to be Marcellus Shale.

The URS report gives the following information relative to this site:

- 1) Depth to Bedrock - Greater than ten (10) feet.
- 2) Soil Permeability - Very slow.
- 3) Soil Texture/Structure - 35% clay.
- 4) Depth of Natural Water Table - Eastern - perched - 2' - 4'.  
- Western - perched -.5' - 2'.

Although field inspection indicated the disposal lagoons were excavated in clay, file information indicates that four soil test holes were dug to approximately 10 to 12 feet in depth. Water was encountered at a depth of 8 to 10 feet and the soil was gravel, coarse sand and clay.

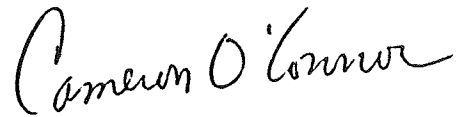
Consequently, there appears to be the situation where there is a thin layer of permeable sand and gravel overlying an impermeable clay layer.

There would seem to be the possibility of some problem with leachate entering the subsurface water which seasonally reaches the sand and gravel deposits. Any leachate in these deposits would probably travel laterally and appear as surface leachate.

D. Campbell  
Page 2

Due to the tightness of the clay, down ward migration of leachate through the clay to the shale would be minimal, if any. (It should be noted that both the clay deposits and the shale are poor aquifers).

Given the set of geologic facotrs described above, leachate entering the groundwater should not be a problem.



CAMERON O'CONNOR  
Env. Quality Technician

CC'O:dp

cc: A. Voell

INTERVIEW FORM

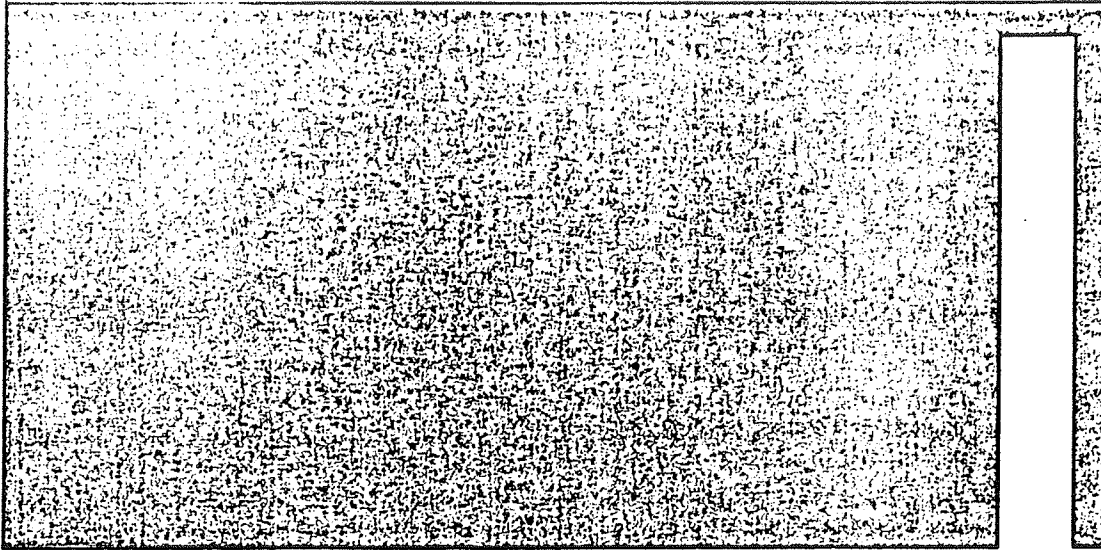
INTERVIEWEE/CODE Mr. Ron Koczaja 1  
 TITLE - POSITION Erie County - Department of Health  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 PHONE ( ) \_\_\_\_\_ RESIDENCE PERIOD \_\_\_\_\_ TO \_\_\_\_\_  
 LOCATION: telephone interview INTERVIEWER J. C. Brod  
 DATE/TIME January 16, 1986  
 SUBJECT: Lancaster Reclamation Landfill

REMARKS: The North Branch Plum Bottom Creek  
is the closest surface water body to the Lancaster  
Reclamation Landfill. Within a three mile  
distance from the site, surface water is not  
used for drinking water supplies, however,  
surface water is most likely used for  
recreational purposes.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE: \_\_\_\_\_

COMMENTS: \_\_\_\_\_



R. Allan Freeze

Department of Geological Sciences  
University of British Columbia  
Vancouver, British Columbia

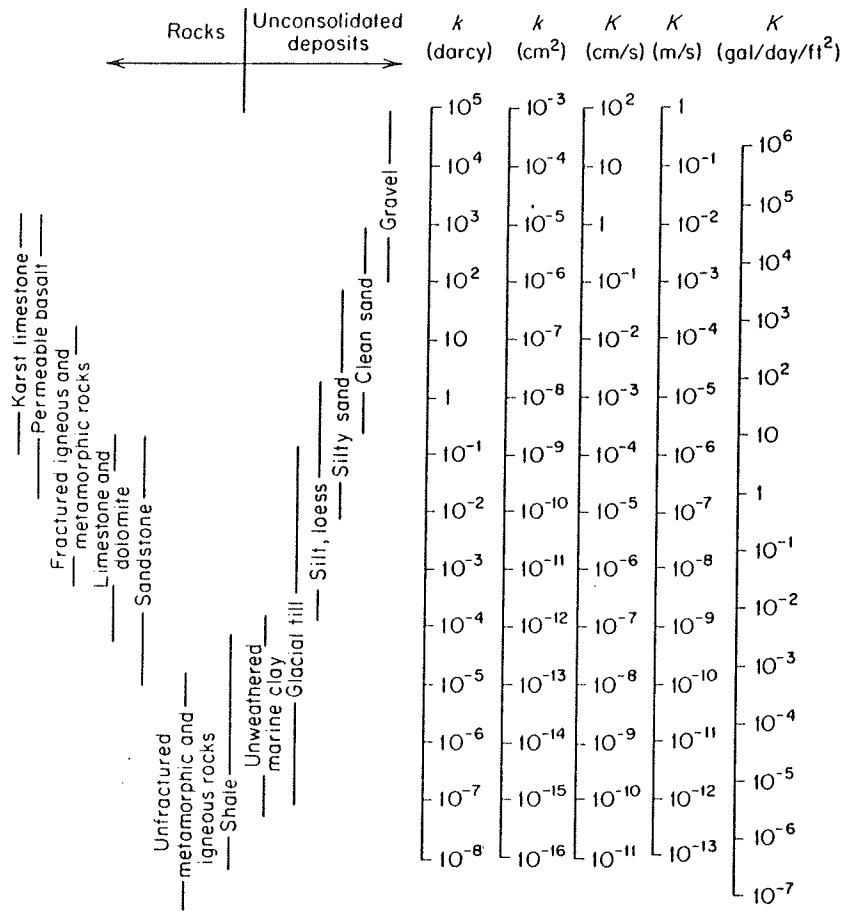
John A. Cherry

Department of Earth Sciences  
University of Waterloo  
Waterloo, Ontario

# GROUNDWATER

Prentice-Hall, Inc.  
Englewood Cliffs, New Jersey 07632

**Table 2.2 Range of Values of Hydraulic Conductivity and Permeability**



**Table 2.3 Conversion Factors for Permeability and Hydraulic Conductivity Units**

	Permeability, <i>k</i> *			Hydraulic conductivity, <i>K</i>		
	cm <sup>2</sup>	ft <sup>2</sup>	darcy	m/s	ft/s	U.S. gal/day/ft <sup>2</sup>
cm <sup>2</sup>	1	1.08 × 10 <sup>-3</sup>	1.01 × 10 <sup>8</sup>	9.80 × 10 <sup>2</sup>	3.22 × 10 <sup>3</sup>	1.85 × 10 <sup>9</sup>
ft <sup>2</sup>	9.29 × 10 <sup>2</sup>	1	9.42 × 10 <sup>10</sup>	9.11 × 10 <sup>5</sup>	2.99 × 10 <sup>6</sup>	1.71 × 10 <sup>12</sup>
darcy	9.87 × 10 <sup>-9</sup>	1.06 × 10 <sup>-11</sup>	1	9.66 × 10 <sup>-6</sup>	3.17 × 10 <sup>-5</sup>	1.82 × 10 <sup>1</sup>
m/s	1.02 × 10 <sup>-3</sup>	1.10 × 10 <sup>-6</sup>	1.04 × 10 <sup>5</sup>	1	3.28	2.12 × 10 <sup>6</sup>
ft/s	3.11 × 10 <sup>-4</sup>	3.35 × 10 <sup>-7</sup>	3.15 × 10 <sup>4</sup>	3.05 × 10 <sup>-1</sup>	1	6.46 × 10 <sup>5</sup>
U.S. gal day/ft <sup>2</sup>	5.42 × 10 <sup>-10</sup>	5.83 × 10 <sup>-13</sup>	5.49 × 10 <sup>-2</sup>	4.72 × 10 <sup>-7</sup>	1.55 × 10 <sup>-6</sup>	1

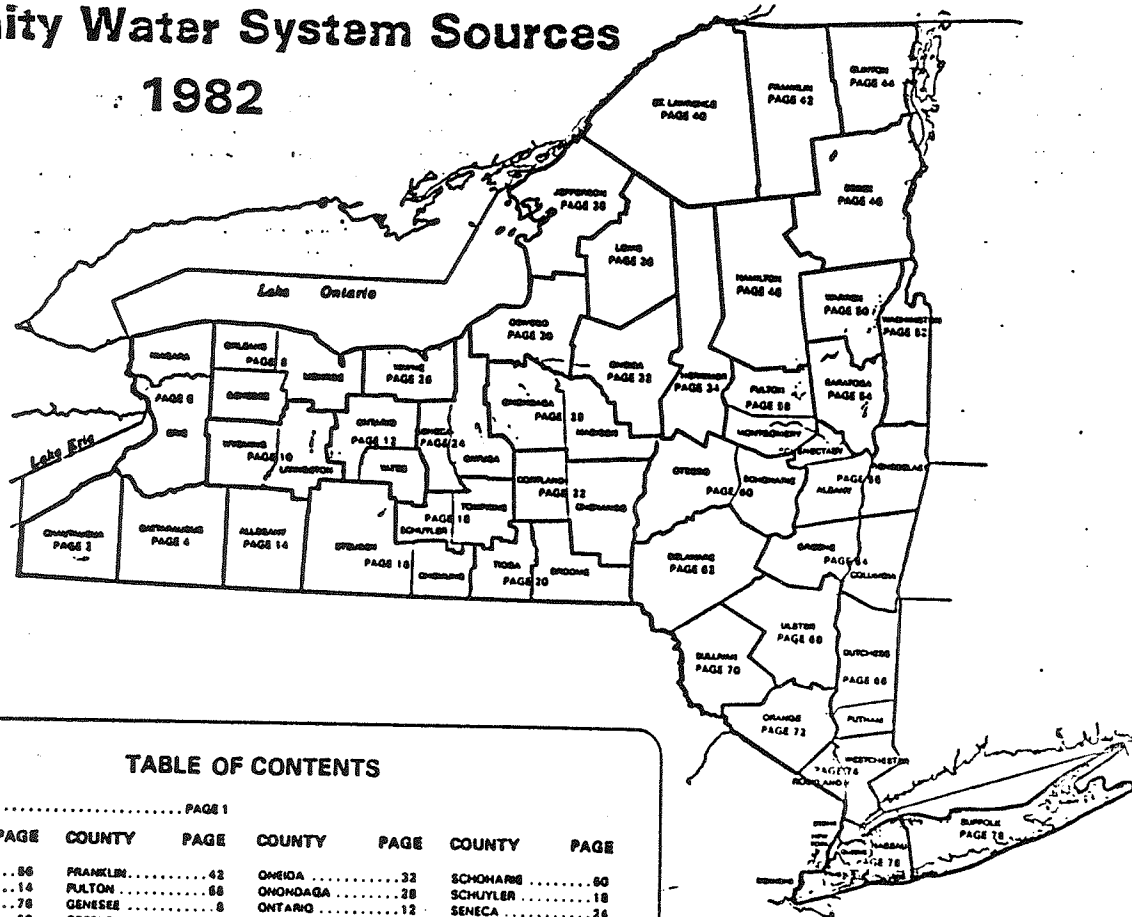
\*To obtain *k* in ft<sup>2</sup>, multiply *k* in cm<sup>2</sup> by 1.08 × 10<sup>-3</sup>.



# New York State Atlas of Community Water System Sources

NEW YORK STATE  
DEPARTMENT OF HEALTH

1982



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## LEGEND

### BOUNDARIES AND PLACES

International	-----
State	-----
County	-----
Town	-----
Indian Reservation	-----
City	-----
Village	-----
Unincorporated Place	-----
Federal Reservation	-----
Build-up Area (Over 25,000 population including any contiguous city or village)	-----

### CLASSIFICATION OF POPULATED PLACES

100,000 or more	YONKERS
60,000 to 100,000	Levittown
12,500 to 60,000	Poughkeepsie
2,500 to 12,500	Hamorton Falls
250 to 2,500	So. ...
250 or less	

### TRANSPORTATION

Highways	
Divided Highways	
Full Control of Access	
Partial or No Control of Access	
Undivided Highways	
Interchange	
Touring Route (State, U.S., Interstate or State Parkway)	
Touring Route Markers	
State, U.S., Interstate	
Railroads	
Operating Line	
Service Connection	
Operator	
Owner (if Other than Operator)	
Company Having Trackage Rights	
Airports (Open to the Public, Military)	
Runway under 4000'	
Runway over 4000'	
Rest Areas	
Food, Gas, Rest Rooms	
Rest Rooms	
Gas, Rest Rooms	
Rest Rooms	
Other State Recreation Sites	

### RECREATION FACILITIES

State or National Recreation Area	
State Campground	
State Boat Launching Site	
State Canal Park	
State Fish Hatchery	
Other State Recreation Site	

R.H. 15

(07-15-11 (10/8...))

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID AND HAZARDOUS WASTE  
INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

PRIORITY CODE: 2a SITE CODE: 915069  
NAME OF SITE: Lancaster Reclamation REGION: 9  
STREET ADDRESS: 403 Pavement Rd.  
TOWN/CITY: Lancaster COUNTY: Erie  
NAME OF CURRENT OWNER OF SITE: Lancaster Reclamation  
ADDRESS OF CURRENT OWNER OF SITE: 403 Pavement Rd., Lancaster, NY

TYPE OF SITE: OPEN DUMP  STRUCTURE  LAGOON   
LANDFILL  TREATMENT POND

ESTIMATED SIZE: 10 ACRES

SITE DESCRIPTION:  
Former sand quarry. Foundry sand, diatomaceous earth, distressed oils are disposed.

HAZARDOUS WASTE DISPOSED: CONFIRMED <input checked="" type="checkbox"/>	SUSPECTED <input type="checkbox"/>
TYPE AND QUANTITY OF HAZARDOUS WASTES DISPOSED:	
<u>TYPE</u>	<u>QUANTITY (POUNDS, DRUMS, TONS, GALLONS)</u>
<u>Foundry sand w/phenolic binders</u>	<u>Unknown</u>
<u>Sludges of diatomaceous earth</u>	<u>Unknown</u>
<u>Distressed oils</u>	<u>Unknown</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

PERIOD SITE WAS USED FOR HAZARDOUS WASTE DISPOSAL:

\_\_\_\_\_, 19 \_\_\_\_ TO \_\_\_\_\_

OWNER(S) DURING PERIOD OF USE: Lancaster Reclamation Inc.

SITE OPERATOR DURING PERIOD OF USE: Same

ADDRESS OF SITE OPERATOR: 403 Pavement Rd., Lancaster, NY

ANALYTICAL DATA AVAILABLE: AIR  SURFACE WATER  GROUNDWATER   
SOIL  SEDIMENT  NONE

CONTRAVENTION OF STANDARDS: GROUNDWATER  DRINKING WATER   
SURFACE WATER  AIR

SOIL TYPE: Sandy

DEPTH TO GROUNDWATER TABLE: >12'

LEGAL ACTION: TYPE: \_\_\_\_\_

STATE  FEDERAL

STATUS: IN PROGRESS

COMPLETED

REMEDIAL ACTION: PROPOSED

UNDER DESIGN

IN PROGRESS

COMPLETED

NATURE OF ACTION: \_\_\_\_\_

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

No significant environmental problems.

ASSESSMENT OF HEALTH PROBLEMS:

INSUFFICIENT INFORMATION

PERSON(S) COMPLETING THIS FORM:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NAME John S. Tygert, PE

TITLE Sr. Sanitary Engr.

NAME Roberto A. Olazagasti

TITLE Solid Waste Management Spec.

DATE: 11/16/83

NEW YORK STATE DEPARTMENT OF HEALTH

NAME R. Tramontano

TITLE Bur. Tox. Subst. Assess.

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

DATE: 12/83

INTERVIEW FORM

INTERVIEWEE/CODE Jim Sneider Mike Wilkerson  
 TITLE - POSITION NVSEEC, Div of Fish & Wildlife  
 ADDRESS Delaware Ave.  
 CITY Rushville STATE NY ZIP \_\_\_\_\_  
 PHONE ( ) \_\_\_\_\_ RESIDENCE PERIOD \_\_\_\_\_ TO \_\_\_\_\_  
 LOCATION in DEC office INTERVIEWER Eileen Helligan  
 DATE/TIME 1/10/85 - 1/11/85  
 SUBJECT: Phase T site information

REMARKS: The above-named interviewees provided us with the following information regarding our Phase T site (see attached list):

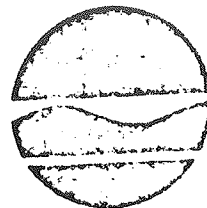
- 1) Wetlands in Niagara Co. & proximity to site
- 2) Types of fish & wildlife in Erie/Niagara area
- 3) Use by fish & wildlife of Niagara River & tributaries
- 4) Sensitive environments & proposed wetlands in the Erie/Niagara area  
Lancaster Reclamation site  
- there are no fresh-water wetlands within 1 mile of site

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

SIGNATURE: James R. Sneider - Sr. Wildlife Biologist  
Michael A. Wilkerson - Conservation Biologist (Aquatic)

COMMENTS: No discussion of wetlands/wildlife regarding  
mine landfill site - referred to Olean Office

New York State Department of Environmental Conservation  
600 Delaware Avenue Buffalo, NY 14202



Robert F. Flacke  
Commissioner

REF - 9

December 9, 1981

Mr. John Ferry  
Lancaster Reclamation Co.  
403 Pavement Road  
Lancaster, NY 14086

Re: General Motors Company - Chevrolet Plant  
Tonawanda (T), Erie County  
Waste Streams

Dear Mr. Ferry:

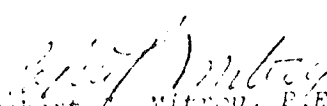
I am in receipt of 3 applications for disposal of waste streams from the above referenced facility. These waste streams include ash from the coal burning operations, waste sands, and sludges from the grinding and chipping operations.

Based on Chevrolet analysis, dated November 17, 1980, these waste streams will be acceptable for disposal at your facility. However, I would require a statement from Chevrolet indicating that the current waste streams are identical to the analysis dated November 17, 1980.

You were also informed that the new Part 360 Rules and Regulations effective May 1981 may require changes in your present operations, when your permit is renewed.

If you have any questions please contact the writer at 847-4885.

Very truly yours,

  
Robert A. Mitrey, P.E.  
Associate Sanitary Engineer

RJM:ld

INTERVIEW FORM

INTERVIEWEE/CODE Robert Thill / \_\_\_\_\_

TITLE - POSITION Town Clerks Office

ADDRESS 21 Central Ave

CITY Lancaster STATE NY ZIP 14086

PHONE (716) 683-9028 RESIDENCE PERIOD \_\_\_\_\_ TO \_\_\_\_\_

LOCATION Telephone Interview INTERVIEWER JCBrod

DATE/TIME 1/17/86 10:00 AM

SUBJECT: Phase I - Lancaster Reclamations

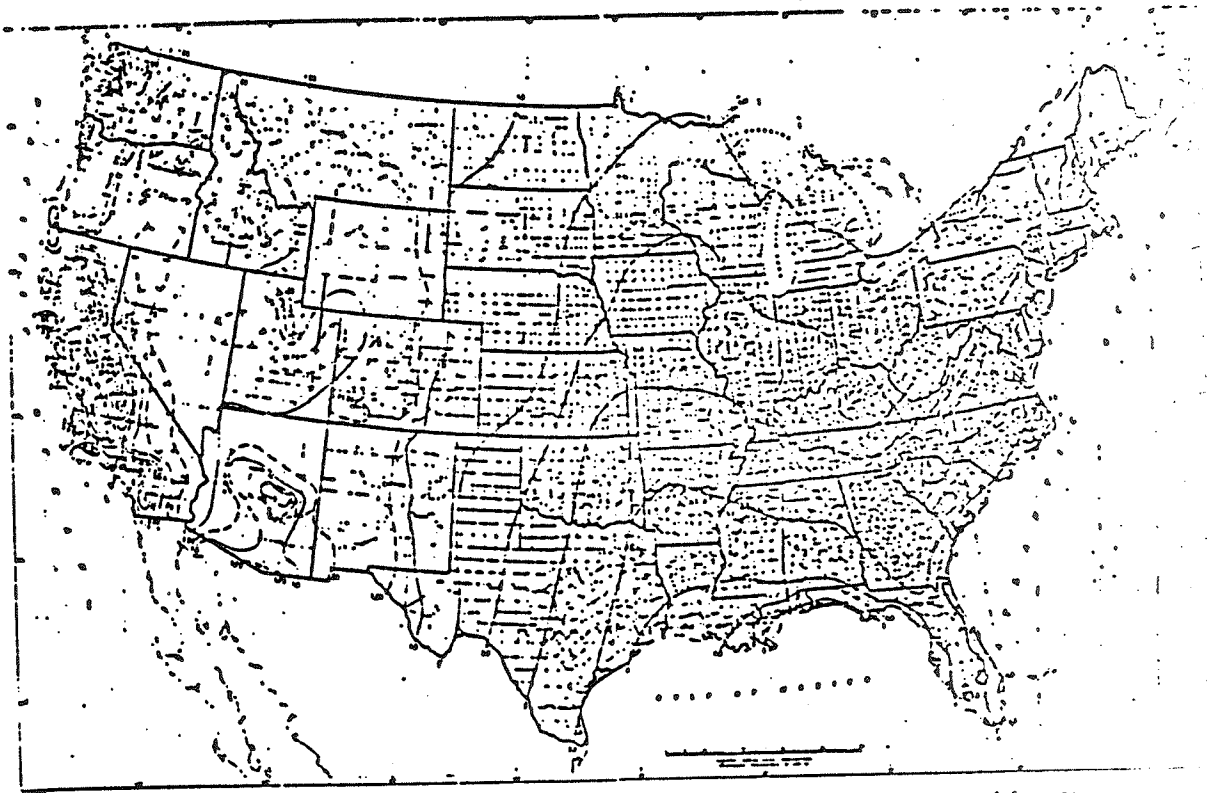
REMARKS: Every paved and dedicated road in the Town of Lancaster is served by a water line supplied by the Erie County Water Authority. Essentially, all residents have municipal water available to them.

I AGREE WITH THE ABOVE SUMMARY OF THE INTERVIEW:

\_\_\_\_\_  
SIGNATURE

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

989



Source: Rainfall Frequency Atlas of the United States, Technical Paper No. 40, U.S. Department of Commerce,  
U.S. Government Printing Office, Washington, D.C., 1963.

Figure 8

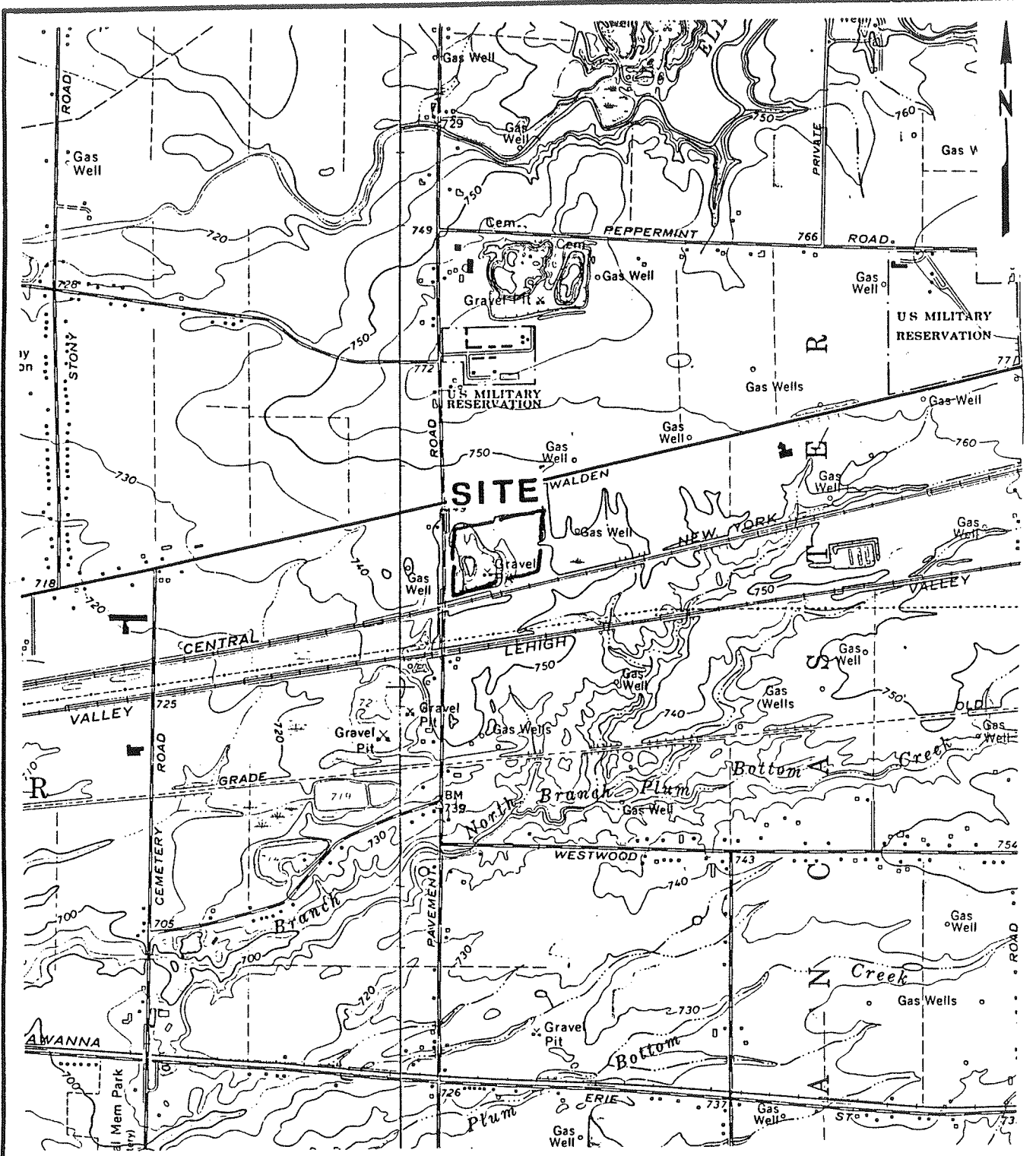
1-Year 24-Hour Rainfall (Inches)

REF-11

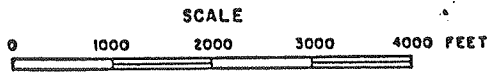
## US CENSUS DATA, 1980

US Census Data used in the HRS scoring was obtained from various County Planning Offices. This data was not obtained from a report. The raw census data combined with County Planning Maps was used to estimate the population within 1, 2, 3, and 4 miles of the Phase I site being investigated. Because of the voluminous amount of data used, the data is not provided in this Appendix.





LATITUDE: 42°55'18"  
 LONGITUDE: 78°37'30"



ENGINEERING-SCIENCE, INC. IN ASSOCIATION WITH DAMES & MOORE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PHASE I REPORT
SITE LOCATION MAP LANCASTER RECLAMATION
FIGURE iv-1

REFERENCE: U.S.G.S. 7.5' Topographic Map  
 Clarence, NY (1965) Quadrangle

REF-14

RESTRICTED USE LANDFILL  
PERMIT UPDATE

FOR

LANCASTER RECLAMATION COMPANY  
403 PAVEMENT ROAD  
LANCASTER, NY 14086

PERMIT NO: DEC: 2021  
SITE NO: DEC 15 S 08

PER OCTOBER 25, 1979 APPROVAL  
AND JUNE 21, 1979 REPORT WENDEL ENGINEERS

6/22/84



## GENERAL

It is the intent and desire of Lancaster Reclamation, Inc. to continue operation of a restricted use landfill at the Pavement Road site. Only one cell has been brought to completion since the original permit was issued in 1979, with parts of two other cells partially completed.

This report is intended to describe the updating of this permit under current Part 360 requirements and regulations.

## MARKET AND USE

The site was planned for the disposal of industrial waste slurries of bentonite clay, polyelectrolyte and spent casting wastes, with some bricks, foundry wastewater treatment slurries and demolition wastes. The market for the disposal service has since reduced between industrial pretreatment, other disposal requirements, conservation and business reduction or termination, locally, of the primary customers.

At the present time no specific users are identified and consequently, no projection of volumes, rates, or life expectancy are projected. All users and waste streams would be subject to review and approval by the DEC Regional Office prior to acceptance and depletion rates reported annually.

The operators expect to continue the operation and seek additional business of like nature for compatible industrial wastes (ie., non-toxic, non-hazardous grade material) as may be acceptable to the DEC.

It is not the intention of the operators to pursue a hazardous, toxic waste disposal permit.

## HYDROGEOLOGIC

The original report is amended to include a more thorough soils and groundwater statement. In fact, part of this analysis is to allay certain concerns about water quality in a non-functional test well (EAST WELL) where certain parameters have been found to be elevated in past testing.

As originally reported, the site is a played-out gravel pit. The residual remaining is generally a silty sand overburden underlain by a dense compacted clay layer to bedrock at elevation 683± 40 to 70 feet below existing site grades. The existing well in the barn is 78' deep at elevation 676±, but no log exists. Water level in the well is at about elevation 733, similar to the pond. No direction of flow at the bedrock plane has been established.



It is expected that any water encountered above bedrock is trapped or perched in localized pockets. Natural groundwater most likely moves at the bedrock interface. The ponds on site are symptomatic of this effect.

The underlying clay is a stiff (ML - CL) plastic to moderately plastic soil which will exhibit low permeability in the  $10^{-8}$  cm/sec or lower range.

Occasional sand, and sand-gravel seams were encountered on-site and all the likely conductors of the shallow aquifers that recharge the ponds, and most likely the well in the barn.

Our conclusion from the 8 test borings and trenches is to place the waste cells in the clay areas as proposed and install a clay cut off wall north to south through the sand-gravel lense into the deeper clay level to isolate horizontal migration into the aquifer area.

It is proposed to abandon the east well and install a new well to bedrock to more accurately monitor groundwater quality. It is felt from field observations the current east well only monitors surface water recharge, explaining the intermittent phenol elevations, due to natural surface causes, ie., leaf rot.

Two additional wells should be installed, one on the north and south perimeters, again to bedrock to monitor quality and establish actual hydraulic gradients of the site.

### WASTE CELLS

It is intended to continue disposal into open cells of natural material bases and side slopes. Slurries will be disposed in the cells for settling and hydraulic compaction. Dry wastes will be spread and compacted and covered. Waiver of daily cover is requested on slurries disposed. When final grade is reached, a final cover layer will be placed with a 6 inch layer of topsoil graded to drain, seeded and fertilized.

Cells will be graded to drain to a low point (sump) for collection of precipitation, decanted liquid and any leachate generated. Leachate disposal is proposed to be by land application, spray irrigation, seasonally over the wooded and vegetated area of the site to maximized evapotranspiration and percolation in the graded overburden.

Cell 3 will be drained to Cell 4 by piping for collection and pumping future cells can be individually sumped.

Where periodic tests indicate contamination, collection, transport and disposal at a proper wastewater treatment plant will be utilized.



### LEACHATE DISPOSAL (ON-SITE)

Since the surface areas of the cells are relatively limited, and each cell is graded to drain away from the cell, water accumulation due to precipitation will be limited. Certain of the slurries will likely have high water contents (up to 80%). These will be the significant contributors to leachate generation.

Disposal is proposed by spray irrigation onto the site seasonally as required.

The table shows the water balance evaluation for disposal by this method from May 1 to November 1, with excess and snow-ice accumulation stored until the next season, or transported if contaminated.

Spraying will be by 2 - 4 inch suction pumps discharged by hose and nozzles. Spraying can only be done on dry, light wind days.

Any runoff will be collected in the surface ponds for monitoring.

### MONITORING

Water quality sampling will be continued on a quarterly basis during operation and semi-annually for periods one year after non-disposal periods.



TABLE LEGEND

- (1) ET = Evapotranspiration rate
- (2) PERC = Percolation rate, 12 inches per month
- (3) Water loss = (1) + (2)
- (4) Precipitation per month
- (5) Applied = Spray to surface
- (6) Decant = Estimated maximum 48 inches per year of 80% slurries 5 ft. deep
- (7) Total liquid = (4) + (6)
- (8) Net Storage = (7) - (3)
- (9) Total Storage = cumulation of (7)



WATER BALANCE (INCHES)

(SPRAY AREAS 0.9 ACRES)

MONTH	ET (1)	PERC (2)	WATER LOSS (3)	PRECIP. (4)	APPLIED (5)	DECANT (6)	TOTAL LIQUID (7)	NET STORAGE (8)	TOTAL STORAGE (9)
NOV	0	0	0	4.63	0	4	8.63	8.63	0
DEC	0	0	0	3.67	0	4	7.67	7.67	16.3
JAN	0	0	0	1.05	0	4	5.05	9.05	25.35
FEB	0	0	0	2.79	0	4	6.79	6.79	32.14
MAR	0	0	0	3.64	0	4	7.64	7.64	39.78
APR	0	0	0	4.75	0	4	8.75	8.75	48.53
MAY	2.25	12.0	14.25	3.50	10.75	4	7.50	-6.75	41.78
JUN	3.51	12.0	15.51	2.68	12.83	4	6.68	-8.83	32.95
JULY	4.09	12.0	16.09	1.84	14.25	4	5.84	-10.25	22.7
AUG	4.01	12.0	16.01	1.02	14.99	4	5.02	-10.99	11.71
SEPT	3.19	12.0	15.19	1.68	13.51	4	5.68	-9.51	2.2
OCT	1.86	12.0	13.86	4.48	9.38	4	8.48	-5.20	-3.0
TOTALS	18.91	72.0	90.91	35.73	75.71	48.0	83.73		



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
NY 0000513911

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Lancaster Reclamation		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 403 Pavement Rd.			
03 CITY Lancaster		04 STATE NY	05 ZIP CODE 14086	06 COUNTY Erie	07 COUNTY CODE 029
09 COORDINATES LATITUDE 42° 57' 08" N		LONGITUDE 78° 37' 10" W			

10 DIRECTIONS TO SITE (Starting from nearest public road)  
The site is located near the intersections of Walden Ave and Pavement Road in Lancaster, NY

III. RESPONSIBLE PARTIES

01 OWNER (if known) John Ferry, Lancaster Reclamation Co.		02 STREET (Business, mailing, residential) 403 Pavement Rd.			
03 CITY Lancaster		04 STATE NY	05 ZIP CODE 14086	06 TELEPHONE NUMBER 716 684-9624	
07 OPERATOR (if known and different from owner) John Ferry		08 STREET (Business, mailing, residential)			
09 CITY		10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER ( )	

13 TYPE OF OWNERSHIP (Check one)  
 A. PRIVATE     B. FEDERAL: \_\_\_\_\_ (Agency name)     C. STATE     D. COUNTY     E. MUNICIPAL  
 F. OTHER: \_\_\_\_\_ (Specify)     G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)  
 A. RCRA 3001 DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR     B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR     C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION  
 YES DATE 3/1/85 MONTH DAY YEAR     NO  
 BY (Check all that apply)     A. EPA     B. EPA CONTRACTOR     C. STATE     D. OTHER CONTRACTOR  
 E. LOCAL HEALTH OFFICIAL     F. OTHER: \_\_\_\_\_ (Specify)  
 CONTRACTOR NAME(S): \_\_\_\_\_

02 SITE STATUS (Check one)    03 YEARS OF OPERATION  
 A. ACTIVE     B. INACTIVE     C. UNKNOWN    1976 | present     UNKNOWN  
 BEGINNING YEAR    ENDING YEAR

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED  
 Wastes include bentonite clay, foundry sand, cement/asbestos slurry, wall paper production wastes, steel shot blast and oily sludge

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION  
 Surface impoundments are underlain by natural clay soil; however overlying sandy soils may allow migration of contaminants in surficial groundwater. Additionally, site excavations may provide cross-connections

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
 A. HIGH (Inspection required promptly)     B. MEDIUM (Inspection required)     C. LOW (Inspect on time available basis)     D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT John A. Botts		02 OF (Agency Organization) Engineering Science		03 TELEPHONE NUMBER 703-571-7575	
04 PERSON RESPONSIBLE FOR ASSESSMENT John A. Botts		05 AGENCY same	06 ORGANIZATION	07 TELEPHONE NUMBER ( )	08 DATE 4/26/85 MONTH DAY YEAR





POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE NY	02 SITE NUMBER D 000 513.911

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

<p>01 PHYSICAL STATES (Check all that apply)</p> <p><input type="checkbox"/> A. SOLID <input type="checkbox"/> B. POWDER, FINES <input checked="" type="checkbox"/> C. SLUDGE <input type="checkbox"/> D. OTHER _____ (Specify)</p>	<p>02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)</p> <p>TONS _____ CUBIC YARDS <u>52,000</u> NO. OF DRUMS _____</p>	<p>03 WASTE CHARACTERISTICS (Check all that apply)</p> <p><input checked="" type="checkbox"/> A. TOXIC <input type="checkbox"/> B. CORROSIVE <input type="checkbox"/> C. RADIOACTIVE <input checked="" type="checkbox"/> D. PERSISTENT</p> <p><input type="checkbox"/> E. SOLUBLE <input type="checkbox"/> F. INFECTIOUS <input type="checkbox"/> G. FLAMMABLE <input type="checkbox"/> H. IGNITABLE</p> <p><input type="checkbox"/> I. HIGHLY VOLATILE <input type="checkbox"/> J. EXPLOSIVE <input type="checkbox"/> K. REACTIVE <input type="checkbox"/> L. INCOMPATIBLE <input type="checkbox"/> M. NOT APPLICABLE</p>
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III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	52,000	Cubic yards	Wastes disposed in the surface impoundments include bentonite clay, small quantities of fine sand, oils mixed with bentonite clay, asbestos slurry, wall paper production wastes, steel shot blast, and oily garage sludge.
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OLW	oil	8002-05-9	lagoon/landfill	4500-21400	ppm
OCC	PCBs	1326-36-3	"	300	ppm
OCC	phenols	108-95-2	"	.01-.026	ppm
MES	cadmium	7440-43-9	"	.05	ppm
MES	lead	7439-92-1	"	.052	ppm
MES	selenium	7782-49-2	"	.1	ppm
MES	zinc	7440-66-6	"	45	ppm
	asbestos	1332-21-4	"	10	percent
OCC	1,1-dichloroethane (suspected)				

The concentrations given above are the amounts found to be in a particular waste and do not represent the amount in the total waste on-site.

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview Mr John Ferry during site inspection ES and DEM 3/21/85  
 NYSOEC Application for Treatment or Disposal of an Industrial or Hazardous  
 Waste Stream, 4/11/78, 12/4/81, 4/30/79, 7/22/82, 6/15/81, 1/14/81, 3/2/84  
 5/17/82

Letter from John Ferry of Lancaster Reclamation to Robert Mitrey  
 of NYSOEC, 9/3/80.



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS.

I. IDENTIFICATION

01 STATE | 02 SITE NUMBER  
NY | 10000513911

II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Due to unlined condition of lagoons & permeable nature of soil

01  B. SURFACE WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

unknown - not likely except thru groundwater seeps into nearby stream

01  C. CONTAMINATION OF AIR 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

unknown

01  D. FIRE/EXPLOSIVE CONDITIONS 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  E. DIRECT CONTACT 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  F. CONTAMINATION OF SOIL 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_ (Acres) 04 NARRATIVE DESCRIPTION

Possible due to migration of contaminated groundwater

01  G. DRINKING WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION

Possible degradation of nearby private residential wells

01  H. WORKER EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  I. POPULATION EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS:

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

NY 0000513911

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01  J. DAMAGE TO FLORA 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  K. DAMAGE TO FAUNA 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION (include name(s) of species)

Unknown

01  L. CONTAMINATION OF FOOD CHAIN 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  M. UNSTABLE CONTAINMENT OF WASTES 02  OBSERVED (DATE: 1985)  POTENTIAL  ALLEGED  
(Spills/Runoff/Standing liquids, Leaking drums)

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

unknown lagoons

01  N. DAMAGE TO OFFSITE PROPERTY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  P. ILLEGAL/UNAUTHORIZED DUMPING 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

Site visit 1985



**POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 1 - SITE LOCATION AND INSPECTION INFORMATION**

I. IDENTIFICATION	
01 STATE NY	02 SITE NUMBER D000513911

**II. SITE NAME AND LOCATION**

01 SITE NAME (Legal, common, or descriptive name of site) Lancaster Reclamation		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 403 Pavement Rd.				
03 CITY Lancaster		04 STATE NY	05 ZIP CODE 14086	06 COUNTY Erie	07 COUNTY CODE 029	08 CONG DIST 38
09 COORDINATES LATITUDE 42° 57' 08" N		LONGITUDE 78° 37' 10" W		10 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER <input type="checkbox"/> G. UNKNOWN		

**III. INSPECTION INFORMATION**

01 DATE OF INSPECTION 3, 21, 85 MONTH DAY YEAR	02 SITE STATUS <input checked="" type="checkbox"/> ACTIVE <input type="checkbox"/> INACTIVE	03 YEARS OF OPERATION 1976   present BEGINNING YEAR ENDING YEAR
04 AGENCY PERFORMING INSPECTION (Check all that apply) <input type="checkbox"/> A. EPA <input checked="" type="checkbox"/> B. EPA CONTRACTOR <u>Engineers Science</u> <input type="checkbox"/> C. MUNICIPAL <input type="checkbox"/> D. MUNICIPAL CONTRACTOR <input type="checkbox"/> E. STATE <input checked="" type="checkbox"/> F. STATE CONTRACTOR <u>Daniel E. Moore</u> <input type="checkbox"/> G. OTHER		

05 CHIEF INSPECTOR Robert Steele	08 TITLE Environmental Scientist	07 ORGANIZATION Engineers Science	08 TELEPHONE NO. (703) 591-7575
09 OTHER INSPECTORS Eileen Gilligan	10 TITLE Geologist	11 ORGANIZATION James E. Moore	12 TELEPHONE NO. ( )
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED Mr. John Ferry	14 TITLE Engineer	15 ADDRESS 403 Pavement Rd. Lancaster, NY 14086	16 TELEPHONE NO. (716) 624-9624
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one) <input checked="" type="checkbox"/> PERMISSION <input type="checkbox"/> WARRANT	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
---	-----------------------	-----------------------

**IV. INFORMATION AVAILABLE FROM**

01 CONTACT S. Robert Steele	02 OF (Agency/Organization) Engineers Science (ES)	03 TELEPHONE NO. (703) 591-7575
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM John A. Botts	05 AGENCY ES	06 ORGANIZATION Same as above
	07 TELEPHONE NO.	08 DATE 4, 26, 85 MONTH DAY YEAR



**POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 2 - WASTE INFORMATION**

I. IDENTIFICATION	
01 STATE <i>NY</i>	02 SITE NUMBER <i>D 000 513.911</i>

**II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS**

<b>01 PHYSICAL STATES</b> (Check all that apply) <input type="checkbox"/> A. SOLID <input type="checkbox"/> B. POWDER, FINES <input checked="" type="checkbox"/> C. SLUDGE <input type="checkbox"/> D. OTHER _____ <small>(Specify)</small>	<b>02 WASTE QUANTITY AT SITE</b> <small>(Measures of waste quantities must be independent)</small> TONS _____ CUBIC YARDS <u>52,000</u> NO. OF DRUMS _____	<b>03 WASTE CHARACTERISTICS</b> (Check all that apply) <input checked="" type="checkbox"/> A. TOXIC <input type="checkbox"/> B. CORROSIVE <input type="checkbox"/> C. RADIOACTIVE <input checked="" type="checkbox"/> D. PERSISTENT <input type="checkbox"/> E. SOLUBLE <input type="checkbox"/> F. INFECTIOUS <input type="checkbox"/> G. FLAMMABLE <input type="checkbox"/> H. IGNITABLE <input type="checkbox"/> I. HIGHLY VOLATILE <input type="checkbox"/> J. EXPLOSIVE <input type="checkbox"/> K. REACTIVE <input type="checkbox"/> L. INCOMPATIBLE <input type="checkbox"/> M. NOT APPLICABLE
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**III. WASTE TYPE**

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	52,000	Cubic yard	Wastes disposed in the surface impoundments include bentonite clay, small gravels, or foundry sands, oils mixed with bentonite clay, asbestos slurry, wall paper production wastes, steel shot blast, and oily garage sludge.
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

**IV. HAZARDOUS SUBSTANCES** (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OLW	oil	8002-05-9	lagoon/landfill	4500-21400	ppm
OCC	PCBS	1326-36-3	"	300	ppm
OCC	phenols	108-95-2	"	.01-.026	ppm
MES	cadmium	7440-43-9	"	.05	ppm
MES	lead	7439-92-1	"	.052	ppm
MES	selenium	7782-49-2	"	.01	ppm
MES	zinc	7440-66-6	"	45	ppm
	asbestos	1332-21-4	"	10	percent
OCC	1,1-trichloroethane (suspected)				

The concentrations given above are the amounts found to be in a particular waste and do not represent the amount in the total waste on-site.

**V. FEEDSTOCKS** (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

**VI. SOURCES OF INFORMATION** (Cite specific references, e.g., state files, sample analysis, reports)

Interview Mr. John Ferry during site inspection ES and D4M 3/21/85  
 NYSDEC Application for Treatment or Disposal of an Industrial or Hazardous  
 Waste Stream, 4/11/78, 12/4/81, 4/30/79, 7/22/82, 6/15/81, 1/14/81, 3/2/84  
 5/17/82

Letter from John Ferry of Lancaster Reclamation to Robert Mitrey of NYSDEC, 9/3/80.



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS.

I. IDENTIFICATION  
01 STATE: NY 02 SITE NUMBER: 0000513911

II. HAZARDOUS CONDITIONS AND INCIDENTS

01  A. GROUNDWATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

Due to unlined condition of lagoons + permeable nature of soil

01  B. SURFACE WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

unknown - not likely except thru groundwater seeps into nearby stream

01  C. CONTAMINATION OF AIR 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

unknown

01  D. FIRE/EXPLOSIVE CONDITIONS 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  E. DIRECT CONTACT 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  F. CONTAMINATION OF SOIL 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_ (Acres) 04 NARRATIVE DESCRIPTION

Possible due to migration of contaminated groundwater

01  G. DRINKING WATER CONTAMINATION 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION

Possible degradation of nearby private residential wells

01  H. WORKER EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

01  I. POPULATION EXPOSURE/INJURY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
03 POPULATION POTENTIALLY AFFECTED: unknown 04 NARRATIVE DESCRIPTION



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
NY 0000513911

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01  J. DAMAGE TO FLORA 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  K. DAMAGE TO FAUNA 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION (Include name(s) of species)

Unknown

01  L. CONTAMINATION OF FOOD CHAIN 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  M. UNSTABLE CONTAINMENT OF WASTES 02  OBSERVED (DATE: 1985)  POTENTIAL  ALLEGED  
(Spills/Runoff/Standing liquids, Leaking drums)  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_ 04 NARRATIVE DESCRIPTION

unlined lagoons

01  N. DAMAGE TO OFFSITE PROPERTY 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

NO

01  O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

Unknown

01  P. ILLEGAL/UNAUTHORIZED DUMPING 02  OBSERVED (DATE: \_\_\_\_\_)  POTENTIAL  ALLEGED  
04 NARRATIVE DESCRIPTION

NO

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

Site visit 1985



**POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION  
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION**

I. IDENTIFICATION	
01 STATE <i>NY</i>	02 SITE NUMBER <i>D000513911</i>

**II. PERMIT INFORMATION**

01 TYPE OF PERMIT ISSUED <i>(Check all that apply)</i>	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input type="checkbox"/> C. AIR				
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input checked="" type="checkbox"/> G. STATE <i>(Specify)</i>	<i>2021/2290(mod)</i>	<i>10/25/79</i>	<i>11/1/82</i>	<i>Solid Waste Maint/Operation</i>
<input checked="" type="checkbox"/> H. LOCAL <i>(Specify)</i>	<i>81-1/81-2</i>	<i>7/19/79</i>		
<input type="checkbox"/> I. OTHER <i>(Specify)</i>				
<input type="checkbox"/> J. NONE				

**III. SITE DESCRIPTION**

01 STORAGE/DISPOSAL <i>(Check all that apply)</i>	02 AMOUNT	03 UNIT OF MEASURE	04 TREATMENT <i>(Check all that apply)</i>	05 OTHER
<input checked="" type="checkbox"/> A. SURFACE IMPOUNDMENT	<i>52,000</i>	<i>cu br yd.</i>	<input type="checkbox"/> A. INCENERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input type="checkbox"/> C. DRUMS, ABOVE GROUND			<input type="checkbox"/> C. CHEMICAL/PHYSICAL	06 AREA OF SITE <i>13.2</i> (Acres)
<input type="checkbox"/> D. TANK, ABOVE GROUND			<input type="checkbox"/> D. BIOLOGICAL	
<input type="checkbox"/> E. TANK, BELOW GROUND			<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input type="checkbox"/> F. LANDFILL			<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER <i>(Specify)</i>	
<input type="checkbox"/> I. OTHER <i>(Specify)</i>				

**07 COMMENTS**

Four surface impoundments, each approximately 2 acres are used to dispose of materials including primarily bentonite clays and smaller quantities of foundry sands, waste oil mixed with clay from wet steam cleaning and washing operations, steel shot blast, asbestos/cement slurry and wall paper production wastes.

**IV. CONTAINMENT**

01 CONTAINMENT OF WASTES *(Check one)*

A. ADEQUATE, SECURE       B. MODERATE       C. INADEQUATE, POOR       D. INSECURE, UNSOUND, DANGEROUS

**02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.**

The soil underlying the surface impoundments is natural clay. Bentonite clay is also disposed in the impoundments, which acts to contain collected surface water.

**V. ACCESSIBILITY**

01 WASTE EASILY ACCESSIBLE:  YES  NO

02 COMMENTS

Access to the site is not restricted.

**VI. SOURCES OF INFORMATION *(Cite specific references, e.g. state files, sample analysis, reports)***

Interview with Mr. John Ferry during site inspection conducted by ES and D&M, 3/21/85.





POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION  
01 STATE NY 02 SITE NUMBER D000513911

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

A.  $10^{-6} - 10^{-8}$  cm/sec  B.  $10^{-4} - 10^{-6}$  cm/sec  C.  $10^{-4} - 10^{-3}$  cm/sec  D. GREATER THAN  $10^{-3}$  cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

A. IMPERMEABLE (Less than  $10^{-6}$  cm/sec)  B. RELATIVELY IMPERMEABLE ( $10^{-4} - 10^{-6}$  cm/sec)  C. RELATIVELY PERMEABLE ( $10^{-2} - 10^{-4}$  cm/sec)  D. VERY PERMEABLE (Greater than  $10^{-2}$  cm/sec)

03 DEPTH TO BEDROCK

~50 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

unknown (ft)

05 SOIL pH

unknown

06 NET PRECIPITATION

9 (in)

07 ONE YEAR 24 HOUR RAINFALL

2.1 (in)

08 SLOPE

SITE SLOPE < 1.0 %

DIRECTION OF SITE SLOPE

W

TERRAIN AVERAGE SLOPE

< 1.0 %

09 FLOOD POTENTIAL

SITE IS IN > 100 YEAR FLOODPLAIN

10

SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE

A. > 2.0 (mi)

OTHER

B. 0.14 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

MIGRATORY BIRDS

> 1.0 (mi)

AQUILA CHRYSAETOS  
ENDANGERED SPECIES: HALIAEETUS LEUCOCEPH

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

A. > 1.0 (mi)

RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES

B. > 1 (mi)

AGRICULTURAL LANDS  
PRIME AG LAND AG LAND

C. > 1 (mi) D. 0.1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site has irregular ground surface with deep excavated lagoons. Adjacent ground surface is level, as was original site ground surface

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

ECDEP memorandum to D. Campbell from K. Koczaja, 9/25/84 NYSDEC Reg 9 Dept of Fish & Wildlife  
NYS wetlands maps  
Report by Buffalo Drilling  
NYS Atlas of Community Water System Sources  
USGS Topographic map Clarence, NY Quad  
NYS Floodplains maps  
map prepared by ECDEP "Agricultural Districts"  
site visit 1985



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
NY 0000513911

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	HNU readings were taken during site inspection and all readings were less than 1 ppm

IV. PHOTOGRAPHS AND MAPS

01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>Engineer - Sealed</u> <small>(Name of organization or individual)</small>
03 MAPS <input type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS _____

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection conducted by ES and DBM, 3/21/85



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 7 - OWNER INFORMATION

**I. IDENTIFICATION**  
01 STATE 02 SITE NUMBER  
NY 0006513911

II. CURRENT OWNER(S)				PARENT COMPANY (if applicable)			
01 NAME Lancaster Reclamation Co.		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 3179 Walden Ave			04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE
05 CITY Dewey		06 STATE NY	07 ZIP CODE 14043	12 CITY		13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	12 CITY		13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	12 CITY		13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	12 CITY		13 STATE	14 ZIP CODE
01 NAME		02 D+B NUMBER		08 NAME		09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)			11 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	12 CITY		13 STATE	14 ZIP CODE
III. PREVIOUS OWNER(S) (List most recent first)				IV. REALTY OWNER(S) (if applicable; list most recent first)			
01 NAME Rose Pietruszewski		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	05 CITY		06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	05 CITY		06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER		01 NAME		02 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	05 CITY		06 STATE	07 ZIP CODE

**V. SOURCES OF INFORMATION** (Cite specific references, e.g., state files, sample analysis, reports)

Interview with John Ferry, Owner of Lancaster Reclamation, during site inspection conducted by ES and DEM, 3/21/85



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
NY D000513911

II. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (If applicable)			
01 NAME Lancaster Reclamation		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 3179 WALKEN AVE			04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)			13 SIC CODE
05 CITY DEPEW		06 STATE NY	07 ZIP CODE 14043	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1976-present	09 NAME OF OWNER						
III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)			
01 NAME Rose Pieterzowski (?)		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)			13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION — to 1976	09 NAME OF OWNER DURING THIS PERIOD same						
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)			13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)			04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)			13 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD						
IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)							
Interview with Mr. John Ferry, owner of Lancaster Reclamation during site inspection conducted by ES and D&M, 3/21/85.							



**POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 9 - GENERATOR/TRANSPORTER INFORMATION**

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NY	0000513911

**II. ON-SITE GENERATOR**

01 NAME		02 D+B NUMBER	NO hazardous wastes are generated on-site.
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	

**III. OFF-SITE GENERATOR(S)**

01 NAME		02 D+B NUMBER	01 NAME	02 D+B NUMBER
Dresser Transportation			Fabricon	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	05 CITY
Depew		NY		Alden
01 NAME		02 D+B NUMBER	01 NAME	02 D+B NUMBER
Chevrolet Division, GM			Reed Holdings	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY		06 STATE	07 ZIP CODE	05 CITY
Tonawanda		NY	14150	Buffalo

**IV. TRANSPORTER(S)**

01 NAME		02 D+B NUMBER	01 NAME	02 D+B NUMBER
Lancaster Reclamation			Ferry Construction Co	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
403 Pavement Rd			3179 Walden Ave	
05 CITY		06 STATE	07 ZIP CODE	05 CITY
Lancaster		NY	14086	Depew
01 NAME		02 D+B NUMBER	01 NAME	02 D+B NUMBER
Ken Staub Jr Trucking Co.				
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Box B, Station B				
05 CITY		06 STATE	07 ZIP CODE	05 CITY
Buffalo		NY		

**V. SOURCES OF INFORMATION** (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection conducted by ES and DEM, 3/21/85  
 NYSD&C Applications for Treatment or Disposal of an Industrial  
 or Hazardous Waste Stream. 4/11/78, 12/4/81, 4/25/79, 7/22/82,  
 6/15/81, 1/14/81, 3/2/84, 5/17/82.



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
NY 0000513911

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
No		



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE NY 02 SITE NUMBER 000513911

II PAST RESPONSE ACTIVITIES (Continued)

01  R. BARRIER WALLS CONSTRUCTED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  S. CAPPING/COVERING  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  T. BULK TANKAGE REPAIRED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  U. GROUT CURTAIN CONSTRUCTED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  V. BOTTOM SEALED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*natural clay underlies surface impoundments*

01  W. GAS CONTROL  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  X. FIRE CONTROL  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  Y. LEACHATE TREATMENT  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  Z. AREA EVACUATED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  1. ACCESS TO SITE RESTRICTED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*Access to site is unrestricted.*

01  2. POPULATION RELOCATED  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NO*

01  3. OTHER REMEDIAL ACTIVITIES  
04 DESCRIPTION

02 DATE \_\_\_\_\_

03 AGENCY \_\_\_\_\_

*NONE*

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

*Site Inspection by ES and O&M, 3/21/85*



POTENTIAL HAZARDOUS WASTE SITE  
SITE INSPECTION REPORT  
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NY	0000513911

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION  YES  NO *NONE*

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

*NYSDEC, Environmental Enforcement Division*  
*NYS, Attorney General's Office.*



## SECTION VI

### ASSESSMENT OF DATA ADEQUACY AND RECOMMENDATIONS

#### ASSESSMENT OF DATA ADEQUACY

A summary assessment of the adequacy of existing data for completion of the HRS score is presented in Table VI-1. Based on this assessment, the following Phase II work plan and cost estimate has been prepared.

#### PHASE II WORK PLAN

##### Objectives

The objectives of the Phase II activities are:

- o To collect additional field data necessary to identify the occurrence and extent of contamination and to determine if any imminent health hazard exists.
- o To perform a conceptual evaluation of remedial alternatives and estimate budgetary costs for the most likely alternative.
- o To prepare a site investigation report including final HRS score.

The additional field data required to complete this investigation are described as follows:

Geophysical Survey - A geophysical study consisting of an electrical resistivity survey is recommended. The electrical resistivity survey will be performed at various locations within and beyond the perimeter of the site to investigate site stratigraphy, delineate significant discontinuities and assess the presence and location of contaminant plumes.

Groundwater - A groundwater monitoring system consisting of 4 wells is recommended. Borings will be drilled to a maximum depth of 50 feet; soil samples will be taken every 5 feet or more frequently if a change in soil lithology is encountered. The wells will be placed in the aquifer of concern and constructed of 2" PVC pipe. The groundwater samples will be analyzed for priority pollutants. In addition, sieve and hydrometer analyses will be performed on representative samples of the subsurface soils. Finally, an in-situ permeability test will be performed on each well.

Surface Water and Sediment - A surface water and sediment monitoring system consisting of 2 monitoring stations is recommended. One station (S-1) will be in the pond on the northeast corner of the site. Station S-2 will be in the northeast quadrant of the site in the swampy area. The surface water and sediment samples will be analyzed for priority pollutants.

Waste Cell Water - Two of the cells will be sampled for ponded water and analyzed for priority pollutants.

Air - An air monitoring survey with an HNU meter is recommended to test the air quality during site activities.

#### TASK DESCRIPTION

The proposed Phase II tasks are described in Table VI-2 as required under the site specific health and safety plan and quality assurance plan which must be submitted prior to initiation of field activities. The proposed monitoring well and sampling location are presented in Figure VI-1.

#### COST ESTIMATE

The estimated man-hours required for the Phase II project are presented in Table VI-3 and the estimated project costs by tasks are presented in Table VI-4. The estimate total cost for this project is \$58,188.

TABLE VI-1  
ASSESSMENT OF DATA ADEQUACY

HRS Data Requirement	Comments on Data
Observed Release	
Groundwater	Inadequate for HRS score
Surface Water	Inadequate for HRS score
Air	Adequate for HRS score
Route Characteristics	
Groundwater	Inadequate for HRS score
Surface Water	Adequate for HRS score
Air	Adequate for HRS score
Containment	Adequate for HRS score
Waste Characteristics	Adequate for HRS score
Targets	Adequate for HRS score
Observed Incident	Adequate for HRS score
Accessibility	Adequate for HRS score

TABLE VI-2  
PHASE II WORK PLAN - TASK DESCRIPTION

Tasks	Description of Task
II-A Update Work Plan	Review the information in the Phase I report, conduct a site visit, and revise the Phase II work plan.
II-B Conduct Geophysical Studies	Conduct resistivity survey.
II-C Conduct Boring/Install Monitoring Wells	Install 1 upgradient and 3 down-gradient wells. The borings will be drilled to a depth of approximately 50 feet. Wells will be constructed of 2" PVC pipe.
II-D Construct Test Pits/Auger Holes	No further construction of test pits/auger holes necessary.
II-E Perform Sampling & Analysis	
Soil samples from borings	Soil samples collected at 5 ft. intervals during drilling and at changes in subsurface lithologies. Perform one grain size analysis and permeability test per subsurface lithology change.
Soil samples from surface soils	No further studies necessary.
Soil samples from auger holes/test pits	No further studies necessary.
Sediment samples from surface water	2 sediment samples are to be collected and analyzed for priority pollutants.
Groundwater samples	4 groundwater samples are to be collected and analyzed for priority pollutants.
Surface water samples	2 surface water samples are to be collected and analyzed for priority pollutants.
Waste Cell Water	2 cells will be sampled for waste cell water and analyzed for priority pollutants.

TABLE VI-2 (Continued)  
 PHASE II WORK PLAN - TASK DESCRIPTION

Tasks	Description of Task
Air samples	Using the HNu determine the presence of organics.
Waste samples	No further sampling necessary.
II-F Calculate Final HRS	Based on the field data collected in Tasks II-B - II-E, complete the HRS form.
II-G Conduct Site Assessment	Prepare final report containing significant Phase I information, additional field data, final HRS and HRS documentation records, and site assessments. The site assessment will consist of a conceptual evaluation of alternatives and a preliminary cost estimate of the most probable alternative.
II-H Project Management	Project coordination, administration and reporting.

TABLE VI-3  
PERSONNEL RESOURCES BY TASK  
PHASE II HRS SITE INVESTIGATION (SITE: LANCASTER RECLAMATION)

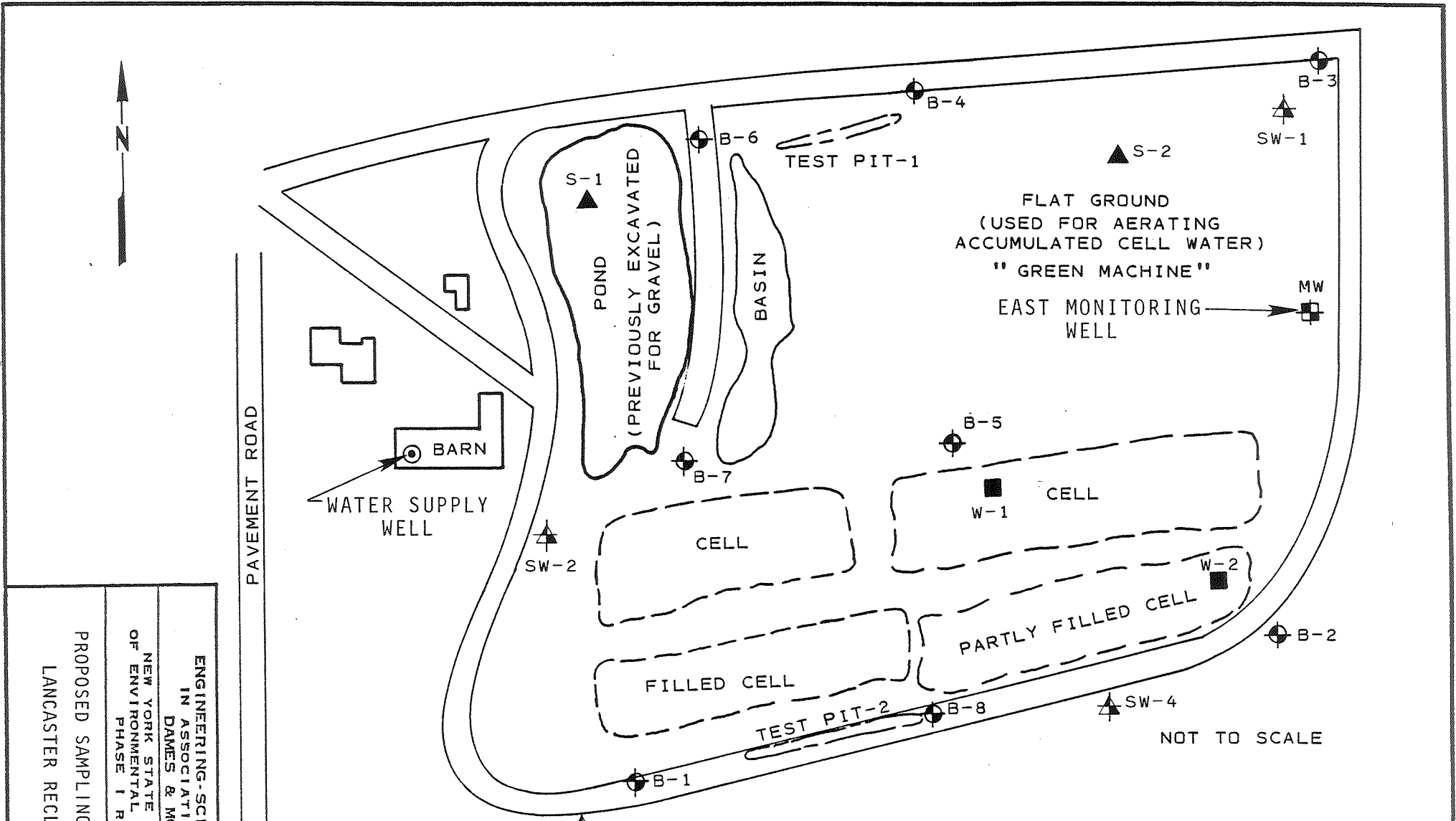
TASK DESCRIPTION	TEAM MEMBERS, MANHOURS												TOTAL HOURS	TOTAL \$	
	PIC	TRB	PM	DPM	PCM	QAM	HSM	FTL	FT	RAAL	RAAT	SS			
II-A UPDATE WORK PLAN	1	1	8	4		4	4	16		8			28	74	1144.1
II-B CONDUCT GEOPHYSICAL STUDIES			4	2			4	12	160				40	222	2243.86
II-C CONDUCT BORING/INSTALL MONITORING WELLS			8	16		4	4	20	80				40	172	2213.4
II-D CONSTRUCT TEST PITS/AUGER HOLES														0	0
II-E PERFORM SAMPLING AND ANALYSIS															
SOIL SAMPLES FROM BORINGS			4	4		2	2	4	16			8	40	555.14	
SOIL SAMPLES FROM SURFACE SOILS													0	0	
SOIL SAMPLES FROM TEST PITS AND AUGER HOLES													0	0	
SEDIMENT SAMPLES FROM SURFACE WATER			4	4		1	1	4	8			4	26	425.11	
GROUND-WATER SAMPLES			4	2		1	1	4	16			8	36	470.49	
SURFACE WATER SAMPLES			4	4		1	1	4	8			4	26	425.11	
AIR SAMPLES			2	2			1	2	4			2	13	214.61	
WASTE SAMPLES			4	4		1	1	4	8			4	26	425.11	
II-F CALCULATE FINAL HRS			4	4				4	4	2		4	22	394.56	
II-G CONDUCT SITE ASSESSMENT	2	2	8	4				24	32	12	40	50	174	2275.72	
II-H PROJECT MANAGEMENT	2		6	2	3	4	4					12	33	529.88	
TOTALS	5	3	60	52	3	18	23	98	336	22	40	204	864	11317.09	

TABLE VI-4  
 COST ESTIMATE BREAKDOWN BY TASK  
 PHASE II HRS SITE INVESTIGATION (SITE: LANCASTER RECLAMATION)

TASK DESCRIPTION	DIRECT LABOR		OTHER DIRECT COSTS (ODC), \$					SUBTOTAL ODC	TOTAL (\$)	
	HOURS	COST	LAB ANALYSIS	TRAVEL AND SUBSISTANCE	SUPPLIES	EQUIP. CHARGES	SUBCON- TRACTORS			MISC.
II-A UPDATE WORK PLAN	74	\$1,144.10		\$200.00	\$50.00	\$50.00		\$50.00	\$350.00	\$1,494.10
II-B CONDUCT GEOPHYSICAL STUDIES	222	\$2,243.86		\$1,750.00	\$50.00	\$350.00		\$50.00	\$2,200.00	\$4,443.86
II-C CONDUCT BORING/INSTALL MONITORING WELLS	172	\$2,213.40		\$650.00	\$250.00	\$600.00	\$5,700.00	\$250.00	\$7,450.00	\$9,663.40
II-D CONSTRUCT TEST PITS/AUGER HOLES	0	\$0.00							\$0.00	\$0.00
II-E PERFORM SAMPLING AND ANALYSIS										
SOIL SAMPLES FROM BORINGS	40	\$555.14			\$100.00	\$150.00		\$50.00	\$300.00	\$855.14
SOIL SAMPLES FROM SURFACE SOILS	0	\$0.00							\$0.00	\$0.00
SOIL SAMPLES FROM TEST PITS AND AUGER HOLES	0	\$0.00							\$0.00	\$0.00
SEDIMENT SAMPLES FROM SURFACE WATER	26	\$425.11	\$3,200.00	\$85.00	\$20.00	\$75.00		\$50.00	\$3,430.00	\$3,855.11
GROUND-WATER SAMPLES	36	\$470.49	\$4,800.00	\$150.00	\$60.00	\$175.00		\$50.00	\$5,245.00	\$5,715.49
SURFACE WATER SAMPLES	26	\$425.11	\$2,400.00	\$85.00	\$20.00	\$75.00		\$50.00	\$2,630.00	\$3,055.11
AIR SAMPLES	13	\$214.61				\$60.00			\$60.00	\$274.61
WASTE SAMPLES	26	\$425.11	\$2,400.00	\$85.00	\$50.00	\$60.00		\$50.00	\$2,645.00	\$3,070.11
II-F CALCULATE FINAL HRS	22	\$394.56			\$150.00	\$150.00		\$20.00	\$320.00	\$714.56
II-G CONDUCT SITE ASSESSMENT	174	\$2,275.72			\$750.00	\$300.00		\$75.00	\$1,125.00	\$3,400.72
II-H PROJECT MANAGEMENT	33	\$529.88	\$1,100.00	\$300.00	\$150.00	\$50.00		\$50.00	\$1,650.00	\$2,179.88
TOTALS	864	\$11,317.09	\$13,900.00	\$3,315.00	\$1,650.00	\$2,095.00	\$5,700.00	\$745.00	\$27,405.00	\$38,722.09

OVERHEAD= \$16,150.80  
 SUBTOTAL= \$54,882.89  
 FEE= \$3,305.54  
 TOTAL PROJECT COST= \$58,188.43





EXPLANATION:

- ⊕ TEST BORING; DRILLED 1984
  - ⊞ MONITORING WELL (1977)
  - ⊙ WATER SUPPLY WELL
- ▲ PROPOSED GROUNDWATER MONITORING WELL
  - ▲ PROPOSED SURFACE WATER AND SEDIMENT SAMPLE
  - PROPOSED WASTE CELL WATER SAMPLE

ENGINEERING-SCIENCE, INC.  
 IN ASSOCIATION WITH  
 DAMES & MOORE  
 NEW YORK STATE DEPARTMENT  
 OF ENVIRONMENTAL CONSERVATION  
 PHASE I REPORT  
 PROPOSED SAMPLING LOCATIONS  
 LANCASTER RECLAMATION  
 FIGURE VI-1

NOT TO SCALE

APPENDIX A  
Sources Contacted  
References

SOURCES CONTACTED FOR  
LANCASTER RECLAMATION, INC. INVESTIGATION

CONTACT	DATE CONTACTED	PERSON CONTACTED	TELEPHONE NUMBER	LOCATION	INFORMATION COLLECTED
USEPA Headquarters, Superfund Office	4/2/85	Hamid Saebfed	(202) 382-4839	401 M Street, NW Washington, D.C. 20460	Reviewed list of sites to determine if additional information was available.
USEPA - Region II, OERR	3/22/85	Mel Hauptman	(212) 264-7681	Room 402 26 Federal Plaza New York, NY 10278	General information from site files.
NYSDEC - Division of Solid and Hazardous	12/19/84	Marsden Chen	(518) 457-0639	50 Wolf Road Albany, NY 12233	General information from site files.
NYSDEC - Division of Water	12/19/84	Sal Pagano	(518) 457-6675	50 Wolf Road Albany, NY 12233	Mr. Pagano set up meetings with three bureaus within Division of Water.
NYSDEC - Division of Water	12/20/84	Bob Hannaford	(518) 457-6716	50 Wolf Road Albany, NY 12233	Reviewed SPDES Files for permit numbers and conditions.
NYSDEC - Division of Water	12/21/84	George Hansen	(518) 457-2010	50 Wolf Road Albany, NY 12233	Reviewed DMR files for discharge violations.
NYSDEC - Division of Air	12/21/84	Art Fossa	(518) 457-7454	50 Wolf Road Albany, NY 12233	Reviewed site list to identify sites with potential air emissions.

SOURCES CONTACTED FOR LANCASTER RECLAMATION, INC. INVESTIGATION

CONTACT	DATE CONTACTED	PERSON CONTACTED	TELEPHONE NUMBER	LOCATION	INFORMATION COLLECTED
NYSDEC - Division of Monitoring and Assessment	12/21/84	Bill Berner Frank Estabrook Fred Van Alstine	(518) 457-7363	50 Wolf Road Albany, NY 12233	Reviewed geology and monitoring information for specific sites.
NYSDEC - Division of Environmental Enforcement	12/20/84	Kevin Walter	(518) 457-4346	50 Wolf Road Albany, NY 12233	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYS - Dept. of Law Attorney General's Office	1/7/85	Val Washington	(518) 473-3105	Empire State Plaza Justice Building Albany, NY 12233	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYS - Dept. of Law Attorney General's Office	1/3/85	Albert Bronson	(716) 847-7196	Buffalo State Office Bldg. Buffalo, NY 14202	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYSDEC - Region 9 Division of Solid and Hazardous Waste	1/7/85	Peter Buechi Ahmad Tayyebi Jack Tygert Larry Clare	(716) 847-4585	600 Delaware Ave. Buffalo, NY 14202	Collected information from site files.

SOURCES CONTACTED FOR LANCASTER RECLAMATION, INC. INVESTIGATION

CONTACT	DATE CONTACTED	PERSON CONTACTED	TELEPHONE NUMBER	LOCATION	INFORMATION COLLECTED
NYSDEC - Region 9 Division of Air	1/8/85	Henry Sandonato Robert Armbrust	(716) 847-4565	600 Delaware Ave. Buffalo, NY 14202	Collected information concerning previous air emissions from inactive disposal sites.
NYSDEC - Regional Attorney	1/10/85	Peter J. Burke	847-4551	600 Delaware Ave. Buffalo, NY 14202	Reviewed list of sites to determine if legal action has occurred in the past, is in progress, and/or is scheduled in the near future.
NYS Dept. of Health, Buffalo Region, Public Health Engineering	1/8/85	Lou Violanti	(716) 847-4500	584 Delaware Ave. Buffalo, NY 14202	Collected information from site files.
NYSDEC - Region 9 Division of Fish and Wildlife	1/10/85 & 1/11/85	Mike Wilkenson Jim Sneider	(716) 847-4600	600 Delaware Ave. Buffalo, NY 14202	Collected information from site files
Erie County, Division of Environmental Control, Dept. of Environment & Planning	1/10/85	Don Campbell Ron Koczaja	(716) 846-6271 (716) 846-6370	95 Franklin Street Buffalo, NY 14202	Collected information from Erie County site files. Obtained additional information through interview.
Erie County, Division of Economic Development and Planning	4/2/85	Mike Alspaugh	(716) 846-6013	95 Franklin Street Buffalo, NY 14202	Obtained 1980 U.S. Census Data.
Lancaster Reclamation, Inc.	3/27/85 4/25/85	John Ferry	(716) 684-9624	403 Pavement Rd. Lancaster, NY 14086	Conducted site inspection and reviewed past and present waste management practices.

REFERENCES  
LANCASTER RECLAMATION

1. Buffalo Drilling Company, Boring Logs, 1984.
2. Chevrolet Central Laboratory, Analytical Results, November 17, 1980.
3. Fabritron, Analysis of Sludge, 1/9/79.
4. Ferry, J., Ferry Construction Company, List of Waste Disposed On-site (See Section IV), 1985.
5. Frontier Chemical Waste Process, Inc., Analytical Results, 2/4/76.
6. J-Labs, Inc., Analytical Results, 8/26/80.
7. NYS Museum and Science Service Bedrock Geology Map, Map and Chart Series, No. 15 (Compiled by Richard, Lawrence, Fisher, Donald), 1970.
8. NYSDEC, Leaching Potential Test Report, 1981.
9. NYSDEC, Application for Treatment or Disposal of Industrial or Hazardous Wastes, 1979.
10. Wendel Engineers, Lancaster Reclamation Engineering Report, 5/21/79 (Revised June 1979).
11. Worthington, Letter from J. Kasner to J. Ferry, Ferry Construction Company, 3/2/84.

# BUFFALO DRILLING COMPANY INC. REF-1

1965 Sheridan Drive  
Kenmore, New York 14223  
(716)-875-0906

foundation test borings  
rock coring • monitoring wells  
geotechnical instrumentation  
construction dewatering

GEOTECHNICAL REPORT  
on  
INVESTIGATION AND INTERPRETATION  
of  
SUBSURFACE CONDITIONS  
for  
LANCASTER RECLAMATION SITE

submitted to:

Lancaster Reclamation Company

prepared by:

Mr. James S. Barron, P.E.

Job No. 84-115  
August 6, 1984

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2.0	Field Explorations	2
3.0	Discussion of Site Conditions	3
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	3.3 Groundwater Conditions	4
	3.4 Bedrock Conditions	5
4.0	Discussion of Proposed Groundwater Monitoring System	6
	Figures	
	Appendices	



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<u>Figure No.</u>	<u>Title</u>
1	Site Details and Exploration Location Plan
2	Profile: Section A-A
3	Profile: Section B-B
4	Geotechnical Reference Standards
5	Proposed Monitoring Well Details

LIST OF APPENDICES

Appendix No.

Title

A

Test Boring Logs

B

Test Pit Logs

## 1.0 INTRODUCTION

This report presents subsurface exploration results and interpretation of conditions by Buffalo Drilling Company, Inc., for the Lancaster Reclamation Company site. The technical data and all interpretations and conclusions presented in the report were prepared by Mr. James S. Barron, P.E. Mr. Barron is a geotechnical engineer with substantial experience in the Central and Western New York State region. Buffalo Drilling Company and Mr. Barron were retained by Mr. John Ferry of the Lancaster Reclamation Company to develop and undertake subsurface studies and prepare this report.

The site is located on an approximate 13-acre land parcel near the intersection of Walden Avenue and Pavement Road in Lancaster, New York. In addition to the portions of the site designated for waste burial, the site also accommodates a house, barn, half-acre pond, and an equipment and material storage area.

This study has been undertaken in partial fulfillment of the requirements of Part 360 of the New York State law for solid waste management facilities. It is noted that the site has been previously used as a restrictive industrial waste disposal site and in compliance and under the approval, during that usage, of the New York State Department of Environmental Conservation (NYS DEC).

## 2.0 FIELD EXPLORATIONS

Eight test borings and two test pits were undertaken during March 1984 and located as shown on Figure 1. These explorations were field located through survey by Thomas P. Ryan and Associates. Elevations, as noted on the logs, are referenced to the USC & GS datum.

The test borings were drilled using a truck mounted CME 55 rotary drill rig between March 14 and 29, 1984. All test borings were observed and under the technical supervision of Mr. James S. Barron, P.E. Drilling was done using 3-3/4 inch inside diameter (ID) continuous flight hollow stem augers. In general, soil samples were recovered on 5-foot intervals by driving a standard split-barrel sample (2 feet long by 1-3/8 inch ID) 24 inches with a 140-pound hammer falling 30 inches each blow (ASTM D1586). The number of blows to drive the sampler was recorded at 6-inch intervals. The number of blows for 12 inches of penetration is defined as the Standard Penetration Test N-value.

Soil samples were initially classified in the field, and a portion of each sample was placed and sealed in a glass jar. The boring logs, included as Appendix A, were prepared based on the field log and a second visual classification of the retained samples. Classification of soil samples is based on the Unified Soil Classification System. Refer to Figure 4, entitled "Geotechnical Reference Standards," for an explanation of the terminology used for soil descriptions.

Two test pits were excavated with a backhoe operated by personnel employed by Lancaster Reclamation Company. As shown on Figure 1, the test pits are located at approximately midpoint of the north and south site boundary. The test pits were about 2 feet wide and 50 to 75 feet long. The conditions, as revealed by the excavations, were observed and documented by Mr. Barron. The test pit logs are included as Appendix B.

### 3.0 DISCUSSION OF SITE CONDITIONS

#### 3.1 Introduction

In general, the soil conditions at the site are a result of glacial lacustrine deposits of silt, clay and silty sands, and glacial outwash deposits of sand and gravel. The northwest corner of the site and land sectors north have been extensively excavated by Pine Hill Concrete Corporation for recovery of sorted gravel and sand materials. It is noted that the exploration program has determined that the substantial deposits of sand and gravel are primarily isolated west of the noted site dividing line on Figure 1. Based on the conclusions of the exploration program to be subsequently discussed, it is proposed that the land east of the site dividing line is now suitable for industrial waste burial and capable of complying with Part 360.

The site has been divided into an east and west portion for the ease of presentation and discussion. As noted on Figure 1, two section lines are indicated for which profiles have been prepared and included as figures 2 and 3.

As determined through field observations and the results of borings B-1, 6, and 7, the western portion of the site consists almost totally of sand and gravel. Interbedded in the sand and gravel and extending from the east to approximately half way across the western portion of the site is an upper wedge of silty clay and a lower wedge of plastic clay. Refer to Figure 2 and logs in Appendices A and B for additional details.

It is extremely difficult to determine the exact geological events, except that it was a result of glacial activities, which created the unusual subsurface conditions at the site. The remainder of the discussion to follow will primarily concentrate on the results of the exploration program and interpreted conditions for the eastern portion of the site.

#### 3.2 Soil Conditions for Eastern Portion of Site

The subsurface conditions for the eastern portion of the site have been investigated by borings B-2 through B-8 and test pits TP-1 and 2. The results of these explorations have concluded that this portion of the site consists primarily of silty clay and clay layers. It is noted that a three to five foot thick sand and gravel layer has been identified at an approximate depth between 15 and 20 feet and interbedded between the silty clay and clay layers. Profiles of these conditions are presented on figures 2 and 3, and additional discussion of the soil layers is presented below.

The above noted borings have determined that the upper five-foot depth of soil consists of a fill layer underlain by a thin silty sand layer. The three to four foot thick fill layer is a result of roadway construction along the perimeter site boundary and for interior site access. The fill material is described as either compacted slag or compacted, reddish brown, silty clay intermixed with some sand and gravel. The underlying natural deposit of silty sand is between one and two feet thick and suspected of covering the eastern portion of the site. The permeability of this material is estimated to range between 10-2 and 10-3 cm/sec.

Underlying the silty sand and extending to a depth between 15 and 20 feet is a layer of silty clay. This material is described as very stiff, moist, and moderately plastic, and consisting of between 10 and 20 percent sand and fine gravel. The estimated permeability of this material is less than 10-5 cm/sec.

An approximate two or three foot thick permeable sand and gravel layer has been identified in borings B-4, 5, and 8 located near the site dividing line shown on Figure 1. Since neither Boring B-2 nor B-3, which extend to a 30-foot depth and retrieved 24-inch soil samples on 5-foot intervals, did not reveal the thin sand and gravel layer, it is suspected that this layer may be discontinuous.

All borings east of the site dividing line encountered silty clay and/or clay conditions beneath a 15- to 20-foot depth and extending to the full depth drilled. Except for Boring B-4, which was drilled to a 41-foot depth, all remaining borings were drilled to an approximate 30-foot depth. The deep lying clay material is described as stiff to very stiff, plastic, and wet with little amounts of silt and interbedded with thin lenses of gravelly sand. The estimated permeability of the clay is less than 10-7 cm/sec.

### 3.3 Groundwater Conditions

The natural groundwater level at the site is approximately elevation 730 feet. The elevation is confirmed by the water level of the existing pond located in the northwest corner of the site and the noted groundwater depth for borings B-1, 6, and 7. Furthermore, it is suspected, based on preliminary information, that the groundwater gradient is in a southwest direction. Confirmation of these conditions will be provided subsequent to the installation of the proposed monitoring wells. Groundwater depth is not indicated on the logs for borings B-1 through B-5, and B-8 due to the termination of drilling efforts within a nearly impermeable soil layer.

### 3.4 Bedrock Conditions

The elevation of the bedrock surface, as determined by Boring B-7, is approximately 682.5 feet. Due to the site location south of the Onondaga Escarpment, the bedrock surface is most likely a member of the Onondaga Limestone Formation. It is noted that the Onondaga Limestone is typically weathered and fractured at the rock surface due to the effects of glaciation, and variations in the elevation of the top of rock are common.

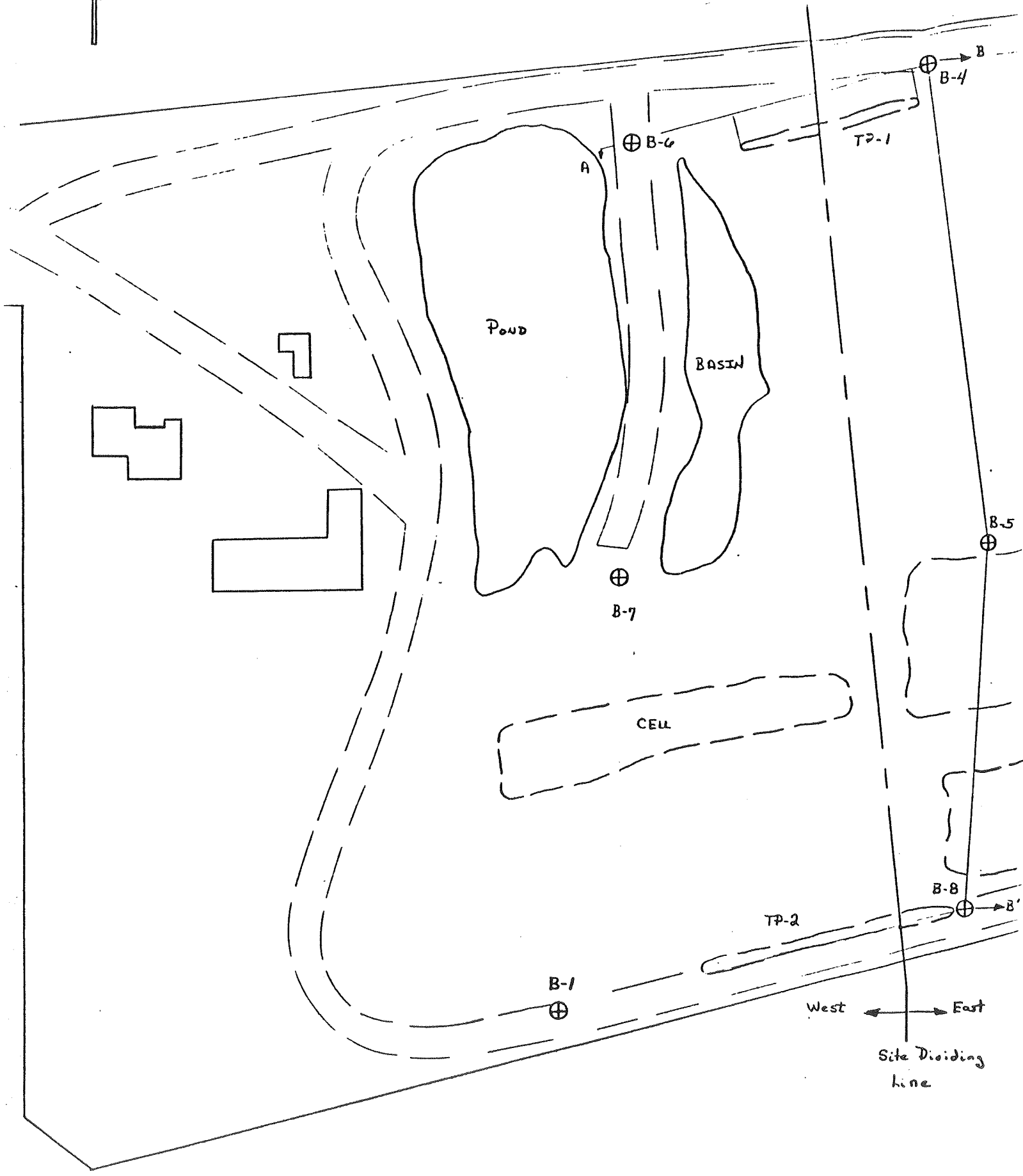
#### 4.0 DISCUSSION OF PROPOSED GROUNDWATER MONITORING SYSTEM

Part 360 of the New York State law for solid waste management facilities requires a minimum of three observation wells to evaluate groundwater gradient and retrieve water samples. Currently, wells are located within the site limits near the center of the east and west ends. In addition to these two existing wells, it is argued that the half-acre pond located in the northwest corner of the site can be effectively used to fulfill Part 360 requirements.

At this time, it is proposed that the approximately 70 and 30 foot deep wells at the east and west ends, respectively, will be field tested. These results accompanied with documentation of the well details will, hopefully, conclude that the existing wells are properly constructed and applicable to Part 360 requirements.

To supplement the existing groundwater monitoring system, it is recommended that additional wells are installed. It is proposed that these supplemental wells are constructed with 1-1/2 inch diameter PVC screens and riser pipe and under the supervision of a licensed engineer.





EXPLORATION LOCATION PLAN

FIGURE No. 1

LEGEND

⊕ Test Boring; Drilled 1984

--- Test Pit; 1984

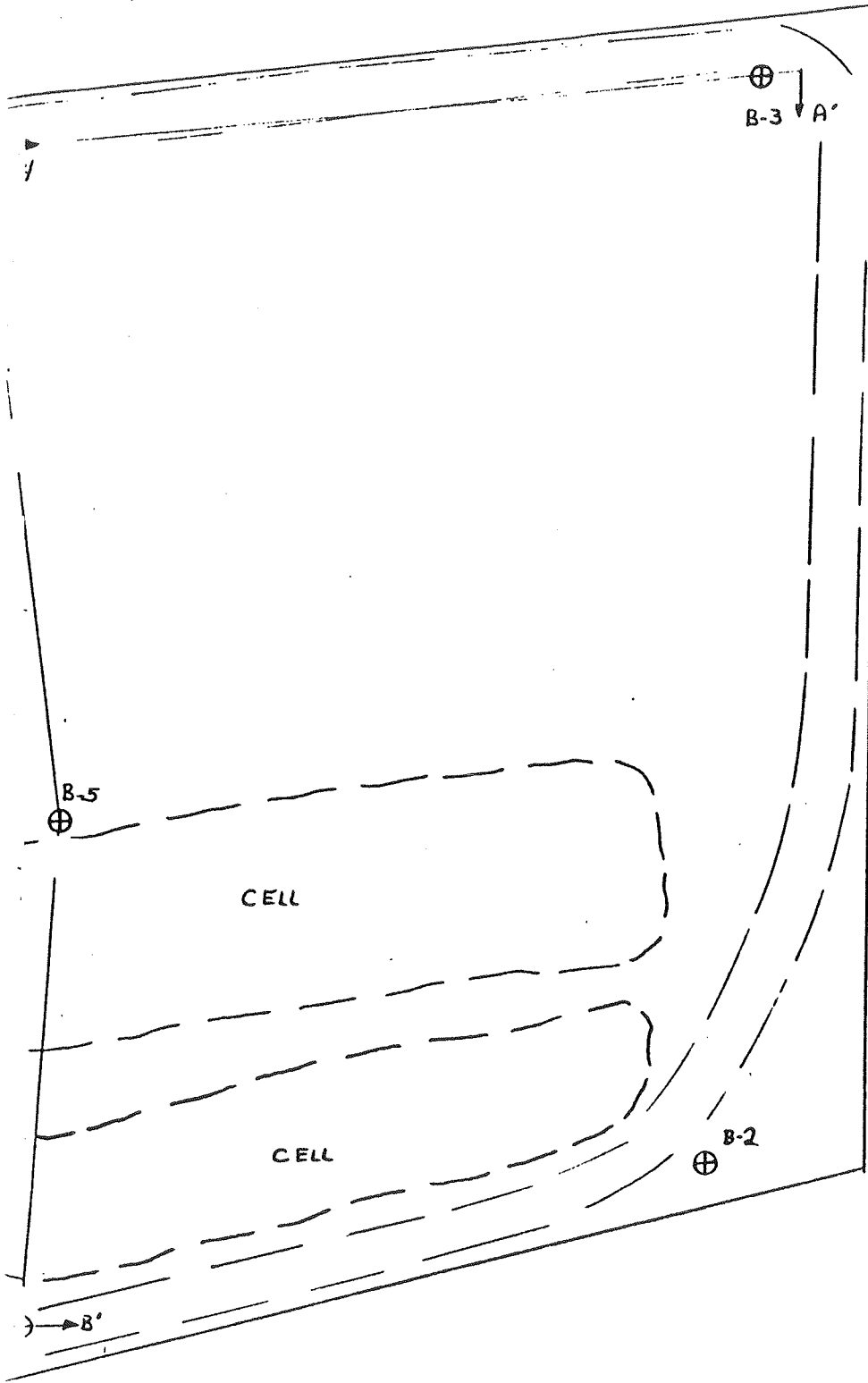
□ Existing Cell.

⎓ Existing Roadway

A A' Section line

⌊ Existing Frame Structure

SCALE: 1" = 80'

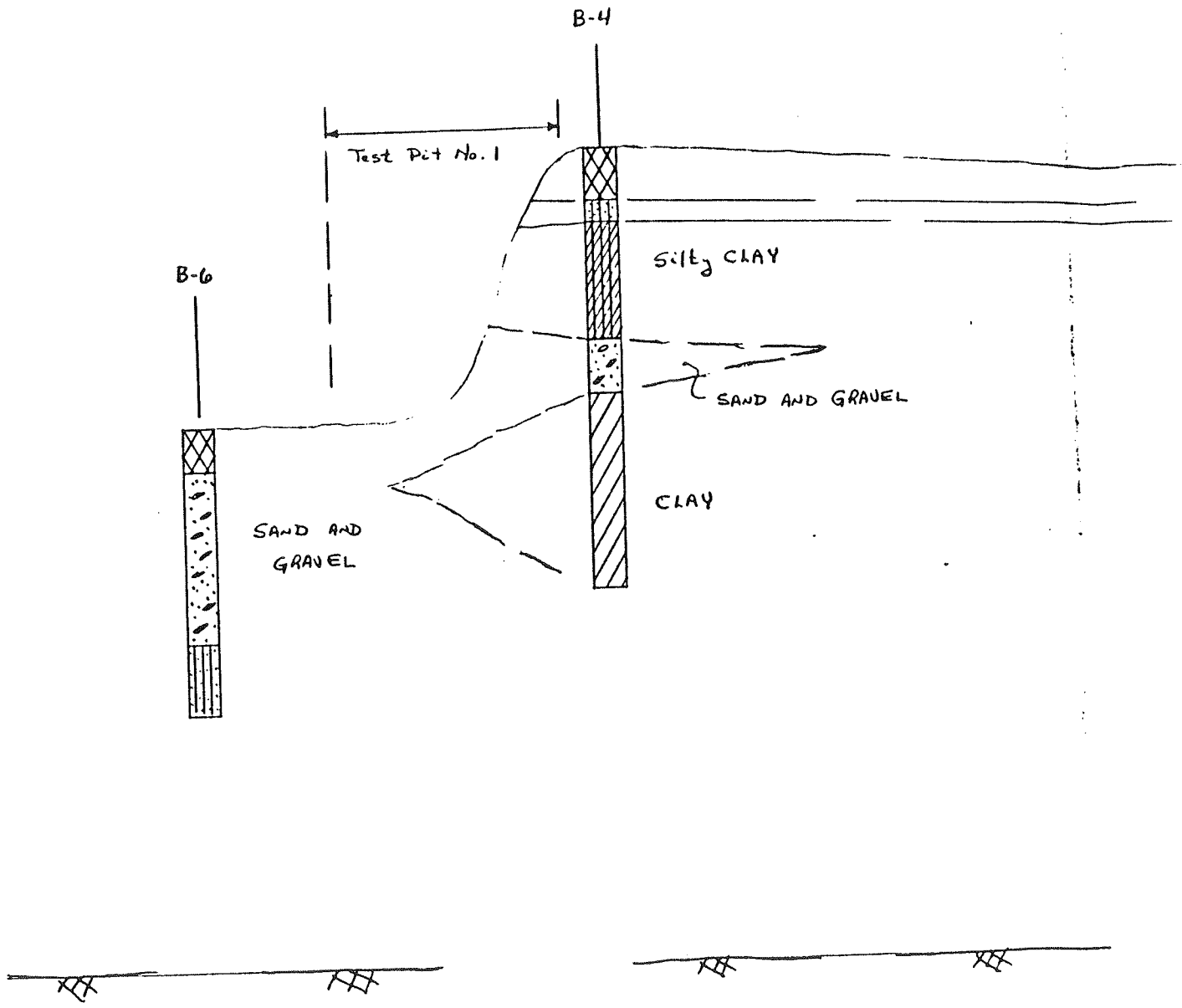


East

BUFFALO DRILLING COMPANY, Inc.

Date: June, 1984

By: J.S. Barron

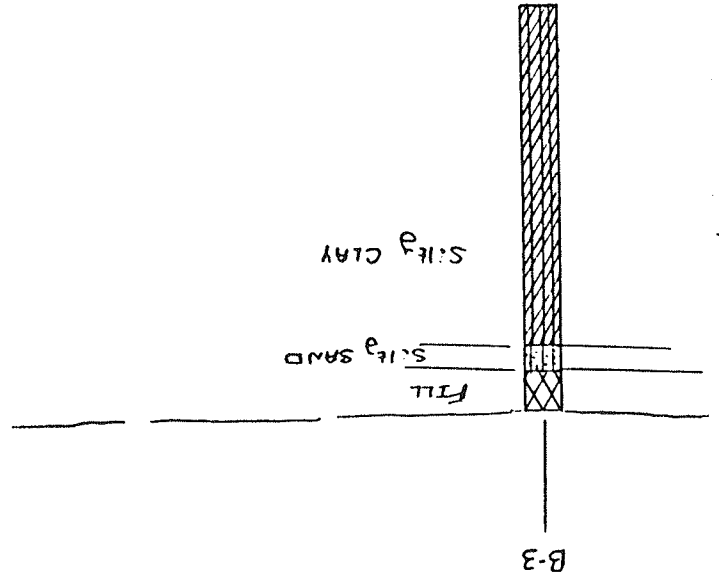
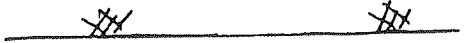


PROFILE: SECTION A-A'

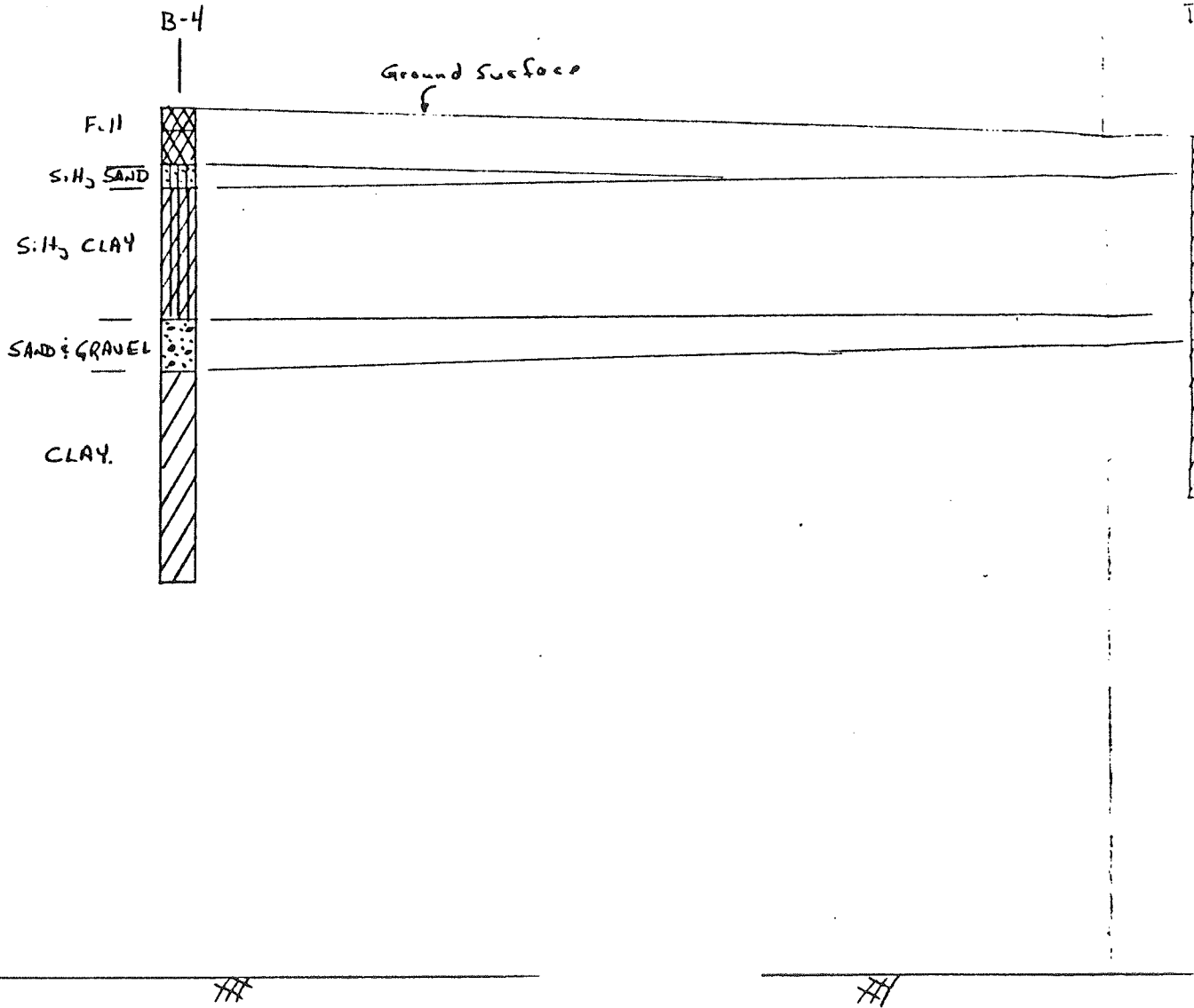
SCALE: (H) 1" = 80'  
 (V) 1" = 15'

Buffalo Drilling Company, Inc.  
Figure No. 2  
Date: July 27, 1984  
By: J. S. Barron

Bedrock - depth interpolated  
from Boring B-7

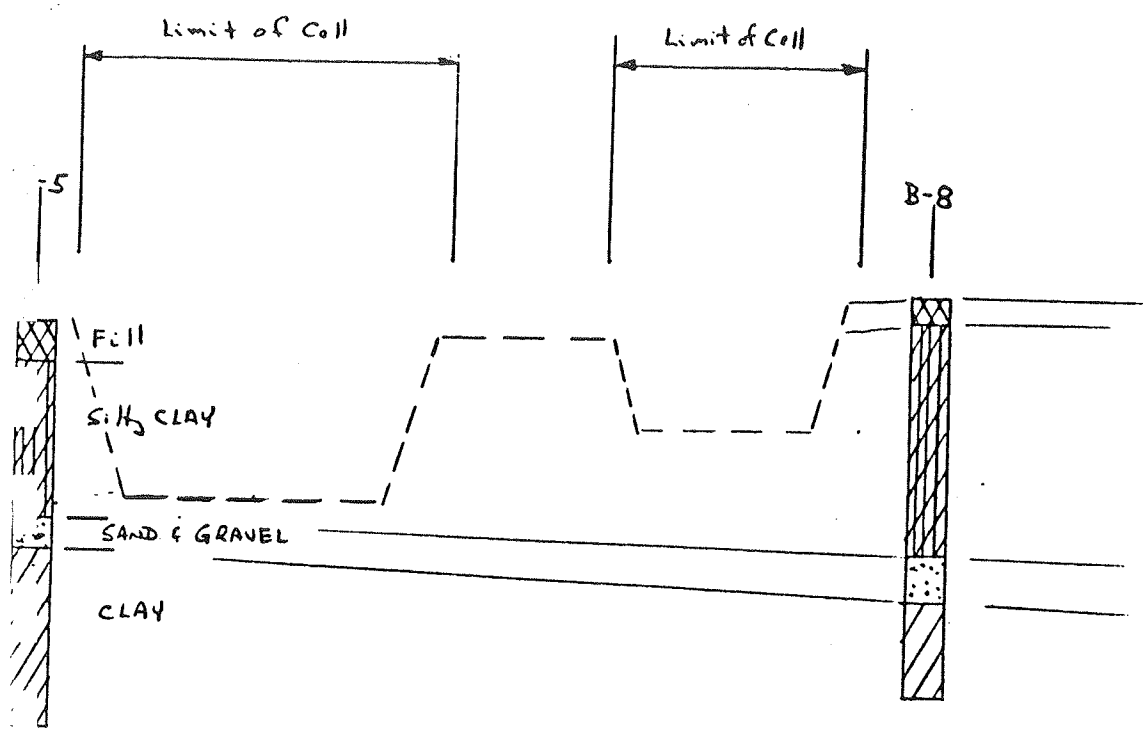


1)



PROFILE : SECTION

SCALE: (H) 1" =  
(V) 1" =



Bedrock - depth interpolated from Boring B-7.

B-B'  
15'

BUFFALO DRILLING COMPANY, INC.  
Figure No. 3  
Date: June, 1984 By: JS Barrow

**TERMINOLOGY USED FOR SOIL DESCRIPTIONS**

**Key to Density & Consistency Description of Granular & Cohesive Soils**

Number of Blows per ft., N	Relative Density	Number of Blows per ft., N	Consistency
0-4	Very loose	Below 2	Very soft
4-10	Loose	2-4	Soft
10-30	Medium	4-8	Medium
30-50	Dense	8-15	Stiff
Over 50	Very dense	15-30	Very stiff
		Over 30	Hard

**Description of Percentage or Proportions Used in Soil Sample Classification**

Trace	0-10%
Little	10-20%
Some	20-35%
And	35-50%

**Abbreviations Used in Soil Sample Classification**

f - fine	v - very
m - medium	gr - gray
c - coarse	bn - brown
f/m - fine to medium	yel - yellow
f/c - fine to coarse	

**Notes:**

1. Description and classifications are based on visual inspection of samples and boring operations.
2. The stratum lines shown on the boring logs are based upon interpretation and may not represent precise subsurface conditions.
3. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the groundwater level may occur due to other factors than those present at the time measurements were made.
4. The Standard Penetration Test N-value, as specified by ASTM D-1586, is defined as the number of blows required by a 140-pound hammer falling 30 inches each blow to drive a 2-inch outside diameter split spoon sampler 12 inches.

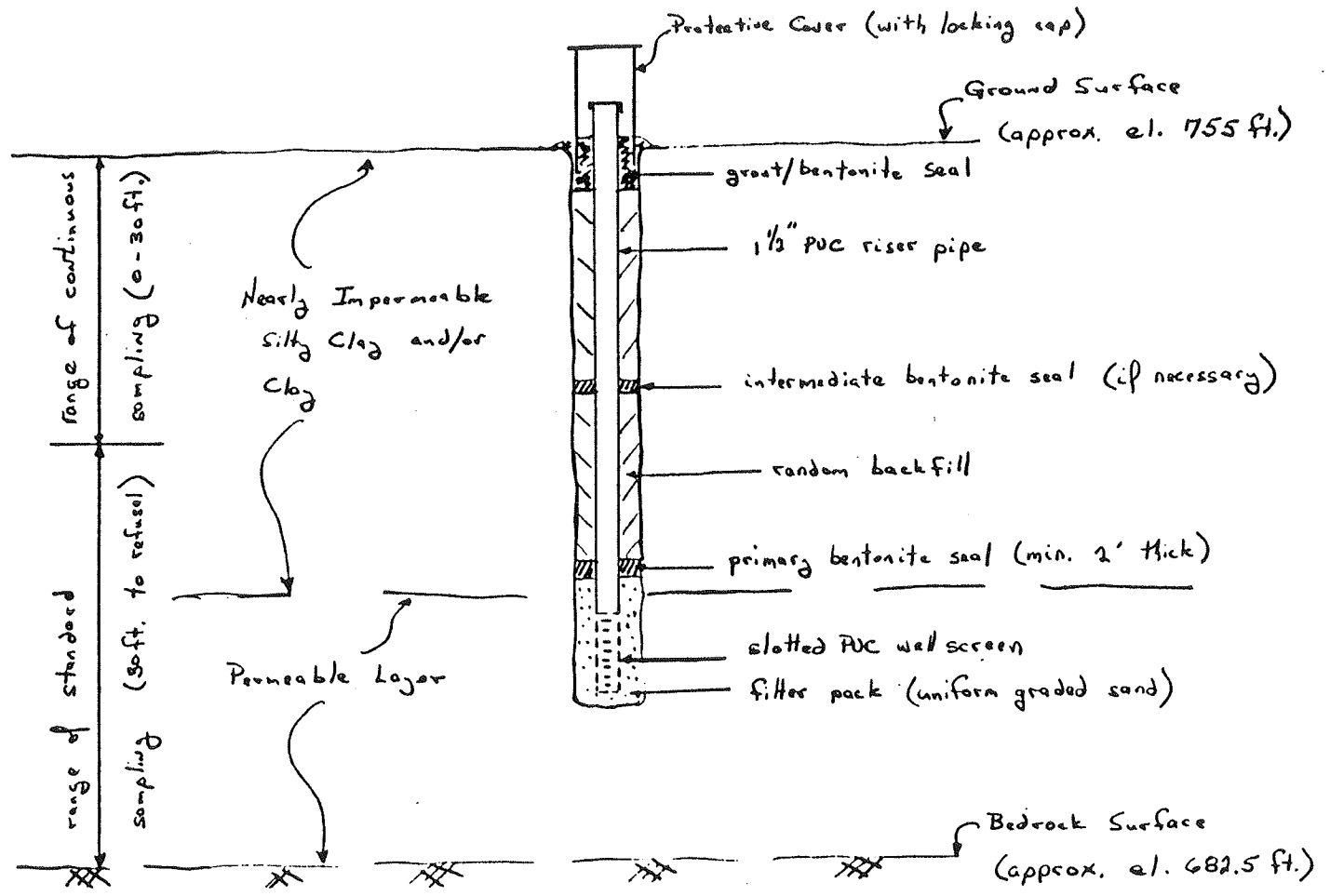
**SOIL CLASSIFICATION CHART**  
(Unified Soil Classification System)

MAJOR DIVISIONS	GRAPH SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS More than 50% of coarse fraction larger than No. 4 sieve	GRAVELS Clean Gravels (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with appreciable amounts of fines	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS Clean Sands (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly-graded sands, gravelly sands, little or no fines
FINE GRAINED SOILS Less than 50% of coarse fraction larger than No. 4 sieve	SANDS WITH APPRECIABLE AMOUNTS OF FINES	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
	SILTS AND CLAYS	Low plasticity Liquid Limit < 50%	ML
CL			Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
High plasticity Liquid Limit > 50%		OL	Organic silts and organic silty clays of low plasticity
		OH	Organic clays or high plasticity, fat clays
Highly Organic Soils	PT	Peat, humus, swamp soils with organic contents	
Miscellaneous Fill	MFLL	Miscellaneous fill may belong to any division but is identified as fill	

GEOTECHNICAL REFERENCE  
STANDARDS

Figure 4

PROPOSED MONITORING WELL DETAILS



Scale: Not To Scale

NOTES:

1. The above monitoring well is proposed for a deep well installation in the eastern portion of the site.
2. The screen will be installed at the depth required to penetrate the nearly impermeable silty clay and/or clay material. It may be necessary to place the screen near the bedrock surface.



APPENDICES

APPENDIX A - Test Boring Logs

APPENDIX B - Test Pit Logs

APPENDIX A

Test Boring Logs

FIELD BORING LOG

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client Lancaster Reclamation Company

Project Landfill Evaluation

File No. 84-115 Boring No. B-1

Driller John Sniderhan

Surface Elevation 757.67

Type of Drill Rig CME-55

Datum -

Sampling Method Split-spoon

Location Refer to sketch

Size & Type of Bit 3-3/4 in. ID augers

Date Started 3/14/84 Completed 3/14/84

Overburden Samples: Disturbed 8 Undist.       

Top of Rock Elevation -

Total Depth of Hole 31.5 ft.

Bottom of Hole Elevation       

Depth Drilled into Rock 0 ft.

Ground Water Depth 26 ft. at completion

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1						Compact slag - (FILL)	Augered to 3 ft. without sampling
	3	3	S-1	13		Brown, medium dense, Silty Sand and f. Gravel, little crushed stone, moist (FILL)	S-1: 3-5'
5	10	16					
	11	19	S-2	38		Brown, dense, Gravelly SAND, little Silt, dry (GM).	S-2: 5-7'
	19	17					
		16					
	15	19	S-3	34		Same as S-2	S-3: 7.5-9.5'
10	20	21					
	27	33	S-4	60		Same as S-2	S-4: 9.5-11.5'
	45						
		9					
15	9	21	S-5	30		Brown, stiff, Silty CLAY, some f. Sand, moist, moderate plastic (CL).	S-5: 14.5-16.5'
	40						
						Brown, dense, Silty f. SAND, moist (SM).	
20		10					

Notes:

Boring No. B-1

Sheet 1 of 2



FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.  
1965 Sheridan Drive  
Kenmore, New York 14223

Client Lancaster Reclamation Company

Project Landfill Evaluation

File No. 84-115

Boring No. B-2

Driller John Sniderhan

Surface Elevation 752.04

Type of Drill Rig CME-55

Datum -

Sampling Method Split-spoon

Location Refer to sketch

Size & Type of Bit 3-3/4 in. ID augers

Date Started 8/14/84 Completed 8/14/84

Overburden Samples: Disturbed 7 Undist.       

Top of Rock Elevation       

Total Depth of Hole 31.5 ft.

Bottom of Hole Elevation       

Depth Drilled into Rock 0 ft.

Ground Water Depth No water at completion

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1						Compact slag - (FILL)	Augered to 4.5 ft. without sampling
						Brown, medium dense, silty f. SAND, moist (SM).	
5	14	19	S-1	33	0	Reddish brown, very stiff, Silty CLAY, little f. Sand and f. Gravel, moist, moderate plasticity (ML-CL).	S-1: 4.5-6.5' (no recovery)
	23	6					S-2: 6.5- 8.5'
	11	14	S-2	25			
	17						
10	11	14	S-3	25		Same as S-2	S-3: 9.5-11.5'
	20						
15	7	11	S-4	18		. . .grade: plastic, trace f. Gravel.	S-4: 14.5-16.5'
	14						
20		5					

Notes:

Boring No. B-2

Sheet 1 of 2

FIELD BORING LOG

Client Lancaster Reclamation Company

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Project Landfill Evaluation

File No. 84-115

Boring No. B-2

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
21	5	7	S-5	12		. . .grade: stiff, plastic	S-5: 19.5-21.5'
	7						
			S-6	12		Same as S-5.	S-6: 24.5-26.5'
25		4					
	5	7					
		8	S-7	13		. . .grade: wet	S-7: 29.5-31.5'
30	6	7					
		7					
						Bottom of Hole 31.5ft.	
35							

Notes:

FIELD BORING LOG

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client Lancaster Reclamation Company

Project Landfill Evaluation

File No. 84-115 Boring No. B-3

Driller John Sniderhan  
 Type of Drill Rig CME-55  
 Sampling Method Split-spoon  
 Size & Type of Bit 3-3/4 in. ID augers

Surface Elevation 753.47  
 Datum -  
 Location Refer to sketch  
 Date Started 3/14/84 Completed 3/14/84

Overburden Samples: Disturbed 7 Undist.         
 Total Depth of Hole 31.5 ft.  
 Depth Drilled into Rock 0 ft.

Top of Rock Elevation -  
 Bottom of Hole Elevation         
 Ground Water Depth No water at completion

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1						Compact slag - (FILL)	
						Brown, medium dense, Silty f. SAND moist (SM).	
5	10	10	S-1	20		Brown, very stiff, Silt and Clay, little f. Sand, trace f. Gravel, moist, slight plasticity (ML-CL).	S-1: 4.5-6.5' (intermittent thin lenses of f. Sand and Silt).
	13						
10	11	14	S-2	25		Reddish brown, very stiff, Silty CLAY, little f. Sand, trace Gravel, moist, moderate plasticity (ML-CL).	S-2: 9.5-11.5'
	17						
15	11	12	S-3	33	0		S-3: 14.5-16.5' (no recovery)
	14	5					
	7	12	S-4	19		. . .grade: plastic, wet	S-4: 16.5-18.5'
	19						
20		4					

Notes:

Boring No. B-3  
 Sheet 1 of 2





FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.  
1965 Sheridan Drive  
Kenmore, New York 14223

Client Lancaster Reclamation Company

Project Landfill Evaluation

File No. 84-115 Boring No. B-4

Driller John Sniderhan

Surface Elevation 757.87

Type of Drill Rig CME-55

Datum -

Sampling Method Split-spoon

Location Refer to sketch

Size & Type of Bit 3-3/4 in. ID augers

Date Started 3/15/84 Completed 3/15/84

Overburden Samples: Disturbed 9 Undist.       

Top of Rock Elevation -

Total Depth of Hole 41 ft.

Bottom of Hole Elevation       

Depth Drilled into Rock 0 ft.

Ground Water Depth No water at completion

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1			S-1	24	-	Compact slag - (FILL)	S-1: 4-6'
		Reddish brown, compact, mixed Silt, Clay, Sand and Gravel, moist (FILL).					
5	9	10				Brown, dense, Silty f. SAND, wet (SM).	
	14	22					
10	6	11	S-2	26		Reddish brown, very stiff, Silty CLAY, little f. Sand, moist moderate plasticity (ML-CL).	S-2: 9-11'
	15	15					
15	5	6	S-3	13		. . .grade: stiff, trace f. Gravel, plastic	S-3: 14-16'
	7	10					
20	22	32	S-4	67		Brown, dense, SAND and GRAVEL, little, Silt, wet (GM).	S-4: 19-21'

Notes:

Boring No. B-4

Sheet 1 of 2

FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client Lancaster Reclamation Company

Project Landfill Evaluation

File No. 84-115

Boring No. B-4

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
21	35	13	S-4	67			S-4: 19-21'
	13	10					
		17	10	S-5	27		Brown, dense, SAND and GRAVEL, some Silt, saturated (GM).
25	3	4	S-6	8		Reddish brown, stiff, CLAY, little Silt, plastic, wet (CL).	S-6: 24-26'
	4	5					
30	4	6	S-7	12		Same as S-6. (Thin lense of Gravelly SAND from 30 to 30.5 ft.)	S-7: 29-31'
	6	6					
35	4	5	S-8	11		Same as S-6.	S-8: 34-36'
	6	6					
40	4	6	S-9	12		Same as S-6	S-9: 39-41'
	6	7					
						Bottom of Hole 41 ft.	

Notes:

FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.  
1965 Sheridan Drive  
Kenmore, New York 14223

Client Lancaster Reclamation Company  
Project Landfill Evaluation  
File No. 84-115 Boring No. B-5

Driller John Sniderhan  
Type of Drill Rig CME-55  
Sampling Method Split-spoon  
Size & Type of Bit 3-3/4 in. ID augers

Surface Elevation 754.66  
Datum -  
Location Refer to sketch  
Date Started 3/15/84 Completed 3/15/84

Overburden Samples: Disturbed 9 Undist.         
Total Depth of Hole 31 ft.  
Depth Drilled into Rock 0 ft.

Top of Rock Elevation -  
Bottom of Hole Elevation         
Ground Water Depth No water at completion

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1	5	8	S-1	20		Reddish brown, stiff, Silty Clay some Sand and Gravel, wet, moderate plasticity ( <i>Compacted Fill</i> ).	S-1: 0-2'
	12	16					
5	12	15	S-2	40		Reddish brown, hard, Silty CLAY, little f. Sand, trace f. Gravel; moist, moderate plasticity (ML-CL).	S-2: 4-6'
	25	28					
10	4	5	S-3	10		. . .grade: stiff, plastic	S-3: 9-11'
	6	9					
15	5	8	S-4	23		Brown, medium dense, SAND and GRAVEL, some Silt, saturated (GM).	S-4: 14-16'
	15	10					
	20	13	S-5	19		Reddish brown, stiff, CLAY, some Silt, little f. Sand, trace f/m Gravel, wet, plastic (CL).	S-5: 16-18'
	6	8					
20	11	10			0		S-6: 19-21'

Notes:

Boring No. B-5  
Sheet 1 of 2

**FIELD BORING LOG**

Client Lancaster Reclamation Company

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Project Landfill Evaluation

File No. 84-115 Boring No. B-5

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
21	7	9	S-6	17	0	Reddish brown, stiff, CLAY, some Silt, little f. Sand, trace f/m Gravel, wet, plastic (CL).	S-6: 19-21'
	3	4	S-7	9			S-7: 21-23'
	5	5					
25	4	6	S-8	12		Same as S-7	S-8: 24-26'
	6	12					
30	4	5	S-9	12		Same as S-7	S-9: 29-31'
	7	7					
						Bottom of Hole 31 ft.	
35							

Notes:

FIELD BORING LOG

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client Lancaster Reclamation

Project Landfill Evaluation

File No. 84-115 Boring No. B-6

Driller John Sniderhan

Surface Elevation - 732.70

Type of Drill Rig CME-55

Datum -

Sampling Method Split-spoon

Location Refer to sketch

Size & Type of Bit 3-3/4 inch ID augers

Date Started 3/28/84 Completed 3/28/84

Overburden Samples: Disturbed 6 Undist.         

Top of Rock Elevation -

Total Depth of Hole 26.5 ft.

Bottom of Hole Elevation -

Depth Drilled into Rock 0 ft.

Ground Water Depth Refer to notes

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1	3	5	S-1	9		Stiff, brown, Silty Clay, little f. Sand, tr. f. Gravel, moist, slight plasticity (Compacted Fill)	S-1: 0-2'
	4	4					
5		29	S-2	37		Dense, brown, SAND and GRAVEL, little Silt, saturated (GM).	S-2: 4.5-6.5'
	20	17					
	23						
10	17	22	S-3	35		Same as S-2.	S-3: 9-11'
	13	15					
15		12	S-4	36		Same as S-2.	S-4: 14.5-16.5'
	17	19					
	18						
20		18					

Notes:

Sheet No. 1 of 2

1. Water at level of adjacent pond at completion - approximately 5 ft. below ground surface.

**FIELD BORING LOG**

Client Lancaster Reclamation

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Project Landfill Evaluation

File No. 84-115 Boring No. B-6

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
21	34	38	S-5	72		Very dense, brown, Silty f/c SAND, tr. Gravel, saturated, (SM-SW).	S-5: 19.5-21.5'
	52						
25		10	S-6	69		Same as S-5.	S-6: 24.5-26.5'
	33	36					
	41						
30						Bottom of Hole - 26.5 ft.	
35							

Notes:

**FIELD BORING LOG**

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client Lancaster Reclamation

Project Landfill Evaluation

File No. 84-115 Boring No. B-7

Driller John Sniderhan

Surface Elevation - 732.55

Type of Drill Rig CME-55

Datum -

Sampling Method Split-spoon

Location Refer to sketch

Size & Type of Bit 3-3/4 inch ID augers

Date Started 3/28/84 Completed 3/28/84

Overburden Samples: Disturbed 11 Undist.         

Top of Rock Elevation         

Total Depth of Hole 50.0 ft.

Bottom of Hole Elevation -

Depth Drilled into Rock 0 ft.

Ground Water Depth Refer to notes

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1	4	5	S-1	9		Stiff, brown, Silty Clay, little f. Sand, tr. Gravel, moist (compacted Fill).	S-1: 0-2'
	4	6					
5		3	S-2	7	10	Same as S-1.	S-2: 4.5-6.5'
	4	3					
	8						
10		7	S-3	19		Medium dense, brown, Silty f/c SAND, tr. to little f/c Gravel, tr. Clay, saturated, (SM-SW).	S-3: 9.5-11.5'
	11	8					
	17						
15		3	S-4	18		Medium dense, brown, Silty f/m SAND, saturated (SM).	S-4: 14.5-16.5'
	8	10					
	16						
20		7					

**Notes:**

Sheet No. 1 of 2

- Water at level of adjacent pond - approximately 5 ft. below ground surface.

FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.  
1965 Sheridan Drive  
Kenmore, New York 14223

Client Lancaster Reclamation

Project Landfill Evaluation

File No. 84-115

Boring No. B-7

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
21	8	9	S-5	17		Same as S-4.	S-5: 19.5-21.5'
	12						
25		3	S-6	14		Same as S-4.	S-6: 24.5-26.5'
	5	9					
	10						
30		4	S-7	18		Same as S-4.	S-7: 19.5-31.5' (material blowing into augers - 2')
	6	12					
	10						
35		21	S-8	29		Same as S-4.	S-8: 34.5-36.5' (material blowing into augers - 5'; washed out before sampling).
	14	15					
	17						
40		4	S-9	16		. . .grade: gray, tr. f/m Gravel	S-9: 39.6-41.5'
	7	9					
	8						
45		50	S-10	81		Very dense, gray, Sandy Silt and f/c Gravel, tr. Clay, moist, (TILL).	S-10: 44.5-46.5'
	40	41					
	105/5"						
50		100/5"	S-11	-		Same as S-10.	S-11: 49.5-50.0'

Refusal with sampler at 50 ft.  
Bottom of Hole.



FIELD BORING LOG

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client LANCASTER RECLAMATION

Project Landfill Evaluation

File No. 84-115

Boring No. B-8

Driller John Sniderhan

Surface Elevation - 757.67

Type of Drill Rig CME-55

Datum -

Sampling Method Split-spoon

Location Refer to sketch

Size & Type of Bit 3-3/4 inch ID augers

Date Started 3/29/84 Completed 3/29/84

Overburden Samples: Disturbed 8 Undist.       

Top of Rock Elevation       

Total Depth of Hole 31.0 ft.

Bottom of Hole Elevation -

Depth Drilled into Rock 0 ft.

Ground Water Depth Refer to notes

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1						Compacted slag - (FILL).	Augered to 4 ft. without sampling
5	7	13	S-1	30		Very stiff, brown, Silty CLAY, little f. Sand, damp, slight plasticity (ML-CL).	
	17	23					S-1: 4-6'
10	6	8	S-2	19		Stiff, brown, Silty CLAY, little f. Sand, moist, moderate plasticity (ML-CL)	S-2: 9-11'
	11	13					
15	3	5	S-3	10		. . .grade: wet, plastic.	S-3: 14-16'
	5	6					
20	3	5	S-4	13			S-4: 19-21'

Notes:

- Water used to wash material out of augers during drilling. Water at approximately 7 ft. below ground surface at completion with augers in hole. Field permeability test performed with augers at full depth.

**FIELD BORING LOG**

**BUFFALO DRILLING COMPANY, INC.**  
 1965 Sheridan Drive  
 Kenmore, New York 14223

Client Lancaster Reclamation

Project Landfill Evaluation

File No. 84-115

Boring No. B-8

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS	
21	8	11	S-4	13		Medium dense, grayish brown, Sandy SILT, saturated (ML). Loose, grayish brown, Silty f/c SAND, saturated (SM).	change at 20. S-4: 19-21'	
	5	5	S-5	8			S-5: 21-23'	
	3	5						
25	2	2	S-6	5		Medium stiff, reddish brown, CLAY, tr. to little Silt, wet, plastic (CL).	S-6: 24-26'	
	3	3						
30	3	4	S-7	8		Same as S-6.	S-7: 29-31'	
	4	4						
35						Bottom of Hole - 31.0 ft.		

Notes:

APPENDIX B

Test Pit Logs

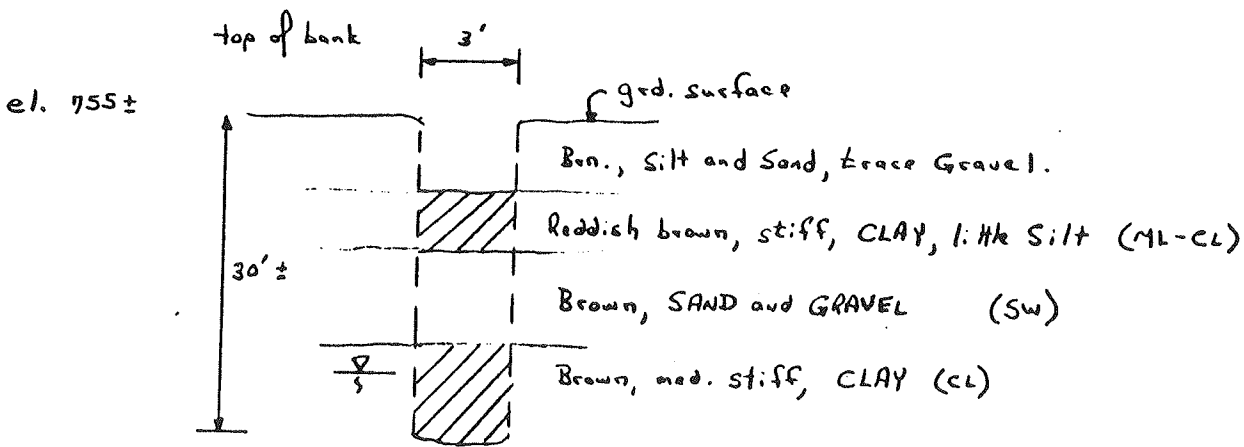
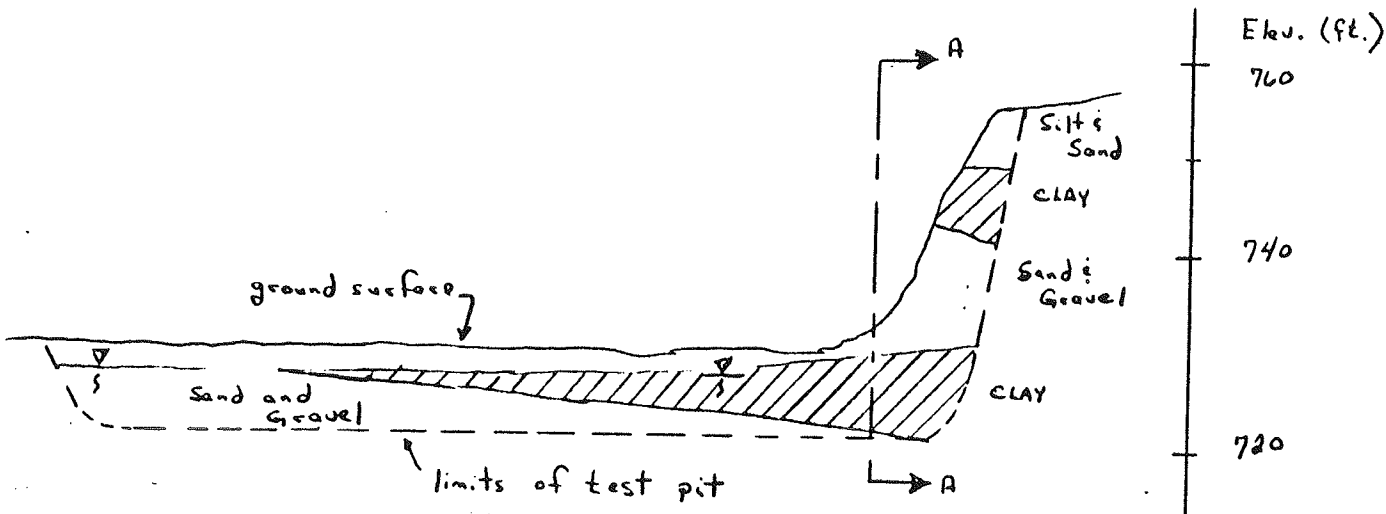
BY JSB DATE 4-21-84

SUBJECT Lancaster Reclamation  
Test Pit No. 1

SHEET NO. OF  
JOB NO. 84-115

### Introduction

Test Pit No. 1 was excavated and logged on 3-29-84. The test pit is located approximately mid-point of the northern edge of the site. The conditions encountered are graphically presented below.



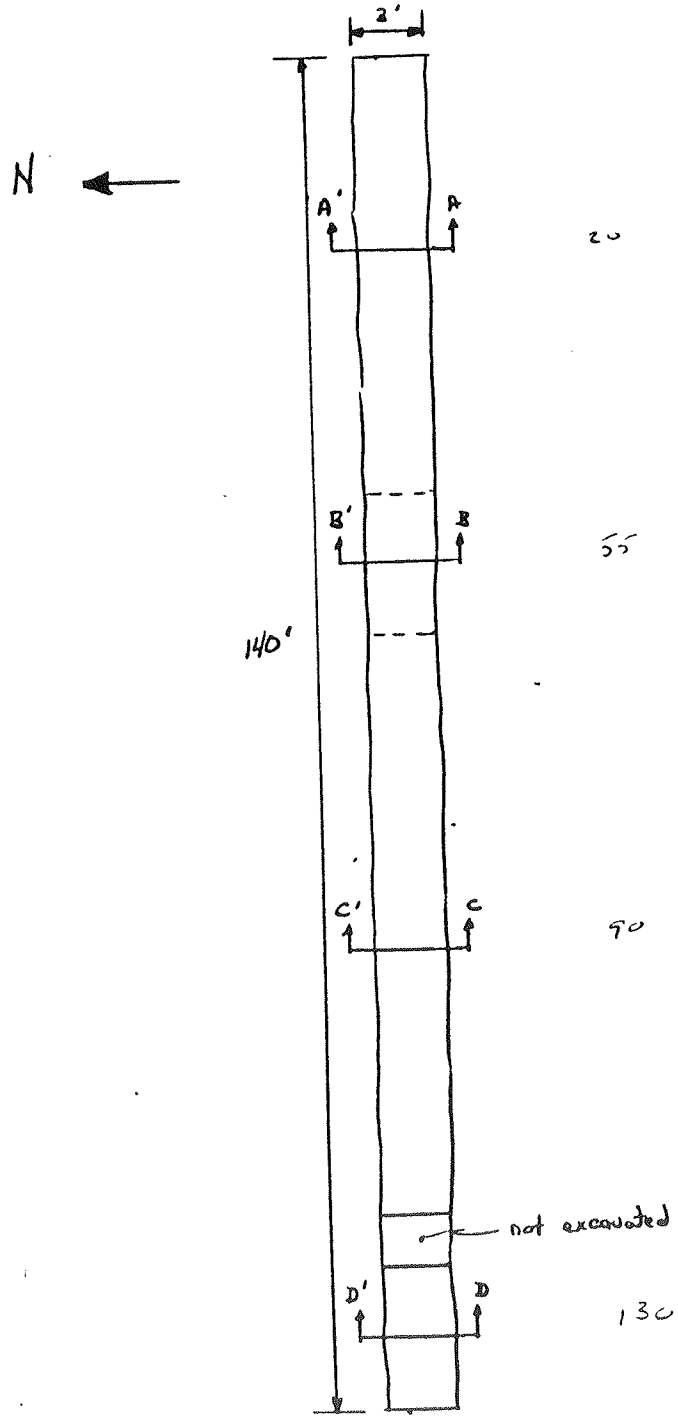
Section A-A' (not to scale)

Note: Top of the sand and gravel layer appears to dip in the easterly direction.

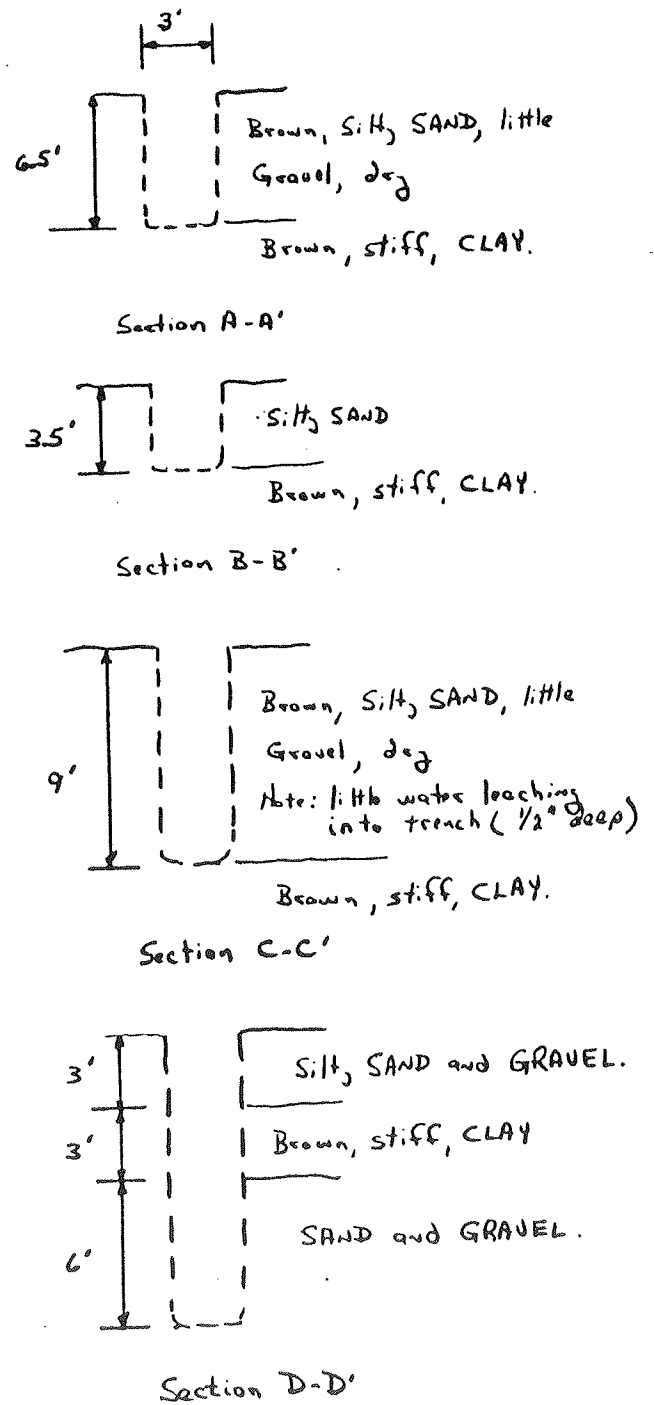
Introduction

Test Pit No. 2 was excavated and logged on 4.2.84. The test pit is located approximately mid-point of the southern edge of the site. The conditions encountered are graphically presented below.

PLAN VIEW



SECTION VIEWS



*Metal Casting Plant  
Waste Sands*

TONAWANDA - Chevrolet Metal Casting Plant

ONE QT. SAMPLES OF SOLID WASTE FROM MCP. SANDS.

ANALYZED BY EPA EXTRACTION PROCEDURE.

S=SLUDGE, L=LEACHATE.

	11-17-1990 L MIXTURE (Leachate)	11-17-1990 S MIXTURE
(PPH)		4500.00000
EN (PPH)	-	(.25000E+05)
(PPB)	-	300.00000
(PPS)	-	(.10000E+05)
(PPH)	.00700	(.25000)
(PPH) 5	.04100	5.50000
(PPH) 100	.09500	12.75000
(PPH) (	.01000)	(.50000)
(PPH) 1.0	.05000	(.50000)
(PPH) 5.0	.05000	7.00000
(PPH) (	.01000)	(.50000)
(PPH)	.05000	6.50000
(PPH) 50	.05200	13.40000
(PPB) 200	.40000	(40.00000)
(PPH) (	.04000)	9.50000
(PPH) 1.0	.02500	4.05000
(PPH) 5.0	.01000	(.50000)
(PPH) (	.00500	(.25000)
EN (PPH)	.97000	49.50000
WIS		2.90000

■ MG/L FOR WATER - MG/KG FOR SLUDGE

■ UG/L FOR WATER - UG/KG FOR SLUDGE

□: RESULTS FOR DILS AND SLUDGES ANALYZED BEFORE 9-1-79 ARE ALL MG/KG DETECTED = ( )

*hole* (with arrow pointing to the table)

*Handwritten:* 11650  
 11650 GENESEE ST. • ALDEN, N.Y. 14004

JANUARY 09, 1979

*Handwritten:* LANCASTER RE-CLAMATION  
~~FERRY CONSTRUCTION~~  
 3179 WALDEN AVENUE  
 LANCASTER, N.Y.

DEAR JOHN,

THE MATERIAL THAT WE WILL BE DUMPING AT YOUR SITE IS A UNILAYERED LOW VISCOSITY SLUDGE COMPOSED OF PORTLAND CEMENT, ASBESTOS AND GLASS FIBRES IN THE APPROXIMATE AMOUNTS SHOWN BELOW:

PORTLAND CEMENT	20%
ASBESTOS FIBERS	5%
GLASS FIBRES	10%
WATER	65%

SINCERELY YOURS,

*Handwritten Signature:*  
 ROBERT LOWREY  
 PLANT MANAGER

"FULL LINE" DISTRIBUTORS AND FABRICATORS OF:

Laminated Plastics (Phenolic, Melamine, Epoxy, Silicone, etc.), Thermoplastics (Nylon, Teflon, Delrin, Acrylic, etc.), And Vulcanized Fibre in Sheet, Rod and Tube Form; Asbestos Cement, Flexible Insulation, Insulation Varnishes and Industrial Paints.

TABLE IV-1  
SUMMARY OF WASTES DISPOSED OF AT THE LANCASTER RECLAMATION, INC. SITE

Date Permit Approved	Generator	Waste Type	Quantity Disposed <sup>a</sup>	Constituents of Concern
5/11/76	Dresser Transportation Equipment Division	Bentonite Clay Slurry	76,000 cu.yd. prior to thickening; 165 after thickening.	Leachate: zinc
1/24/78	Chevrolet Division, General Motors	Foundry Sand Slurry	1.7 million gallons	Pit: oil Pit Leachate: selenium, cadmium Mixture: oil, PCB Mixture leachate: cadmium, lead
1/4/79	Fabritron	Cement, asbestos, and glass fiber slurry	7,000 gallons	Asbestos
5/11/76	Dresser Transportation Equipment Division	Foundry Sand	2,200 cu.yd.	Leachate: phenols
6/16/81	Reed Holdings,	Surface print waste, pre-paste polymer, precast alkali	120,000 gallons	----
10/29/80	Dresser Transportation Equipment Division	Shot blast of steel castings	Mixed with foundry sand	Leachate: phenols
5/27/82	Sweet Home Central School Bus Garage	Dirt and sludge from catch basin	See below	Sluge: oil
7/7/83	Ormsby Vocational School Bus Garage	Dirt and sludge from catch basin	9,000 cu.yd., includes Sweet Home	Heavy metals and oil and grease

<sup>a</sup> Based on telephone interview with J. Ferry of Lancaster Reclamation, Inc., 4/25/85.



FRONTIER CHEMICAL WASTE PROCESS INC.

ENVIRONMENTAL LABORATORY

4626 Royal Avenue, Niagara Falls, New York 14303

JOB: Ferry Concrete Construction Co., Inc.

3179 Walden Avenue, Depew, New York 14043

SAMPLE AND WORK REQUESTED BY: Mr. John Ferry

DATE: February 4, 1976

FRONTIER CHEMICAL LAB NO. FC-2476

I. COMPOSITION OF SLUDGE

ITEM	PARAMETER	FINDINGS AND DESCRIPTIONS
1	Physical Characteristics	Black Thixotropic Sludge
2	Color: (wet) (dry)	Black Gray
3	Percent Solid: Minimum Maximum Mean Average	6.15% 8.31% 7.33%
4	Acidity of Sludge	Neutral

CHEMICAL COMPOSITIONS

5	Moisture (Percent Water)	91.50%
6	Total Solid	8.50%
7	*Loss of Ignition (percent Carbonation)	9.95%
8	SiO <sub>2</sub> (Sand type)	22.25%
9	**Al <sub>2</sub> Si <sub>4</sub> O <sub>x</sub> (Clay Type)	65.19%
10	***Fe <sub>2</sub> O <sub>3</sub> (Iron Oxide)	1.25%
11	CaO (Lime type)	0.36%

\* Organic components plus carbon

\*\* Clay is Bentanite consisting mainly of Montmorillonite

\*\*\* Non-magnetic

ENVIRONMENTAL LABORATORY

4626 Royal Avenue, Niagara Falls, New York

JOB: Ferry Concrete Construction Co., Inc.

3179 Walden Avenue, Depew, New York 14043

SAMPLE AND WORK REQUESTED BY: Mr. John Ferry

DATE: February 4, 1976

FRONTIER CHEMICAL LAB NO. FC-2476

II. COMPOSITION OF WATER		
ITEM	PARAMETER	ANALYSIS
1	Origins	Filtrate from Sludge filtration
2	PH.	7.75
3	Specific gravity	1.03 @ Rt
4	Color (APHA unit)	20
5	Total Dissolved Solids (TDS)	30,500 ppia
6	Chlorides (Cl)	13,500 ppm
7	Sulfates (SO <sub>4</sub> )	600 ppm
8	Silica (SiO)	45 ppm.
9	Nitrate (NO <sub>3</sub> )	70 ppm
10	Calcium (Ca)	9,600 ppia
11	Sodium (Na)	480 ppm
12	Iron (Fe)	125 ppm
13	Zinc (Zn)	45 ppm
14	Aluminum (Al)	50 ppm
15	Total Organics (TOC)	1.100 ppm

ANALYSIS  
CONSULTING  
SALES  
SERVICE

TECK:LABS INC.  
TECK:LABS

TECK:LABS  
New York, N.Y. 10701  
T.L. 511-08087

TECK:LABS DIVISION

August 26, 1980

Dresser Transportation Equipment Division  
Dresser Industries, Inc.  
2 Main Street  
Depew, New York 14043

Attention: Mr. Al Eicheldinger

Subject: Sample for N. Y. S. Leachate Analysis, July 31, 1980 (P.O. #66643)

Gentlemen:

*should be  
EPA  
procedures*

Results from leachates prepared in accord with N. Y. S. Department of Environmental Conservation procedures are as follows:

	L E A C H A T E					
	A		B		C	
pH	8.5		8.3		8.4	
Chlorides	14	mg./ltr.	13	mg./ltr.	14	mg./ltr.
Iron (Total)	3.70	"	3.42	"	3.60	"
Conductance - micromhos	680		660		660	
Phenol	0.012	mg./ltr.	0.010	mg./ltr.	0.014	mg./ltr.
T.O.C.	197	"	198	"	212	"

Should there be any questions regarding this information or if we may be of additional assistance in any regard, please feel free to contact our office.

Very truly yours,

TECK:LABS DIVISION

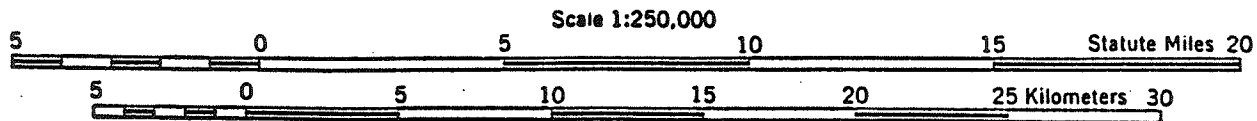
*John S. Mitchell*  
John S. Mitchell

JSM/gc

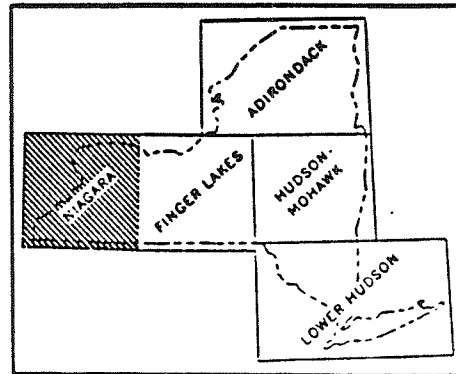
# GEOLOGIC MAP OF NEW YORK

1970

## Niagara Sheet



CONTOUR INTERVAL 100 FEET



Topographic Base from AMS Quadrangles 1:250,000 scale.

NEW YORK STATE MUSEUM AND SCIENCE SERVICE  
MAP AND CHART SERIES NO. 15

COMPILED AND EDITED

Lawrence V. Fisher  
Donald W. Fisher

March, 1970

REF-7

TEACHING REPORT

REK-8  
 Approved  Disapproved

CONDITIONS ON REVERSE SIDE

1. PROJECT/FACILITY Wester Reclamation Company		2. COUNTY Erie	3. SITE NO. 15 So8	4. APPLICATION NO. 7
5. NAME OF OWNER Wester Reclamation Company		6. ADDRESS (Street, City, State, Zip Code) 403 Pavement Rd. Lancaster, N.Y.		7. TELEPHONE NO. 684-1703
8. NAME OF OPERATOR Same As Above		9. ADDRESS (Street, City, State, Zip Code) Same As Above		10. TELEPHONE NO. Same
11. COMPANY GENERATING WASTE Wester Transportation Equip. Div.		12. ADDRESS OF FACILITY GENERATING WASTE (Street, City, State, Zip Code) 2 Main Street Depew, N.Y. 14043		
13. REPRESENTATIVE OF WASTE GENERATOR E. Eicheldinger		14. MAILING ADDRESS OF REPRESENTATIVE 2 Main St. Depew, N.Y. 14043		15. TELEPHONE NO. 716-683-6000

16. DATE SAMPLES TAKEN 7-26-80	17. SAMPLES TAKEN BY (Name and Employer) A.E. Eicheldinger Dresser Transportation	
18. ORGANIZATION PERFORMING ANALYSES Labs Inc. Teck: Lab Division		19. ADDRESS (Street, City, State, Zip Code) West Cordon St. At Clark Lane Bradford PA.
20. REPRESENTATIVE OF ORGANIZATION PERFORMING ANALYSES John S. Mitchell		21. TITLE Director
		22. TELEPHONE NO. 716 368-6087

ANALYSES OF LIQUID FRACTION: pH: Sample 1 \_\_\_\_\_ Sample 2 \_\_\_\_\_ Sample 3 \_\_\_\_\_

1)	COMPONENT	CONCENTRATION			UNIT (Check One)	
		Sample 1	Sample 2	Sample 3	Wt. %	PPM
					<input type="checkbox"/>	<input type="checkbox"/>
2)					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>
4)					<input type="checkbox"/>	<input type="checkbox"/>
5)					<input type="checkbox"/>	<input type="checkbox"/>

ANALYSES OF SOLIDS FRACTION: Percent Solids: Sample 1 \_\_\_\_\_ Sample 2 \_\_\_\_\_ Sample 3 \_\_\_\_\_

1)	COMPONENT	CONCENTRATION (Dry Weight)			UNIT (Check One)	
		Sample 1	Sample 2	Sample 3	Wt. %	PPM
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>
4)					<input type="checkbox"/>	<input type="checkbox"/>
5)					<input type="checkbox"/>	<input type="checkbox"/>

TEACHING TEST ON SOLIDS FRACTION: pH: Sample 1 8.3 Sample 2 8.4 Sample 3 8.3

1)	COMPONENT	CONCENTRATION			UNIT (Check One)	
		Sample 1	Sample 2	Sample 3	Wt. %	PPM
	Arsenic	0.005				
	Barium	0.030				
	Cadmium	<0.001	Chloride	8	4	8
2)	Chromium	0.010	Iron	38.92	59.4	46.98
3)	Lead	<0.020	T.O.C.	2	3	3
	Mercury	0.001	Penol	0.012	0.023	0.012
5)	Selenium	<0.001	Micromhos Conductivity	36	36	36
	Silver	0.006				

ATTESTATION

I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

a. SIGNATURE AND TITLE OF REPRESENTATIVE OF WASTE GENERATOR X <i>E. Eicheldinger</i> SUPR, W.K.S. ENERGY	DATE 1/13/81
b. SIGNATURE AND TITLE OF REPRESENTATIVE OF TREATMENT OR DISPOSAL FACILITY X <i>John S. Mitchell</i> REPRESENT	DATE 7/14/81

DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DISPOSAL OF AN INDUSTRIAL OR HAZARDOUS WASTE STREAM

See Application Instructions on Reverse Side

1. Project/Facility Name <b>Lancaster Reclamation Co.</b>	2. County <b>Erie</b>	3. State <b>PA</b>	4. Application No.
5. Owner's Name <b>Lancaster Reclamation</b>	6. Address (Street, City, State, Zip Code) <b>403 Pavement Rd Land, PA 14086</b>		7. Telephone No. <b>684-1703</b>
8. Operator's Name <b>Lancaster Reclamation</b>	9. Address (Street, City, State, Zip Code) <b>same as above</b>		10. Telephone No. <b>684-1703</b>

11. Method of Treatment or Disposal

**Lagooning**

12. Company Generating Waste <b>FABRIPAN INC.</b>	13. Address of Facility Generating Waste (Street, City, State, Zip) <b>11650 GENESEE ST ALDEN, N.Y. 14004</b>	
14. Representative of Waste Generator <b>ROBERT H. LOWRY</b>	15. Mailing Address of Representative <b>SAME</b>	16. Telephone No. <b>937-9167</b>

17. Description of Process Producing Waste

**WET SAWING OPERATION - WATER USED AS COOLANT**

18. Expected Annual Waste Production Tons/yr. <b>20,000</b> Gal./yr.	19. Waste Hauled In: <input type="checkbox"/> Drums <input checked="" type="checkbox"/> Bulk Tank <input type="checkbox"/> Roll-off Container <input type="checkbox"/> Other
---	---

20. Waste Composition a. Average Percent Solids <b>35%</b>	b. Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Slurry <input checked="" type="checkbox"/> Sludge <input type="checkbox"/> Solid <input type="checkbox"/> Contained Gas
---	--

c. pH Range \_\_\_ to \_\_\_

d. Components	GAL VOL.	CONCENTRATION (dry weight)			UNIT (check one)	WT. %	PPM
		Upper	Lower	Typical			
1) PORTLAND CEMENT	20%				<input type="checkbox"/>	<input type="checkbox"/>	
2) ASBESTOS	5%				<input type="checkbox"/>	<input type="checkbox"/>	
3) GLASS FIBERS	10%				<input type="checkbox"/>	<input type="checkbox"/>	
4) WATER	65%				<input type="checkbox"/>	<input type="checkbox"/>	
5)					<input type="checkbox"/>	<input type="checkbox"/>	
6)					<input type="checkbox"/>	<input type="checkbox"/>	
7)					<input type="checkbox"/>	<input type="checkbox"/>	

21. Was a Leaching Potential Test conducted on the Waste?  Yes  No If yes, attach form.

22. Detail all hazards and nuisance problems associated with the wastes. List necessary safety, handling, treatment and disposal precautions.

**NONE**

**RECEIVED**

**MAY 1 1979**

**N.Y.S. Environmental Conservation  
Region 9 Headquarters**

23. Waste Hauler <b>Ferry Concrete</b>	24. Address (street, city, state, zip code) <b>3179 Walden Av Depew, N.Y.</b>	25. N.Y.S. Reg. No. <b>15-001</b>	26. Telephone No. <b>684-1703</b>
---	--	--------------------------------------	--------------------------------------

27. CERTIFICATION:

I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

a. Representative of Waste Generator:

*Robert Lowry* **PLT. MGR.**  
Signature and Title

**4/30/79**  
Date

b. Representative of Treatment or Disposal Facility:

*[Signature]*  
Signature and Title

**4/30/79**  
Date

REF-10

RESTRICTED-USE LANDFILL SITE

For

LANCASTER RECLAMATION COMPANY  
(Formerly Ferry Concrete Construction Co., Inc.)  
403 Pavement Road  
Lancaster, NY 14086

By

WENDEL ENGINEERS, P.C.  
Consulting Engineers/Planners/Surveyors  
7405 Canal Road  
Lockport, New York

Project No. 1911-2  
May 1979

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BACKGROUND

It will be the purpose of this report to develop a physical plan for the implementation of an existing restricted-use landfill for the private use of the Owner/Operator, Lancaster Reclamation Company. At present, the type of waste to be dumped at this landfill is: (1) A slurry consisting of Bentonite Clay in a 90% water mixture that has been coagulated with a poly-electrolite to a gelatinous precipitate (see Appendix 2); (2) Slurry composed of portland cement, asbestos fibers and glass fibers (see Appendix 8); (3) Spent casting sand including broken brick (see Appendix 10) and (4) Sand fines (slurry) from foundry wastewater treatment (see Appendix 6). The slurry wastes will be hauled to the site in dump trucks with sealed bodies to prevent leakage. The foundry sand will be hauled in covered dump trucks to eliminate blowing sand during transport.

The estimated total quantity of waste that can be presently handled at the site, excluding the pond and shallow surface water holding pond, is 81,000 cubic yards. Based on the present combined quantity of dry and dewatered industrial wastes, the life expectancy of the site would be approximately 6.5 years. If the Owner elects not to accept any one or more of the previously mentioned wastes the life expectancy of the site will be increased and the report data pertaining to life expectancies would have to be revised at that time.

Calculations for life expectancy are based on the following quantities of wastes:

Bentonite Clay Slurry - 20,400 cy/yr. x 10% solids =  
2040 c.y. solids/year

Asbestos Cement/Glass fiber Slurry - 20,400 gal./yr. x 35%  
solids = 7140 gal. solids/202 gal. per cy = 35 c.y. solids/yr.

Foundry Wastewater Treatment Slurry - 2,400,000 gal./yr.  
x 35% solids = 840,000 gal. solids/202 gal. per c.y. =  
4160 c.y. solids/yr.

Foundry sand - 6000 cy/yr.

2040 cy + 35 cy + 4160 cy + 6000 cy = 12235 cy/yr. total solids

Total number c.y. acceptable at site =  $\frac{81,000 \text{ cy}}{12,235 \text{ cy/yr.}}$  = 6.5 yrs.

if all anticipated industrial wastes are accepted.

It is felt that this landfill operation will have a net positive environmental impact upon the site and upon the area surrounding the site. The site is an abandoned gravel pit and contains, in addition to the excavation, a small pond. The pond will not be disturbed by the landfill operation at this time, but could be used for additional fill operations in the future. If the pond which is 14' deep, covers about 1 acre and has a volume of approximately 11,000 c.y. were to be used for additional wastes it would first have to be filled with existing on site material consisting of gravel and sand, to a point 5 foot above the highest known water level. This would increase the total capacity of the site to approximately 117,000 c.y. This preliminary operation would serve to eliminate the pond and to assure placement of all waste materials well above the highest known elevation of trapped water in the area.

It is anticipated that the fill operation at this site will restore the land to approximately its original contours, excepting the pond, and make it again useful for industrial use, for which the area is zoned.

The noise level, occasioned by one or two trucks daily, is anticipated to be less than that caused by adjacent existing operations, one of which is a railroad, while the other is an airstrip. Also the operation site is away from the road where visual interference to the public will be negligible.

The landfill operation will meet all local regulations and ordinances in accordance with the permit issued by the Town of Lancaster (see Appendix 1). This operation is under the jurisdiction of the N.Y.S. Department of Environmental Conservation and it is expected that it will be operated to meet all the requirements of that department.

The landfill is to be operated as a private special-use landfill. Dumping will be on a schedule of once or twice a day, five days per week. Daily records of all dumped material will be maintained by the owner/operator. It is felt that there will be no need for permanent resident personnel and for this reason, it is anticipated that permanent personnel facilities and services will not be required.

Tests taken of the water contained in the bentonite clay slurry mix, indicates that leachate will not be a problem either now or in the future (see Appendix 2 and 4). No tests were taken on the water in the asbestos cement/glass fiber slurry but as per letter dated January 4, 1979 (see Appendix 7) from N.Y.S.D.E.C., there would be no objection to the dumping of this slurry as long as conditions set forth in the letter are met.

Tests were taken of the water in the foundry wastewater treatment slurry, with the results shown on the Application for Treatment or Disposal for Industrial or Hazardous Waste Stream. A copy of this application, along with N.Y.S.D.E.C. no objection letter, dated January 24, 1978 are included, (See Appendix 5 and 6).

Analysis has been completed on the foundry sand and is shown on a copy of the Application for Treatment or Disposal of an Industrial or Hazardous Waste Stream (see Appendix 10). A leachate test report form was also completed for the foundry sand (see Appendix 11).

At some time in the future the Owner/Operator has indicated that he possibly may accept Sewage Treatment Plant sludges if after analysis, these sludges could be accepted at this site. In the event that Treatment Plant sludges could be deposited at the site, the report will have to be amended to meet certain additional requirements.

Materials used in filling this landfill are not anticipated to interfere in any way the proposed final use of the site, that being industrial development for which it is zoned.

#### SITE DESCRIPTION

The landfill site is an abandoned gravel pit located on an old farm on the east side of Pavement Road between Walden Avenue and the Conrail property in the Town of Lancaster, Erie County, New York. The Villages of Lancaster and Depew and the Town of Cheektowaga are approximately 2.5 miles west of this location, while the Hamlet of Clarence is approximately 2.5 miles northeast and the Hamlet of Wende approximately 4 miles to the east.

The site contains about 14 acres of land with about 10 acres planned for use as a landfill area. The site also has on it, a farm house, a barn and one other small farm shed. The farm house has a public water supply available from a 12-inch main along the frontage of the property while the barn contains a drilled well. The drilled well is approximately 78' deep with water to 21' below the surface.

Frontage along Pavement Road is approximately 630± feet and is 1020± feet deep along the south boundary line abutting the Conrail property.

Topography of the site includes some peripheral fencing, particularly along the Conrail property. It includes the scar from the abandoned gravel pit operation and generally is open farm land with some scrub trees and brush.

Four soil test holes were dug to approximately 10 to 12 feet in depth with the following results:

- a. Hole number 1 was one hundred percent coarse sand with no water in evidence either during or after excavation.
- b. Holes number 2, 3 and 4 each had gravel, coarse sand and clay with water encountered generally at the eight to ten foot level. In the three test holes, where water was encountered, it was found that water did not reach the elevation of the existing pond water surface, which would seem to indicate that the water found in the test holes was groundwater rather than a reflection of the pond water surface. It is anticipated the groundwater in this area would seem to have a tendency to flow in a southwesterly direction, judging from the terrain conditions.

See Appendix 17 for logs of these tests holes.

Tests were made on the pond water, the on-site well water, the surface water holding pond and the intermittent swamp area water. For results see Appendix 12, 13, 14 and 15.

Tests were also taken on the clear water contained in the lagoon which is presently accepting the foundry wastewater treatment slurry. These results are shown in Appendix 16.

Maximum recorded rainfall intensity known to the area was found to be 4.28 inches over a 24 hour period, while the maximum for a one hour storm, once in fifty years, reaches something less than 2.75 inches.

Surface drainage at the present finds its way to the pond, the previous excavated lagoons and the surface water holding pond. When the lagoons are brought to finished ground contour levels, surface water from the southern portion of the property will tend to flow towards an existing open ditch along the Conrail property. It seems most likely that there would not be at any time, a problem with drainage to this ditch, since the natural drainage contours of the area will be returned when the landfill site is completed.

Surface drainage from the northwest portion of the site will still drain towards the pond as since its creation. A small portion of this drainage will be held by the surface water holding pond. The holding pond was created to allow settlement of turbid surface waters caused by the steep grades in the immediate area.

From the northeastern portion of the site, surface drainage collects in a intermittent swamp area and dissipates by evaporation, leaching and percolation. In the dry summer months this area becomes arid.

#### OPERATION PLAN

Since the proposed landfill is private and for restricted use only, there would seem to be no need for special on-site parking or interior circulation of roads. There will be no general perimeter fencing or additional drainage systems proposed for this site since neither is felt to be necessary to this operation. However, in the interest of general security and identification, the Owner/Operator will provide a driveway gate to limit unauthorized trespassing with a sign attached for identification and warnings of private property.

The Bentonite clay, foundry wastewater treatment and asbestos cement/glass fiber slurries can be deposited together in the same lagoons with no side effects. (See Appendix 5 and 7).

After each sequence of dumping, the solids contained in the slurry mixtures are and will be allowed to settle. At this time a dewatering pump can be employed (which is presently being done) to pump the clear water to the existing intermittent swamp area. Information included in Appendix 2 indicates that leachate meet state and federal criteria. Appendix 5 and 7 indicates that asbestos cement/glass fiber slurry can be mixed with the Bentonite clay and foundry wastewater treatment slurries, therefore it is assumed that leachate from these wastes falls into the same category as the two previously mentioned leachates.

In the event that any leaching of water from the intermittent swamp occurs through the high ground west of the swamp area, it will be retained by the surface water holding pond previously mentioned. This swamp area leachate then still has to leach through the berm separating the surface water holding pond and the main pond.

As the landfill operation progresses the intermittent swamp area will be eliminated leaving no area for dewatering pump discharge. Therefore the future lagoon located at this area should be the last to be developed excluding the filling in of the existing pond and surface water holding area. When this lagoon is developed, the slurry mixtures will be required to dewater by natural methods with the exception of the possible deposition of spent casting sand to act as an absorbent for the slurry waters. After 20% water content is reached, the material will then be leveled and the method repeated.

No daily cover material is proposed during any of the lagoon filling periods. A variance from 6NYCRR 360 has been submitted for this difference to standard operating procedures.

It is proposed to employ equipment brought to the site for only those times when dumping and leveling operations are in progress and it is not intended that maintenance or storage on-site will be necessary.

After final filling and grading has been completed of the entire or any single portion of the site, the area involved will be completely covered with a minimum of 6-inches of material from the site that will support the growth of vegetation. Immediately after the grading of the material, these involved areas will be seeded for final vegetation cover as follows:

- 15 lb/acre perennial ryegrass
- 15 lb/acre creeping red fescue
- 20 lb/acre Kentucky 31 tall
- 8 lb/acre Empire birds-foot trefoil (inoculated)

Fertilizer should be 800 lb/acre 10-10-10 or equivalent.

The exposed area should be mulched with 2 tons per acre of straw or equivalent.

Continued maintenance following the final cover and seeding of the finished areas is not felt to be necessary in this case since the area is intended for future industrial purposes and the nature of the specialized waste deposited, in this landfill, does not present a problem where minor pockets of water might collect.

It is anticipated that the existing pond and drilled well can be used as surface and ground water monitoring points upon completion of the project. Also an additional monitoring well will be constructed along the east property line for this purpose. In the event that the existing pond and surface water holding pond are used for landfill purposes, an additional monitoring well will have to be constructed near or at the center of the existing pond for required monitoring.

CONTINGENCY PLAN

The need for contingency plans for fires, litter, odor and vectors will not be necessary due to the type of material being deposited at the site. In the case of noise, proper engine mufflers would suffice. Water contamination is next to impossible due to the quality of the liquids after settlement of solids. There will be no unusual traffic conditions due to the site being a restricted private type.

In the event of any equipment breakdown while being used for leveling, the incoming material could be deposited in a different lagoon until repair is made.

MARKETS

It is not anticipated that any of the special wastes at the restricted use site have a continuing market value. Although the Owner has stated that if the quality of the foundry sand were acceptable for use as backfill around building foundations, small amounts would be used for this. No commitments as to the locations of use or value has been placed on this material at this time due to the questions of its acceptability. No adjustments have been made to the computations in determining the life expectancy of the site for this reason.

LANCASTER RECLAMATION CO.  
RESTRICTED USE LANDFILL SITE

TABLE OF APPENDICES

1. Certificate of Zoning Compliance from Town of Lancaster.
2. Bentonite Clay Slurry Description - Letter Dated October 21, 1975.
3. Analysis of Bentonite Clay Slurry.
4. Composition of Bentonite Clay Slurry Water.
5. N.Y.S.D.E.C. Letter Dated January 24, 1978, RE: Acceptance of Foundry Wastewater Treatment Slurry.
6. Foundry wastewater treatment slurry description and composition - shown on copy of previous Application for Treatment or Disposal of an Industrial or Hazardous Waste Stream for the Waste Generator.
7. N.Y.S.D.E.C. letter dated January 4, 1979, RE: Acceptance of Asb. Cem. Slurry.
8. Asbestos Cement/Class Fibre Composition - Letter dated January 9, 1979.
9. Lancaster Reclamation Notification of Acceptance of Asb. Cem. Sludge - Letter dated January 15, 1979.
10. Copy of Application for Treatment or Disposal of an Industrial or Hazardous Waste Stream for foundry sands showing composition, dated 3/29/79.
11. Copy of Leaching Potential Test Report for foundry sands, dated 3/29/79.
12. Pond Water Analysis, dated February 25, 1976.
13. Well Water Analysis, dated May 23, 1978.
14. Surface Water Holding Pond Water Analysis.
15. Water Analysis of Intermittent Swamp Waters.
16. On-site Water Analysis of Foundry Wastewater Treatment Slurries.
17. Soil Boring Logs.



Lancaster Reclamation  
403 Pavement Road  
Lancaster, New York 14089

Attention: Mr. Paul Ferry

March 2, 1984

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Worthington Group  
McGraw-Edison Company  
P.O. Box 1249  
45 Roberts Street  
Buffalo, NY 14206

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Dear Mr. Ferry:

Be advised that processes and general operations at Worthington, Ironworth Foundry have not substantially changed during the last year. For your records, I have enclosed a copy of our previous sand analysis report, dated March 18, 1982.

Should additional information be required, do not hesitate to contact me.

Sincerely,

WORTHINGTON DIVISION  
McGraw-Edison Company

  
Louis J. Kasmer  
Purchasing Supervisor

LJK/as  
Encl.

LABORATORY REPORT

FOR

ALLTIFT INC.

Job No. AT-004

Sample Date: 3/18/82

Date Received: 3/18/82

Sampled By: Alltift

Delivered By: Alltift

E & E Lab Number 82-

336

337

Sample Identity

EPA Maximum Allowable  
Concentrations

Sludge  
Analysis of Extract  
From the EP Toxicity Test

Arsenic, mg/L	5.0	<0.025	<0.025 <i>f</i>
Barium, mg/L	100.0	<0.200	<0.200
Cadmium, mg/L	1.0	<0.002	<0.002
Chromium, mg/L	5.0	<0.010	<0.010
Lead, mg/L	5.0	<0.010	<0.010
Mercury, mg/L	0.2	<0.0004	<0.0004
Selenium, mg/L	1.0	0.013	0.038
Silver, mg/L	5.0	<0.050	<0.050
Phenols, mg/L	—	<0.001	0.009

Composition of Waste

Phenols, mg/Kg (Dry Weight) *ffm*

8.83 1.60

% Solids

59.8 100

Analytical References:

EP Toxicity - Federal Register 45, No. 98, May 19, 1980

Phenols - "Standard Methods for the Examination of Water and Wastewater,"  
15th edition, 1981.

Supervising Analyst *D. H. H.*

Date April 16, 1982



Lancaster Reclamation  
403 Pavement Road  
Lancaster, New York 14089

Attention: Mr. Paul Ferry

March 2, 1984

---

Worthington Group  
McGraw-Edison Company  
P.O. Box 1249  
45 Roberts Street  
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Dear Mr. Ferry:

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Sincerely,

WORTHINGTON DIVISION  
McGraw-Edison Company

Louis J. Kasmer  
Purchasing Supervisor

LJK/as  
Encl.

**LABORATORY REPORT**

FOR  
ALLTIFT INC.

Job No. AT-464  
 Sample Date: 3/18/82  
 Date Received: 3/18/82

Sampled By: Alltift  
 Delivered By: Alltift

E & E Lab Number 82-

Sample Identity	EPA Maximum Allowable Concentrations	336	337
		Sludge Analysis of Extract From the EP Toxicity Test	Sand Analysis of Extract From the EP Toxicity Test
Arsenic, mg/L	5.0	<0.025	<0.025 <sup>7'</sup>
Barium, mg/L	100.0	<0.200	<0.200
Cadmium, mg/L	1.0	<0.002	<0.002
Chromium, mg/L	5.0	<0.010	<0.010
Lead, mg/L	5.0	<0.010	<0.010
Mercury, mg/L	0.2	<0.0004	<0.0004
Selenium, mg/L	1.0	0.013	0.038
Silver, mg/L	5.0	<0.050	<0.050
Phenols, mg/L	---	<0.001	0.009
Composition of Waste			
Phenols, mg/Kg (Dry Weight) <i>ffm</i>		8.83	1.60
% Solids		59.8	100

**Analytical References:**

- EP Toxicity - Federal Register 45, No. 98, May 19, 1980
- Phenols - "Standard Methods for the Examination of Water and Wastewater," 15th edition, 1981.

Supervising Analyst *[Signature]*  
 Date April 16, 1982

APPENDIX B  
PROPOSED UPDATED NYS REGISTRY SHEET

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 DIVISION OF SOLID AND HAZARDOUS WASTE  
 INACTIVE HAZARDOUS WASTE DISPOSAL SITE REPORT

CLASSIFICATION CODE: 2a

REGION: 9

SITE CODE: 915069

NAME OF SITE : Lancaster Reclamation

STREET ADDRESS: 403 Pavement Rd.

TOWN/CITY:

Lancaster

COUNTY:

Erie

ZIP:

SITE TYPE: Open Dump- Structure- Lagoon- Landfill-X Treatment Pond-  
 ESTIMATED SIZE: 10 Acres

SITE OWNER/OPERATOR INFORMATION:

CURRENT OWNER NAME....: Lancaster Reclamation

CURRENT OWNER ADDRESS.: 403 Pavement Rd., Lancaster, NY

OWNER(S) DURING USE...: Lancaster Reclamation Inc.

OPERATOR DURING USE...: Same

OPERATOR ADDRESS.....: 403 Pavement Rd., Lancaster, NY

PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From To

SITE DESCRIPTION:

Former sand quarry. Foundry sand, diatomaceous earth, distressed oils are disposed. Site presently inactive, Part 360 application submitted to the Department and under review for upgrading the site.

HAZARDOUS WASTE DISPOSED:	Confirmed-X	Suspected	-
TYPE	QUANTITY (units)		
Foundry sand w/phenolic binders			Unknown(Sludges of diatom
aceous earth			Unknown(Distressed oils
Unknown			

SITE CODE: 915069

**ANALYTICAL DATA AVAILABLE:**

Air- Surface Water-X Groundwater-X Soil-X Sediment- None-

**CONTRAVENTION OF STANDARDS:**

Groundwater-X Drinking Water- Surface Water- Air-

**LEGAL ACTION:**

TYPE.: None State- Federal-  
STATUS: In Progress- Completed-

**REMEDIAL ACTION:**

Proposed- Under Design- In Progress- Completed-  
NATURE OF ACTION: None

**GEOTECHNICAL INFORMATION:**

SOIL TYPE: Sand, silt clay in layers  
GROUNDWATER DEPTH: >12'

**ASSESSMENT OF ENVIRONMENTAL PROBLEMS:**

Insufficient information

**ASSESSMENT OF HEALTH PROBLEMS:**

Insufficient information.

**PERSON(S) COMPLETING THIS FORM:**

NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION

NEW YORK STATE DEPARTMENT  
OF HEALTH

NAME.: John S. Tygert, PE  
TITLE: Sr. Sanitary Engr.

NAME.: R. Tramontano  
TITLE: Bur. Tox. Subst. Assess.

NAME.: Roberto A. Olazagasti  
TITLE: Solid Waste Management Spec.

NAME.:  
TITLE:

DATE.: 01/24/85

DATE.: 01/24/85