GEOTECHNICAL SITE CHARACTERIZATION PORT OF ROCHESTER HARBOR IMPROVEMENT AND HARBOR FERRY TERMINAL ROCHESTER, NEW YORK



by

Haley & Aldrich of New York Rochester, New York

for

LaBella Associates, P.C. Rochester, New York

File No. 70819-000 September 2000 (Draft 5 September 2000)
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LaBella Associates, P.C. 300 State Street Rochester, New York 14614

Attention:

Sergio Esteban, P.E.

Subject:

Port of Rochester Harbor Improvement and Harbor Ferry Terminal

Rochester, New York

Ladies and Gentlemen:

We are pleased to submit herewith our report entitled, *Geotechnical Site Characterization, Port of Rochester Harbor Improvement and Harbor Ferry Terminal, Rochester, New York.* The work was undertaken at your request, as outlined in our proposal dated 4 June 1999 and authorized under our Subconsultant Agreement, dated 16 December 1999.

This report presents a compilation of the results of historic and new subsurface explorations, field testing, laboratory testing, groundwater observations, and site geotechnical engineering interpretations pertinent to the planning and preliminary design of the proposed ferry terminal and related infrastructure.

If additional information regarding the data or conclusions presented in this report is required, please do not hesitate to contact us. It has been a pleasure working with you and the other project team members on this exciting project, and we look forward to our continued association during subsequent phases of the project.

Sincerely yours,

HALEY & ALDRICH OF NEW YORK

Maureen S. Valentine, P.E. Senior Engineer

Stanley E. Walker, P.E. Vice President

Enclosures

c: Bourne Consulting Engineers, Attn: Ronald Bourne, P.E.

# EXECUTIVE SUMMARY

This report presents a summary of research, exploration, and characterization of the subsurface conditions at the site of the proposed Port of Rochester Harbor Improvement and Harbor Ferry Terminal, City of Rochester Project ID # 99021, conducted by Haley & Aldrich of New York. It has been prepared in accordance with our Subconsultant Agreement with LaBella Associates, P.C. dated 16 December 1999.

The purpose of this study was to characterize the site's subsurface conditions in sufficient detail to support the planning and preliminary design of the proposed site improvements.

This report contains reproductions of historic (Sanborn) maps (1892 to 1967) depicting the various facilities that have occupied the site and records of several earlier subsurface explorations made on or near the site. It also contains detailed records of the 25 test borings, 27 test pits, and 3 groundwater observation wells installed as part of the current study of the site by Haley & Aldrich, LaBella Associates, and Bourne Consulting Engineers.

The project area has undergone significant geologic and man-made alteration. An approximately 85-foot-deep, steep-sided gorge in the bedrock formed by post-glacial erosion, encroaches beneath the former transit sheds (the North and South Warehouses) along the eastern edge of the site. From the gorge's edge the bedrock surface rises more gently from about Elev. 200 (City Datum) to Elev. 215 to 235 near the western edge and southern end of the site, ranging from about 60 to 20 feet below the present ground surface. The much of the site is underlain by man-placed fill consisting of uncontrolled deposits of soil and iron-manufacturing slag and demolition rubble ranging from as much as 20 feet to as little as 1 foot in thickness. The fill varies quite randomly from loose to dense. In most areas loose alluvial (river-deposited) fine sand and silt underlie the fills which extend to depths of a few to more than 100 feet. Groundwater levels appear to be about 2 to 5 feet above river level.

These conditions, while providing generally fair support for at-grade roadways and parking areas, provide variably fair to poor support for buildings and additional earthfills. The loose fills and alluvial deposits could yield detrimental differential settlements under thick regrading fills and moderately to heavily loaded structures.

Careful consideration should be given to the existing data presented in this report and the need for additional exploration, testing, and evaluation of the subsurface conditions in the planning and design of any proposed site and structural improvements.

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### I. INTRODUCTION

### 1.01 Purpose

This geotechnical report has been prepared to assist planning and preliminary engineering efforts for the proposed Port of Rochester Harbor Improvements and Harbor Ferry Terminal, in Rochester, New York.

Haley & Aldrich of New York (H&A) was retained by LaBella Associates, P.C. and the City of Rochester to collect and assimilate existing and new geotechnical and geologic information pertinent to the project to provide a general characterization of subsurface conditions at the project location. This document represents a collection of data, some developed by H&A in the past and some by others, that establish the general regional conditions. Site-specific subsurface explorations and field and laboratory testing were performed as part of the site characterization study.

This report is preliminary in nature, given the state of development for the project. The scope of the investigations has been to collect, assemble and interpret site and subsurface information in order to develop an understanding of the regional subsurface conditions, sufficient to complete initial planning efforts and preliminary engineering design. Additional detailed design phase geotechnical investigations will likely be required to more fully evaluate the significance of the subsurface conditions to the design and long-term performance of the project elements.

## 1.02 Project Description

The proposed Port of Rochester Harbor Improvements site is located as shown on Figure 1 - Project Locus, and is bounded to the east by the Genesee River, to the north by Beach Avenue, to the west by Lake Avenue and to the south by the Stutson Street Bridge. Currently, the site is occupied by parking facilities and two existing warehouses, a boat ramp, an excursion ferry dock, several privately operated marinas and commercial establishments. A CSX railroad crosses the central portion of the project area with a branch to the south along the western bank of the river. Approximate locations of existing structures are shown on Figure 2 - Exploration Location Plan.

This project consists of the preliminary design of proposed transportation access, building facilities and waterside improvements associated with the Port of Rochester Harbor Improvement. The proposed improvements are intended to expand and enhance public access to the waterfront as well as provide the necessary infrastructure to support public recreation, transportation and economic development opportunities. According the contract documents, the project scope includes, but it not limited to the following:

➤ Access/Transportation

Reconstruction of existing street pavement and sidewalks;
Construction of new streets and sidewalks;
Improvement of existing and construction of new parking facilities;
Riverfront pedestrian promenade;
Streetscape and site landscape features;
Street and site lighting;
Signage and graphics;
Public and private utility improvements.



> Building Facilities

New building for a ferry terminal and border crossing operation;

Kiosks and marina support structures;

Rehabilitation of the north warehouse;

Signage and graphics;

Public and private utility services.

> Waterside Improvements

Transient marina and related facilities;

Ferry boat and excursion vessel berthing facilities;

River wall rehabilitation and/or reconstruction;

Navigation improvements;

Marina extension along River Street to Petten Street;

Public and private utility services and fueling facilities.

At the time of this writing, the proposed improvements are in the conceptual stage. Several alternate configurations are being considered for design.

### 1.03 Elevation datum

Elevations used herein are referenced to the City of Rochester Datum. Historical elevations are shown in the Appendices as referenced by the original project, but have been adjusted to the City of Rochester Datum within the tables and text.



# II. FIELD AND LABORATORY INVESTIGATIONS

## 2.01 Background Information

Several earlier investigations in the general area of the project have been conducted by H&A and others, as listed below. The locations of the explorations associated with these earlier investigations are shown on Figure 2, Exploration Location Plan. A summary of the conditions encountered by these explorations is presented in Table II - Conditions Encountered in Earlier Subsurface Investigations:

- ➤ Stutson Street Water Main Genesee River Crossing: Rochester Drilling Company between 13 and 21 September 1989 performed explorations, under the observation of H&A of New York. The work was performed for Joseph C. Lu, P.E for the design of a force main crossing the Genesee River.
- > Stutson Street Bridge: Explorations were performed between 2 November 1994 and 11 December 1997, under the observation of NYSDOT personnel, for the design of a replacement for the Stutson Street Bridge.
- ➤ Army Corps of Engineers Dredge Probes: the Army Corps of Engineers performed Probe explorations between February 1959 and April 1961 for a Rochester Harbor Deepening project.
- ➤ Wave Surge Protection Project: the Army Corps of Engineers performed drive sample explorations in December 1960 for a Wave Surge Protection Project in the Rochester Harbor.
- ➤ Rehabilitation of East Pier: Explorations were performed by Empire Soils Investigation Inc. between April 1973 and August 1985 under the observation of Army Corps of Engineers personnel for a design analysis of the East Pier Repair in the Rochester Harbor.
- Lake Avenue Improvements: Explorations were performed by Vanderhorst between 16 and 17 March 1999 for Bergmann Associates, P.C. and the City of Rochester for the planning and preliminary engineering of the Lake Avenue Improvement Project.

Copies of the logs of the explorations made during these investigations are presented in Appendix C.

# 2.02 Recent Investigations

Three sets of objective-specific explorations were made as a part of this site characterization study. A summary of the conditions encountered in each of the explorations is presented in Table I – Conditions Encountered in Recent (2000) Subsurface Investigations.

In mid-January, 2000, four backhoe-dug test pits were made under the direction of Bourne Consulting Engineers, to explore the configuration and condition of the existing quay wall and its tieback anchorage system. These test pits were observed and logged by Haley & Aldrich. The locations of these test pits, designated BCE-TP # 1 through #4, are shown on Figure 2. Field logs of these explorations are presented in Appendix A-1.

In late-February, 2000, twenty-two backhoe-dug test pits were made under the direction of LaBella Associates, to explore the physical and chemical character of the near-surface subgrade materials and the groundwater levels at the site. LaBella Associates observed, logged, and sampled the test pits. A Haley & Aldrich representative observed and viewed samples from

several of these test pits. The locations of these test pits, designated LBA-TP #1 through #22, as surveyed by LaBella Associates, are shown on Figure 2. The logs of these test pits are presented in Appendix A-2.

Between 23 May and 13 June 2000, twenty-four test borings, HA-101 through HA-107, and HA-109 through HA-125, were drilled by Geologic Enterprises, Inc., of Cortland, New York, at locations selected by Haley & Aldrich to aid in characterizing the soil and bedrock conditions at the site. Tests boring locations and ground surface elevations, as shown on Figure 2, were determined by LaBella Associates.

The borings were drilled using hollow-stem augers to depths below ground surface ranging from 10 to 116 ft. Soil samples were recovered continuously within the fill and at 5-ft intervals thereafter by driving a 1%-in. I.D. split-spoon sampler with a 140-lb. hammer consistent with ASTM Method D1586. The "N" value was determined at each sample interval by counting the number of blows required to drive the split-spoon sampler a distance of 24 in. below the bottom of the hollow stem auger and into the soil under the impact of the hammer free-falling 30 inches. The "N" value is taken as the number of blows required to advance the sampler from 6 to 18 inches within the 24-inch sample range. A Haley & Aldrich geologist monitored the drilling and logged the recovered soil samples.

Bedrock was cored in five of the borings, HA-102, -107, -111, -121, and -122, using an NX-size (1-7/8 in. I.D.) corebarrel. Bedrock was cored to depths ranging from 2.0 to 10.0 ft.

Test Boring and Core Boring Reports prepared by Haley & Aldrich are presented in Appendix A-3. It should be noted that boring reports and related information depict subsurface conditions and water levels at the specific locations at the time of drilling. Soil conditions at other locations may differ from conditions encountered in the explorations. Groundwater conditions at any of the exploration locations may also change with time.

### 2.03 Groundwater Observation Wells

Groundwater observation wells were installed in completed boreholes HA-111 (MW-1, HA-114a (MW-3), and HA-117 (MW-2). The wells consisted of 2-inch-diameter, perforated PVC screen placed at or below groundwater level, and a solid PVC riser extending to approximately 2 ft. above ground surface. The annulus between the PVC pipe and the borehole was backfilled with filter sand, and bentonite seals were placed above the PVC screen.

Observation Well Installation Reports prepared by Haley & Aldrich for each of these wells are included Appendix A-4.

### 2.04 Laboratory Soil Testing

Ray M. Teeter, P.E. of Fairport, New York, performed laboratory tests on six soil samples from the test borings. The soil testing consisted of sieve analyses and hydrometer tests to quantify the grain-size distribution of the soils, and Atterberg limits and moisture content determinations to assess the plasticity of the fine-grained soils. The results of these tests have been incorporated into the soil descriptions shown on the Test Boring Reports, and are presented in Appendix B, Table B-1. Soil testing data from earlier investigations are presented in Table B-2

# III. SITE AND SUBSURFACE CONDITIONS

### 3.01 Site conditions

The project site is located on the western side of the Genesee River, at its discharge to Lake Ontario. The project site has been part of extensive planning over the years, and includes the area bounded by Beach Avenue to the north, Lake Avenue to the west, and the Genesee River to the east. The south end of the project extends beyond the Stutson Street Bridge.

The area north of the CSX railroad is currently occupied by parking facilities for Charlotte Beach, a boat ramp and two existing warehouse structures along the river walk. The foundation from a third warehouse structure remains visible. A group of municipal buildings occupies the southwest corner, near Lake Avenue. This portion of the project slopes downward to the northeast from Lake Avenue toward the Genesee River. The ground surface elevations range from approximately El. 290 near the Lake Avenue crossing of the railroad, to El. 250 in the northeast corner, beyond the existing warehouse structures. Historically, this portion of the project area has housed an iron works which changed hands several times and became a steel company, associated rail lines, a rail loop turnaround, a ball park and yacht club, a steam boat wharf, later boat ramps, three warehouses, and various configurations of roads and parking facilities.

The project area south of the CSX railroad, between River Street and the river, is currently occupied by residential structures, boat docks, boat storage yards, and a small water treatment facility. This portion of the site is relatively level, with elevation ranging from El. 252 to 254 between River Street and the Genesee River. The ground surface slopes up relatively steeply at the railroad embankment, to an elevation of El. 260. West of River Road, the ground surface also slopes up relatively steeply to a crest at approximately El. 283 at the lighthouse. Historically, this portion of the project has housed a planing mill, which later became a veneer works and boat manufacturing facility, various boat-docking facilities and associated structures.

Historic (Sanborn) maps depicting on-site structures and facilities in 1892, 1912, 1924, 1950, And 1967 superimposed on the current site mapping are presented in Appendix D.

### 3.02 Subsurface soil and rock conditions

### A. Geologic History

Rochester lies within the relatively low and flat-lying physiographic province known as the Erie-Ontario Lowland, which begins at Lake Ontario and extends southward to the Appalachian Plateau. The Genesee River runs north- south through the Erie-Ontario Lowland.

Bedrock underlying the northern portion of Rochester is part of the Queenston Formation, which is exposed in outcrops of the Genesee River gorge from Lake Ontario to the Driving Park Avenue Bridge at the Lower Falls. The Queenston Formation is an approximately 1000-foot thick sequence of alternating, nearly level shale and sandstone beds of Ordovician age, formed in deep seawater.

As a result of land movements associated with the building of the Appalachian Mountains to the south and east, the land surface of western New York was raised above the inland seas.

Subsequently, the exposed rocks were tilted southward and a southerly drainage system developed along the shallow dipping beds.

A long period (about 350 million years) of erosion ensued until glaciation occurred during the Pleistocene Epoch. It is estimated that over 2000 feet to rock was stripped from the region during this time.

Major streams, which formed during this erosional period, were the ancient Ontarian River and the Genesee River, which flowed into the Ontarian River at what is now Irondequoit Bay.

Approximately 3.0 to 1.5 million years ago, glacial scouring deepened the Ontarian River Valley, which, upon retreat of the glaciers, became present-day Lake Ontario. Glacial scouring also deepened the pre-glacial Genesee River Valley. As the ice retreated during the past 20,000 years, differential post-glacial uplift resulted in flooding of the pre-glacial Genesee River Valley, forming present day Irondequoit Bay. The Genesee River then established its present course by eroding a new deep channel in the exposed bedrock some 4 to 5 miles west of the pre-glacial Genesee Valley.

Fairchild (1918) concluded in his paper, "The Rochester Canyon and the Genesee River Base-Levels", that the present river valley was formed by post-glacial erosion, the depth of which was regulated by the varying water levels in what is now Lake Ontario. His studies indicated the "canyon" bottom at the lakeshore to be about Elev. 100, about 145 feet below the present lake level.

### B. On-site Conditions

Site stratigraphy was evaluated on the basis of the findings of the test borings, test pits and readily available public information regarding the local geology and hydrology. The borings encountered three principal soil units at the site; fill, alluvial sediments and glacial till. Generalized descriptions of the soil units and encountered thicknesses are presented below.

<u>FILL</u> – Man-placed fill materials, ranging from silty sand and gravel to varying combinations of iron-manufacturing waste slag, demolition rubble (bricks, concrete, and railroad ties), remnant concrete slabs and foundations, and some organic matter, in thicknesses ranging from 1 to 20 feet, were encountered in essentially all of the on-site explorations. Standard Penetration Test values (blows to advance the sampler 1 foot) varied erratically from 4 to refusal on inpenetratable objects, reflecting the varying and uncontrolled nature of the fill deposits. The estimated bottom-of-fill surface, as inferred by Haley & Aldrich, is depicted on Figure 3 – Bottom-of-Fill Contour Map.

ALLUVIUM – Alluvium (stream-deposited soil) was encountered beneath the topsoil or fill in most all of the on-site borings, extending to depths of a few feet toward the western side of the site to as much as 114 feet below the ground surface in the deep borings (HA- 101 and HA-123) at the river's edge. The alluvial soils consist of silty medium to fine sand with varying amounts of gravel with occasional zones of plastic, slightly organic clayey silt with some fine sand. In some test pits remnants of former surface vegetation were observed directly beneath overlying fill material. The samples ranged from dry to wet, generally increasing in moisture content with depth. Results of grain-size analyses and Atterberg limit and moisture content determinations on samples of the alluvial deposits are presented in Appendix B. Standard Penetration Test values ranged from 0 to more than 50 blows per foot and averaged from 3 to more than 20 in



individual borings, indicating the generally loose to very loose condition of these riverdeposited sediments.

<u>GLACIO-LACUSTRINE DEPOSITS</u> – Deposits of late-glacial lakebed sediments consisting of stratified fine sands with occasional clay and coarser sand layers were encountered in thicknesses of up to 10 feet overlying glacial till in several explorations in the higher ground toward Lake Avenue.

GLACIAL TILL - Glacial till was encountered directly below the fill or alluvial or lacustrine sediments and extended to the top of the bedrock in most of the borings. In a few borings, HA-101, -109, -110, and -123, the glacial till was missing and the alluvium extended directly to bedrock. The till materials encountered ranged from soft to hard sandy, silty clay with trace gravel or clayey silt with sand and fine gravel. However, in general the undisturbed till was found to be very compact. The samples ranged from dry to moist. The estimated top-of-till surface, as inferred by Haley & Aldrich, is depicted on Figure 4 – Top-of-Till Contour Map.

A mixture of rock fragments and soil, identified as weathered bedrock, was encountered in a few of the borings. Visual descriptions ranged from "very dense red brown silty fine to coarse SAND, trace clay" to "disintegrated red sandstone". Borings HA-102, -109, -110, -122, and – 123 penetrated weathered bedrock, encountering thicknesses of 1.0 to 5.0 ft.

Bedrock cored in the explorations consisted of relatively flat-lying sedimentary rocks of the Queenston Formation. This unit is are described individually below:

<u>SANDSTONE</u> – A relatively massive layer of sandstone of the Queenston formation was encountered beneath the alluvium and glacial till at depths ranging from 27 to 114 ft. below the ground surface. The core samples recovered from the test borings are described as moderately weathered to competent red, fine-grained sandstone with interbedded or mottled gray sandstone. RQD values ranged from 38 to 69 percent, indicating that the quality is pore to fair.

The bedrock surface was encountered at elevations ranging from El. 138 (auger refusal in HA-101) and El. 139 (HA-123) to El. 232 (in HA-110).

However, earlier borings (DN-B-51 and –B-52) made in the river south of the present Stutson Street Bridge's east abutment, did not encounter bedrock or refusal before reaching elevations at or below 118. These depths are consistent with Fairchild's (1918) findings and together with the present exploration findings support the inference that there is a deep curvilinear trough in the bedrock passing beneath and to the east of the project site on its course to the deeper water off shore.

The estimated top-of-bedrock surface, including a speculated configuration of this deep "canyon", as inferred by Haley & Aldrich, is depicted on Figure 5 – Top-of-Bedrock Contour Map.

### 3.03 Groundwater Conditions

The depth to water was recorded at completion of the explorations in borings HA 102, 107, 111, and 118 at depths ranging from 3.0 to 18 ft. below the existing ground surface. Water levels were also measured in each of the three piezometers at depths ranging from 3.60 to 10.74 ft.

below the existing ground surface. In general, the water table in late-May to early-June 2000 appears to have been between El. 248 and 251, sloping downward from west to east and being 2 to 5 feet above normal river level.

Corps of Engineers' river-level data reviewed and summarized by Bourne Consulting Engineering (5-10-00) indicates a maximum-recorded water level at El. 250.39. The Flood Insurance Vate Map for Rochester shows the project site as "Zone C" - subject to minimal flooding.

Water levels at the site should be expected to vary with precipitation, season, temperature and construction activity in the area. Therefore, groundwater levels during and following construction may differ from those observed in the test borings.



# IV. GEOTECHNICAL ENGINEERING CONSIDERATIONS

The site's geologic and use history have produced subsurface conditions which warrant careful consideration in planning its redevelopment. These conditions include markedly varying bedrock surface elevations; deep, loose, and potentially compressible natural soil deposits; remnant foundations of earlier facilities; extensive areas of filled land containing iron-manufacturing slag and other wastes and demolition rubble; and relatively shallow groundwater levels. Detailed subsurface exploration and testing programs will be needed to establish appropriate design criteria and support construction planning for significant site improvements.

# 4.01 Design Considerations for Site Infrastructure Improvements

The uncontrolled fills and shallow groundwater that underlie most of the site present variable and potentially settlement-yielding support for streets and parking lots and a possibly corrosive environment for underground utilities. The chemical character and potential corrosivity (to concrete and metals) of the groundwater should be assessed in conjunction with the design of such facilities. The addition of more than 1 or 2 feet of fill to the present grade could cause noticeable, long-term settlements in areas of poorer subgrade conditions. To minimize the impact of post-construction differential settlements, site regrading, preceded by removal of existing topsoil and pavement and thorough proof-rolling of the exposed subgrade with a heavy, smooth-drum, vibratory compactor, should be completed prior to the construction of infrastructure improvements. Subgrade and surface drainage should be carefully developed to assure the long-term performance of trafficked areas. The presence of the loose fills and shallow groundwater should be carefully considered in the planning and execution of all utility trenching and installation.

# 4.02 Design Considerations for Foundations

The existing uncontrolled fills present widely varying support for foundations and could yield significant general or differential settlements under moderately to heavily loaded foundations. The buried slag and other waste and affected groundwater could pose threats to the long-term integrity of concrete or steel foundations. Removal and replacement or partial removal and insitu densifications of the existing fill materials and replacement with controlled fill may be appropriate for moderately loaded structures. Heavily loaded or settlement-intolerant structures would most likely require deep foundations (piles or caissons) seated on or in the glacial till or bedrock.

# 4.03 Design Considerations for Below-grade Walls

The shallow groundwater and loose fill and alluvial sediments will exert considerable horizontal loadings on temporary and permanent earth-retaining structures. Chemically aggressive groundwater could pose a threat to the long-term integrity of earth-retaining walls, particularly those constructed of steel. Care must be taken to assure sufficient lateral support both at the top and at or below the bottom of the excavation or below-grade floor.

# 4.04 Design Groundwater Levels

In view of the levels observed in the recently installed observation wells, the presence of the confining sheet-pile quay wall, and the potential (minimal) for site flooding, design groundwater levels should be taken as the finished ground surface throughout the site.

# 4.05 Seismic Design Considerations

The site is located within Seismic Zone A of the proposed (1999) Seismic Zoning Map for New York State Seismic Building Code. Zone A has a seismic zone factor, Z = 0.09, which numerically corresponds to effective peak acceleration in g on rock /stiff soil S1 conditions. In view of the indicated subsurface stratigraphy, all the soil profile beneath and eastward of the westerly line of the existing warehouses should be considered Type S<sub>4</sub>, and that westward of the warehouses should be considered Type S<sub>3</sub>. Seismic design loadings for new structures should be considered in accordance with the latest BOCA Building Code.



### V. CONCLUDING COMMENTS

This report has been prepared for specific application to the preliminary planning of the Port of Rochester Harbor Improvements and Harbor Ferry Terminal development, in accordance with generally accepted geotechnical engineering practices. It presents a general characterization of the subsurface conditions as Haley & Aldrich has inferred them from the cited data and literature. The actual subsurface conditions between and beyond the points of exploration are expected to vary somewhat from those described and depicted in this report.

The characterizations and geotechnical engineering considerations presented in this report are based, in part, upon the data obtained from the referenced subsurface explorations. The historic construction and uses of the site, together with the geotechnical information presented herein, should be carefully considered in establishing the need for additional exploration, testing, and evaluation to support the design and construction of the anticipated structures and site improvements.



# REFERENCES

 Herman L. Fairchild (1918), The Rochester Canyon and the Genesee River Base-Levels, Proceedings of the Rochester Academy of Science, October, 1918.



# TABLE I - CONDITIONS ENCOUNTERED IN RECENT (2000) SUBSURFACE INVESTIGATIONS

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MANUAN   1945/50   1947/		188099	1407751	270.8	27	000	270.80	20.00	250,80									20.00		71	Region 200		-	
Martin   M	1	959791	8677081	261.90	10.3	000	261,90	conc.obstruction	251.6									1	1	7	The same			
Marie   Mari		187766	1406071	26.102	8 5	000	261.92	14,00	247.92	14.00	247.92	19.00	242.92					19.00		П	behow 237		-	
Mary   16890   16990		187987	1408185	552 44	07	240	40.030	19.00	201607	19.00	234.68											,		
		188223	1408074	253.7	26	000	261.20	1000	20,150	toros,	200 200													
		188506	1408063	252.78	51	0.00	252.78	2.00	250.78	2.00	240.78	00.00	36.626											
14499   15494   1549		188218	1408530	250.52	51	1000	29152	2,00	248.52	200	24X 52	Antony	40.40					2000	232.78					
11870   1287   128		187830	1408439	254.31	52	0.000	2931	600	248.31	600	248.31													
		187786	1407572	276	71	0.00	276.00	4.00	272.90	4.00	272.00	30.00	246,00					TOOM	W.W.	1000	100.00	-	L	
		187468	1407931	252.8	42	0.00	252.80	1430	258.50	14,70	238.50	36.00	216.80					36.00	216.80	A210	2000	+	1	sandiner Emerce
MATERIAL DESCRIPTION   10000   10000   10000   10000   10000   10000   10000   10000   1000		USCSUII	0212041	253.54	110	000	253,64		239.64	14,00	239.64	114.00	139.64				4					+		- Commonwe
MALE DIACONSTRUCTION OF COLUMN NATION AND AND AND AND AND AND AND AND AND AN	-	186070	1407222	255.29	100	000	26,707		6/C7 MODES															
Mathematical   Math			0.0000000	CONTRACT.		9000	***************************************		271.47									8,00			beline 245			
Mathematical Notation   Math	That			254.00	9.5	0.00	254.00	not encountered	helow 245															
244   9.5   0   2744   Instrumental Media 245   See Consumental Media 245   See Cons	-TI'12			252	7	0		not encountered	holow 245												-	ŀ	1000	omed on top of pile cap and water to
251   4   0   251   4   0	Trans.		1	174	9.0	0	П	not encountered	below 245						,									of pile cap and water @ 9.5ft
Mail	TP #4			254	4 6	0	ш	not encountered	below 25th												-		. He-r	od⊥ of anchor @101.,water &
251   6   0   251   and excounted below 261   252																			ĺ				100	To be an inferious marketing of
Mathematical Hardward   Math	TP-01			25	6	0	П	ast encountered	helow246	Y				,									vew.	addition of 4 5 ft
Mathematical Process   Mathematical Process	18.61			200	0		ľ	not encountered	DEC WORSE		L					٠							, prac	rod f GW @ 3 ft.
25.55   10.5   10.5   10.5   25.5   12.5   26.5	-TP #4			253	63	0 0	250	12	249 £	13		not cocommence	Deliver 243	ļ								•	nann.	og sand, GW @ 6 ft.
253   4.5   0   253   and concentrated below 345   .	-17:05			255	10.5	0	255	-		not encountered		nor encountered			754	7.5	3.5%	3.0			-	ŀ	- State	ling water @ 5 Ct
252   27	-TP-86			253	4,5	0	253	not encountered.	249			-							1		Cay mark		NOON.	Sanditione of bostom. No water nined.
Main	Na all			202	7	0		not encountered	bolow 245		,	,											GW	. @ 5.2 ft
258   12.5   0   258   252	17 PM			260	120	0.0		Paratemonia pre	SPL Milyne								-			4			· pend	vol GW @ 3 ft.
Maj   13   0   200   120   1	TI'#10			258	12.5	0		5.5	5	possenoons to		od consumered		44	3636	174	3 38.0		L				· Want	ling water of 10.30.
Mail	TP#II			269	13	0	269	8.6		ия сосименто		pot encountered		S.F.		not encountered		163	1	ж сисовиской в	clow 245.5		14.08	anding water
Mail	118411			262		0	262	nit encountered	257														though a second	and on concrete alab 68 5 ft.
Mathematical   Math	Traid			253	7	0 0	263	POSTSHIPPONES NA	DEC MODES														- botto	med en concrete slab @ 9.5 ft.
259   12   0   259   21   25   21   25   21   25   25   25	TP #15			254	9.2	0	254	not encountered	below245														outh +	ling water @ 7 ft
254   6.8   0   254   act consisted   below 254   255   act consisted   below 255   255	11.416			259	12	0	259	7.5		of encountered				7.5		not encountered					-	-	wate	e 6º bottoyn, 9 ft.
233   5   0   254   ad cronunted behav 341	-17/817			265	=	0	265	-		of encountered				-		разменност по	below 254				-	1	Walle	A DATE WHITE OF
1	Train o			254	8.0	0	I		1		,												Mand	ing water @ hottern, 6.8 ft.
Mail ElifyAlions Inver Bight CORVERTED TO CITY Off ROCALISTITE DATUM.   Mail exceeding to City Off ROCALISTITE DATUM.   Mail	TF#20			300	10	0 0	1		4														- stand	ing water 69 bettern, 5 ft.
LALL ELEVATIONS LAVE BEIJN CONVERTED TO CITY OF ROCURSTIR DATUM.	TP #21			251	6,3	0			4	- Constitution						SALINFONE SH					ŀ		wasc	r sait moted
I. ALL BLUEVELD OF TO THE	TP#22			253	8	D		ad encountered	holow 247														olew	and noted
I. ALL ELEVATIONS HAVE BEEN CONVERTED TO CITY OF					100																		Maria	ing water or remain, o it.
OUT THE OUT WITH A STREET TAXABLE SACRESS CONTRACTOR AND THE PARTY OF		AVOIS IN																						
																						-		

# TABLE II - CONDITIONS ENCOUNTERED IN EARLIER SUBSURFACE INVESTIGATIONS

Haley & Aldrich of New York
Project: Post of Rochester
Project F. 7883 9-288
Client Labelt Accessor, P.C.
Subject: Entire Psylmanisms

Checked By	Created By:	Dates
WEIS	HEH.	Janua

Checked By	Created By:	Dates
SEW	PUEHI	January 4

186507.4   407401.6	100.00   1	0-1	NVENTIGATION   EXPLOMATION   MORTHING   EASTING   ELECTRICATION   MORTHING   EASTING   ELECTRICATION   MORTHING   EASTING   ELECTRICATION   MORTHING   EASTING   ELECTRICATION   MORTHING
	HOTTRE   H	1407897.1 223.7% 1408024.1 227.7% 1408024.1 227.7% 140828.1 223.7% 140828.1 223.5% 1407831.1 233.5% 1407831.1 233.5%	EASTING 6 1407522.1 6 1407241.1 6 1407344.1 3 1407344.1 1 1407345.1 1 140735.1
1407401.6 1407244.1 1407246.6 1407262.3 1407262.3 1407262.4 1407262.4 1407262.4 1407262.6 140726	216.72 216.72 219.10 229.18 221.20	221.78 227.48 224.78 224.78 240.28 250.58 250.58	5555555
	0.00		SH SH
		0000	SUMPACE ELEVATION (ft) 250.08 253.08 225.48 221.48 221.48 221.48 221.48 221.48
			100 EEFTH (0)
	216.9% 246.9% 246.89 246.80 241.10 24	296.58 251.58 250.58	ELEV. (1) 250.00 250.00
	4.00 20.00 20.00 1	4.00 7.50	EILL 80 DEPTH (0) 2.00 4.00
	265.79 265.79 276.98 276.98 276.98 276.99 276.10 276.10 276.10 276.10 276.10 27	246.58 244.18 240.58	L. BOTTOM  DEPTH (ft)   ELEY, (ft)  2.00   24008  4.00   29008
	0.000 0.000 0.000 0.000	0.00 0.00 0.00 0.00 1.00 7.59	
	216.07 216.03 219.04 219.04 20.04 20.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 22.24 23.24 24.24 24.24 25.24 26	221.78 227.748 224.78 240.28 246.58 240.58	TOP  DEPTH (6) ELEV.(f) 2.50 244.08 4.60 295.44 0.00 221.48 0.00 221.48 0.00 221.48 0.00 221.48
	9.39 17.30 36.30 100.60 100.60	×25 ×25 ×26 ×27 ×27 ×27 ×27 ×27 ×27 ×27 ×27 ×27 ×27	
A. P. VERLER 1. SERRORI HIGHAL  A. VERLER 2. SERRORI HIGHAL  A. VERLER 3. SERRORI  A. VERL	200 5 196 72 3 196 72 3 197 72		DEPTH (II) ELEV. (II)    DEPTH (III)   ELEV. (III)   S/10    215 (35   S/10    222 (48   S/10    201 (48   S/10    501   S/10
ALLEGATION CONTRICTORY AND AUTOMATICAL WAS A STREET, AND AUTOMATIC	4.00 20.00 10.		
	285.79 226.59 226.08 226.08 226.03 22		TOP DEPTH (0) BLEV, (0)
	34.00 25.00		
	23.5.79 23.5.79 23.19 % 23.19 % 23.18		DEPHAD ELEV.(0)
	7100 1000 1000 1000 1000 1000 1000 1000		DEPTH (A) 17 (A)
	120216 252276 252376 2533766 2533766		OF 22
	100.59 100.59 44.00 45.00 45.00 45.00		ALTIIA. DEPTI 19.8 4.3 20.2
	345.29 235.08 235.08		BOTTOM  1(m) ELEV.(0)  1 231.28  201.28
	9.20 27.20 28.20 27.20 28.20 2		DEPTH (A) 19.80 4.49 20.29
215.73 216.31 216.31 216.31 216.31 216.31 216.31 216.31 216.31 216.31 218.31 21	2007.57 1986.72 1986.72 116.60.60 11		### TOP ################################
NO DEFENSAL	12.3 fl - randshone 10 fl - shake/salasme 10 fl - salasme		BOCK DESCRIPTION  III  5 n - QUEENSTON SHALE 5 n - QUEENSTON SHALE 5 n - QUEENSTON SHALE

3 123

# TABLE II - CONDITIONS ENCOUNTERED IN EARLIER SUBSURFACE INVESTIGATE

NA III

Haley & Aldrich of New York
Project: Post of Rochosor
Project 7: 70819-1819
Client Lablish Accounter, P.C.
Subject: Earlier Explanations

0.10	Created By:	
June,	Constal lies	

Rehabilitation of East Per Army Curp James 8	Wave Sarge Protection Project Army Corp April-95	TITLE Dredge Borings Army Corp June 40	INVESTIGATION
0004.2 0004.3 00	D73-1 D79-2 D79-3 D79-4 D79-5 D85-2 D94-1	IDENTIFICATION 221 638 221 638 24 25 638 26 65 27 65 28 65 2	_
11 189523 11 189524 11 189	1189385.8 1189424.1 1188575.3 1188770.4 1188389.7 1188299.9	NORTHING 1185773.1 1185026.3 1187540.1 1190920.2	DMILLSON
1409721,1 1409873,1 1409874,2 1409874,3 1409874,3 1409874,3 1409874,3 1409874,3 1409874,3 1409874,3 1409874,3 1409874,3 1409873,3 1409874,3 140987	1409593,7 1410130,3 1409061,3 1409129,6 1408888,8 1409437,4	1407422.9 1407422.9 1407241.6 1409019.4 1411001.4	
223.00 224.00 22		ELEVATION (II) 234.53 235.43	SURFACE
0.00	0.00 0.00 0.00 0.00 0.00		$\neg$
2000 2000 2000	234.53 236.63 241.60 252.73 259.83	ELEY. (0)	A an
2. a	1.70 7.50 7.50 8.20 7.10	во вртн (п)	THE
201.00 205.00 205.00	232.83 229.13 233.53 344.13 243.83 234.93	DETTION ELEV. (II) DETTION ELEV. (III)	West
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	7.59 7.59 7.59 8.29 7.10 4.99	00.0 00.0 00.0 00.0 00.0 00.0 00.0 00.	
20.8.XII 20.8.XII 20.1.8.XI 20.1.8.XI 20.5.XI	202.03 229.13 233.53 244.13 243.03 224.33	DEPTH (ft)   ELEV. (ft)	
	525.5 17.50 5.30 5.40.5 35.20 13.70	H44 H44	MODALITA
222.23  222.23	219.13 215.73 226.13	FLEV.(f)	110
IN VICTORIAL DE LEGACIO DE LA CALLEDA DE LEGACIO DE LA CALLEDA DE LEGACIO DE LA CALLEDA DE LEGACIO DE LEGACIO DE LEGACIO DE LEGACIO DE LEGACIO	1759 1759 1759	TVS/NEW	
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2900 2800 2800	AT ELEV.(0)	
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70.107 20.107	19653	ELEV.(M)	
		DEFIN (0)	
		MAZION (IN AZIO (IN AZIO) (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO) (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO) (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO) (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO) (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO (IN AZIO)	
		DBH HTHBRO	GLACIALTILL
		BOTTOM (ft) ELEV.(ft)	
3.5.76 3.	0.0	TI (A) 117430	невно
2013 (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	196.53	170P BLEV.(II) 231.63	HEDROCK/HEFUSAL
2.1 I wealhood red. 10.6 ft wealhood red. 10.6 ft wealhood red. NO BETUSAL NO B	1.2 ii - weathered rock	II ROCK DESCRIPTION	_
		TION	

# TABLE II - CONDITIONS ENCOUNTERED IN EARLIER SUBSURFACE INVESTIGATIONS

Haley & Aldrich of New York
Project: Post of Rochester
Project is 70859-000
Cinent Lalties Associate, P.C.
Subject: Earlier Hydronaious

Date: Created By: Checked By

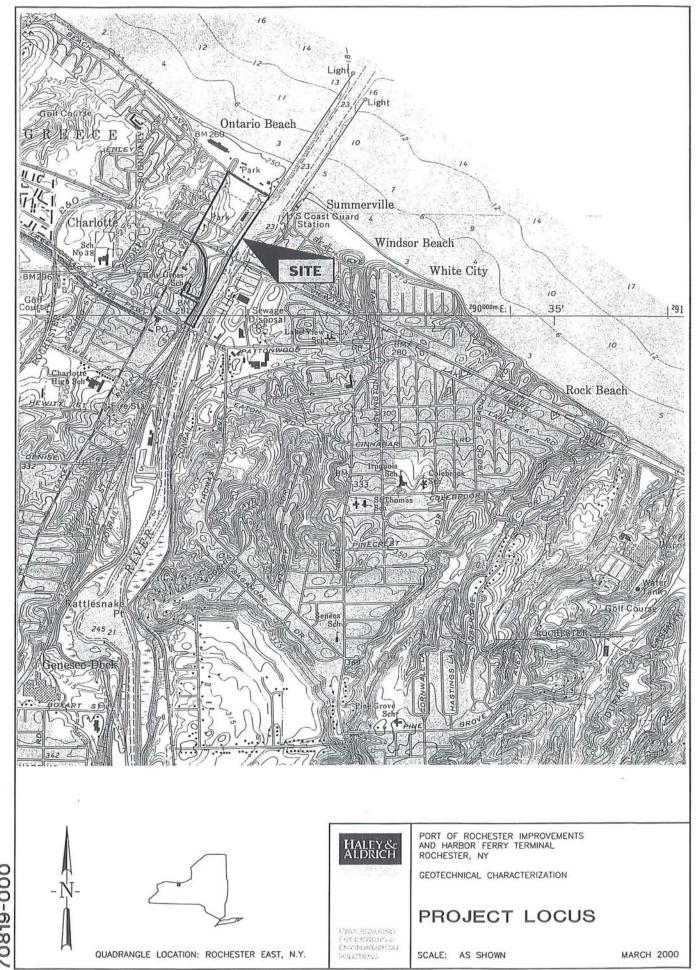
DED<sub>A</sub> SEW

tang weemen Fujica  Vanchanas Manta 99  Matabasas		TITLE
LA-02-1 LA-03-1 LA-03-	199-73 199-73 199-73 199-73 199-73 199-73 199-73 199-74 19	EXPLORATION IDENTIFICATION
1186329.1 1186329.1 1186193.3 1189776.2 1189776.2 1189776.2 1189724.9 1187747.2 1187747.2 1187490.9 1187490.9 1187490.9 1187490.9 1188698.5 1188036.7 1188036.7 1188036.7 1188036.7	11892/27, 7 11892/27, 7 11892/27, 7 11892/27, 7 11893/94, 7 11893/95, 7 11893/	NORTHING
1406798.6 1406792.5 140768.6 140768.6 140778.6 140778.7 140778.7 140778.7 140778.7 140778.7 140778.6 140778.8 140778.8 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6 140778.6	1400654, 1 1400699, 6 1400699, 6 1400699, 6 1400697, 9 140067, 9 140067, 9 140067, 9 140067, 9 140068, 9 1	
282 283 284 285 285 285 285 285 285 285 285 285 285	2012.00 2016.0	ELEVATION (ft)
15.00 15.00	35025	TOP FILL BOTTOM STEVEN (II)
100 100 100 100 100 100 100 100 100 100		++
100 200 200 200 200 200 200 200 200 200	34.75	TOP ALLIVEUM
75 77 77 77 75 75 75 75 75 75 75 75 75 7	HANDE TO THE PROPERTY OF THE P	DEPTH (ft) LEV, (ft)
	WIGHL BURNERS - COMPALTIN AT WIGHT BURNERS - COMPALTIN AT PROJECT BURNERS - COMPALTIN AT PROJ	TOP
	¥i .	LACUSTRINE BOTTONI LACUSTRINE
		TOP GLACI
		GLACIAL TILL  BOTTOM  V.(II) BEFTH (II) ELEV.(II)
		DEPTH (f) ELEV. (f)
		REFUSAL P
at a	MO BEJEVAM  NO BEJ	ROCK DESCRIPTION

NOTES: 1, ALL ELEVATIONS HAVE BEBLICONVERTED TO CITY OF ROCHESTER DATUM.

2. PRODE HEUSAL IS NOT A GUARANTER OF REDROCK DEFTH.

3. NORTHINGS, AND FASTINGS AND BASED OF 35 GRED.



See Electronic Copy for Plans



# APPENDIX A

Records of Recent (2000) Subsurface Explorations

- A-1 Logs of Test Pits by Bourne Consulting Engineers
- A-2 Logs of Test Pits by LaBella Associates
- A-3 Logs of Test Borings by Haley & Aldrich
- A-4 Observation Well Installation Reports by Haley & Aldrich

		1	15.			Т	
	Consul	ting Geo	, ROCHESTE	CR, NEW YORK Engineers, cologists	TEST PIT REPORT	l l	TEST PIT NO.T.P#) (LE NO. 70819-COO
LOCATI CLIENT CONTRA	T: Portion: OI	of Rosella A. Hickory	chester - rel Care ssocrates	Charatte Beach, sp Termunal City of Roches instruction	New York ter)	EI	DOCATION: Adjacent to Book Journel EVATION: Not Surveyed EPLORATION DATE: 11 Jan 2000 LA REP.: R. Dedrick
SCALE IN FEET	SAMPLE NUMBER	SAMPLE DEPTH RANGE	STRATA CHANGE		DESCRIPTION OF MATERIALS		REMARKS
-		+	0,541		Asphalt		
-2			2.04		to course soudy G	and the street of the street o	O Cobbles composition unknown. Irridescent blue & suffer smell. Possible  Foundary biproduct.  O More clease
<b> </b>	Obtaine	<b>4</b>  . · ·		Brown red	fine to course	SAND. Some	composition of cobbles
-4 -	Lubella. Associati			cobbles, So Moist	me coarse gravel.		located adjacent to river-wall
- 6 -							3 Tre-rods located adjacent to triangular concrete forms.
-			,				
-8 -							
<b>-</b>	-						
			9.54	Top of Pile	BOE - 9.5ft	tructure	onto.
-10 -			,				
-				* exploration	n ended due to n	influx of water	
-12 -							
-							
	WA'	TER LEVE	_ <u></u>	APP	ROXIMATE PIT DIMENSIONS AT SU	JRFACE	SUMMARY
DA	TE	TIME*	DEPTH FT	LENGTH 25 f	eet WIDT:	20 feet	DEPTH: 9.5 Ft
11. 1.	200	30mm	9.5A	25		<b>*</b>	JAR SAMPLES: -
		1.			BOULDERS		BAG SAMPLES: -
					AMETER: No. 50+ = Vol.	cu ft	WATER LEVEL: Not Present
•	Hrs aft	er compl	eted	Over 18" DI	AMETER: No. 10+ - Vol.	cu ft	TEST PIT NO. TP#1

स्था जुल्ली

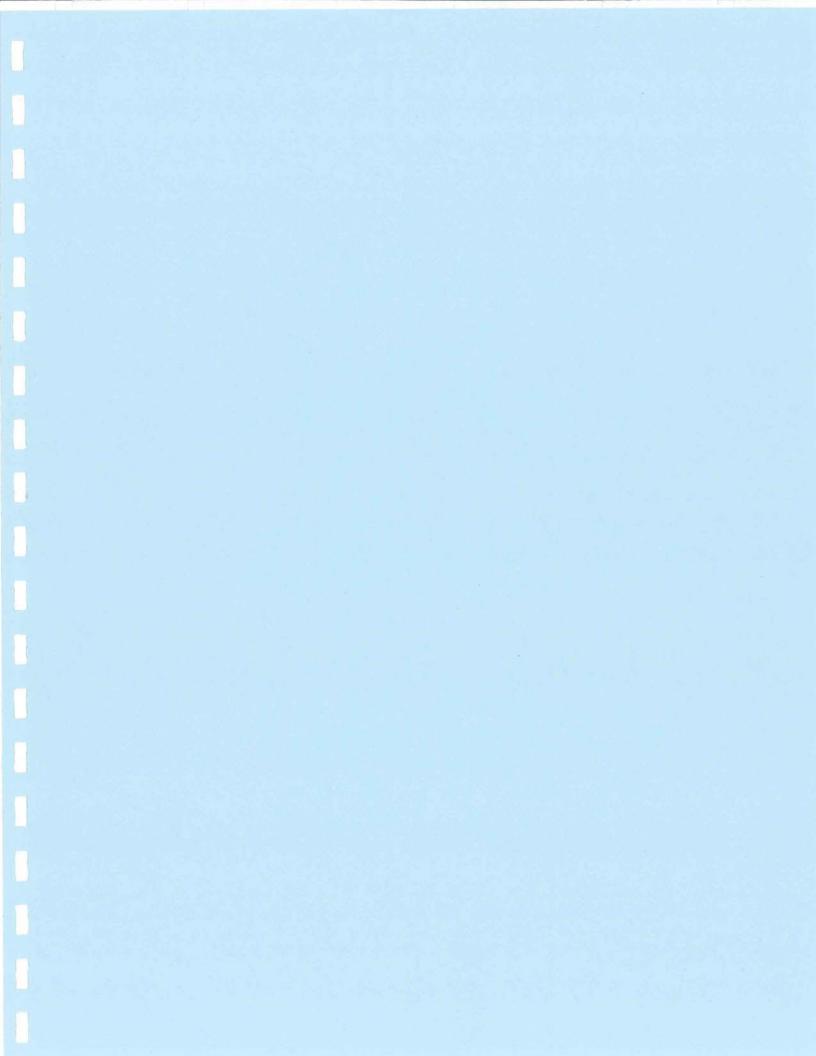
3

TEST PIT NO. TP# 2 H&A OF NEW YORK, ROCHESTER, NEW YORK TEST PIT REPORT Consulting Geotechnical Engineers, FILE NO. 70819-000 Geologists and Hydrogeologists LOCATION: Between Buildings LOCATION: ELEVATION: Not Surveyed CLIENT: EXPLORATION DATE: 12 Jan 2000 CONTRACTOR: HEA REP. : R. Dedrick EQUIPMENT USED: SAMPLE CALE REMARKS DESCRIPTION OF MATERIALS SAMPLE DEPTH STRATA IN CHANGE NUMBER RANGE Asphalt n Lounted between 0.3Ft building above Crushed Stone 1.054 deadoman anchor @ 30 ft Swing - 1.0 Brown silty fine to coarse SAND. Obtained from corner of Little course gravel. Trace cobbles by Trace day. Moist. Pockets of grey Igreen build luttings abella Associates discobred soil. Pocket of crushed to the rod 3 Completed in brick. a sections. Similar cross sections However, 2 pit (closest to river) encontered railroad Located Tie - line & Anchor 7.05+ ties & steel @ BOE = 7.0f+ ~ 0.5 ft -10 --12 SUMMARY APPROXIMATE PIT DIMENSIONS AT SURFACE WATER LEVEL DEPTH: 7,0 H DEPTH FT TIME\* DATE WIDTH 10 feet LENGTH 50 feet JAR SAMPLES: -12 Jun 00 15mm 6.75ft BAG SAMPLES: BOULDERS WATER LEVEL: 6.75 F4 8" to 18" DIAMETER: No. 15+ - Vol. cu ft TEST PIT NO. TP# 2 cu ft Over 18" DIAMETER: No. O # Vol. \* Hrs after completed

	Consul	ting Geo	, ROCHESTER technical E nd Hydrogeo	ngineers,	TEST	PIT REPORT	FILE	TEST PIT NO. TP#
PROJECT LOCATI CLIENT CONTRA	ON:	D:					DI DU	rion: South of Paddle boat House Artion: Not Surveye DRATION DATE: 12 Jan 20 REP.: R. Dedrich
1777	SAMPLE NUMBER	SAMPLE DEPTH RANGE	STRATA CHANGE		DESCRIPTION OF M	MATERIALS		REMARKS
	Obtained by Labella Assextat		9.584	Light brown Some sill	of pile c	coarse SAND		DENCOUNTERED  rantroad tracks approximately 0.5 below groundsur 7.0ft intend or riverwall.  3 2nd set of railroad track similar to Firs set located approximately 201 in from river we
				_		MOTONE AT CIDENCE		SUMMARY
	AW.	TER LEVE		APPI	ROXIMATE PIT DIME	NSIONS AT SURFACE		DEPTH: 9,5 FT
12)4	TE CO	30min	9.5 St	LENGTH 20 f	eec.	WIDTH 15	feet	JAR SAMPLES:
1234	100	JUMIN	10 017		BOULD	DERS		BAG SAMPLES: -
				8" to 18" DI.	,	≈ Vol.	cu ft	WATER LEVEL: 9.5
	Hrs aft	cer compl	eced	Over 18" DI	AMETER: No.	* Vol.	cu ft	TEST PIT NO. TPH

TEST PIT NO TP#36 H&A OF NEW YORK, ROCHESTER, NEW YORK TEST PIT REPORT Consulting Geotechnical Engineers, FILE NO. Geologists and Hydrogeologists LOCATION: Southwest of Paddle bast PROJECT: LOCATION: ELEVATION: A) of Surveyed EXPLORATION DATE: 13 Jan 2000 CLIENT: CONTRACTOR: HEA REP. : R. Dedrick EQUIPMENT USED: SAMPLE REMARKS DESCRIPTION OF MATERIALS SAMPLE DEPTH STRATA IN RANGE CHANGE NUMBER FEET Concrete Foundation O Strata change Crushed Stone / Asphalt Mixture 0.75+ € 5.0 ft 15 even with top of Brown fine to coarse SAND. Some silt. Sheetpile on Trace course growel, Moist. dundmen withor Samples Taken 5.0 ft Dark brown grey sitty fine to course SAND. Some course gravel. Little combles. Concrete debris. Located Tie-roel/Bottom of excher BOE = 100 St 10.05+ 10 12 -SUMMARY APPROXIMATE PIT DIMENSIONS AT SURFACE WATER LEVEL DEPTH: 10.0 FH DEPTH FT DATE TIME\* WIDTH 15 feet LENGTH 20 feet JAR SAMPLES: -9.5 ft 12 Jan 00 30min BAG SAMPLES: -BOULDERS WATER LEVEL: 9.5 54 8" to 18" DIAMETER: No. 204 cu ft - Vol. TEST PIT NO. TP# 36 " Vol. Over 18" DIAMETER: No. \* Hrs after completed

Consult	ing Geot	ROCHESTER, echnical En nd Hydrogeol	ineers, TEST	PIT REPORT		TEST PIT NO. TP#4 NO. 70819-800
PROJECT: LOCATION: CLIENT: CONTRACTOR: EQUIPMENT USE	):				ELEVA EXPLO	ion: North of puddlebox house tion: Not Surveyed ration date: 13 Jan 99 EP.: R. Dedrick
IN SAMPLE PEET NUMBER	SAMPLE DEPTH RANGE	STRATA CHANGE	DESCRIPTION OF M	MATERIALS		REMARKS
-4		4.0	Brown silty fine to bittle gravel. Little clebris.  Top of She to off	et Rie  to return		O Located north of paddleboat house at intersection of 2-deadmen, anchors.
_ 12 _						
WA	TER LEVE	L	APPROXIMATE PIT DIME	NSIONS AT SURFACE		SUMMARY
DATE	TIME*	DEPTH FT	LENGTH feet	WIDTH fee	c	DEPTH: Left before Completion JAR SAMPLES: -
			BOULD	ERS		BAG SAMPLES: -
			8" to 18" DIAMETER: No.	= Vol. cu	ft	WATER LEVEL: -
	er compl		Over 18" DIAMETER: No.	« Vol. cu	ft	TEST PIT NO. TP# 4



O STATE		P.C.	40 7		TEST PIT # / PROJECT # 99,650  DATE: 0=3
OCATION: LIENT:	. 0		P.D. TURN TABLE	ELEVATION:	
ONTRACT	ror: Hicko	ny Hills BACK-HOE		LABELLA REP:	DEA
SCALE IN	SAMPLE	SAMPLE DEPTH	DESCRIPTION OF MATERIALS		REMARKS
FEET 1	NUMBER	RANGE	- Black Civotas Misr. Fil	2200	, o
3			MED/COURSE BROWNS SAND		0
4			3		0
6			- WATER INFITERTION (NEXCUEN?)  (UNIVERS SAUD/GW & &	V	
8					
10	П				-
12					i e
13			ADDROVINATE TEXT BIT DIVENDIDAD AT CUSTAGE	-	
ATE .	TIME*	DEPTH	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE WIDTH X LENGTH =		
Hrs. after	completion				TEST PIT #1

SELLA AS	SSOCIATES, STREET	P.C.			TEST PIT # Z PROJECT # 99150 DATE: 2 28 00
DJECT: LOCATION: ENT: NTRACT		×	ese di	ELEVATION:	: OE)
EQUIPMEN		BACK-HOE			
CALE		SAMPLE			
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS		REMARKS
FEET	NUMBER	DANCE			
1			BIACKTUP TED SIFT/SAUZ WITH GRAND SIAY MED/COURSE SAUD	NE SOOT	O
3			MED GIEVEL		o
4			PERCUES? ACTUAL GLO		C
_5			STANDING GW - THEM		
6					r
_8				*	
10					
_11_					8
12			74	F	
13				-	*
ATE .	TIME*	DEPTH	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE WIDTH X LENGTH=		100
- Hos after	r completion		in the second se		TEST PIT #1

	SSOCIATES,	P.C.			TEST PIT # 3 PROJECT # 99150
00 STATE STREET					DATE: 2/20/00
ROJECT: DCATION: LIENT: DNTRACT	OR:			ELEVATION:	
QUIPMEN	T:	BACK-HOE			
SCALE	SAMPLE	SAMPLE DEPTH	DESCRIPTION OF MATERIALS		REMARKS
IN FEET	NUMBER	RANGE	DESCRIPTION OF THE PARTY OF		7 (2000 - 2000 C) (2000 C) (20
1	NOMBLIN	104101	Blacktop DEB 9 #1/Sound W/Grand		
2			Braw gray sout	2	0
3					0 -
4				nooda	
5			• • •	1	σ
7			Zurung sand /3w		
9					
10					
12					
13	WATER LEV		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
ATE	TIME	DEPTH	WIDTH X LENGTH=		
Hos after	roompletion				TEST PIT #1

ABELLA AS		P.C.				# 4- # 99150 7/28/00
PROJECT: LOCATION: CLIENT: CONTRACTO	OR:				ELEVATION:	
EQUIPMENT	:	BACK-HOE				
SCALE		SAMPLE			REMARK	'e
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS		KEMAKK	
1 2	NUMBER	RANGE	Brown red and MANER OF SING (dollar)		100, Odo,	0
3			BIOLD Med SAND TILANES OF STAG (down) III			0
5			- Showing H2C -		recar	0
6					1	G
- 8						
. 10			*			9 5 5
11						
12						
13						
	WATER LEV		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE			
DATE	TIME*	DEPTH	WIDTH X LENGTH =		ė	
				25		• • •
" Hrs. after	completion				TEST P	T #1

> 4

BELLA AS	SOCIATES, I	P.C.		TEST PIT # 5 PROJECT #9150 DATE:2/28/08
OJECT: OCATION: JENT: MTRACTO				ELEVATION:  LABELLA REP:
QUIPMENT	r:	BACK-HOE		
CALE	OAMBI E	SAMPLE DEPTH	DESCRIPTION OF MATERIALS	REMARKS
IN	SAMPLE NUMBER	DANGE		
FEET 1	NOMBER	RANGE	GROWN SOME GROWN  Brown SOUD	no aga o
3				
4			sill sout some clay	0
6				
_8_			Fire soil some grave	C
9			SOME 5 DUDS TOWE	
11 12				
13			APPROXIMATE TEST PIT DIMENSIONS AT SURFACE	
WATER LEVEL  NATE TIME* DEPTH		1	100-00-00-00-00-00-00-00-00-00-00-00-00-	
MTE	TIME*	DEPTH	WIDTH X LENGTH=	
,	er completion	1	-	TEST PIT #1-

•	
Varakin.	
Will Sales	
VI TOTAL	
EN	

BELLA ASSOCIATE	SPC			TEST PIT # 6
	PROJECT # 99150			
00 STATE STREET	DATE: 2/28/05			
ROJECT:				ELEVATION:
OCATION:		100		
JENT:			٠	LABELLA REP:
ONTRACTOR:		,	,	
EQUIPMENT:	BACK-HOE			
SCALE	SAMPLE		TEDIAL C	REMARKS
IN SAMPLE		DESCRIPTION OF MA	PERIODIN	
FEET NUMBER	RANGE	GrASS .		
1		Blue "Juhu Rocks"		***
3		MSC FILL		
5		Tame 4' DUE TO SLAG	. white "slag" (smale)	
6		)		
8				
9		*	240	
. 10				141
		*	a E	S 8
12		H		
1 13				
WATER	EVEL.	APPROXIMATE TEST PIT DIME	NSIONS AT SURFACE	1
NATE TIME		WIDTH X LENGTH=	w 1	
		ű.		
* Hrs. after completi				TEST PIT #1

OO STATE	SSOCIATES, STREET	P.C.			PROJECT DATE:	T# 7 T# 99150 2/29/4	>
ROJECT:				ELEVATION:			
OCATION:	:			LLL WITON.			
LIENT:				LABELLA REP:			
ONTRACT		BACK-HOE					
SCALE	(1:	SAMPLE			*		
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS		REMAR	KS	
FEET	NUMBER	RANGE	STANCE OF THE STATE OF THE STAT				_
1 2			Mose SIH/GORAND	solly i		Ö	
3_4			misc Fill-Beich /Steafceure - Shell Lavon sample		`	0	į
_ 5			- μ <sub>ω</sub> -			0	ķ
7			_ misc. Fill		*	0	
8		•				Ą	ing.
10			F *				
12			· ·				í
13	-						2:
····	WATER LEV		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE			,	,
MTE	TIME*	DEPTH	WIDTH X LENGTH = .				
	er completion	1	** *		TEST	PIT #1	

BELLA	ASSOCIATES,	P.C.		TEST PIT	
300 STATE				PROJECT	2/28/00
300 017112				DATE:	2/28/00
DJECT:				ELEVATION:	30
LOCATION	l:			ELEVATION.	
ENT:				LABELLA REP:	i
NTRAC				DABELLA R.D.	
EQUIPME	NT:	BACK-HOE			
CALE	1) 2	SAMPLE	THE PROPERTY OF LATERIAL C	REMARI	(S
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS	112111	
FEET	NUMBER	RANGE	A-ACC	0 1	
1_1_	3		misc. fil - slag (brick	sefter occe	O
2			Misc. Fill - stag (Brick)  Chall Five ASH/SH?  Stag. Misc. Fill		ð
3			slag. misc. fill		
5			GW C		٥
6					٥
7			347		
8					
10				-	
11				•	
12					
13			APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
<u> </u>	WATER LE		MICHAEL V. I CHOTH -		
TE	TIME*	DEPTH	WIDTH X LENGTH =		
			4	TEST	PIT #1
rirs. aft	er completion			15011	

BELLA ASSOCIATES	S, P.C.		TEST PIT : PROJECT DATE:	" 9 " 99150 2  28  00
OJECT:			ELEVATION:	
OCATION:				
" JENT:			LABELLA REP:	
MTRACTOR:	DAGK HOE			
QUIPMENT:	BACK-HOE	8		
CALE	SAMPLE	DESCRIPTION OF MATERIALS	REMARK	s
IN SAMPLE		DESCRIPTION OF MINISTRAL	-JE	
1 2 3		SOUD  SOUD	Sulfare	o
5		ASH (SAMPA)	Sulfue	c
8				6
9			.	
10		- SLUMBER (NO Specia)		e .
13		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
ATE TIME		WIDTH X LENGTH ≈ .	12.	
Hrs. after completic	0		TEST P	IT #1

BELLA A	SSOCIATES, F	P.C.		TEST PIT # 10
O STATE	STREET			PROJECT # 99156 DATE: A Japlas
				Onic. Pog-s
OJECT:				ELEVATION:
LENT:	•			
INTRACT	IOR:		:e6	LABELLA REP:
UIPMEN		BACK-HOE		
CALE		SAMPLE		
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS	REMARKS
FEET	NUMBER	RANGE	Arenot 1 2 3 4	
1			Sound Silt Grand Grand Grand Silt? It	sulfu
2			Consersions rough Tong 3' Cours.  A lack curders fill	
3			Constitution of the conduction	
4			Bown said	
_5			Clox. Military	No
6			GIAY F. SANZ - Frem	
8			Brown Sand	6
9				-
10				
11			(100 sanding)	6
49	1		HAN SOND/TICLLANGE	
13	WATER LEV	EL.	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE	-
NTE .	TIME*	DEPTH	WIDTH X LENGTH≖ .	
	er completion			TEST PIT #1

BELLA AS O STATE :	SSOCIATES, STREET	P.C.	•	PROJE	PIT# 11 CT# 99150 E: 2/28/00
ROJECT: CATION: LIENT:				ELEVATION:	
ONTRACT			e e	LABELLA REP:	
DUIPMEN	т:	BACK-HOE		-	
SCALE		SAMPLE	PERSONAL OF MATERIAL C	REMA	RKS
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS	1,5	
FEET	NUMBER	RANGE	Cut		
1_			SIL/SAND BROWN (SOME BODINS/CONX. Sois)	00gr	U
3					
4					O
5					D
. 7					
8					d
10	и			.	
11			Grow) self (Doorse) /Clay		6
12					
13			V		
	WATER LEV	EL	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
ATE	TIME*	DEPTH	WIDTH X LENGTH =		
Hra ofte	r completion			TES	FPIT#1

				TEST PIT # IZ
BELLA ASSOCIATES	5, P.C.			PROJECT # 99155
000 STATE STREET	1.	8		DATE: 2/20/00
OJECT: LOCATION: IENT: WITRACTOR: EQUIPMENT: CALE IN SAMPLE FEET NUMBER	RANGE	DESCRIPTION OF MATERIALS  GASS  GRASS	ELEVATION:	
		Bruck/Reck Frag. Sill miss. stag  MISS. Fill Miss. stag  Brick  B		
7 8				*
9				
11 12				
13				
WATER U	EVEL.	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
TIME*	DEPTH	WIDTH X LENGTH= .		•
$\overline{}$		9		
'		-		
l° Hrs. after completion		1		TEST PIT #1

ABELLA A	ASSOCIATES,	P.C.		TE	STPIT# /3
300 STATE					OJECT # 99/50
					DATE: 2/29/00
ROJECT:					**
LOCATION	ı:			ELEVATION:	
XLIENT:					
CONTRAC				LABELLA REP:	
EQUIPMEN	NT:	BACK-HOE			
SCALE		SAMPLE	PERCENTION OF MATERIALS	P	EMARKS
1NY	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS		
FEET	NUMBER	RANGE	GOAREL/Sub-base		
			11 / 1 danub	115-	0
1			silf/soul w/ gravel	NG Odo/	Ä
2			FROM DENSE HARD FINE SAND		
3			and have		6
			Brick Conx. The Brown South	i	
4			Grown sour		
5					0
1					Ü
6			1		
				1 \ .	
7	1		<b>*</b> ,		
			and cinders		
8	1				
1 .				1-1	•
9		}	Million conx. slob.		
. 10				1	
10	1				74
11					
- 33	1				
12			· ·		
,	1		×		
, 13			*		
WATER LEVEL		EL	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
DATE	TIME*	DEPTH	WIDTH X LENGTH≖		
			-		
L		<del> </del>	-	1	
			-		YOY DIT #4
Hrs. afte	er completion			1 1	EST PIT #1

3ELLA A	SSOCIATES, STREET	P.C.			PROJECT # 14 PROJECT # 99156 DATE: 2/24/19
OJECT: CATION:	:			ELEVATION:	
NTRAC1	TOR:			LABELLA REP:	
UIPMEN	m:	BACK-HOE			
CALE		SAMPLE			DELLARIO
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS		REMARKS
FEET	NUMBER	RANGE	Charles a la la com		(Carlo Daniel Da
1			Grovel - sub-there.  MISC - FUL (SUS) Grovel, SOUS , Brid)	sulfue oder	O
2				sulfue odi-	v
3					
4					o
5	·		* 6		8
6	Æ.				c
7			STLOWING WOSTER	1	*
8			.0		
9					
10				•	
11					8
12					
13					,
	WATER LEV	1	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
ATE .	TIME*	DEPTH	WIDTH X LENGTH ≈ .		
Hrs. afte	er completion		· ji		TEST PIT #1

VBELLA ASSOCIATES,	P.C.		TEST PIT # 15 PROJECT # 99150 DATE: 2/29/00
ROJECT:		*	ELEVATION:
OCATION:			
LIENT:			LABELLA REP:
ONTRACTOR: QUIPMENT:	BACK-HOE		
DCALE	SAMPLE		
IN SAMPLE	DEPTH	DESCRIPTION OF MATERIALS	REMARKS
FEET NUMBER	DANIOE		
1		Sill/sour grand (gill)	
2		TTT COIX. 5/4/	
3		rvisc. Slag. (White - Sample) (IRON - Sample)	
4			
_5			
6			
7			
8			
9		H20	
10			
_11			
12		*	
13 WATER LE	VEI	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE	· ·
DATE TIME*	DEPTH.		
			TEST PIT #1

					TEST F	PIT# 16
	SOCIATES,	P.C.				
OO STATE S	TREET	4		1	DATI	CT #99/50 E: 2/29/00
OJECT:				E	ELEVATION:	
WENT:					ADD LA DED	
MTRACTO	OR:		987		ABELLA REP:	
QUIPMENT	:	BACK-HOE				4
CALE		SAMPLE			REMA	DVC
181	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS	- 1	KEMA	rno
FEET	NUMBER	RANGE		-		
1			Good Fill		Sulla	ø
_2			Misc. slag			
3						
4						)
_5						
6						
8	• ,		silty day (works)		A lis	o
9			3 .0		OCON 1	
. 10				•	•	
11			,			6
12					V	
13			0 11			
	WATER LEV	/EL	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE			
ATE	TIME®	DEPTH	WIDTH X LENGTH = .	pri		
		-				
	completion		Ť		TES	T PIT#1

BELLA ASS	SOCIATES, I	P.C.	ki e e e e e e e e e e e e e e e e e e e	PRO	T PIT # /1 UECT # 99 /50 ATE: 2/29 /06
OCATION:  JENT:  JUTRACTO		BACK-HOE		ELEVATION:	2
SCALE IN	SAMPLE	SAMPLE DEPTH RANGE	DESCRIPTION OF MATERIALS	REI	MARKS
1 <u>2</u>	NUMBER		GORSS TOPSIL/SIH MED BROWN 5002/ SIH	Ne	0
3			Gray Blue day (sitty)		0
5					
6					. 6
8			a a a		o
10			v v		
12					
13	WATER LEV		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
ATE	TIME*	DEPTH	7:		
Hrs. after					EST PIT #1

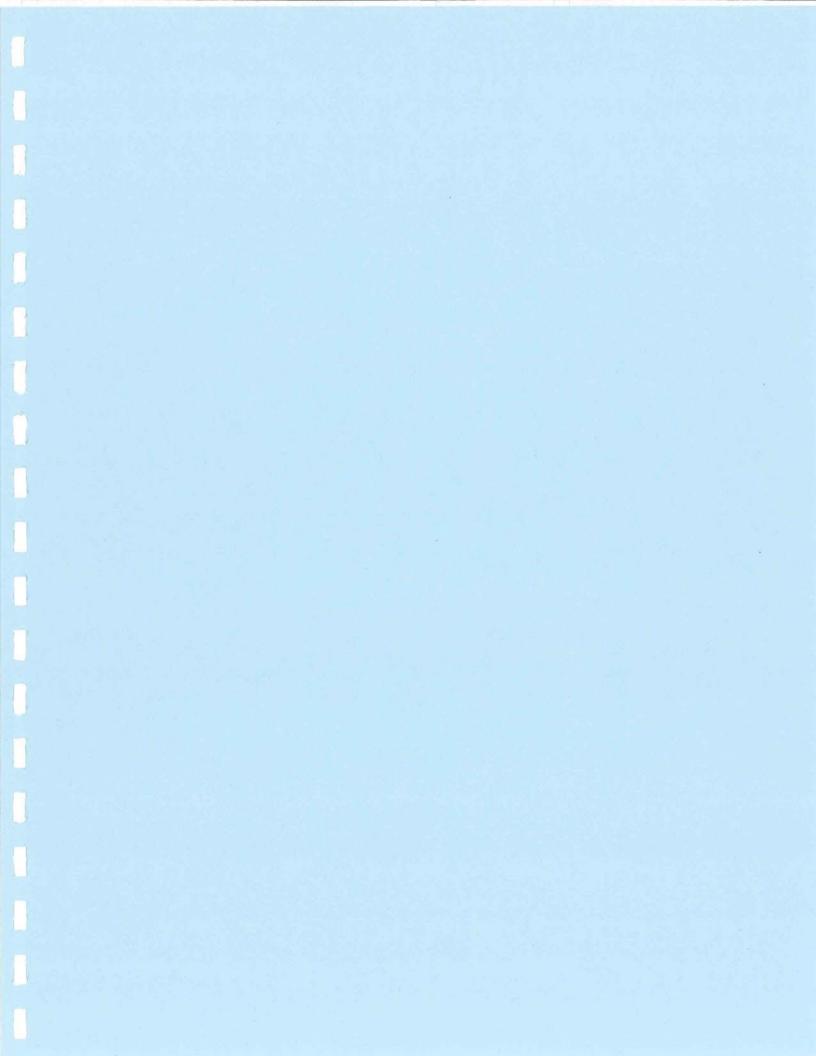
SELLA	ASSOCIATES,	P.C.		1	TEST PIT # 18
	STREET				PROJECT # 9915
,00 011111					DATE: 2/29/00
OJECT					
OCATION	4:			ELEVATION:	
JENT:					
ONTRAC	TOR:		e e	LABELLA REP:	
EQUIPME	NT:	BACK-HOE		-	
CALE		SAMPLE			
1N	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS		REMARKS
FEET	NUMBER	RANGE		-	
1_		1	STAT/SDUD-GIAND		0
_2			misc. stag white, blure, geen	sulfue	
3				1	σ
4					
_5					
6	-		<b>\</b>		. 0
7			- STAND. WATER -		
8					2
9	-				
. 10			9	4	
	1				
12	-		*		
13					
l	WATER LEV	1	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE	1 .	
ATE	TIME	DEPTH	WIDTH X LENGTH ■		
·					
I° Hrs. eff	er completion				TEST PIT #1

BELLA ASSOCIATE	ES, P.C.	y #	PROJECT # 97 US
1			DATE: Z/ZG/QU
COJECT: LOCATION: JENT: SMTRACTOR:			ELEVATION: LABELLA REP:
EQUIPMENT:	BACK-HOE		
SCALE	SAMPLE		REMARKS
IN SAMPL		DESCRIPTION OF MATERIALS	Kellisans
FEET NUMBE	R RANGE		
1		Ganss silt sout	
2			
	1	- consestag-white/alue 	
_ 5		STAND. WATER - SOME SLEEN	~
6			ě
7			
8		g · · · ·	
9			
. 10			
12		*	
13 WATER	1D/E	APPROXIMATE TEST PIT DIMENSIONS AT SURFACE	
DATE TIME			
1			
I" Hrs. after complet	llon		TEST PIT #1

BELLA ASSOCIATES, P.C.			TEST PIT # @ PROJECT # Q DATE: a/a	9150
OJECT: DCATION: ISNT: NTRACTOR:	ev lies		ELEVATION:  LABELLA REP:	
	CK-HOE			
The second second second	AMPLE	DESCRIPTION OF MATERIALS	REMARKS	
Parison of Street, Str	RANGE	DESCRIPTION OF MATERIALS	1555000.00	
FEET NUMBER F	9	PED CRISE SOUR -WASTE File	NP	0
3				G
6		BOOMS SIH /FINE SAUD  NO SLAG (PROCES)		c
8				6
10				
12		₹		
13		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
WATER LEVEL	DECTI	MIDTH V LONGTH -		
ATE TIME*	DEPTH	WIDTH X LENGTH =	*	
Hrs, after completion			TEST PIT #1	

201144	SSOCIATES,	P.C		TEST	PIT# 21
		F.O.		PROJE	CT #99150
00 STATE	SIREEI				E: 2/29/00
-					
OJECT:				ELEVATION:	
OCATION:	:		4		
" JENT:				LABELLA REP:	
MTRACT			*	DAGELLA NEI .	
QUIPMEN	π:	BACK-HOE			
CALE		SAMPLE		REMA	ADKS
IN	SAMPLE	DEPTH	DESCRIPTION OF MATERIALS	Kem	
FEET	NUMBER	RANGE	Abel La 711	548	
R			BACLTO 2" Ground (not sub-base) Gray MED/GUE SOUD	904	0
1			GIRL MED/ PLUE SOUD		
				conste	
2			sample - creande adar	creasete	
			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	C
3					
1	E.				
4					
-			TIES		C
5					
	1		V samola	1.	
6			Sample State	"	6
	1		TITUL SLAG		
7				3	
-				1	
8			34		
0	1			-	
9	1	į.			
4			*	•	
10	1				
100	1				
11	-				
	1		*		
12	-				
			Ĭ		
13					-
	WATER LE		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE		
ATE	TIME*	DEPTH	WIDTH X LENGTH = .		
			-		*
		-	-		
			1	20.50	
Hrs. afte	er completion			TES	T PIT#1

BELLA AS	SSOCIATES, STREET	P.C.			TEST PIT # 22 PROJECT # 9950 DATE: 2/29/00
OJECT: OCATION: JENT: ONTRACT	OR:			ELEVATION:	
QUIPMENT	Т:	BACK-HOE			
CALE	OAMO! E	SAMPLE	DESCRIPTION OF MATERIALS		REMARKS
IN	SAMPLE	RANGE	DESCRIPTION OF INVESTMENT		30000 PM(80 90 PM 800
1 2	NUMBER	NANGE	Sill/Savo sice  misc. stag Tong - Blue / White.	Solfter	0
3 4 5					6
. 7			TITELL CONC. / Slag loger - Hoe liber - Standing CHANCE - SIDER	4	
9					
11 12					*
13					
	WATER LEV		APPROXIMATE TEST PIT DIMENSIONS AT SURFACE	1	
ATE	TIME*	DEPTH	WIDTH X LENGTH = .		
Hrs. after	roompletion				TEST PIT #1



### TEST BORING REPORT

BORING NO.

HA-101
Page 1 of 5

nn c ir c		DODE OF BO	OHEOTER					H&A FILE	NO.	70819-000	)	
PROJECT		PORT OF RO						PROJECT N		M. VALE		
LOCATIO		ROCHESTER		K				•				
CLIENT		LABELLA AS	SSOCIATES					FIELD REP.		R. DEDRI		
CONTRAC	CTOR	GEOLOGIC E	ENTERPRISE	ES				DATE STAF		23-May-0		
DRILLER		L. TODD						DATE FINIS	SHED	23-May-0	0	
INTEREST PARTY NAMES			0.	ln.	ring Locatio	on See Do	ring I o	cation Plan				
Elevation	251.8	The second second	-		g Make & N			ck Mount			Drill Mu	ıd
Item		Casing			Truck	Tripod	1	Cat-Head	Hammer			Bentonite
Туре		HSA	SS		ATV	Geoprobe		Winch	✓ S			Polymer
Inside Diame		3-1/4	1-3/8			Air Track	-	Roller Bit		oughnut		None
Hammer We			140	CHT-U-F-ST ENGINEERING	Track	☐ Air Hack		Cutting Head	Casing		Driven	Spun
Hammer Fal				品的地理的	Skid			Cutting Fread	Casing		DITT OF	
D	Casing	Sampler Blows per 6	Sample Number &	Sample Deptl	Change			Visual Classifica	tion and I	Remarks		
Depth (ft)	Blows per ft	in	Recovery	(ft)	(ft)							
	- "		Recovery		(-7							
- 0 -			****					CONC	CRETE		11-11-11-11	
				10		Vant dense black h	rown m	ray silty fine to coar	se SAND	some rock fra	gments.	
		26	S1 -10"/12"	1.0		dry		Suffrage State Supplies				
1		9	S2	2.0		Medium dense bla	ck brow	n silty fine to coarse	e SAND, s	ome rock frag	ments,	
		10				moist.						
l l		18	12"/24"	4.0	d							
-		4 15	S3	4.0		Medium dense bla	ck brow	n yellow, silty fine	to coarse S	SAND, some r	ock	
		8				fragments, wet.						
_ 5 _		5	90000	6.0	,							
		7 4	7"/24" S4	6.0		Same.						
		17		-				F	ILL			
l i		18										
		17	10"/24" S5	8.0		Very dense bla	ck brov	wn silty fine to coars	e SAND,	some rock frag	gments.	
1 1		1007.2	33	8.2		1.50		Obstructi	on at 8.0 f	t.		
l 1						D	1.					
10						See Boring HA-10						
						(HA-101a offset 3	0' West	of Original Location	n)			
1	-	***************************************										
	***************************************	***************************************		-								
193												
— 15 —												
1 1												
			****************									
			****									
				-								
		***************************************										
20												
	-											
												- Company
				-	-							
25												
1												
1												
1												
1							-					
1						-						
30												
						San-	iple ID			Summe	iry	
	1	Water   Elapsed Time	Level Data Bottom of	Bottom of		O O F			ourden (Li	near ft) 11	5	
Date	Time	(hrs)	Casing (ft)		Water (fi	T Thin Wal	Tube	Rock	Cored (Li	near ft)		
		,,				U Undisturb		· · · · · · · · · · · · · · · · · · ·	per of Sam	The same of the sa		101
						S Split Spor		pie B	ORING N	Ю.	HA	-101

### TEST BORING REPORT

BORING NO.

HA-1012

ALDI	alClat		11 1	ענונטט	OIO	TT 4	() I(	نان	л (							2 0	f 5
								_					==0		age	2 0	1 3
PROJECT		PORT OF RO	CHESTER							H&A FII			-	819-0			
LOCATIO	N	ROCHESTER	, NEW YOR	K					_	PROJEC		IGR.	_		ENTIN	Е	
CLIENT		LABELLA AS	SSOCIATES							FIELD F			-	DEDI			
CONTRAC	CTOR	GEOLOGIC E	NTERPRISE	ES						DATE S	TAR	TED	7	Jun-00	)		
DRILLER		L. TODD						DATE FINISHED 7-Jun-00									
			at.	In .			Can D	orine	. Loon	tion Plan	n Plan						
Elevation	251.	the same of the sa	and the second named in column 2 is not the owner, where the party is not the owner, where the owner, which is	The second secon	ng Locatio Make & M	n	366 13	orm	Local	tion r tan					Drill	Mud	
Item					Fruck	Tri	hod	T	V 0	Cat-Head		Hamr	ner Typ	e-		Bento	nite
Туре		HSA	SS 1-3/8	100000000000000000000000000000000000000		- 10	probe	Ti		Winch	- 1		Safety		15	Polyn	ner
Inside Diam		3-1/4				_	Track	H		Roller Bit		П	Dough			None	
Hammer W Hammer Fa				Control of the Contro	Skid	ī		Li	$\Box$	Cutting Head		Casin			Drive	n [	Spun
Hammer Fa	Casing	Sampler	Sample	The second second	Stratum												
Depth (ft)		Blows per 6	Number &	Sample Depth (ft)	Change					Visual Classi	ificat	ion an	d Rema	rks			- 1
	ft	in	Recovery	(11)	(ft)												
0									•		-	-				-	
						*****	-										
										Aug	gered	to 5.0	ft.			-	
						-											
5	Same and the second									Jr		-216		melai			
_ 3 _		5 5	S6	5.0		Loose	gray brow	n fine	e to me	edium SAND,	, trace	silt, c	rganics,	moist.			
		3								A	LLU	VIUM					
		5	14"/24"	7.0													
										Aug	ered	to 10.0	ft.				
					*****			-									
						+											
1000											-						
— 10 —		4	S7	10.0		Same,	except we	t.									
		3															
		2	16"/24"	12.0													
				l-													
		**************															
— 15 —			S8	15.0		Mediu	m dense g	ray b	rown f	fine to coarse	SAN	D, son	e coarse	e grave	, wet.		
		9															
		7	23"/24"	17.0							-						
— 20 —		n	S9	20.0		Same.						- 1000					
		10												->//			
1		11 14	20"/24"	22.0											Section 1		
1	****	14	20127	22.0		-											
1												-					
1																	
1	**********		************														
25		12	\$10	25.0		Same	except lo	ose.	-		-						
		3	310														
-		4	20"/24"	27.0													
		3	20"/24"	27.0													
1																	-
1																-	
1												-					
30							2500-1611		1145								
		Water	Level Data					mple					Option and the	Sumn			
Date	Time	Elapsed Time	Bottom of	Bottom of	Water (ft)	0	Open Er						Linear f		15		
Date	Time	(hrs)	Casing (ft)	Boring (ft)	()	T U	Thin Wa						Linear f amples		8S		
	_			1		S	Split Sp	oon S			the local division in	RING	and the last of th			-101	a
	_					G	Geoprol	oe			50				***		74

## TEST BORING REPORT

BORING NO.
HA-101a

Page 3 of 5

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		9	SII	30.0		Loose gray brown silty fine to coarse SAND, trace gravel, wet.
		4 4				ALLUVIUM
		3	22"/24"	32.0		
				,		
- 1						
35						
_ 33		2	S12	35.0		Same, except very loose.
		2				
		2	23"/24"	37.0		
<b>—</b> 40						J. CH.T. Lab. alay according that
<b>—</b> 40 <b>—</b>		1	S13	40.0		Very loose gray brown fine sandy SILT, little clay, organics, wet.
		2				
		3	22"/24"	42.0		
45						
<del></del>		1	S14	45.0		Same, except no organics.
		2 2				
		3	18"/24"	47.0		
			(4)(4)(4)(1)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)(4)			
		***************************************				
50		1	S15	50.0		Same.
		2 2				
			20"/24"	52.0		
55		1	S16	55.0		Same.
		2 3				
			5 20"/24"	57.0	Ď.	
	E COLOR MESSAGE					
60				78.2		Loose gray brown SILT, little clay, trace sand, wet.
		3	S17	60.0		Loose gray orown StL1, nute eray, trace sand, wet.
		4				
			4 20"/24"	62.	0	
					1	
65				76.0		Coma
		1_2	S18	65.0		Same.
		2				
			4 23"/24"	67.	0	
					70 110 110	(Augered to bedrock)
				-		
70						
						FILE NO. 70819-000 BORING NO. HA-101a

### TEST BORING REPORT

BORING NO.
HA-101a

Page 4 of 5

	Casing	Sampler	Sample	Camela Day	Stratum	1.1180
Depth (ft)	Blows per ft	Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Change (ft)	Visual Classification and Remarks
						(Augered to bedrock - No samples recovered)
						(Augered to bedrock - No samples recovered)
			***************************************			
_ 75						
		***************************************	***************************************			
<b>—</b> 80 <b>—</b>						
		***************************************				
<b>—</b> 85 <b>—</b>						
90						
	*********					
<b>—</b> 95 <b>—</b>						
		********				
12000		*************				10-10-10-10-10-10-10-10-10-10-10-10-10-1
<u> </u>						
			-			
			-			
		1				
					-	
					-	
<del></del>						
110 -	-	-				FILE NO. 70819-000 BORING NO. HA-101a

### TEST BORING REPORT

BORING NO.
HA-101a

HA-101a

Casing Sampler Sample Stratum Sample Visual Classification and Remarks Depth (ft) Blows per Blows per 6 Number & Change Depth (ft) (ft) Recovery (Encounter Change in drilling condtions ? WEATHERED ROCK (Auger refusal) 115-Bottom of Exploration of 115.0 ft. 120 --125--130 -- 135 -140 -- 145 -

FILE NO.

70819-000

BORING NO.

150

# HALEY &

### TEST BORING REPORT

BORING NO. HA-102

ALDI	WCII		11.			MI I O I	all Ole	<b>3</b> ,	Pag	ge 1 of 2
nno iro		DODE OF BO	CUESTER				HEA	FILE NO.	70819-000	, ,
PROJECT		PORT OF RO		)V				ECT MGR.	M. VALE	
LOCATIO		ROCHESTER						D REP.	R. DEDRI	
CLIENT		LABELLA AS						E STARTED	30-May-0	
CONTRA		GEOLOGIC E	ENTERPRIS	ES				E FINISHED	30-May-0	
DRILLER		L. TODD					DATI	FINISHED	50-May-0	v
Elevation	253.	5 ft Date			Boring Locat	tion See	Boring Location Plan			Drill Mud
Item		Casing			Rig Make &		55 - Truck Mount	Hamme	w Tuna	☐ Bentonite
Туре		HSA	SS		✓ Truck	☐ Tripod ☐ Geoprobe	✓ Cat-Head  Winch	-	Safety	Polymer
Inside Dian		3-1/4	1-3/8	2	☐ ATV ☐ Track	Air Track	Roller Bit		Doughnut	✓ None
Hammer W			30		Skid		Cutting He			Driven Spun
Hammer Fa	Casing	Sampler	Sample		Ctrotum	1	10			
Depth (ft)	Blows per ft		Number & Recovery	Sample De	Change (ft)		Visual Cl	assification and	Remarks	
<u> </u>		28	SI	0.0		Medium dense l	prown and black silty i		ND, little rock	fragments,
		16	16"/24"		2.0			FILL		
		9	S2	2.0		Medium dense	prown silty fine to coa	rse SAND, trace of	coarse gravel, d	ry.
		8 6								
		5	14"/24"	-	4.0					
		5	S3	4.0		Same, rock obst	ruction in bottom of s	poon.		
<u> </u>		3								
		3	2"/24" S4	6.0	6.0	Loose gray broy	vn fine to coarse SAN	D, wet.		
		2		0.0						
		3	15"/24"		8.0			ALLUVIUM		
		4	S5	8.0	0.0	Medium dense	gray brown fine to coa	rse SAND, some	gravel, wet.	
		18								
10		17	17"/24"		0.0	0	un Gua ta garage CASI	D. moist		
10 -		22 48	S6	10.0		Very dense bro	wn fine to coarse SAN	D, Moist.		
		58	00/0/0		30					
		45	2"/24"		2.0					
<u> 15</u>		54	S7	15.0	15.0	Very dense gray	y brown silty fine to co	parse SAND, som	e gravel, moist	
1		100/.4	8"711"		3.9			GLACIAL TILL		
	-									
1	****									
20		10077		20.0		Vary dance has	wn silty fine to coarse	SAND some ara	vel Red sands	tone in
		1007.4	S8 4"75"	20.0		bottom of spoo	n, moist.	January, aomic gra		
1	Lanco Marin									
				_						
25		19	S9	25.0		Very dense gra	y brown silty fine to c	oarse SAND, som	e gravel, mois	
		91	12"/18"		26.3					
		1007.3	12 /10							
1										
30										
		Water	Level Data				ample ID		Summe	
Date	Time	Elapsed Time	Bottom o		I Water I	6671	end Rod	Overburden (L Rock Cored (L		.5
30-May	No. of the Control of	(hrs)	Casing (ft	t) Boring (	ft) 17.5	1 111111 7	/all Tube urbed Sample	Number of San		S
30-May		-					poon Sample	BORING		HA-102



### TEST BORING REPORT

BORING NO.
HA-102

Page 2 of 2

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Кесочегу	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		10 100/.3	S10 7"/10"	30.0		Very dense gray brown silty fine to coarse SAND, little rock fragments, wet.
		1007.3	7 /10	30.0		GLACIAL TILL
			AT (Table )	/		
					,	
_ 35						
_ 55		19 60	SII	35.0		Very dense silty fine to coarse SAND, some gravel, trace clay, wet.
	A CONTRACTOR OF CONTRACTOR OF CONTRACTOR	1007.3	16"/16"	36,3		
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
	w					
_ 40		15	S12	40.0		Same.
		100/.4	10"/11"	40.9		Oalie,
				·		
	and a second second second second second		***************************************			
			***************************************			
45		20	\$13	45.0	45.0	Very dense red brown silty fine to coarse SAND, trace clay, moist.  WEATHERED ROCK
		100/.1	6"/8"	45.6		WEATHERED ROCK
	and the second of the second o					
				**************************************		
50		1007.5	\$14	50.0	50.5	Same, with little clay.
				50.5		Began rock coring at 50.5 ft.
						Competent, red sandstone with interbedded gray sandstone.  QUEENSTONE FORMATION
						QUEENSTONE FORMATION
55		***************************************				
						Highly fractured 58.8 ft. to 60.5 ft.
60						IMBILIT MUNICIPAL POLICE AND
					<b></b>	Bottom of Exploration at 60,5 ft.
65						
	1					
<del> 70</del>						
	***************************************					FILE NO. 70819-000 BORING NO. HA-102

HALE	N 8-
ALDI	HOH.

BORING NO.

CORE BORING REPORT HA-102 Page 1 of 1 70819-000 H&A FILE NO. PROJECT PORT OF ROCHESTER ROCHESTER, NEW YORK M. VALENTINE PROJECT MGR. LOCATION R. DEDRICK FIELD REP. CLIENT LABELLA ASSOCIATES 30-May-00 DATE STARTED CONTRACTOR GEOLOGIC ENTERPRISE 30-May-00 DATE FINISHED DRILLER L. TODD ft Datum **Boring Location** Elevation Rig Make & Model Drill Mud Item Casing Sampler Core Barrel Hammer Type Bentonite 4 Truck Tripod Cat-Head NX Type HAS SS Polymer Winch Safety ATV Geoprobe 3-1/4 1-3/8 2 Inside Diameter (in) Air Track 1 Doughnut None Track Roller Bit Hammer Weight (lb) 140 Casing Spun Driven Skid Cutting Head 30 Hammer Fall (in) Recovery Drilling Stratum Visual Classification and Remarks Depth (ft) RQD Weathering Rate Core No. Change (ft) (min/ft) Depth (ft) (in) (%) Competent red sandstone with interbedded gray sandstone. 3.4/5.0 68 QUEENSTONE FORMATION Avg. 3-4 minutes per foot 3.45/5.0 69 Highly fractured 8.0 ft. to 10.0 ft. 60.5 10 25 . 30 Sample ID Open End Rod Summary ) <u>50.5</u> 10 Water Level Data Bottom of Boring Overburden (Linear ft) Elapsed Time Bottom of Water (ft) Date Thin Wall Tube Undisturbed Sample Rock Cored (linear ft) Casing (ft) (ft) (hrs) Split Spoon Sample BORING NO. HA-102

:3

### TEST BORING REPORT

BORING NO.

HA-103

FALIDI	dCII		Л	LOI.	DON	TIA	O II	الانال				-	1-105
													1 of 3
PROJECT		PORT OF RO	CHESTER						H&A	FILE NO.	70819-	-000	
LOCATIO	ON	ROCHESTER	, NEW YOU	RK					_ PROJ	ECT MGR.	M. VA	LENTINI	Ē
CLIENT		LABELLA AS	SSOCIATES	S					FIELI	D REP.	D. NO	STRANT	
CONTRA	CTOR	GEOLOGIC E	ENTERPRIS	SES					DATE	ESTARTED	31-Ma	y-00	
DRILLER		L. TODD							DATE	FINISHED	31-Ma	y-00	
Titi	253.8	36 ft Dat	um City	. In	oring Locati	on	See B	ring I no	cation Plan				
Elevation Item	255.0	Casing			lig Make & N		THE RESERVE AND PERSONS NAMED IN	SALES AND PROPERTY.	k Mount			Drill N	Mud
Туре		HSA	SS	0010 000110	Truck		ripod	1		Hamme	er Type	П	Bentonite
Inside Dian	neter (in)	3-1/4	1-3/8		ATV		eoprobe		Winch	V	Safety	一一	Polymer
Hammer W			140	TOTAL CONTRACT CORP., NAME OF	Track	□ A	ir Track		Roller Bit		Doughnut	V	None
Hammer Fa			30	用制度的	Skid				Cutting He	ad Casing		Driver	ı 🗌 Spun
	Casing	Sampler	Sample	Sample Dep	Stratum		14		1,600 01020	e steri eric eg			
Depth (ft)	Blows per ft	Blows per 6 in	Number & Recovery	(ft)	Change (ft)				Visual Cl	assification and	Remarks		
— o —		8	SI	0.0		Media	ım dense ar	velly co	narse to fine s	and, little silt, dry	,		
		°11	31	10.0		ivicuit	in dense gr	ivelly co	ourse to time st				
		11	Terresur			-				FILL			
		13	15"/24" S2	2.0	2.0 —	Medii	m dense da	rk brow	n coarse to fin	e SAND, some g	ravel, little	silt, dry.	
		18											
		11 7	10"/24"							FILL			
		9	S3	4.0		Same							
<u> </u>		8 4				Moist	to wet begin	nning at	5.5 It.	FILL			
		6			0.0		****						
		3	S4	6.0		Same	wet.			FILL			
		8				Noted	refusal and	suspect	ed cobble at 7				
		50/.0	4"/18"		.5	Same	except blac						
		7	S5	8.0		Same	ехсері отас	N		FILL			
		9	2010 20										
— 10 —		74	6"/24" S6	10.0	0.0	Media	ım dense bla	nck coar	se to fine sand	y GRAVEL, litt	e silt, wet.	NO. 14 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		9				# 100 mm				FILL			
		10		12	2.0								
		62	S7	12.0	***	Same	except very	dense,	gray-black.				
		26				Drille	r noted sulp	hur-like	odor in samp	FILL le.			
		9	12"/24"	14	1.0	See N	ote on Page	2 of 3.					-
	1001010000000		***************************************					······································	Aug Boring moved	ger Refusal at 14. 18.0 ft. west of o	O It. riginal locat	ion.	
— 15 —													
	-												
		**************											
20							***************************************						
— 20 —													
,									•				
l													
5		1-445-at 1-61-at 1-1-2-1-2-1-2											
	**************************************		784.0004.000										
l													
25													
20													
									** ***		**************************************		
l													
	Alexandria de la constitución de								******				
1		****						200			e acotengario e e		
30													
		Water	Level Data			-	Sar	nple ID			Sum	mary	
Data	Time	Elapsed Time	Bottom of	Bottom of		0	Open End	Rod		Overburden (Li	near ft)	14	
Date	Time	(hrs)	Casing (ft)	Boring (ft)	mater (it	T U	Thin Wall Undisturb		ple	Rock Cored (Lin Number of Sam		7S	
						s	Split Spoo			BORING N			A-103
						1	Cannecha			DOMINO	1 100	111	400

BORING NO.

HA-103

BORING NO.

TEST BORING REPORT HA-103 1 of 3 Page 70819-000 H&A FILE NO. PORT OF ROCHESTER PROJECT M. VALENTINE PROJECT MGR. ROCHESTER, NEW YORK LOCATION D. NOSTRANT FIELD REP. CLIENT LABELLA ASSOCIATES 31-May-00 DATE STARTED GEOLOGIC ENTERPRISES CONTRACTOR 31-May-00 DATE FINISHED DRILLER L. TODD 253.86 ft Datum **Boring Location** See Bring Location Plan Elevation City CME-55 Truck Mount Drill Mud Sampler | Core Barrel | Rig Make & Model Item Casing Bentonite ✓ Truck Tripod Cat-Head Hammer Type HSA SS NX Type ☐ Geoprobe ✓ Safety Polymer ☐ ATV Winch 1-7/8 Inside Diameter (in) 3-1/4 1-3/8 1 Doughnut None Air Track Roller Bit Track 140 Hammer Weight (lb) Driven Spun Cutting Head Casing Skid 30 Hammer Fall (in) Stratum Casing Sample Sample Depth Sampler Visual Classification and Remarks Depth (ft) Blows per Number & Change Blows per 6 in (ft) Recovery ft . 0 Medium dense gravelly coarse to fine sand, little silt, dry. 15"/24 2.0 Medium dense dark brown coarse to fine SAND, some gravel, little silt, dry 2.0 S2 18 FILL 4.0 10"/24" Same 4.0 Moist to wet beginning at 5.5 ft. 6.0 6.0 Noted refusal and suspected cobble at 7.5 ft. 50/.0 7.5 4"/18 8.0 Same, except black. 6"/24" 10.0 10 Medium dense black coarse to fine sandy GRAVEL, little silt, wet. 10.0 S6 12.0 12.0 Same, except very dense, gray-black 26 Driller noted sulphur-like odor in sample 14.0 12"/24" See Note on Page 2 of 3. Auger Refusal at 14.0 ft.
Boring moved 18.0 ft. west of original location. 15 . 20 . 25 . - 30 -Sample ID Summary Water Level Data Open End Rod Overburden (Linear ft) Elapsed Time Bottom of Bottom of Water (ft) Date Thin Wall Tube Rock Cored (Linear ft) Boring (ft) T (hrs) Casing (ft) 75 Undisturbed Sample Number of Samples U

S

Split Spoon Sample

Geoprobe

### TEST BORING REPORT

BORING NO.
HA-103a

													Page	2	of 3
PROJECT		PORT OF RO	CHESTER						H&A	FILE	NO.	70819	-000		
LOCATIO		ROCHESTER	TO A CONTRACT OF THE PARTY OF T	rK.					PRO	JECT N	IGR.	M. VA	LENTI	INE	
CLIENT		LABELLA AS							FIEL	D REP		R. DE	DRICK		
		LAC DESCRIPTION OF THE PARTY.		1827				_	000000000000000000000000000000000000000	E STAI		31-Ma			
CONTRA		GEOLOGIC I	ENTERPRIS	E5				_		E FINIS		1-Jun-	_		
DRILLER		L. TODD									SHED	1-5011-	00		
Elevation	253.8	36 ft Dat	- pulsar		ing Location		The second secon		ocation Plan				In :		
Item		Casing	Sampler C		Make & N			-	ruck Mount		ree .			II Mud	
Туре		HSA	SS		Truck	-	pod	4			-	ier Type		_	ntonite
Inside Diam	neter (in)	3-1/4	1-3/8		ATV	_	oprobe	4	Winch		님	Safety		-	ymer
Hammer W	eight (lb)	(See	140		Track	Air	Track	I⊨	Roller Bit			Doughnut	☐ Dri		Spun
Hammer Fa		-	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWIND TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN	2.20年期	Skid	$\sqcup$ _			Cutting H	ead	Casin	3		ven	орин
Depth (ft)	Casing Blows per	Sampler Blows per 6	Sample Number &	Sample Depth	Stratum Change				Visual C	lassifica	tion an	d Remarks			
Depth (1t)	ft	in	Recovery	(ft)	(ft)										
— º —		A				(Offset	18 west of	origii	nal location)	171111-17	-				
		<del></del>										-			
		G	See Samples												
		Е	for 0-14 ft.												
11			HA-103												
		R													
<u> </u>		11		5.0		Mediu	m dense bro	wn b	ack fine to co	oarse SAl	ND, litt	e silt, dry.			
		14								V.	ILL				
		7 4		7.0							ILL				
		A						-							
		U G													
		E													
10		9 R		10.0		Dense	black brown	fine	to coarse SA	ND, little	silt, sl	ag fragments	s, wet.		
l		19													
1		22 20		12.0											
1		20		12.0		-									
	7710/4-2-03-40-05-05-05-05-05-05-05-05-05-05-05-05-05														
		7	S8	14.0		Same,	except med	um d	lense.						
15		11		_											
		12	14'724"	16.0								15			
		8 3	No	16.0					<del>,</del>						
			Recovery												A LOCAL CONTRACTOR
		7	**	18.0		Madia	- dance ble	al be	own silty fine	to coars	CANI	) wet			
	350000000000000000000000000000000000000	8	S9	18.0		Mediu	m dense bia	CK DI	own siny mic		0.000				
	***********	8								ALLU	JVIUM				
20		6	6"724"	20.0							-		*******		
				-		-									
1											Line in the second				
	-									-					
		-5	S10	24.0		Loose	gray brown	fine	sand SILT, w	et.					
25		3													
		3 4	2"/24"	26.0				****							
			- 72.								150-20-20				
1						-		-							
1				_		-						-			
ľ															
1		2	SII	29.0		Loose	gray fine sa	nd S	ILT, some cla	y, organi	cs, moi	st.			
30		3						*****						-	
		Water	12"/18" Level Data	30.5			San	ple I	D	_		Sur	nmary		
		Elapsed Time		Bottom of	Water (ft	0	Open End	Rod				Linear ft)	7		
Date	Time	(hrs)	Casing (ft)		mater (II	1	Thin Wall Undisturb	Tub	3		Cored ( er of S	Linear ft)	19S		
				_	-	U	Split Spoo			DOMESTIC AND LOCATION AND LOCAT	ORING			IA-10	130
	_				-	1 6	Georgeba	0722500	* * C.	В.	ORLING	110.		ALK"AU	

### TEST BORING REPORT

BORING NO.
HA-103a

Page 3 of 3

							Page 3	3 of	
Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks	populari de la compania de la compa		
Ì		May 2000 100 100 100 100 100 100 100 100 10							
			S12	34.0		Loose gray fine sand SILT, some clay, organics, moist.			
35		3	312	34.0		ALLUVIUM			
00		3 4	12"/24"	36,0		ALLOVION		.,	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
		~#4/~							
			Ang and a company of the Archaette						
		2	S13	39.0		Loose gray silty fine to coarse SAND, trace ogranics, moist.			
40		2							
		4 4	23"/24"	40.0					
		*************							
	For any Laboratory of solving parameters designed	***************************************							
		2	S14	44.0		Loose gray brown fine to medium sandy SILT, little clay, organics	, moist.		
45		4 4							
		5	22"/24"	46.0					
		2	S15	49.0	PA-9000000000000000000000000000000000000	Same.			
50		3							
		3	22"/24"	51.0					
								~~~~	
		2 2	S16	54.0		Same.			
— 55 —		3	23"/24"	36.0					
			23 /24	50.0					
			S17	59.0		Same.			
60		2 2	31/	JJ.U					
		3	22"/24"	61.0					
							0		
		4	\$18	64.0		Medium dense gray brown fine to medium sandy SILT, little clay	organics, m	oist.	
65		4 7							
			22"/24"	66,0					
		***************************************							
				-	<b> </b>				
	*								
		7 70	\$19	69.0	/	Bottom of Exploration at 71.0 ft.			
70-		10	1			FILE NO. 70819-000 BORING NO.	),	HA-103	a
I		14	17"/24"	71.0			and the second s		

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### TEST BORING REPORT

BORING NO.
HA-104

ALDR	dCH_		11 1	DOT T		IT ACI TE			Page 1 of 2				
							FF 0. 2 *	ELLE NO. 20	Page 1 of 2				
PROJECT		PORT OF RO							VALENTINE				
LOCATIO		ROCHESTER		K				-	DEDRICK				
CLIENT		LABELLA AS		20			FIELD REP.   R. DEDRICK						
CONTRA	3	GEOLOGIC E	ENTERPRISE	25					3-Jun-00				
DRILLER		L. TODD						FINISHED 13	-Juli-00				
Elevation	254.2	5 ft Date			ring Location		ring Location Plan		In mag 1				
Item		Casing			Make & N		1E 55 - Truck Mount	The second secon	Drill Mud  Bentonite				
Туре		HSA	SS			☐ Tripod ☐ Geoprobe	✓ Cat-Head Winch	Hammer Typ					
Inside Dian		3-1/4	1-3/8			Geoprobe Air Track	Roller Bit	Dough					
Hammer W Hammer Fa					Skid		Cutting Hea	The second secon	Driven Spun				
Hammer Pa	Casing	Sampler	Sample		Stratum								
Depth (ft)	Blows per	0.000 (0.0	Number & Recovery	Sample Depth (ft)	Change (ft)		Visual Cla	ssification and Rema	arks				
-			Recovery		(17)		Mudline 19	0.0 ft below top of sea	wall.				
— º —													
						Sunk augers 4.0 ft	below mudline.						
1		WOR	SI	4.0		Very loose gray b	own silty coarse to f	fine SAND.					
_ 5 _		WOR											
		WOR	11"/24"	6,0									
	*****							ALLUVIUM					
1													
		*****			~								
		WOR	S2	9.0		Same as above.							
10		WOR											
		WOR	20"/24"	11.0									
	#1900000000							011.76					
E PART		1 3	S3	14.0		Loose gray brown	sandy fine to mediur	m SILT, organics, wet					
15		3											
		5	24"/24"	16.0									
1													
1													
1			61	100		Same as above.							
		3 5	S4	19.0		Same as above.	0						
— 20 —		5	350571	317									
		9	20"/24"	21.0	1								
		*****											
1	***********			-									
		2	S5	24.0		Same as above.							
25		2											
20		4 6	24"/24"	26.0	j								
	**********												
1													
				-									
1													
30													
			Level Data				nple ID	O	Summary ft) 31				
Date	Time	Elapsed Time	Bottom of Casing (ft)	Bottom of Boring (ft)	Water (ft	O Open End T Thin Wal		Overburden (Linear Rock Cored (Linear	ft)				
N 107 (39 N 2		(hrs)	Casing (II)	Doring (it)		U Undistur	oed Sample	Number of Samples	6S				
						S Split Spo G Geoprobe	on Sample	BORING NO.	HA-104				
			1		1	G Goophoon							

# TEST BORING REPORT

BORING NO.

HA-104
Page 2 of 2

Depth (ft) Casing Blows per ft	Sampler Blows per 6 in 2 2 4 5	Recovery	Sample Depth (ft)  29.0  31.0	Stratum Change (ft)	Visual Classification and Remarks  Loose gray fine to medium sandy SILT, organics, wet.  ALLUVIUM  Bottom of Exploration at 31.0 ft.
	2	S6 24"/24"	31.0		Loose gray fine to medium sandy SIL I, organics, wet.  ALLUVIUM  Bottom of Exploration at 31.0 ft.
	4	24"/24"	31.0		Bottom of Exploration at 31.0 ft.
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70		-	-		FILE NO. 70819-000 BORING NO. HA-104
		-			- The no.

### TEST BORING REPORT

BORING NO.

TILLI												Page	e 1	0	f 2
PRO VECT		DODE OF BO	CHECTER				_	TT 0. 4	EII E *	NO	70910			0	. 4
PROJECT		PORT OF RO	and the second second second second	NK.			H&A FILE NO. 70819-000 PROJECT MGR. M. VALENTINE								
LOCATIO	N	ROCHESTER	Maller VIII. 27 to 1 to 200 AV					_			-				
CLIENT	Santana S	LABELLA A		2000				-	D REP.		R. DE		, N	-	
CONTRA		GEOLOGIC I	ENTERPRIS	ES				_	E STAF		13-Ju			_	_
DRILLER	<u> </u>	L. TODD						DAT	E FINIS	SHED	13-Ju	n-00			
Elevation	253.9	6 ft Dat			ring Locati			ocation Plan							
Item		Casing			Make & M		-	Truck Mount				I	Drill M		-tre
Туре		HSA	SS		Truck	Tripod					er Type	_		Bento Polyn	
Inside Dian		3-1/4	1-3/8		ATV	Geoprobe	⊢⊢	Winch Roller Bit			Safety Doughnut			Polyn None	
Hammer W					Track Skid	☐ Air Track	ᅵ片	Cutting He	111	Casing	AND DESCRIPTION OF THE PERSON NAMED IN	-	riven	T	Spun
Hammer Fa	Casing	 Sampler	Sample		Stratum			Cunting Th		- maning					
Depth (ft)		Blows per 6	Number &	Sample Depth (ft)	Change			Visual C	lassificat	tion and	l Remarks				
1 + 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	ft	in	Recovery	(11)	(ft)			150 15 5	Analises 1	trans II	FC	11			
_ 0 _					-	-Sunk augers 3.0	t belov		viudline f	rom 10	p of Seawa	11	91 GHV		(Alexander of the Alexander
	TO THE PROPERTY OF THE PARTY OF			-											
								*****							
		WOR	SI	3.0		Very loose gray by	own ea	andy SILT	vet						
		WOR	31	3.0		Very loose gray brown sandy SILT, wet									
		WOR	(0053)						ALLU	VIUM					
<u> </u>		WOR	14"/24"	5,0											
		WASE	65	60		Very loose gray bi	own el	ilty coarse to	fine SA	ND wet					
		WOR	S2	6.0		very loose gray bi	OWII SI	my coarse to	IIIIC OA	. 1D, WC	-				
		WOR	1200520											Dept.	
		WOR	14"/24" S3	8.0		Same as above.									
	****	WOR													
		WOR	16"/24"	10.0											
— 10 —		- HOK		15.0											
					***************************************										
				-											
	***************************************														
									ď						
15				~											
_ 13		WOR WOR	S4	15.0		Loose gray brown	silty co	oarse to fine	SAND, v	vet.	W. D. C.	-			
		5													
		7	15"/24"	17.0			-								
		***************************************													
20		2	S5	20.0		Loose gray brown	sandy	SILT, organi	cs.						
		2	33	20.0		- Sout Bray Grown		, 0. 6011							
		7 7	24"/24"	22.0											
1		·	24 124	22.0											
								- Colombia							
									-						
<u> </u>		WOH	S6	25.0		Same as above.									
		2 5													
		7	20"/24"	27.0											
	SOUTH STATE														
20															
30		I	18				ple ID		Т		Sun	nmary			
		Water Elapsed Time	Level Data Bottom of	Bottom of		0 0 5 7	Rod		Overbu	ırden (L	inear ft)	32			
Date	Time	(hrs)	Casing (ft)		Water (ft)	T Thin Wall	Tube	anla.	Rock C	Cored (L	incar ft)	7S			
						U Undisturb S Split Spoo			THE R. P. LEWIS CO., LANSING	r of San	-	15	XX V	-105	
					-	G Georgobe	2000	#15T)	RG	RING	NO.		IIA.	-103	

### TEST BORING REPORT

BORING NO.
HA-105

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Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classificat	ion and Remarks
		1	S7	30.0		Loose gray brown sandy SILT, organics.	
		3 3				ALLU	VITIM
		6		32.0			
						Bottom of Explo	ration at 32.0 ft.
	Normal Areas						
- 35							
- 00							
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	Marie Park September						
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- 55							
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- 60-							
			***************************************				
		*		+			
			***************************************				
- 65			***************************************	-			
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_ 70							
- 70	- Marine Control					FILE NO. 70819-000	BORING NO. HA-105

## TEST BORING REPORT

BORING NO.
HA-106

Page 1 of 2

Type HSA SS NX   Truck   Import   California   California										_					_		ra to co		_	01	
Color   Colo	PROJECT	V	PORT OF RO	CHESTER													-				
Control Cont	LOCATIO	N	ROCHESTER	, NEW YO	ORK																
CONTRACTOR   COLORIS   C	CLIENT		LABELLA AS	SSOCIATE	ES							FIELD	REP	•		-		ICK			
DRILLER		CTOR	GEOLOGIC E	ENTERPRI	SES							DATE	STAI	RTEI	D	-	eta i como sono				
Elevation   250 79			L. TODD								- 10	DATE	FINI	SHE	D	1-Ju	ın-00				
Time			o e In .	C'.	. I	Boris	g Locatio	n	See Bo	ing	Location	on Plan									
Type		250,7			-			odel CME 55 - Truck Mount Drill Mud													
Insulate Diameter (in)   3-14   1-378   2			The state of the s	-	-			Tripod									te				
Hammer Weight (1b)		eter (in)					Statistics - 192			Ī		inch		[v	/ S	afety					ē
							5000 - 2 <u>1</u>			E	Ro	oller Bit		LĒ			ut	-		_	
Depth (i)   Depth (ii)   Depth (iii)   Depth (iiii)   Depth (iiii)   Depth (iiii)   Depth (iiii)   Depth (iiii)   Depth (iiii)   Depth (iiiii)   Depth (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii					CONTRACTOR OF THE	_		]			Cu	utting Hea	d	Casi	ing			Drive	n		Spun
Depth (n)   Hillows per   Horse per   Number & fin   Number & fi			Sampler		Sample De	nthl															
Augusted   S	Depth (ft)		277	NEW TRANSPORT	(ft)	•					V	ISUAL CIA	ssinca	tion	and I	cemar	NS				
August		ft	in	Recovery		+	(11)			_					_	_					
3   S1   0.5   Medium dense brown sity fine to coarse SAND, trace rock fragments, mys.	0		Augered											W							
			3	SI	0.5			Medium	dense bro	wn s	silty fin	e to coars	e SAN	D, so	me re	ock fra	gments	s, ary.			
S			4 7	11"718"		2.0														-	
S   7   12*724*   4.0   Medium dense black brown fine to coarse SAND, little silt, wet.								Medium dense red brown silty fine to coarse SAND, trace rock fragments, moist.													
12																					
12			7			4.0		N. F. Janes block brown fine to coorse CANIN little cilt wat													
10				S3	4.0			Medium	dense bla	rown ti	me to coar	ALLU	JVIU	M	iit, wet	•					
20	5																				
10						6.0		Same a	xcept very	den	ise				-						
31				54	0.0			Jame, C													
10			31	10020		9.0				7.0			-			-					·
10						8.0		Same.						-	-						
10			28												-					-	
10				6"/24"		10.0				-											
S	— 10 —	5 S6 10.0						Loose g	ray brown	fine	e to coa	rse SAND	, little	silt, v	vet.					901100	
15													-								
3   S7   12.0   Same, except trace rock fragments.						12.0					4-4	*****			-						
15			A CONTRACTOR OF THE PARTY OF TH					Same, c	xcept trace	roc	ck fragn	nents.				-				edir.	
15															ermer						
15			5			14.0		Madin	dense :	v la	rown fi	ne to coar	se SAN	ID IS	ttle	ilt, wet					
15				S8	14.0			Mediun	i delise già	y 01	. Own III		- Uni	-, 11		,					
2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same and SILT, little clay, moist.  2 SIO 24.0 Same and SIO Same	— 15 —		14			16.8										110000					
2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same except very loose.  3 Same except very loose.  3 Same except very loose.  5 Same except very loose.  6 Same except very loose.  7 Sample ID Summary  8 Summary  8 Sample ID Overburden (Linear ft) 41  Thin Wall Tube Rock Cored (Linear ft) 41  Thin Wall Tube Rock Cored (Linear ft) - Number of Samples 13S			14	11"/24"		16.0							-								
2 SI0 24.0 Same, except very loose.  2 SI0 24.0 Same, except very loose.  2 SI0 24.0 Same, except very loose.  1 SI1 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Bottom of (hrs) Casing (ft) Boring (ft) Undisturbed Sample Mumber of Samples 138																					
2 SI0 24.0 Same, except very loose.  2 SI0 24.0 Same, except very loose.  2 SI0 24.0 Same, except very loose.  1 SI1 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Bottom of (hrs) Casing (ft) Boring (ft) Undisturbed Sample Mumber of Samples 138						-								-							
2 SI0 24.0 Same, except very loose.  2 SI0 24.0 Same, except very loose.  2 SI0 24.0 Same, except very loose.  1 SI1 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Bottom of (hrs) Casing (ft) Boring (ft) Undisturbed Sample Mumber of Samples 138																			enise.		1100010
2 S10 24.0 Same, except very loose.  2 S10 24.0 Same, except very loose.  2 S10 24.0 Same, except very loose.  1 S11 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Bottom of (hrs) Casing (ft) Boring (ft) Undisturbed Sample Mumber of Samples 138				60	100			Loose	ray fine se	ind s	SILT. I	ittle clay	moist.			TOTAL S					
2 SIO 24.0 Same, except very loose.  2 SIO 24.0 Same, except very loose.  2 15"/24" 26.0  1 SII 29.0 Loose gray brown fine to medium sand SILT, little clay, organics, moist.  2 17"/24" 3I.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time Bottom of (hrs) Casing (ft) Casing (ft) Boring (ft) Water (ft) U Undisturbed Sample Number of Samples 13S	20		3	39	15.0	-		20000							7/5						
2 S10 24.0 Same, except very loose.  2 S10 24.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  30 Sample ID Summary  Water Level Data  Water Level Data  Bottom of (hrs) Casing (ft) Boring (ft)  Water (ft) Undisturbed Sample Number of Samples 13S	Z0			21175711		210				-			-		-						
2 2 4 15"/24" 26.0  1 S11 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  2 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Bottom of (hrs) Casing (ft) Water (ft) U Undisturbed Sample Number of Samples 13S			2	3"/24"		21.0															
2   2   3   3   15"/24"   26.0   2   2   2   2   2   2   2   2   2											30000				-			-	-	-	
2   2   3   3   15"/24"   26.0   2   2   2   2   2   2   2   2   2																					
2 2 4 15"/24" 26.0  1 S11 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  2 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Bottom of (hrs) Casing (ft) Water (ft) U Undisturbed Sample Number of Samples 13S	1														11/15						
2   2   3   3   15"/24"   26.0   2   2   2   2   2   2   2   2   2	1		2	810	24.0			Same	except very	loc	ose.			-					-		-
4 13"/24" 26.0  1 S11 29.0 Loose gray brown fine to medium sand SfLT, little clay, organics, moist.  2 3 17"/24" 31.0  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Boring (ft)  Elapsed Time (hrs) Casing (ft) Boring (ft)  Water (ft) Thin Wall Tube U Undisturbed Sample Number of Samples 13S	25		2	310	21.0					-115											*
Time   S11   S12   S13   S15   Summary      S1	L 72 -			1317571		26.0								-							
2 3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Boring (ft) Water (ft) Boring (ft) Undisturbed Sample Number of Samples 13S	1			13 /24		20,0															
2 3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Boring (ft) Water (ft) Boring (ft) Undisturbed Sample Number of Samples 13S	1						-								2000						
2 3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Boring (ft) Water (ft) Boring (ft) Undisturbed Sample Number of Samples 13S																					
2 3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Boring (ft) Water (ft) Boring (ft) Undisturbed Sample Number of Samples 13S	1																				-
2 3 17"/24" 31.0 Sample ID Summary  Water Level Data  Date Time Elapsed Time (hrs) Casing (ft) Boring (ft) Water (ft) Boring (ft) Undisturbed Sample Number of Samples 13S	1			SII	29.0			Loose	gray brown	fin	ne to me	edium sand	SILT	, little	e clay	y, organ	nics, m	oist.			
Water Level Data  Date Time    Casing (ft)	30					87.5								1,200	-						
Date Time Elapsed Time (hrs) Casing (ft) Bortom of Character (hrs) Casing (ft) Boring (ft) Water (ft) Undisturbed Sample Overburden (Linear ft) 41  Time Character Data of Coverburden (Linear ft) 41  Thin Wall Tube Undisturbed Sample Number of Samples 138	50.					31.0			Sar	nple	e ID						Summ	ary			
(hrs) Casing (ft) Boring (ft) Undisturbed Sample Number of Samples 13S		ans.		e Bottom	of Bottom		Water (ft		Open End	Ro	od						4	1			
	Date	Time	(hrs)	Casing (	(ft) Boring	(ft)	ci (ii	1 .				,									
				-									-	_				ACCRECATE VALUE OF THE PARTY OF	[A-]	106	

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HA-106

							Page	2		_
epth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks				_
										-
ŀ									VIII	
			·-··					****		_
ľ		2	S12	34.0		Loose gray brown fine to medium sand SILT, little clay, organics,	moist,			
35		3				ALLUVIUM				
	*******	4	20"/24"	36.0						-
										-
Ì										-
1										_
		1	S13	39.0		Same.	-	-		-
40-		2	- 015	37.0						_
140		3 4	22"/24"	41.0					- CHI	-
			22 (2)			Bottom of Exploration at 41.0 ft.				_
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### TEST BORING REPORT

BORING NO. HA-107

ALDI	исп		11.1			III 101 IV		M.	-	1 0 7				
									Page	1 of 2				
PROJECT	•	PORT OF RO	CHESTER				H&A	FILE NO.	70819-000					
LOCATIO	N	ROCHESTER	, NEW YOR	K			PRO	PROJECT MGR. M. VALENTINE						
CLIENT		LABELLA AS	SSOCIATES				FIEL	D REP.	R. DEDRICK					
CONTRA	CTOR	GEOLOGIC E	ENTERPRISE	S			DAT	E STARTED	26-May-00					
DRILLER		L. TODD					DAT	E FINISHED	26-May-00					
			a.	T,		Can Da	ring Location Plan							
Elevation	266.0				Boring Location		5 - Truck Mount		Dri	ill Mud				
Item		Casing HSA	Sampler Co		✓ Truck	Tripod	Cat-Head	Hammer '		Bentonite				
Type Inside Dian	raton (in)	3-1/4	1-3/8			Geoprobe	Winch	✓ Sai		Polymer				
Hammer W	- ' '	3-1/4	140		Track	Air Track	Roller Bit		ughnut	The second second				
Hammer Fa			30		Skid	<u> </u>	Cutting H	ead Casing	Dri	ven Spun				
Timminet 1	Casing	Sampler	Sample	Sample Dep	Stratum									
Depth (ft)			Number &	(ft)	Change		Visual C	lassification and Re	marks					
	ft	in	Recovery	()	(ft)									
_ 0					0.5			ASPHALT						
		5	SI	0.5	- 0.3	Medium dense bla	ck brown fine to co	arse SAND, some gr	ravel, dry.					
		21	7"718"		2.0			FILL						
		13	S2	2.0		Medium dense bro	wn fine to coarse S	AND, damp.						
		18												
		14	16"/24"		1.0									
		-3	S3	4.0		Dense brown black	fine to coarse SA	ND, little silt, brick,	damp.					
5		22 22												
		30	17"/24"		5.0									
		11	S4	6.0		Same, except med	um dense.							
		14												
		12	20"/24"		3.0	Madium dense bro	own orange fine to	coarse SAND, moist.						
		4 6	S5	8.0		Wiedfulli delise ore	wir orange tine to t	oarse of trop, moisi.						
		6												
10		/	18"/24"	10	0.0									
						a. Darker meetite								
			***************************************	13.0	13.0 —	V	fine and SILT ter	ce to little clay, trace	a organice mois					
		1 2	S6	13.0		Loose brown gray	ime sand SIL1, ita	ice to fittle cray, tract	s organics, mors					
		3												
<u> </u>		3	21"/24"	1.	5.0			ALLUVIUM						
			68	100		Same.								
		2 3	S7	18.0		Same.								
		4	~~~~~											
20		3	24"/24"	2	0.0									
										STATE OF THE STATE				
			CD	22.0	- 23.0 -	Very dependence or av la	rown silty SAND	some gravel. Pocket	s of brown fine	to coarse				
1		7 35	S8	23.0		SAND, wet.	TOWN SHEY SAIND,							
1		37						GLACIAL TILL						
25		21	22"/24"	2	5.0									
1														
1														
		100	CO	200	•	Same.								
		22 24	\$9	28.0		Gaine.								
		26	- WANTED THE		~~									
30		26	20"/24"	3	0.0									
			Level Data				iple ID		Summary					
Date	Time	Elapsed Time		Bottom o		O Open End T Thin Wall		Overburden (Line Rock Cored (Line						
26-May		(hrs) 0.5	Casing (ft)	Boring (f	18	I I I I I I I I I I I I I I I I I I I	ed Sample	Number of Sampl						
20-iviay	1	0,5				S Split Spoo		BORING NO		HA-107				

## TEST BORING REPORT

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epth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
			010	22.0		Very dense gray brown fine silty sand, little gravel, wet.
		15 39	\$10	33.0		
		41 40	19"/24"	35.0		GLACIAL TILL
35			19724	33.0		
	III. SOLINO, ACCO					
		16	S11	38.0		Same.
		26				
- 40		43	17"/24"	40.0		
		25	S12	43.0		Very dense gray brown fine sandy SILT, trace clay, little gravel, wet.
		65 100/.4		-		
		100/.4	16"/17"	44.4		
45						
		24	S13 11"/12"	48.0		Same, except pocket of red brown fine to coarse SAND, some rock fragments, wet.
		100/.5	11712	42.0	49.0 -	Began Rock Coring at 49.0 ft.
- 50-						
						Competent red sandstone with interbedded gray sandstone.
					-	Competent rea sanasione with interocuded gray sandstone.
					54.0 -	Bottom of Exploration at 54.0 ft.
_ 55-						
				-		
- 60-						
	1				-	
					-	
			-		-	
_ 65_						
<b>—</b> 65 <b>—</b>						
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65						

## CORE BORING REPORT

		Page 1 of 1														
PROJEC	Г	PORT OF	ROCHES	ΓER			H&A FILE NO. 70819-000 PROJECT MGR. M. VALENTINE									
LOCATIO		ROCHEST									PROJ	ECT M	IGR.	M. VALI	ENTINE	
CLIENT		LABELLA									- FIELI	D REP.		R. DEDR		
CONTRA		GEOLOGI									DATE			26-May-0	00	
DRILLER		L. TODD									DATE			26-May-0		
		-			-											=
Elevation			Datum			oring	Location ake & Mod	1-1		_					Drill Mud	_
Item		Casing	Samp		-	_			ripod	1	Cat-Head		Hamme	or Tyne	Bentonite	
Type Inside Diar		HAS 3-1/4	SS 1-3/	_		_		- T	eoprobe		Winch		_	Safety	Polymer	8
Hammer V		3-1/4	140			-	rack [	_	ir Track	H	Roller Bit	_	- London	Doughnut	✓ None	
Hammer F			30		The state of the s	-	kid [	ī _		$\Box$	Cutting Hea	ad	Casing			pun
	Drilling		-	very			Stratum					6)				
Depth (ft)	Rate	Core No.		QD .	Weatherin	ng	Change				Visual Cla	assificat	tion and	Remarks		
	(min/ft)	Depth (ft)	(in)	(%)			(ft)									
		49.5						0-2 ft.	Highly fractu	ired.		-				
	Avg. 4 ft.		1.9/5.0	38				Comp	etent red sand	stone	with interbed	ded gray	v sandsto	one.		
	per		1.7/5.0					Comp								
	minute					-					QUEEN	STONE	FORM	ATION		
	miliate															
5		54.5														
					• • • • • • • • • • • • • • • • • • • •											
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13																
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20																-
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					-					SOLIOS						
															A) - 11 (10 - 2 - 11 - 11 - 11 - 11 - 11 - 11 - 1	
20																
- 30																
		V	Vater Leve	Data					Samp	le ID				Summa	ry	
Date	Time	Elapsed Ti	me Bott	om of B	ottom of Bor	ing	Water (ft)	O	Onen End E	hos		Overbu Rock C	rden (Lin	near ft)		
	1,444,550	(hrs)	Casi	ng (ft)	(ft)	+	100	U	Thin Wall 7 Undisturbed	d Samp	ple	Sample		— —		
								S	Split Spoon	Samp	le		RING N	io.	HA-107	

BORING NO.

TEST BORING REPORT HA-109 1 of 1 Page H&A FILE NO. 70819-000 PROJECT PORT OF ROCHESTER M. VALENTINE PROJECT MGR. ROCHESTER, NEW YORK LOCATION R. DEDRICK FIELD REP. LABELLA ASSOCIATES CLIENT DATE STARTED 12-Jun-00 GEOLOGIC ENTERPRISES CONTRACTOR 12-Jun-00 DATE FINISHED DRILLER L. TODD See Boring Location Plan **Boring Location** Elevation 251.78 ft Datum City Drill Mud CME 55 - Truck Mount Sampler | Core Barrel | Rig Make & Model Item Casing Bentonite ✓ Truck Tripod Hammer Type Cat-Head NX HSA SS Type √ Safety Polymer Geoprobe Winch ☐ ATV 3-1/4 1-3/8 Inside Diameter (in) 4 None Air Track Roller Bit Doughnut Track Hammer Weight (lb) 140 Spun Driven Skid Cutting Head Casing Hammer Fall (in) 30 Sampler Sample Stratum Casing Sample Depth Visual Classification and Remarks Change Number & Depth (ft) Blows pe Blows per 6 (ft) in Recovery Medium dense brown black gray silty coarse to fine SAND, some gravel, ash, 10 2.0 17"/24" Same. 2.0 Medium dense brown silty coarse to fine SAND, dry. 4.0 14"/24" Medium dense brown black silty coarse to fine SAND, moist. 4.0 S3 10 ALLUVIUM 10 17"/24" 6.0 Very loose gray brown fine sandy SILT, little clay, organics, moist. **S4** 9.0 10 . 15"/24" 11.0 Very loose, gray brown silty medium to fine SAND, organics, moist. **S5** 14.0 15 . 16.0 16"/24" Same. \$6 19.0 20 -20"/24" 21.0 24.0 Same. **S7** 25.0 25 Very dense red silty fine to coarse SAND, dry. 16"/24" 26.0 DISINTEGRATED RED SANDSTONE Same, except some rock fragment. 100/.3 4"/4" Bottom of Exploration at 27.9 ft. 27.8 Auger Refusal. 30 Sample ID Summary Water Level Data Overburden (Linear ft) 27.8 Open End Rod Bottom of Elapsed Time Bottom of Water (ft) Time Date Thin Wall Tube Rock Cored (Linear ft) Boring (ft) T Casing (ft) (hrs) 88 Undisturbed Sample Number of Samples U Split Spoon Sample Geoprobe HA-109

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BORING NO.

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BORING NO.

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										Page	1 of 1
PROJECT		PORT OF RO	CHESTER				Н&/	A FILE NO.	70819-	000	
LOCATIO	ON	ROCHESTER	R, NEW YOR	K			PRC	JECT MGR.	M. VA	LENTINE	3
CLIENT		LABELLA A	SSOCIATES				FIE	LD REP.	R. DEI	DRICK	
CONTRA	CTOR	GEOLOGIC I	ENTERPRISE	ES			DAT	TE STARTED	12-Jun	-00	
DRILLER	1	L. TODD					DA7	TE FINISHED	12-Jun	-00	
Elevation	252.7	78 ft Dat	tum City	I	Boring Location	on See Bo	ring Location Plan	n			
Item	272.	Casing			Rig Make & N		5 - Truck Mount			Drill M	Iud
Туре		HSA	SS	NX	✓ Truck	Tripod	✓ Cat-Head				Bentonite
Inside Diam	neter (in)	3-1/4	1-3/8	2	☐ ATV	Geoprobe	☐ Winch	✓ S			Polymer
Hammer W				(注:)。	Track	Air Track	Roller Bi		oughnut	□ □	None Spun
Hammer Fa	all (in) Casing	 Sampler	30 Sample	學室際關聯	Skid Stratum		Cutting F	lead Casing		Driven	зрип
Depth (ft)	Blows per		Number &	Sample Dep	Change		Visual (	Classification and F	Remarks		
	ft	in	Recovery	(ft)	(ft)						
_ 0		22	SI	0.0		Very dense gray br	own silty fine to c	coarse SAND, some	gravel, dry	v.	
		30	- 31	0.0		very dense gray or		FILL	Bruter, and		
		27	11"/24"		2.0						
		7	S2	2.0	2.0		wn black silty find	to coarse SAND, tr	race gravel	, trace	
		7 6				organics, moist.					
		6			4.0			***************************************			
100		3	S3	4.0		Loose gray black g	ravelly SAND, sla	ig, wet.			
— 5 —		3									
		3	3"/24" S4	6.0	6.0 6.0	Very loose gray sil	ty fine SAND, org	ganics, moist.			
		2						ALLUVIUM			
		2 3	13"/24"		8.0				15-00-01-0		
		I	S5	8.0		Same, except wet.					
		1									
10		2	10"/24"	1	0.0						
			************								
	***********										
		1	S6	14.0		Very loose gray sil	ty coarse to fine S	AND, organics, wet	i.		
— 15 —		2									
			12"/24"	1	6.0						
	-							· · · · · · · · · · · · · · · · · · ·			
					19.0						
		100/.2	S7	19.0	19.0	Very dense red silt			e water		
20			3"/3"	19.3				ATHERED BEDRO tom of Boring at 20.			
						Auger Refusal					
					-						
											Charles and the second
25							•				
			***************************************								
			***************************************								
30											
			Level Data				ple ID		Sumi		
Date	Time	Elapsed Time	Bottom of	Bottom o	I Water (III)	O Open End	Rod	Overburden (Line Rock Cored (Line	earft)	20	
		(hrs)	Casing (ft)	Boring (f	()	U Undisturbe	d Sample	Number of Samp		7S	
						S Split Spoor		BORING NO		HA	-110

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BORING NO.
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										Pa	ge 1 of 3					
PROJECT		PORT OF RO	CHESTER					H&A FILE	NO.	70819-000	)					
LOCATIO		ROCHESTER		K				PROJECT	MGR.	M. VALE	NTINE					
CLIENT	11	LABELLA AS						FIELD RE	P.	R. DEDRI	CK					
CONTRAC		GEOLOGIC I						DATE STA		23-May-0	0					
DRILLER	1	L. TODD	Land Ido					DATE FIN		23-May-0						
								-								
Elevation	251.8		-		oring Location			cation Plan ck Mount			Drill Mud					
Item		Casing			Truck	Tripod	3 - 11u	Cat-Head	Hammer	Туре	Bentonite					
Type	ator (I-)	HSA 3-1/4	SS 1-3/8	0.1010	ATV	Geoprobe	H	Winch		afety	Polymer					
Inside Diam Hammer W		3-1/4			Track	Air Track	Ħ	Roller Bit	_	Doughnut	✓ None					
Hammer V			30		Skid	<u> </u>		Cutting Head	Casing	The second second second	Driven Spun					
	Casing	Sampler	Sample	Sample Dept	Stratum				The state of							
Depth (ft)	7.200	Blows per 6	Number &	(ft)	Change	1		Visual Classific	ation and I	Kemarks						
	ft	in	Recovery	1.5	(ft)											
— 0 —			No sample		0.5_		Contraction to		PHALT	,						
		3	SI	1.0	1.0 —	Loose gray brown	silty fin	CRUSH ne to coarse SAND	ED STONE	olack fine to co	parse					
		3	5"/12"	2.	0	SAND, dry.										
		5	S2	2.0		Medium dense gra	y brown	n fine to coarse SA	ND, little si FILL	it, wet.						
		6 7														
		6	8"/24"	4.	0	Medium dense gra	v brown	n green (mottled) e	ilty fine to	oarse SAND	some fine					
		9	S3	4.0		gravel, wood, mois	t. Wat	er in borehole at 3.	9 ft.							
<u> </u>		19	1500576	6.	0											
		19	12"/24" S4	6.0		Dense gray brown gravelly SAND, wet. Rock Obstruction in shoe.										
		19	*********													
		27	16"/24"	8	0											
		21	S5	8.0		Very dense gray b	own fir	ne to coarse SAND	, some fine	gravel, wet.						
		24 26														
10		25	20"/24"	10	10.0 —	Madium dessa	y brew	n fine to coarse SA	ND		¥					
		10	S6	10.0		iviedium dense gra	y orowi									
		14			×			ALI	LUVIUM							
		19	17"/24"	12	0											
	-					<b> </b>										
<u> </u>		4	S7	15.0		Loose gray brown	fine to	coarse SAND, son	ne fine to co	arse gravel, m	oist.					
		6														
		3	14"/24"	17	0											
								***************************************								
1											MATERIAL MAT					
20								COL		intentions to	oile moist					
Z0			S8	20.0	-	Very loose gray b	own fir	ne sand SILT, woo	d, natural la	minations in s	ons, moist.					
1		2														
I		2	18"/24"	22	.0											
1																
						-	-		0							
-																
25		-	S9	25.0		Very loose gray h	rown fi	ne sand SILT, little	clay, wood							
		1		25.0		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
			24"/24"	27	0											
			24 724	2.1												
1		***************************************		-												
		***************************************														
— 30 —																
			Level Data	Bottom of		O Open End	ple ID Rod	Ove	rburden (Lir	Summa near ft) 58						
Date	Time	Elapsed Time (hrs)	Bottom of Casing (ft)	2 77576 YO 1930W		T Thin Wall	Tube	Roc	k Cored (Lin	near ft) 5						
23-May	10	0.75		, , , , , , , , , , , , , , , , , , ,	3.9	U Undisturb			iber of Sam	Common Taxan						
						S Split Spoo	n samp	pie	BORING N	IO.	HA-111					

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Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		2	S10	30.0		Very loose gray brown fine sand SILT, little clay, root structures, wood, moist.
		2 3	24"/24"	32.0		
			24 724	52.0		ALLUVIUM
						ADDITION
			-10-10-10-10-10-10-10-10-10-10-10-10-10-			
<b>-</b> 35		2 2	S11	35,0		Same, except some clay.
		2 2	24"/24"	37.0		
			24 724	37.0		
- 40		2	S12	40.0		Very loose gray-green fine sand SILT, root structures, red fine to coarse sand in shoe, moist.
		2 6	24"/24"	42.0		SHOOT, HOLDS.
			24 724	42.0	. 42.0 —	
						GLACIAL TILL
<b>→</b> 45 <b></b>		70 33	S13	45.0		Dense red brown SILT, little clay, gray green fractured sandstone.
		8 12	16"/24"	47.0	- 46.0 —	
			10 724	47.0		
		***************************************				
50		100/.2				No Recovery.
55		100/.2	S14 2"/3"	55.0	- 55.0 -	Very dense red, brown fractured sandstone, red brown silt, wet.
						WEATHERED BEDROCK
	***************************************					
						Auger Refusal at 58.5 ft.; began rock coring.
<b>—</b> 60 <b>—</b>						
	According to the control of					
<b>—</b> 65 <b>—</b>						
<del> 70</del>						FILE NO. 70819-000 BORING NO. HA-111



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epth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
						Competent red sandstone with interbedded gray sandstone.
						QUEENSTON FORMATION
						2000.0.0.0.0
						Bottom of Exploration at 63.5 ft.
→ 65 <b>—</b>	-					Manual installed in religious therebole. See Installation Report
						Monitoring well installed in adjacent borehole. See Installation Report for LBA-MWI
- 70						
. 70						
				***************************************		
	<del></del>					
75						
80-						
- 85						
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<del></del> 90						
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#### CORE BORING REPORT

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PROJECT	Γ .	PORT OF	ROCHESTI	ER .						H&A FI			70819-0		1000	
LOCATIO	ON	ROCHEST	ER, NEW	YORK						PROJE	CT MC	GR.	M. VAL		E	
CLIENT		LABELLA	ASSOCIA	TES						FIELD	REP.		R. DEDI			
CONTRA		GEOLOGI					- E			DATE S	START	ED	23-May-	00		
DRILLER		L. TODD								DATE F	FINISH	IED	23-May-	00		
			D .		T <sub>e</sub>	olas Y	die-									
Elevation			Datum		Barrel Ri	ring Loca g Make &	Mod	el				_		Drill	Mud	
tem		Casing	Sample		NX [			Tripod	V	Cat-Head	Тн	Iamm	er Type		Bento	onite
Type Inside Dian	notor (i)	HAS 3-1/4	1-3/8		2		Ĺ	THE STREET		Winch	-		Safety	1 🗇	Polyr	
Hammer W		3-1/4	140	40000		Section .	Ē		i	Roller Bit			Doughnut	V	None	
Hammer F			30	Tel Service			Ī			Cutting Head	ı c	asing		Drive	n [	Spun
	Drilling		Recov	ery		Strati				FORE RESERVE	(2.5c × 35		000.0			
Depth (ft)	Rate	Core No.	RQ	D	Weatherin					Visual Class	sificatio	n and	Remarks			
	(min/ft)	Depth (ft)	(in)	(%)		(ft)	'								_	
	5	58.5														
			-					Competent red sand	stone	with interbedde	ed gray s	sandst	one.			
	5									QUEENS	TONE F	ORM	ATION			
	3															
	4						was.		-							
5	5	63.5														
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			Vater Level					Sam	ple ID		Oue-I	da- /I	Summ	ary		
Date	Time	Elapsed T	1000	200000000000000000000000000000000000000	ottom of Bori (ft)	Water	r (ft)	O Open End T Thin Wall	Tube	F	Overbure Rock Co	red (li	near ft) -			
2000000		(hrs)	Casin	K (11)	(11)			U Undisturbe	d Sam	iple S	Samples		-			
								S Split Spoo	n sam	pid	BOR	RING	NO.	H	IA-111	
		1								-						

## TEST BORING REPORT

BORING NO.

	The second second											Ī	age	1 of	2
PROJECT		PORT OF ROO	CHESTER						H&A	FILE	VO.	70819-0	000		
LOCATIO	Sec. 118	ROCHESTER,		RK					PROJ	ECT N	IGR.	M. VAI	ENTINI	3	
CLIENT		LABELLA AS							- FIELI	REP		R. DED	RICK	-540-	
CONTRAC	CTOD	GEOLOGIC E							DATE	STAI	RTED	9-Jun-0	0		
	termine .	L. TODD	NIEKIKIS	Lo					- DATE			9-Jun-0	0		
DRILLER					and W										-
Elevation	260.8			-		g Location			ocation Plan uck Mount				Drill N	Aud	-
Item		-		COLC DILL.	√ Tr		Tripod	7			Hamm	er Type	П	Bentonite	c
Туре		HSA	SS 1-3/8	NX 2	☐ A7	7.007.000	Geoprobe	Ï	Winch			Safety	一 一	Polymer	
Inside Diam Hammer W		3-1/4		L. ALLE	Tr		Air Track		Roller Bit			Doughnut	V	None	
Hammer Va		-		CONTRACTOR	_	cid [	<u> </u>		Cutting He	ad	Casing		Driver		Spun
TIMILINE Y	Casing	Sampler	Sample	Sample De	nthl	Stratum						· n			
Depth (ft)	Commence of the Commence of th	Secretaria de la Contraction d	Number &	(ft)		Change			Visual Cla	assifica	tion and	Remarks			
	ft	in	Recovery	8000	-	(ft)		_							
_ 0 _		3	SI	0.0					C		DSTON	NÉ			
		4				1.0	oose brown silty	ine to	coarse SANI		LL			_	-
		4 3	14"724"		2.0										
		3	S2	2.0		I	Loose brown silty	fine to	coarse SANI	), trace	clay, trad	ce organics, r	noist.		
		3 3								ALL	, 110W				
1	0.000,000,000,000	3	18"/24"		4.0			[a-							
41		3	S3	4.0			Same, except very	loose							
_ 5 _		2												100	
		3	18"724"		6.0										
			****												
			***												
							Medium dense bro	oun fi	na candy SII T	come	clay noc	kets moist			
		5	S4	9.0			viedium dense bio	WII II	ne sandy STET	, some	ciay poc	Kets, morst.			
— 10 —		6													
		6	17"/24"		11.0										
															-
				1140			Loose gray brown	fine s	andy SILT sc	me clay	nockets	s moist.			
30		2 2	S5	14.0			Loose gray brown	11110	andy one ry		1				
— 15 —		3			17.0										
		5	20"/24"		16.0										
															-
1		2	\$6	19.0	-	19.0	Loose gray brown	silty	coarse to fine	SAND,	some gr	avel, moist.			
20		4	50							GLAC	IAL TIL	L			-
20 —	1	5 6	12"/24"		21.0										
1			12 /24		20										
1															
I	~~~	3	S7	24.0	-		Loose gray brown	silty	fine to coarse	SAND,	some gr	avel, little cl	ay, wet.		
25		5													
		4 5	24"/24"		26.0										
1															
1					-										
1															1000
1															
1															
30		-			-										
			Level Data					nple l					mary		
Date	Time	Elapsed Time	Bottom o	Control of the Contro		Water (ft)	O Open End T Thin Wal					Linear ft) Linear ft)	41		
	-	(hrs)	Casing (f	t) Boring	(11)		U Undisturb	ed Sa	ample		ber of Sa		108		
	_						S Split Spo	on Sa	mple	I	ORING	NO.	H	A-112	

### TEST BORING REPORT

BORING NO.
HA-112

Page 2 of 2

epth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classificati	on and Remarks
		16	S8	30,0		Medium dense gray brown silty fine to coarse SA	AND, some gravel, little clay,
		19 21	23"/24"	32.0		wet.	
			23 724	32.0			
35		35 46	S9	35.0		Same, except very dense	
-	*******	46	***************************************				
		62	24"/24"	37.0			
	Aug 1007 - 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
		44 46	S10	39.0		Same.	
40	******	66	A-1011 (S-101111)				
		100/.3	24"/24"	41.0		Bottom of Explor	ration at 41.0 ft.
45							
. 50							
	A STATE OF THE SALE						
- 55							
							Example 1
			***************************************				
60							
	***************************************						
65-	el Annual parties pi						
- 03							
			72				
→ 70 <del></del>						FILE NO. 70819-000	BORING NO. HA-112

BORING NO.

									****	NO	70010 000	
PROJECT		PORT OF RO	5 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					_	H&A FILE	in the second second	70819-000	
LOCATIO		ROCHESTER							PROJECT I	. 0	M. VALE	
CLIENT		LABELLA AS		-					FIELD REP		R. DEDRI	ICK
CONTRA	CTOR	GEOLOGIC I	ENTERPRI	ISES					DATE STAI	Y61145-00-00	7-Jun-00	
DRILLER	1	L. TODD							DATE FINI	SHED	8-Jun-00	
Elevation	270.8	g ft Dat	tum (	City		ing Locatio		MARKET BEFORE	cation Plan			
Item		Casing			Rig	Make & M	lodel CME 5		ck Mount	Ter		Drill Mud
Туре	1	HSA	SS	NX		Truck [	☐ Tripod		Cat-Head	Hammer T	-	Bentonite Polymer
Inside Diam		3-1/4	1-3/8	2	1		Geoprobe Air Track		Winch Roller Bit	✓ Saf	ety ughnut	☐ Polymer  ✓ None
Hammer W			140	1000000000000000000000000000000000000		Track [ Skid [	☐ Air i rack		Roller Bit Cutting Head	Casing		Driven Spun
Hammer Fa	all (in)  Casing	Sampler	30 Sample	N. G. Walter	-	Stratum			rivau	1		
Depth (ft)	The Control of the Co	Blows per 6	Number & Recovery	& Sample Do	epth	Change (ft)			Visual Classifica	ation and Re	marks	
_ 0 _				0.0	$\exists$		Loose brown silty f	ine S A	ND, organics des			
N 10 10 10 10 10 10 10 10 10 10 10 10 10		2	SI	0.0			Source or Own Silly I	oA	, o. Buntos, dry.		***********	
1 1		3 3	16"/24"		2.0			-				
1		3	16"/24" S2	2.0	2.0		Very loose brown r	ed silty	y fine to coarse SAN	ID, little rock	fragments,	slag, dry.
		2							Nee - A HE SAN TO THE SAN THE	TICL		
		2 2	14"724"		4.0				r			
		3	No	4.0			No Recovery					
5		4	Recovery	У								
		7	2"/24"	60	6.0		Loose brown red at	tv fire	to coarse SAND, fi	ttle rock free	ments slag	, dry.
1 '		5	S3	6.0	_		Loose brown rea si	unc	POMISO DAND, II	I VVN II d)	, orng	
		4	15"/24"		8.0							
1		4	S4	8.0			Same.	manufacture of				
		100/.4	4"/24"		8.9				Ohetmet	ion at 8.3 ft.	CONTRACTOR OF THE PARTY OF THE	AND AND ADDRESS OF THE PARTY OF
									Costruct	at 0.3 II.		
<u> </u>					-		Note: Moved 4.0	1.10.00	outh. Blind augered	to 10.0 ft av	id hit anger	refusal again.
							Moved agai	n 10.0	ft. south of second	boring. See	Boring HA-	113a.
1												
1												
								-				
15												
					-							
	***********											
20					******			-				
								1177				
						**********						
25												
1												***************************************
								-				
1												
1												
30												
		Water	Level Data					ple ID			Summa	ry
Date	Time	Elapsed Time	e Bottom	of Bottom	of	Water (ft)	O Open End			burden (Line Cored (Line	arft) 27	.0 ft.
Date		(hrs)	Casing (	ft) Boring	(ft)		U Undisturbe	ed Sam	ple Numi	ber of Sample		
	+		_				S Split Spoo		- Continues of the Cont	ORING NO		HA-113

BORING NO. HA-113a

35.00									Pag	ge 2 of 2
PROJECT	,	PORT OF RO	CHESTER				Н&.	A FILE NO.	70819-000	)
LOCATIO		ROCHESTER	Le ne de la section de la sect	RK			PRO	DJECT MGR.	M. VALE	NTINE
CLIENT		LABELLA A						LD REP.	R. DEDRI	
CONTRA	CTOP	GEOLOGIC I	Victoria de la Constitución de l				Table 1	TE STARTED	7-Jun-00	
DRILLER		L. TODD	LIVI EKT KIS	LU				TE FINISHED	8-Jun-00	
DRILLER	•									
Elevation	270,			The second second	ring Location	William Committee on the Committee of th	ring Location Pla	n		Drill Mud
Item		Casing		0010 0111101	g Make & N	PROPERTY SECTION	5 - Truck Mount  Cat-Hea	d III.	er Type	Bentonite
Туре		HSA	SS			☐ Tripod ☐ Geoprobe	Cat-Hea		Safety	Polymer
Inside Diam		3-1/4	1-3/8		ATV Track	Air Track	Roller B		Doughnut	None
Hammer W			30	No. State C	Skid		Cutting			Driven Spun
Hammer Fa	Casing	Sampler	Sample		Chuntum	I				
Depth (ft)	Blows per		Number &	Sample Depth	Change	I	Visual	Classification and	l Remarks	
	ft	in	Recovery	(ft)	(ft)					
_ 0 _										
							(E	Slind augered to 10 See Boring HA-1		
						******		See Botting FIA-1		
				-						
				-						
5										
10			0.5	10.0		Loose brown rad a	ilty fine to coarse	SAND, little rock	fragments slag	, moist.
		1 2	S5	10.0	-	Loose brown red s	nty mie to coarse		gc.ms, stag	
		3						FILL		
		3	3"/24"	12.9						
				-						
								***************************************		
15			82	150		(Slag obstruction i	n spoon)			
		7	S6	15.0						
1		11								
		14	1"/24"	17.	0					
1										
							100			
20				20.0	20.0	Vany dansa arası lı	rown silty fine to	coarse SAND, sor	ne gravel nocke	ets of clavey
		3	S7	20.0		silt, moist.	town sinty fille to			
1		36			×			GLACIAL TIL	L	AND SECTION OF THE PROPERTY.
		50	22"/24"	22.	0					
1										
1										
25		1		36.0		Same as above.				
		76	S8	25.0		Same as above.				
1		98								
		100/.3	22"/24"	27.0		The state of the s	Botto	om of Exploration	at 27.0 ft.	
1										
1				~						
30										
- 30		Water	Level Data			San	iple ID		Summa	
		Elapsed Time		f Bottom of	Water (ft	O Open End	Rod	Overburden (I	Linear ft) 27	.0 ft.
Date	Time	(hrs)	Casing (ft	- 10 Care 700 1250 C	water (It	1 111111 17 111	Tube ed Sample	Rock Cored (I Number of Sa		
			-		_	U Undisturb S Split Spoo		BORING	-	HA-113a
						G Geonrobe		BORING	NO.	ALTA-IIJA

BORING NO.

										Page 1	of 2
PROJECT		PORT OF RO	CHESTER					H&A FILE N	Ю.	70819-000	
LOCATIO		ROCHESTER						PROJECT M		M. VALENTINE	
CLIENT		LABELLA A	and the second of the second o	1100				FIELD REP.	TOTAL PROPERTY.	R. DEDRICK	
CONTRAC	CTOR	GEOLOGIC I						DATE STAR		25-May-00	
DRILLER		L. TODD	J. LLKI K					DATE FINIS		25-May-00	
			-15/97	o: I-		C D		- Dlaw			
Elevation	261.9				Boring Locations of Make & N		oring Location 55 - Truck M			Drill Mu	d
Item		Casing	Sampler SS		Truck	Tripod			Hammer T	20000000000	Bentonite
Type Inside Diam	notor (in)	HSA 3-1/4	1-3/8		ATV	Geoprobe	☐ Win	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLU	✓ Safe		olymer
Hammer W		5-1/4	140		Track	Air Track	Rol	ller Bit	Dot Dot	ughnut 🗸 N	lone
Hammer Fa		-	30		Skid		Cut	tting Head	Casing	☐ Driven	Spun
	Casing	Sampler	Sample		Stratum		***	sual Classificat	·		
Depth (ft)		Blows per 6 in	Number	(ft)	Change (ft)		Vi	sual Classificat	ion and Re	marks	
	ft	ın	Recover	У	(11)			SEPPERATURE SEPERATURE OF SEPERATURE SEPERAT			
— o —		1	SI	0.0		Medium dense bro	own sandy SI	LT, brick, dry.			
		7 12						FI	CL		
		6	6"/24"		.0			1. en a 1.2.	des des		
		6 7	S2	2.0		Medium dense bro	own black sai	nay SILI, brick,	stag, dry.		
		8	8"/24" S3	4.0	.0	Same.					
,		15	33	4,0		Came.					
5		7 8	100020		5.0						
		35	10"/24" S4	6.0	0.0	Medium dense bro	own black sil	ty SAND, brick,	, slag, dry.		
		22									
		16 50/,3	12"/24"		3.0						
		12	S5	8.0		Same, except som	e rock fragm	ents.			
1		17						-0(1)			
10			9"/24"		0.0	~~-					
		100/.3	S6	10.0		Concrete Obstruc (offset 6' south of	initial location	on, see log HA-1	114a)		
			Hard .	10.5							
							4-1-4-				
1											
15											
1									K-1-1-11-		
1											
1											
— 20 —											
1											
1											
	***************************************										
									-		
— 25 —											
	***************************************										
30											
		Water	Level Data				nple ID			Summary	
Date	Time	Elapsed Time	e Bottom	of Bottom	I water (i	O Open En	Rod		urden (Line		
Date	Time	(hrs)	Casing (	(ft) Boring (f	t) (1	I Inin wa	ll Tube bed Sample		Cored (Lines or of Sample		
							on Sample		ORING NO		114

BORING NO. HA-114a

									Pa	nge 2 of 2
PROJECT		PORT OF RO	CHESTER				H&A	FILE NO.	70819-00	00
LOCATIO		ROCHESTER	Security of the transfer of	K			PROJ	ECT MGR.	M. VALI	ENTINE
CLIENT		LABELLA AS	The Control of the State				FIEL	D REP.	R. DEDR	
CONTRAC	CTOP	GEOLOGIC E	CONTRACTOR OF THE PROPERTY OF	75				ESTARTED	25-May-	
DRILLER		L. TODD	AVIEW MOI				DATE	FINISHED	25-May-	
			( <u>) 4</u>						-	
Elevation	261.9				ing Location Make & M		ng Location Plan - Truck Mount			Drill Mud
Item						Tripod Tripod	Cat-Head	Hamme	r Type	Bentonite
Туре		HSA	SS 1-3/8		ATV [	Geoprobe	Winch		Safety	Polymer
Inside Diam Hammer W		3-1/4				Air Track	Roller Bit		Doughnut	✓ None
Hammer Fa			1000	COUNTY PROFIT PR	Skid [	51	Cutting He	ead Casing		Driven Spun
	Casing	Sampler	Sample	Sample Depth	Stratum					
Depth (ft)	Blows per	Blows per 6 in	Number & Recovery	(ft)	Change (ft)		Visual Cl	assification and	Kemarks	
_ 0 _										
- $ -$										
								nd Augered to 12.0		
			***********					Boring Log HA-		
1										
5										
				-						
1										
10			***************************************							
								CANID -I		
		97	S7	12.0		Very dense gray bla	ck blue gravelly S	AND, slag, wet.		
		90						FILL		
		3 29	15"/24" S8	14.0	14.0 —	Medium dense gray	brown clayey SIL	T, moist.		
15		5						ALLUVIUM		
13.		8 12	16"724"	16.0				ALLUVIUM		
		12	10.121	10.0						
1										
1			***********							
1		7	S9	19.0	19.0	Medium dense brow	n silty fine to coa	arse SAND, some	gravel, wet.	
20		17 20								
1		21	18"/24"	21.0				GLACIAL TILL		
								SENCINE HEL		
1										
1				210		Very dense gray bro	win fine to coorse	SAND some ora	vel wet	The second secon
	With the second second	1007.4	S10 10"/24"	24.0		very dense gray bro				
— 25 —							Botton	n of Exploration a	t 25.0 ft.	
1										
			~~~			Monitoring well ins	talled in complete	ed borehole. See l	Installation R	eport for
1			***********			DDT MITS.				
1										
30										
		Water	Level Data			Samp			Summ	
Date	Time	Elapsed Time	Bottom of		Water (ft)	O Open End F		Overburden (Li Rock Cored (Li	inear ft) 2	-
Date	111110	(hrs)	Casing (ft)	Boring (ft)	Andrews N. S.	T Thin Wall 7 U Undisturbed		Number of San		0S
-	+	-				S Split Spoon		BORING !		HA-114a

BORING NO.

HA-115

BORING NO.

TEST BORING REPORT HA-115 1 of 1 Page 70819-000 H&A FILE NO. PORT OF ROCHESTER PROJECT M. VALENTINE PROJECT MGR. LOCATION ROCHESTER, NEW YORK R. DEDRICK FIELD REP. CLIENT LABELLA ASSOCIATES 25-May-00 DATE STARTED CONTRACTOR GEOLOGIC ENTERPRISES 25-May-00 DATE FINISHED DRILLER L. TODD City See Boring Location Plan ft Datum **Boring Location** Elevation 253.68 Drill Mud CME 55 - Truck Mount Core Barrel Rig Make & Model Casing Sampler Item Cat-Head Hammer Type Bentonite ✓ Truck Tripod 1 NX Type HSA ✓ Safety Winch Polymer ☐ Geoprobe П ☐ ATV 1-3/8 3-1/4 Inside Diameter (in) Air Track None Roller Bit Doughnut 1 Track 140 Hammer Weight (lb) Driven Spun Skid Cutting Head Casing Hammer Fall (in) 30 Stratum Casing Sampler Sample Sample Depth Visual Classification and Remarks Change Number & Depth (ft) Blows per Blows per 6 (ft) Recovery (ft) ft CRUSHED STONE Very dense black blue gray silty fine to coarse SAND, brick, slag, dry. 2.0 SI 54 FILL 4.0 16"/24" Same, except moist. 4.0 5 6.0 14"/24" Medium dense brown-black sandy ROCK FRAGMENTS, wet. S3 12 7"/24" 8.0 Same. 10.0 4"/24" Same 10 10.0 4"/24" 12.0 Same. 12.0 12 S6 14.0 6"/24" 15 . 19.0 Loose brown-gray sandy SILT, organics, wet. 20 ALLUVIUM 21.0 10"/24" 24.0 Same. 25 . 26.0 10"/24" Bottom of Exploration at 26.0 ft. 30 Summary Sample ID Water Level Data Overburden (Linear ft) 26 Open End Rod Bottom of Elapsed Time Bottom of Water (ft) Time Date Thin Wall Tube Rock Cored (Linear ft) Casing (ft) Boring (ft) (hrs) Undisturbed Sample U Number of Samples

Split Spoon Sample

Geoprobe

BORING NO.

TEST BORING REPORT HA-116 1 of 1 Page 70819-000 H&A FILE NO. PORT OF ROCHESTER PROJECT M. VALENTINE PROJECT MGR. ROCHESTER, NEW YORK LOCATION R. DEDRICK FIELD REP. LABELLA ASSOCIATES CLIENT 2-Jun-00 DATE STARTED GEOLOGIC ENTERPRISES CONTRACTOR DATE FINISHED 2-Jun-00 L. TODD DRILLER See Boring Location Plan ft Datum City **Boring Location** 252.4 Elevation Drill Mud Rig Make & Model CME 55 - Truck Mount Item Casing Sampler Core Barrel Hammer Type Bentonite Cat-Head ✓ Truck Tripod HSA NX Type ✓ Safety Polymer Winch ☐ ATV Geoprobe Inside Diameter (in) 3-1/4 1-3/8 1 None Roller Bit Doughnut Track Air Track Hammer Weight (lb) 140 Spun Driven Cutting Head Casing Skid Hammer Fall (in) Sample Stratum Sampler Casing Sample Depth Visual Classification and Remarks Change Blows per 6 Number & Depth (ft) Blows per (ft) Recovery 0.4 ft. TOPSOIL Medium dense black blue silty fine to coarse SAND, slag, dry. 16 2.0 11"/24" Same, except wet. 12 12"/24" 4.0 **S3** 6.0 Medium dense brown fine to coarse SAND, slag. S4 8.0 T0"/24" Medium dense gray brown fine to coarse SAND, some gravel, wet. S5 10.0 8"/24" 10 Same. 18 S6 ALLUVIUM 12.0 8"/24" Loose gray brown fine sand SILT, organics, moist. 15 15.0 17.0 Very loose gray brown fine sand SILT, little clay, organics, moist. 20 . 20.0 22.0 16"/24" 25 . **S9** 25.0 Same. 27.0 18"/24" Bottom of Exploration at 27.0 ft. 30 Summary Sample ID Water Level Data Overburden (Linear ft) Open End Rod 27 Elapsed Time Bottom of Bottom of Water (ft) Date Thin Wall Tube Rock Cored (Linear ft) T Boring (ft) Casing (ft) (hrs) 98 Undisturbed Sample Number of Samples U

Split Spoon Sample Geoprobe

BORING NO.

BORING NO. HA-117

										Pag	ge 1	of 1
PROJECT	r	PORT OF RO	CHESTER				Н&	A FILE	NO. 70	0819-000	)	
LOCATIO		ROCHESTER		K			PRO	OJECT N	AGR. M	. VALE	NTINE	
CLIENT		LABELLA A	WE THE STATE OF TH				FIE	LD REP	200	. DEDRI		
CONTRAC	CTOR	GEOLOGIC I					DA'	TE STAF	RTED 24	4-May-0	0	
		L. TODD	NI PICI KINI					TE FINIS		4-May-0		
DRILLER								***************************************		, may		
Elevation	253.	7 ft Dat			ing Locatio		ing Location Pla				D-012	
Item		Casing	Sampler C	The second secon	Make & M		5 - Truck Mount		lee on		Drill Mu	
Туре		HSA	SS		Truck	Tripod	✓ Cat-Hea	d	Hammer Typ			entonite
Inside Diam	neter (in)	3-1/4	1-3/8		ATV	Geoprobe	Winch		✓ Safety			olymer
Hammer W	eight (lb)		140	THE PROPERTY OF THE PARTY OF TH	Track	Air Track	Roller B		Dougl	-		one
Hammer Fa			30	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Skid		Cutting	Head	Casing		Driven	Spun
	Casing	Sampler	Sample	Sample Depth	Stratum		Vienal	Classifica	tion and Rema	arks		
Depth (ft)	Blows per	Blows per 6 in	Number & Recovery	(ft)	Change (ft)		Visual	Chaainea	tion and recan			
	11	- In	Recovery	-	(11)							
<b>-</b> ∘ -		2	SI	0.0		Medium dense brov	wn sandy SILT, o	organics, d	ry.			
		4 7										
		7 8	8"/24"	2.0							OFFICE STATE	
		10	S2	2.0		Medium dense brow	wn blue silty SA	ND, found	ry, debris, dry.			
		9							ILL			
		20	9"/24"	4.0								
		13	S3	4.0		Very dense blue-bl	ack gray sandy S	ILT, brick	, slag, moist.			
5		53				~····						
		50/.4	14"/24"	6.0								
		62	S4	6.0		Same, except wet.						
		100/.4										
			7"/10"	8.0				avraett w	765 000			
		6	S5	8.0		Medium dense blac	k-blue silty RO	CK FRAGI	MENTS, wet.			
		13										
10		15	9"/24"	10.0	10.0					18000000116		
10		13	S6	10.0		Medium dense san	dy SIL1, little ci	ay, organic	es, moist.			
		20 7			***						with the	
		4	12"/24"	12.0		Medium dense blac	1 2 6		CANID some 6	ina graval	moist	
		2	S7	12.0		Medium dense blac	ck-gray siity nne	to coarse	SAND, Some I	ine gravei	, moist.	
		19		-				ALLU	JVIUM			
		19	12"/24"	14.0								
— 15 —												
1												
1												
1				-								
		2	S8	19.0		Medium dense gra	y-brown sandy S	ILI, little	gravel, wood,	organics,	moist.	
20		3 6										
1	la succession de la	7	14"/24"	21.0								
1												
1												
1							***************************************					
		3	S9	24.0		Same.						
25		3 4										
			17"/24"	26.0								
							Bott	om of Exp	loration at 26.0	nt.		
						<del> </del>				****		
						Monitoring well in	istalled in compl	eted boreh	ole. See Instal	lation Rep	port for	
						LBA-MW2.						
30												
		Water	Level Data			Sam	ple ID	T		Summa		
D. 1	Try	Elapsed Time			Water (ft	O Open End	Rod		ourden (Linear			
Date	Time	(hrs)	Casing (ft)	Boring (ft)		T Thin Wall U Undisturb	Tube ed Sample		Cored (Linear er of Samples	ft) 98		
	-		-		-	S Split Spoo		-	ORING NO.		HA-	117
1	1					T Committee	1000					30170171

### TEST BORING REPORT

BORING NO.

		(								Pag		of 2
PROJECT	•	PORT OF RO	CHESTER				Н	&A FILE N	iO.	70819-000	)	
LOCATIO		ROCHESTER		RK.			PI	ROJECT M	GR.	M. VALE	NTINE	
CLIENT		LABELLA AS					FI	IELD REP.		R. DEDRI	CK	
CONTRAC		GEOLOGIC I					-	ATE STAR	TED	8-Jun-00		
DRILLER		L. TODD						ATE FINIS		8-Jun-00		
					40/2004	200		november of the surroun				
Elevation	242.7				Boring Location	ALTERNATION AND DESCRIPTION AN	ring Location P				D-111 34	ıd
Item		Casing		COLC DIST.	Rig Make & M		5 - Truck Mour		Ua		Drill Mu	entonite
Туре		HSA	SS		Truck	☐ Tripod	Cat-He		Hammer T			Polymer
Inside Diam	- ' '	3-1/4	1-3/8		ATV	Geoprobe Air Track	Winch Roller	Manager and a second		ety ighnut	_	Vone Vone
Hammer W		-	140		Track Skid	☐ Air Track			Casing		Driven	Spun
Hammer Fa	all (in) Casing	Sampler	30 Sample	Control of the Contro	Stratum		cutun	J - 10114	Б		1.70	
Depth (ft)		1 TO	Number &	Sample Dep	Change	1	Visua	al Classificati	ion and Rer	marks		
	ft	in	Recovery	(ft)	(ft)							
_ 0 _				-		ASPHALT						
		9	SI	0.5		Medium dense bla	k brown red si	Ity fine to coa	rse SAND,	brick, some	rock	
1 1		18			0 22	fragments, dry.		FIL				
		7 9	13"/18" S2	2.0	2.0 2.0	Medium dense bro	wn silty fine to	coarse SAND	), moist.	Action Laborated and		
1 1		12						ALLU				
		9 8	12"724"		1.0							••
		4 8	S3	4.0		Loose gray brown	silty fine to me	dium SAND,	organics, m	ioist.		
5		4										
		3 3	12"/24"		5.0							
1			12 /24									
				_								
				-								
									- District No			
	**********			-								
10								0.150	_0_0			
10		6	S4	10.0		Medium dense gra	y fine to coarse	SAND, little	sitt, little gi	ravel, wet.		
		14		-								
		4	16"/24"	12	2.0							
											-	
				-								
15		3	S5	15.0		Very loose brown	organic SILT, 1	moist.				HILL HAR HER
		1										
		4	16"724"	17	7.0							
							-					
					20.0							
20		4	S6	20.0		Medium dense gra	y brown silty f	ine to coarse	SAND, som	e gravel, m	oist.	
l		16						GLACIA	AL TILL			
l		22	20"/24"	22	2.0							
I												-
I												
						<b> </b>						
<u> </u>		28	S7	25.0		Very dense brown	silty fine to co	arse SAND, s	ome gravel,	moist.		
		100/.4	10"710"	2:	5.9				HAID PAGE			
	1000											
1												
	Control of the Control											
900												
<b>→</b> 30 <b>←</b>												
			Level Data			O Onen End	ple ID	0. 1	rden /! '	Summa		
Date	Time	Elapsed Time				O Open End T Thin Wall			rden (Linea Cored (Linea	rft)		
5/8/2000	-	(hrs) 0.5	Casing (ft)	Boring (f	9.1	U Undisturb	ed Sample		r of Sample			
57072000	_					S Split Spoo	n Sample	-	RING NO.		HA-	118



BORING NO.

epth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks			
		100/,4	S8 3"/5"	30.0		Very dense brown silty fine to coarse SAND, some gravel, moist.			
					***************************************				
. 35		18	S9	35.0		Same, except gray brown.			
		77 100/.5	12"/18"	36.5					
065									
- 40		36 66 98 87	S10 12"/24"	40.0		Same.			
- 45		1007.5	S11 3"/6"	45.0		Same, except trace rock fragments.			
<b>-</b> 50		1007.4	S12 4"/5"	50.0		Very dense red silty sandstone rock fragments.  Bottom of Exploration at 51.0 ft.			
- 55									
- 60									
- 65									
<del></del>	-					FILE NO. 70819-000 BORING NO.	D.	HA-1	118

BORING NO. HA-119

									Pag		2		
PROJECT	•	PORT OF RO	CHESTER					FILE NO.	70819-000				
LOCATIO	N	ROCHESTER	, NEW YOL	RK			-	IECT MGR.	M. VALE				
CLIENT		LABELLA AS					FIEL	D REP.	R. DEDRI	CK			
CONTRAC	CTOR	GEOLOGIC I					DAT	E STARTED	2-Jun-00				
DRILLER		L. TODD					DAT	E FINISHED	2-Jun-00				
				ity I	Boring Location	on See Box	ing Location Plan						
Elevation Item	250.5	2 ft Dat	-		Rig Make & N		5 - Truck Mount			Drill Mud			
			SS	Out o minitar	✓ Truck	Tripod	✓ Cat-Head	Hamme	r Type	☐ Bentonit	te		
Type Inside Diam	ator (in)	HSA 3-1/4	1-3/8		ATV	Geoprobe	Winch		Safety	Polymer	ć i		
Hammer W		3-1/4	140		Track	Air Track	Roller Bit		Doughnut	✓ None			
Hammer Fa			30		Skid	<u> </u>	Cutting H	ead Casing		Driven :	Spun		
	Casing	Sampler	Sample	Sample Dep	Stratum		80 82	72 4 4					
Depth (ft)			Number &	(ft)	Change		Visual C	lassification and	Remarks				
	ft	in	Recovery	100	(ft)								
_ 0 _								ASPHALT					
			01	10		Very dense brown	gravelly fine to co	erse SAND dry		Contragality of the second			
		44 66	S1 3"/12"	1.0	2.0			FILL					
		10	S2	2.0		Medium dense bro	wn silty fine to me	dium SAND, little	silt, wet.				
		10						ALLUVIUM					
		7	14"/24"		1.0								
		1	S3	4.0		Medium dense bro	wn gray, fine to co	arse SAND, little	siit, wet.				
5		7											
		7	16"/24"		5.0	Medium dense gra	y brown fine to cor	rse SAND some	silt little rock	fragments.			
		8	S4	6.0		wet.	y brown mile to cor	o. map, some	, rook i				
		20											
		25	10"/24" S5	8.0	8.0	Medium dense gray brown gravelly fine to coarse SAND, trace silt, wet.							
		14											
		25	20"/24"	10	0.0								
— 10 —		30	20 /24	1									
						Loose gray brown	conductiff						
		14	S6	14.0		Loose gray brown	sality SIL1, Wel.						
— 15 —		3			7.								
		3	18"/24"	1	6.0								
				-									
			07	19.0		Loose gray brown	silty fine to coarse	SAND, trace gra	vel, wet.				
		3 3	S7	19.0		Eddac gray brown	in course	, giu					
20		3	AAU 25 70	x	10								
1		3	20"/24"	2	1.0	-							
1													
1													
		-											
1		6	S8	24.0		Loose gray brown	fine to medium sa	ndy SILT, trace c	ay, organics, m	oist.			
26		2	30	24.0		Budy Storing							
25	1	3	15"724"		6.0								
1			15 724"		.0.0								
1													
1													
1			S9	29.0		Same.							
30		<u> </u>											
30		Water	Level Data		31.0	San	iple ID	T	Summa				
-	T m	Elapsed Time				O Open End	Rod	Overburden (L			-		
Date	Time	(hrs)	Casing (f	t) Boring (	ft) Water (I	I I I I I I I I I I I I I I I I I I I	Tube ed Sample	Rock Cored (L Number of Sar		S			
	-					S Split Spoo		BORING	-	HA-119			
						- 0 1.		1/47/2010/07 14/07/07 14/07	77000000000000000000000000000000000000				

#### TEST BORING REPORT

BORING NO.
HA-119

Page 2 of 2

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		History allegant and				
				31.0		
						***************************************
)		-r	S10	34.0		Loose gray brown fine sand SILT, trace clay, organics, moist.
25		2		minner		
35		3	17"/24"	36.0		
		3	17724	30.0		
		1	SII	39.0		Same.
40		2				
		3 3	22"/24"	41.0		
			22,721			
		1	S12	44.0		Loose, gray fine sand SILT, trace clay, organics.
<u> </u>		2 3				
100.0		3	24"/24"	46.0		
l				10.0		Comment
		1-2	S13	49.0		Same.
<b>—</b> 50 <b>—</b>		2				
	Name and the second	4	18"/24"	51.0		Bottom of Exploration at 51.0 ft.
						Bottom of Exploration at 31.0 ft.
					1	
55						
	**********					
1						
						A N. CONTROL OF THE PROPERTY O
1	A THE WAS COOK					
1						
60						
- 00-						
		-				
1						-
1						
1				~		
65					-	
1	CONTRACTOR OF THE PARTY OF THE					
1						
1						
1						
1						
70-						
T /0-						FILE NO. 70819-000 BORING NO. HA-119

#### TEST BORING REPORT

BORING NO.

PROJECT		PORT OF RO	CHESTER				Н&.	A FILE NO.	70819-000	
LOCATIO		ROCHESTER		K			PRO	DJECT MGR.	M. VALENTI	
CLIENT		LABELLA AS					FIE	LD REP.	R. DEDRICK	
CONTRAC	1	GEOLOGIC E					DA	TE STARTED	8-Jun-00	
DRILLER		L. TODD					DA	TE FINISHED	9-Jun-00	
DRILLER										
Elevation	254.3			THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED AND ADDRESS	ing Locatio		ring Location Pla	n	IDri	ll Mud
Item		Casing			Make & M Truck	Tripod CME 5	5 - Truck Mount  Cat-Head	d Hamme		] Bentonite
Туре		HSA	SS			- And the second	Winch	√ S		
Inside Diam		3-1/4	1-3/8		1177 N	Geoprobe Air Track	Roller B		Doughnut	
Hammer W			140	The a Control of the	Track Skid	☐ All Hack	Cutting		Dri	
Hammer Fa	CARL STATE OF THE PARTY OF THE		30 Sample		Stratum	<u> </u>	Cutting	read Casing		
Depth (ft)	Casing Blows per	Sampler Blows per 6	Number &	Sample Depth	Change		Visual	Classification and	Remarks	
Depin (it)	ft	in	Recovery	(ft)	(ft)					
_ 0 _						ASPHALT				
		6	SI	0,5		Medium dense grav	v to black fine to	coarse SAND, some	rock fragments, d	гу.
		10						FILL		
		20	10"/18"	2.0		Madium dance blac	k to red brown s	ilty fine to coarse Sa	AND some rock fr	agments,
		5	S2	2.0		dry.	to rea orowit s			
		7								
		6	12"/24" S3	4.0		Same, except loose				
		3	33	- 4.0		<u> </u>				
<u> </u>		3	12000	76	6.0				,	
		1 2	12"/24" S4	6.0	0.0	Very loose brown:	silty fine to medi	um SAND, trace roo	k fragments, mois	
		1						ALLUVIUM		
		1	7"/24"	8.0						
		1	S5	8.0		Same, except wet.				
		1								
		1 2	3"/24"	10.0						
— 10 —		1	S6	10.0		Very loose gray br	own silty fine to	coarse SAND, little	gravel, wet.	
		1 3								
		3	18"/24"	12.0		************				
	************	5	S7	12.0		Same, except some	gravel.			
		5 5								
		12		14.0				OAND I	ittle orangi wat	
		6	S8	14.0		Medium dense gra	y brown silty fine	e to coarse SAND, I	ittie gravei, wet.	
— 15 —		5								
1		8	14"/24"	16.0						
1										
					***					
								THE ENGLAND		
20			S9	20.0		Same, except very	loose.			
	TO GOOD WARRANT	2								
1		2 3	14"/24"	22.0						
1	-		14 724	22.0						
1										
1										
1	-	-								
25		-3	S10	25.0		Very loose gray h	rown fine to med	ium sandy SILT, tra	ce clay, organics, i	noist.
	1	3	310	25.0						
1		2	LAUSAN	27.0						
1			14"/24"	27.0						
1										
1										
30										
00.		Water	· Level Data			San	iple ID		Summary	
	I me	Elapsed Time		Bottom of	Water (ft	O Open End	Rod	Overburden (L		
Date	Time	(hrs)	Casing (ft	40 0 000	WHIEF (II	1 Thin was	l Tube ed Sample	Rock Cored (L. Number of San		
							on Sample	BORING I		HA-120
		-		_	-	G Geoprobe		BORING	10.	AAFA-AMU

### TEST BORING REPORT

BORING NO.
HA-120

Page 2 of

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
			S11	30.0		Very loose gray brown fine to medium sandy SILT, trace clay, organics, moist.
	******	2				Tely loose play storm and the
		2	18"/24"	32.0		
						ALLUVIUM
35-		1	S12	35.0		Same.
		2				
		2	24"/24"	37.0		
<del> 40</del>		3	S13	40.0		Same.
		3				
		3	24"/24"	42.0		
<b>—</b> 45 <b>—</b>		1	S14	45.0		Same.
		2 4				
		3	22"/24"	47.0		
			*********			
<b>—</b> 50 <b>—</b>		Н	S15	50.0		Same.
		2 2				
		2	24"/24"	52.0		Bottom of Exploration at 52.0 ft.
55						
<b>—</b> 60 <b>—</b>						
				-		
	110000000000000000000000000000000000000				-	
<u> </u>						
70	1		-			FILE NO. 70819-000 BORING NO. HA-120

BORING NO. HA-121

												Ī	age	1 of	2
PROJECT	r	PORT OF RO	CHESTER		_					H&A FILE	NO.	70819-0			
PROJECT					-				_	PROJECT N		-	ENTIN	E	
LOCATIO	אוע	ROCHESTER							_	FIELD REP		R. DED			
CLIENT	omor	LABELLA AS							-	DATE STAI		30-May			
CONTRA		GEOLOGIC E	ENTERPRI	SES					_	DATE STATE		30-May			
DRILLER		L. TODD								DATEFINE	JILED	JU-IVIAY	00		
Elevation	276 +	-/- ft Dat				ng Locatio		_		tion Plan			In.m.s	Mud	_
Item		Casing		The second second second second second		Make & M		-	_	Mount	lu <sub>a</sub>	er Type	Drill !	Bentonite	
Туре		HSA	SS	NX		ruck	Tripod		_	Cat-Head Winch		Safety		Polymer	
Inside Dian		3-1/4	1-3/8	2			Geoprobe Air Track	누	_	Roller Bit		Doughnut		None	
Hammer W			30		_	rack kid	☐ All Hack	1 7	_	Cutting Head	Casing		Driver	-	oun
Hammer F	Casing	Sampler	Sample		-	Stratum			_						
Depth (ft)			Number &	Sample De	pth	Change				Visual Classifica	tion and	i Remarks			
	ft	in	Recovery	(11)		(ft)									_
_ 0 _		-5	S1	0.0	-		Medium dense gra	y bro	own f	ine sand SILT, lit	le clay,	dry.			
		8									ICL				
		8 14	16"/24"		2.0				-		ILL				
		18	S2	2.0	2.5		Dense gray red fir	e sar	nd SI	LT, little clay, dry					
		20									-27				
		22 24	16"/24"		4.0	4.0		-	HITTE.						
		14 20	S3	4.0			Dense brown silty	fine	to m	edium SAND, littl	e clay, r	noist.			
5		24	LEADER CO.							ALLU	DVIUM				
		20	18"/24" S4	6.0	6.0		Dense brown silty	fine	SAN	D some clay mo	ist.				
		21	54	6.0			Delise brown siny	mic		D, some city, mo					
		24			0.0										
1		19	23"/24" S5	8.0	8.0		Dense brown silty	fine	to m	edium SAND, litt	le clay, r	noist.			
1		24													
		26	20"/24"		0.0										
<del></del>	-	14	S6	10.0			Medium dense bro	own s	silty	fine to coarse SAN	D, pock	ets of clay, m	oist.		
		8 12			-										
i		17	19"/24"		12.0										
					-			-							-
							~~~~								
															-
											ONT LCTY				
<u> </u>		7	S7	15.0	_		Medium dense br	own:	silty	fine to coarse SAN	ND, little	clay, moist.			
		9 9													
		10	16"/24"		17.0										-
									40000						
															-
									-						
20			0.0	20.0			Same.	SILISO			-				-
		4 5	S8	20.0			Jame.								
1		5	18"/24"		22.0										
1		6	18"/24"		22.0				1						
1								-							
1															
											U. Julia				
25		3	S9	25.0	-		Loose gray brown	ı san	idy Sl	LT, some clay, m	oist.				
		3										Userii			
1		4-4	20"/24"		27.0										
									10000						
1															
SHWG.															-
30				****					TIN			C	mary		
	1	Water Elapsed Time	Level Data	of   Bottom	of		O Open En	nple Roc		Over	burden (	Linear ft)	61		
Date	Time	(hrs)	Casing (	Str. 1900 (10		Water (ft	T Thin Wa	I Tul	be	Rock	Cored (	Linear ft)	10 16S		
							U Undistur			The second second	or of Sa	A STATE OF THE PARTY OF THE PAR		A-121	
		1					- Spin Spe			. I B	THE HITCH	TITU.		A A/ A	

#### TEST BORING REPORT

BORING NO.
HA-121

Page 2 of 2

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		6	S10	30.0		Medium dense brown gray silty fine to coarse SAND, little gravel, wet.
		8				
		10	20"/24"	32.0		GLACIAL TILL
- 35		2	S11	35,0		Same.
		16 18 20	14"/24"	37.0		
<b>—</b> 40 <b>—</b>		5	S12	40.0		Very dense brown gray silty fine to coarse SAND, some gravel, wet.
		64 37 67	17"/24"	42.0		
4						
<b>—</b> 45 <b>—</b>		14 44 100/,4	S13	45.0		Same, except little gravel.
50		6 1007.2	S14 6"/8"	50.0		Same.
55		1007.3	S15 3"/9"	55.0		Same.
→ 60		100/.4	S16 2"/5"	60.0	60.4	Same. Began Rock Coring at 61.0 ft.  Moderately fractured red SANDSTONE with interbedded gray sandstone, clay
						pockets.
— 65 —						BEDROCK
					/	Bottom of Exploration at 71.0 ft.
<del> 70</del>					/	FILE NO. 70819-000 BORING NO. HA-121

#### **CORE BORING REPORT**

BORING NO.
HA-121

Page 1 of 1 70819-000 H&A FILE NO. PROJECT PORT OF ROCHESTER M. VALENTINE PROJECT MGR. ROCHESTER, NEW YORK LOCATION FIELD REP. R. DEDRICK LABELLA ASSOCIATES CLIENT DATE STARTED 31-May-00 GEOLOGIC ENTERPRISE CONTRACTOR DATE FINISHED 31-May-00 L. TODD DRILLER ft Datum **Boring Location** Elevation Drill Mud Rig Make & Model Core Barrel Item Casing Sampler Bentonite ✓ Truck Tripod Cat-Head Hammer Type SS NX HAS Туре Polymer ☐ ATV Geoprobe Winch 1 Safety 3-1/4 1-3/8 2 Inside Diameter (in) V None Air Track Doughnut Roller Bit Track Hammer Weight (lb) 140 Driven Spun Skid **Cutting Head** Casing Hammer Fall (in) 30 Stratum Recovery Drilling Change Visual Classification and Remarks Weathering Depth (ft) RQD Rate Core No. (ft) (min/ft) Depth (ft) Moderately fracture red SANDSTONE with interbedded gray sandstone, clay 6 to 7 4.8/2.1 minutes QUEENSTONE FORMATION per foot 66.0 5 to 5 4.5/3.9 minutes per foot Bottom of Exploration at 71.0 ft. 20 30 Summary Sample ID Water Level Data Open End Rod Thin Wall Tube Overburden (Linear ft) Bottom of Boring Elapsed Time Bottom of Water (ft) Time Rock Cored (linear ft) TO Date T Casing (ft) (ft) (hrs) Undisturbed Sample **16S** Samples Split Spoon Sample Geoprobe HA-121 BORING NO.

#### TEST BORING REPORT

BORING NO.

													Pag	e 1	l o	f 2
PROJECT	,	PORT OF RO	CHESTER						H&A F	TLE N	NO.	70819	-000			
		-		3K					PROJE			M. V				
LOCATIO		ROCHESTER							- FIELD			D. NO				
CLIENT		LABELLA AS						-	- DATE			31-Ma	_			
CONTRAC		GEOLOGIC E	ENTERPRIS	) E3		_		-	DATE			-				
DRILLER		L. TODD								. 11419	LLED	31-IVI	٠,٠٠٠			
Elevation	252.			-	oring Locati		THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	-	ocation Plan				- 1	Drill M	[md]	
Item		Casing	Sampler (		ig Make & I				k Mount			T	-		Bento	nite
Туре	-v-,	HSA	SS		Truck	Trip			Cat-Head			ner Type Safety	$\dashv$		Polyn	
Inside Diam		3-1/4	1-3/8		ATV	_	probe		Winch Poller Bit		뇓	Doughnut			None	
Hammer W		-	140		Track	Air	Track		Roller Bit Cutting Hea	d	Casin		ACCRECATE VALUE OF	Driven		Spun
Hammer Fa	all (in)	Samular	30 Sample		Skid Stratum	<u> </u>		~	January Hea				<u> </u>			-
Depth (ft)	Casing Blows per	Sampler Blows per 6	Number &	Sample Dep	Change				Visual Cla	ssificat	ion an	d Remarks				
Sepan (it)	ft	in	Recovery	(ft)	(ft)				- TENERAL PLANT							
_ 0 _		,		0.0	- 0.3 -	Made	danca J	c brow	n, coarse to fir	TOP.	SOIL	cinders link	e grav	el.		
		7 8	SI	0.0		iviediun	, dense dar	. DIOWI	, coarse to HI				0.44	1		
1 1		10								FI	LL					
1		6	14"/24" S2	2.0	.0	Same.							-	27.50		
		6														
1		5	10"/24"		.0											
		3	10"/24" S3	4.0		No Rec	overy.									
_ 5 _		3									CONTRACT					
	STATE STATE OF	2	0"/24"		.0								775177			
1		2	S4	6.0		Loose	lark brown	coarse	to fine sand, s	ome gr	avel, t	race silt, wet				
1		3 2											-			
		2	2"/24"		.0											
1		2	S5	8.0		Same.										
		2 3		-		-										
10		21	18"/24"	10	.0	0										
		1 2	S6	10.0	-	Same.										
		6			*									-		
		10		12.0	.0	-									-	
		26	S7	12.0												
		10	2006.0			Dense	blue-gray g	ravel, I	ittle coarse to	fine sai	nd, we	ı.				
		3	20"/24" S8	14.0		-						7.7.7.7.7				
15		2			14.3 -	Very lo	ose brown	ORGA	NICS, trace sa	and, tra	ce silt,	wet.				
		1 3	16"/24"	16	15.5	Very le	ose gray-b	rown fi	ne clayey STL	T, som	e sand	little organi	cs, m	oist.		
			10 124	- 10							JVIUN	Ser Constitution				
					_					ALLU	VIUN	*				
															Name of	
					_					-						
					-											
20				40.0			except little	fier	and							
		1 2	S9	20.0		same,	evecht utti	ATTIC SI								
	*****															
		2	24"/24"	22	2.0	-										
	ggeren															
1				_		-										
25				26.0		Committee										
23		2 2	\$10	25.0		Same.										
		2											recess.			
		3	20"/24"	2	7.0											
1																
1																
30											Trans.			-		
_ 55 _		Water	Level Data		1	-		iple ID					mma	ry		
W041-F	rpu.	Elapsed Time		1 10 10 10 10 10 10 10 10 10 10 10 10 10	I water (1	(t) O	Open End	Rod				(Linear ft)	37			
Date	Time	(hrs)	Casing (ft	t) Boring (f	)	TU	Thin Wal Undisturb		nple			(Linear ft) Samples	123	S		
	-	+	-	-		s	Split Spor	on Sam			ORING		- 201	CONTRACTOR OF	-122	2
	-					G	Geoprobe		53		OTT.	3 1101		***		70



BORING NO. HA-122

2 of 2 Page Stratum Casing Sample Sample Depth Sampler Depth (ft) Blows per Number & Change Visual Classification and Remarks Blows per 6 in (ft) Recovery Loose gray-brown clayey SILT, little fine sand, little organics, moist. SII 30.0 ALLUVIUM 24"/24" 32.0 S12 35.0 36.0 Medium dense brown-red coarse to fine sandy SILT, some gravel, little clay, damp to moist. GLACIAL TILL
Observed auger refusal at 37.0 ft. Begin coring at 37.0 ft. See Core Boring Report. 37.0 37.0 15"/24" 40-Bottom of Exploration at 42.0 ft. 45-50 60-HA-122 BORING NO. FILE NO. 70819-000

#### **CORE BORING REPORT**

BORING NO.
HA-122

1 of 1 Page 70819-000 H&A FILE NO. PORT OF ROCHESTER PROJECT PROJECT MGR. M. VALENTINE ROCHESTER, NEW YORK LOCATION FIELD REP. R. DEDRICK LABELLA ASSOCIATES CLIENT 30-May-00 DATE STARTED GEOLOGIC ENTERPRISE CONTRACTOR DATE FINISHED 30-May-00 L. TODD DRILLER ft Datum Elevation **Boring Location** Drill Mud Rig Make & Model Casing Core Barrel Item Sampler Bentonite Hammer Type ✓ Truck Tripod Cat-Head NX Туре HAS SS Polymer П Winch Safety 1 Geoprobe 3-1/4 1-3/8 2 ATV Inside Diameter (in) Air Track Roller Bit Doughnut V None Track Hammer Weight (lb) 140 Driven Spun Cutting Head Casing Skid Hammer Fall (in) 30 Stratum Recovery Drilling Visual Classification and Remarks Weathering Change Depth (ft) RQD Rate Core No. (ft) (%) (min/ft) Depth (ft) (in) 37.0 Begin Coring at 37.0 ft. Moderately soft, moderately weathered red-brown-green mottled fine grained, 37.0 very thin to thin bedded SANDSTONE with close to very close weathered shaley partings. QUEENSTON FORMATION MOD RI 40 42.0 42.0 Bottom of Boring at 42.0 ft. 50-60-65 Sample ID Open End Rod Summary Water Level Data Bottom of Boring Overburden (Linear ft) Elapsed Time Bottom of Water (ft) Time Date Rock Cored (linear ft) T Casing (ft) (ft) (hrs) TZS **Undisturbed Sample** U Samples Split Spoon Sample Geoprobe HA-122 BORING NO.

BORING NO.

		1								Pa		of 4
PROJECT		PORT OF RO	CHESTER				не	&A FILE N	o.	70819-00		
LOCATIO		ROCHESTER		K			PR	ROJECT M	GR.	M. VALE	and the same of th	
CLIENT		LABELLA AS					FI	ELD REP.		R. DEDR	ICK	
CONTRAC	CTOR	GEOLOGIC I					DA	ATE STAR	TED	5-Jun-00		
DRILLER		L. TODD					DA	ATE FINIS	HED	6-Jun-00		
			um Cit	v In	oring Locati	on See Bo	ring Location P	lan				
Elevation	253.6			Core Barrel R	ig Make & N	Aodel CME 5	5 - Truck Moun				Drill Mı	ıd
Item		Casing HSA	Sampler C		Truck	Tripod	✓ Cat-He		Hammer	Туре	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN	Bentonite
Type Inside Diam	notor (in)	3-1/4	1-3/8		ATV	Geoprobe	Winch	5275	✓ S		i	Polymer
Hammer W		3-1/4		~	Track	Air Track	Roller			Ooughnut		None
Hammer Fa				To the training of the	Skid		Cutting	g Head	Casing		Driven	Spun
	Casing	Sampler	Sample	Sample Dep	Stratum		Nava:	NOS 100 00	8 87			
Depth (ft)	Blows per		Number &	(ft)	Change	l	Visua	l Classificati	on and I	cemarks		
	ft	in	Recovery		(ft)	(0.3 ft. TOPSOIL)						
_ 0 _		4	SI	0.0		Medium dense bro	wn gray sandy S			vel, dry.		
		8						FII	JL			
		8 8	8"/24"	2	0							
		-8	S2	2.0		Medium dense bro	wn red silty fine	e to coarse SA	AND, trac	ce fine gravel,	dry.	
		7 8										
		8	13"/24"		0							
		5	S3	4.0		Same, except mois	t.					
5		3										
		3	16"/24"		0	Loose brown red s	Ity fine to com	ee SAND tea	ce fine o	ravel wet		
	10 THE SEC.	2 2	S4	6.0	-	Loose brown red s	my mie to coars	ov ortivo, tra	oo mie gi	,		
		2										
		2	20"/24" S5	8.0	.0	Medium dense bla	ck brown silty f	ine to coarse	SAND, v	wood, wet.		
		4		0.0		31100 311						SECRETARION SECRET
		8 0	120000	10	0							
<b>—</b> 10 <b>—</b>		5	16"/24" S6	10.0	.0	No Recovery.						
		5										
		2 2	0"/24"		.0							
		5 - 2	\$7	12.0		No Recovery.						
		5										
		3	0"/24"	14	.0		706	CAVIIS		nias maist		
		5	S8	14.0		Loose gray brown	sity fine to coa	use sand, s	ome orga	mics, moist.		
— 15 —		T T							VIII V			
		3	19"/24"	16	.0			ALLU	VIUM			
1												
1						-						
1				18.		Loose gray brown	alayer Cit T II	ttle sand	ict			
		2	S9	19.0		Loose gray brown	crayey SILI, II	tile sand, mo	iot.			
<u> </u>		2										
		2	10"/24"	21	.0							
1				-								
									-			
						0 19.0	clay					
		1 2	\$10	24.0		Same, except little	ciny.					
25		2										
1		2	14"/24"	20	5.0							
1						-						
			ATT	20.0		Came						
10232		2 2	S11	29.0		Same,						
30		4	15"/24"	3	1.0		rala IIV			Summa	arv	
			Level Data Bottom of	Bottom o		O Open End	iple ID Rod	Overbu	ırden (Li	near ft)		
Date	Time	Elapsed Time (hrs)	Casing (ft)			T Thin Wal	Tube	Rock C	Cored (Lin	near ft) 2		
		()	, , , , , , , , , , , , , , , , , , ,				ed Sample	-	er of Sam			102
					1	S Split Spoo	vi gambie	I BC	RING N	O.	HA.	-143

#### TEST BORING REPORT

BORING NO.
HA-123

Page 2 of 4

- 40 - 40 - 45 - 50 - 55	2 2 2	S11 4 20"/24"  S12  3 14"/24"	34.0 36.0 39.0		Very loose gray brown fine to medium sand SILT, trace clay, organics, moist.
45		S12	36.0		
45		S12	36.0		
45		S12	36.0		
45		S12	36.0		
45	1 2 2	S12			
45	1 2 2	S12			
45	2		39.0		
45	2		39.0		ALLUVIUM
45	2		39.0		
45	2				Same.
		149/249			
		14 /24	41.0		
50					
	1 2	S13	44.0		Very loose gray silty fine to medium SAND, moist.
	2	3 19"/24"	46.0		
		19724	40.0		
		S14	49.0		Loose gray fine sand SILT, trace clay, organics, moist.
. 55	3				
55		4 20"/24"	51.0		
55					
55					
55					
55.	1	S15	54.0		Same.
	3	3 20"/24"	56.0		
	<u></u>	S16	59.0		Same.
60	2 5				
		4 20"/24"	61.0	)	
			-		
			-		
		013	(10		Loose gray fine sand SILT, trace clay organics, moist.
65	3	S17	64.0		LAVIST BIOS MILE SILLE CITE I, THOSE AND ST. MILES I MODEL
	4	5 24"/24"	66.0	)	
		-			
-					
-		S18	69.0		Same, except medium dense.
<del> 70</del>	WOH				FILE NO. 70819-000 BORING NO. HA-123

#### TEST BORING REPORT

BORING NO.
HA-123

Page 3 of 4

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
		4	S19	74.0		Medium dense gray fine sandy SILT, trace clay, organics moist.
<b>—</b> 75 <b>—</b>		8 9	22"/24"	76.0		ALLUVIUM
			***********			
		2 5	S20	79.0		Same.
80		7 9	23"/24"	81.0		
			23 727			
		5 5	S21	84.0		Same.
— 85 —		8 9	20"/24"	86.0		
			20 724	00.0		
_ 90		5	S22	89.0		Medium dense gray brown silty medium to fine SAND, trace clay, moist.
		8	21"/24"	91.0		
			21 /24	71.0		
				-		
		WOR WOR	S23	94.0		Very loose gray brown silty medium to fine SAND, trace clay, moist.
<u> </u>		WOR	22"/24"	96.0		
			22 124	70.0		
			****************			
				-		
		5	S24	99.0		Same, except medium dense.
100 —		8 9	22"/24"	101.0		
		WOR WOR	S25	104.0		Same, except very loose.
<u> </u>		WOR	24"724"	106.0		
				100.0		
				-		
		3 5	S26	109.0		Medium dense gray brown silty fine to medium SAND, trace clay, pockets of rock fragments, moist.
<u> </u>		5 17	23"/24"	m		FILE NO. 70819-000 BORING NO. HA-123

#### TEST BORING REPORT

BORING NO.
HA-123

Page 4 of 4

Depth (ft)	Casing Blows per ft	Sampler Blows per 6 in	Sample Number & Recovery	Sample Depth (ft)	Stratum Change (ft)	Visual Classification and Remarks
					17.57	
						ALLUVIOM
					114.0	
		1007.2	S27 2"/3"	114.0		Very dense sandy ROCK FRAGMENTS. WEATHERED BEDROCK
<b>—115</b> —			2"/3"	114.2		WEATHERED BEDROCK Began rock coring 114.0 ft.
						Bottom of Exploration at 116.0 ft.
		**********				
				e-manning a manning		
<del> 120</del>						
			***************************************			
<u> </u>						
	THE RESIDENCE OF THE PARTY OF T					
<b>—</b> 130 —						
130						
	Estate and the second					
<b>—</b> 135 —						
						0
<u> </u>	<del> </del>					
	MINUS SECTION					
1.00						
<u> </u>						
				***		
150						
_ 100		Indicate Sesponsor Sea				FILE NO. 70819-000 BORING NO. HA-123

### **CORE BORING REPORT**

BORING NO.

													Pa		of 1			
PROJECT		PORT OF RO	CHESTER	2							H&A FILE	NO.	70819-000 M. VALENTINE					
LOCATION		ROCHESTER									PROJECT							
CLIENT		LABELLA A																
CONTRAC	10000000	GEOLOGIC						DATE STARTED 5-Jun-00										
		L. TODD	LIVILIKI	IOD							DATE FINI	SHED	6-Jun-00					
DRILLER						_		_										
Elevation	253.	6 ft Da		1		Bori	ng Location		THE RESERVE THE PARTY OF THE PA	THE REAL PROPERTY.	cation Plan			Drill Me	vd			
Item		Casing	Sampler	Name and Address of the Owner, where the Owner, which is the Owner,	Barrel		Make & Mo				k Mount	Hamme	- Tune		Bentonite			
Туре		HAS	SS	1			Truck		Tripod Geoprobe		Cat-Head Winch		Safety					
Inside Diame	eter (in)	3-1/4	1-3/8	Santa (Vincini)	2		ATV	_		무	Roller Bit	_						
Hammer We			140	ALC: NO	STATE OF THE STATE		Track Skid	H	Air Track		Cutting Head	☐ Doughnut ☑ N Casing ☐ Driven			Spun			
Hammer Fal	The second secon		30	THE PARTY	粉发系建筑		Stratum	屵			Cutting ricad	Chang						
Depth (ft)	Drilling	C N	Recover		Weathering		Change				Visual Classifica	ation and	Remarks					
Deptii (it)	Rate (min/ft)	Core No Depth (ft)	(in)	(%) Wea			(ft)											
	(IIIII/IL)	Depth (it)	(III)	(10)														
				***										********				
								******										
							114.0	Beg	gin coring at 114	.0 ft.			1.15		ANDETONE			
		114.0		00	MO	ň		Mo	derately soft, m	oderate	ely weathered red-b	rown-gray	y mottled fine	-grained S	ANDSTONE.			
— 115 —		RI	21 15	88 63	IVIO						QUEENSTO	N FORM	ATION					
		116.0					116.0				Bottom of B	oring at 1	16.0 ft.					
											Dottom or B	orring at 1						
— 120 —								-										
														A. A. A. (MAIL)				
								-										
								-										
— 125 —								-										
	And the second of the							-					**					
								-										
								-										
1																		
— 130 —								-		********								
						Annes.												
— 135 —								+										
1					-													
	*(-)4)*****							*****										
	and the state of			****														
				******				-					400000000000000000000000000000000000000	Charles Co.				
— 140 —															1.000			
140						-		-										
		Wa	ter Level Da	ata	-				O Open End T Thin Wall	ple ID	0	hueden (1	Summ					
Date	Time	Elapsed Tin	ne Botton	n of B	ottom of	Borin	Water (ft	)	O Open End T Thin Wall	Tube	Rock	burden (L Cored (li	near ft) 2	14				
270000	200707	(hrs)	Casing	(110)	(ft)				U Undisturbe	ed Sam	iple Sam		2	.7S				
									S Split Spoo	n Sam	ple	BORING	NO.	HA	-123			

BORING NO.

		<u>.</u> §							Pag	ge 1 of 1				
nne ree	,	DODE OF BO	CHECTER				11.8. A	FILE NO.	70819-000					
PROJECT		PORT OF RO							M. VALENTINE					
LOCATIO		ROCHESTER						JECT MGR. .D REP.	R. DEDRI					
CLIENT		LABELLA AS				DATE STARTED 12-Jun-00								
CONTRA		GEOLOGIC E	ENTERPRI	5E5		DATE STARTED 12-Jun-00								
DRILLER		L. TODD							12-3411-00					
Elevation	267.9	2 ft Dat			oring Locati	CONTRACTOR OF THE PERSON NAMED IN COLUMN 1	oring Location Plan			Drill Mud				
Item		Casing			ig Make & N		55 Truck Mount  Cat-Head	Hamme		Bentonite				
Туре		HSA	SS		Truck	☐ Tripod ☐ Geoprobe	✓ Cat-Head  Winch	The second second second second	Safety	Polymer				
Inside Dian		3-1/4	1-3/8		Track	Air Track	Roller Bit		Doughnut	✓ None				
Hammer W				Control of the Contro	Skid		Cutting H			Driven Spun				
Hammer Fall (in) Casing		Sampler	Sample		Stratum	Ī —	GRADIE AND	10 MM (M) A	4 0					
Depth (ft)	Blows per	Blows per 6	Number 8	(11)	Change	l	Visual C	lassification and	Remarks					
	ft	in	Recovery	1	(ft)									
_ 0 _								ASPHALT	r					
			eı	1.0		Medium dense bro	own black silty fine	CRUSHED STON to medium SAND	), little gravel, a	sh, brick,				
		6 S1 4 12"/1		2.	0	dry.								
		3 S2 2.0				Loose brown silty	fine to coarse SAN	D, moist.						
					-			FILL						
1		4	18"/24" S3	4.0	0	(Black rock obstru	action in spoon.)							
			33	4.0		Control Took Coality								
5		4	1"/24"	6.	0									
1		2 4	S4	6.0		Loose brown silty SAND, organics, wet.								
		3 3												
		2	17"/24"	8.	0									
		2 5	S5	8.0		Same.								
		-3-4	***************************************											
10		3	24"/24"	10.	.0		Bottor	n of Exploration a	t 10.0 ft.					
							-							
15														
1					-									
1														
1														
20														
						-								
I	-													
1														
1														
1														
25														
1														
						-								
30							nple ID		Summa	rv				
		Water   Elapsed Time	Level Data	of Bottom of	T	O Open En								
Date	Time	(hrs)	Casing (			T Thin Wa	l Tube	Rock Cored (L						
							oed Sample on Sample	Number of Sar		HA-124				

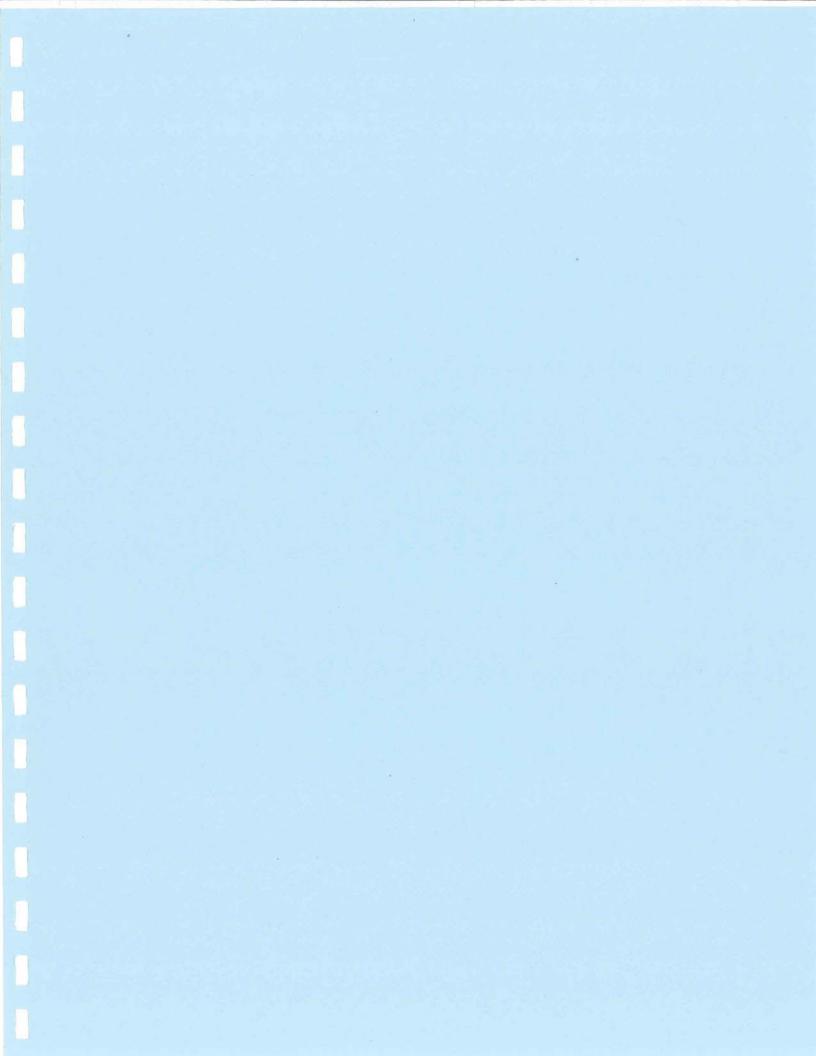
### TEST BORING REPORT

BORING NO.

HA-125

Page 1 of 1

The second					_		H&A FILE NO. 70819-000								
PROJECT		PORT OF RO	CHESTER											Control of the Control	
LOCATIO	Course	ROCHESTER	, NEW YO	RK			PROJECT MGR. M. VALENTINE								
CLIENT	1000	LABELLA AS	N. Salara Stations of the	3.0			FIELD REP. R. DEDRICK							DRICK	
CONTRAC	,	GEOLOGIC I	in action to the party	THE PERSON						DAT	E STA	RTED	12-Jun	-00	
DRILLER		L. TODD	J. T. LEIN INI				DATE FINISHED 12-Jun-00								
DRILLER					_					-	annes merchen	- A. O.			
Elevation	255.2	9 ft Dat	um (	Lity		ing Locatio			and the same of	cation Plan				In m.	f 1
Item		Casing	Sampler	Core Barrel		Make & M			_	ck Mount		T	m	Drill N	400
Туре		HSA	SS	NX			Trip		V	Cat-Head		Hamme		<b>-</b>   □	Bentonite
Inside Diam	eter (in)	3-1/4	1-3/8	2	_		_	probe	Ш	Winch		_	Safety		Polymer
Hammer W			140	non kelaluksi.	_		Air	Track		Roller Bit		-	Doughnut		None
Hammer Fa			30	對其物學的		Skid				Cutting H	lead	Casing		Driven	Spun
	Casing	Sampler	Sample	Sample De	pth	Stratum					O116		Dame to		
Depth (ft)	Blows per	Blows per 6 in	Number 8	(ft)		Change				visual (	assilic	ation and	Kemarks		
	ft	The second second second	Recovery	113000	-	(ft)	_		-		Table 1				-5500=81000=000
— o —			-1	****							ASI	PHALT			
	and the second			***				- december	L.I	le over III d	CRUSH	ED STON	E		
		12	S1 4"/12"	1.0	2.0		********	n dense bro							
	***********	3	S2	2.0	2.0		Loose b	rown gray	silty fin	e to mediur	n SAND	, damp			
		4							h a sili de base		I	FILL			
		2	15"/24"		4.0						**********	*****			
		3	S3	4.0	4.0		Same.		*(*****						
_ 5 _		2													
		4 2	14"/24"		6.0	*******									
		3	S4	6.0	5.0		Loose	gray silty fir	e SAN	D, some cla	y, little g	gravel, dan	np		
		3													
		3 7	18"/24"		8.0	8			-						
		8	S5	8.0	5,0		Very de	ense brown	gray sil	ty fine SAN	D, some	e gravel, da	amp		
		28									GLAC	CIAL TILL		icas minimación	
55000		29 28	15"/24"		10.0									**********	******
— 10 —									Li I mare	Botto	m of Exp	oloration a	t 10.0 ft.		
									A						
				****			Topic of North Street								
	11-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-														
		***********		140 to 100 per 1 construction of 1		************	****								
		17-1-17-17-17-17-17												****	
— 15 —		(* 17 - * (* 17 - * * * * * * * * * * * *		F1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	wike-										
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	The second second														
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	processor to the second														
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20															
20														J	
						CHILDREN STATE									
					****										*****
									4-1-1-1						
1															
-20-00					-										
— 25 —												****			
									1.00000						
									30.000						
														- Part Name	
							******								
1															
30					0.400	(1									
		Water	Level Data				-	San	ple 1D		T		Sun	mary	
		Elapsed Time		of Bottom	of	W-1 (6)	0	Open End	Rod			burden (Li	inear ft)	10	
Date	Time	(hrs)	Casing (f			Water (ft)	Т	Thin Wall	Tube	nla		Cored (Li		 5S	
							U	Undisturb Split Spoo				ber of San			10-
							S	Canneba	a Saint		1 1	BORING	NO.	$\mathbf{H}_{A}$	1-125



HALEY & ALDRICH

## OBSERVATION WELL INSTALLATION REPORT

Well No.
LBA-MW1
Boring No.
HA-111\*

ALDIGER	111	ISTA	LLATION REI	PORT		Boring No. HA-111*
nno ve car				H&A FIL		
Establishment.	PORT OF ROCHEST ROCHESTER, NEW			PROJECT		LENTINE
	LABELLA ASSOCIA			FIELD RI		DRICK
	GEOLOGIC ENTER				STALLED 5/24/2	
Santa Maria Cara Cara Cara Cara Cara Cara Cara	L. TODD			WATER I	LEVEL	
Ground El.	251.83 ft	Location	N: 1188376.32		☐ Guard Pip	ne e
El. Datum	City		E: 1408 396.58		✓ Roadway	Box
SOIL/ROCK	BOREHOLE		Type of protective cove	er/lock	Road	way Box
CONDITIONS	BACKFILL		Height/Depth of top of above/below ground su		adway box	n
			Height/Depth of top of above/below ground su			ft
		+111	Type of protective casi	ng:	7	lone
			Length			ft
			Inside Diameter			in
			Depth of bottom of gua	ard pipe/roady	way box	ft
			Tv	pe of Seals	Top of Seal (ft)	Thickness (ft)
				Concrete	0.0	1.0
				ntonite Seal	1.0	2.5
				nonne bear		
		LI				
Gray brown silty			Type of riser pipe:			
coarse to fine SAND.	Sand/Grout		Inside diameter of i	riser pipe		in
Some gravel, wood,			Type of backfill are	ound riser	Quar	rtz Sand
wet.						
			Diameter of borehole			4-1/4in
FILL						
			Depth to top of well sci	reen		ft
					(a a	H E 40 DVC
1			Type of screen	2 3	SCHEDU	JLE 40 PVC 0.010 in
			Screen gauge or siz			2.0 in
		L2	Diameter of screen		Oue	rtz Sand
			Type of backfill aroun	d screen	Qua	Itz Salid
	Ť		Depth of bottom of we	ll screen		13.0ft
		L3	Bottom of Silt trap			n
		Î [_	Depth of bottom of bot	rehole		14.0 ft
	om of Exploration)			(Not to Scale)		
(Numbers refer to d	epth from ground surface in feet)		10 ft + 0	(Not to Scale)	= 13	ſt
Rise	3 ft + r Pay Length (L1)		of screen (L2) Length of si		Pay lei	
COMMENTS: W	ell installed 4 ft. west of	Boring HA-1	11. Hole was blind augered to 14.0 ft. p	er Greg Seneg	al of Labella Associa	tes
A CONTRACTOR OF THE PROPERTY O						

HALEY & ALDRICH

### OBSERVATION WELL INSTALLATION REPORT

Well No.
LBA-MW2
Boring No.

ALDRICH	TT	ATZ	LLATION REP	ORT	ſ	Boring No.
						HA-117
PROJECT	PORT OF ROCHEST			H&A FILI		LENTINE
LOCATION	ROCHESTER, NEW			PROJECT		
CLIENT	LABELLA ASSOCIA			FIELD RE		DRICK
CONTRACTOR	GEOLOGIC ENTER	PRISE		DATE INS		000
DRILLER	L. TODD			WATER I	EVEL	
Ground El.	253.7 ft	Location	N: 1188222.94		☐ Guard Pip	e
El. Datum	City		E: 1408074.34		✓ Roadway !	Box
SOM WOCK	BOREHOLE		Type of protective cover/	lock	Roady	way Box
SOIL/ROCK	- had a state a part of the state of the sta		Type of protective cover,	ioen		
CONDITIONS	BACKFILL	٦ [	Height/Depth of top of gr above/below ground surf		adway box	n
			Height/Depth of top of ri above/below ground surf			ft
			Type of protective casing	ζ;	N	lone
			Length			ft
			Inside Diameter			in
ŀ			Inside Diameter			
			N. 41 - 51 - 44 5	d nina/vandu	way bay	ft
	7.		Depth of bottom of guard	a pipe/roady	vay box	~
	Quartz Sand					m. 1.1 (6)
	(17 ft. bgs.)		Туре	e of Seals	Top of Seal (ft)	Thickness (ft)
	Bentonite			oncrete	0.0	0.0
	(17 ft. to 26 ft.)		Bento	onite Seal	0.0	4.0
	550 P. J. O. W. S.	LI				
		111				7. TANK TO BE TO SERVE THE
						-
20 20 20			Type of riser pipe:		1	PVC
Black brown silty					-	2.0 in
SAND, slag, brick,			Inside diameter of ris		Oue	rtz Sand
gravel.			Type of backfill arou	nd riser	Qua	Itz Saliu
FILL			Diameter of borehole		*	in
	10.0	*	Depth to top of well scre	en		ft
Gray silty SAND,			Type of screen		SCHEDU	JLE 40 PVC
little gravel.			Screen gauge or size	of openings		0.010 in
		L2	Diameter of screen		491	2.0 in
ALLUVIUM			Type of backfill around	screen	Qua	rtz Sand
			Depth of bottom of well	screen		ft
1		L3	Bottom of Silt trap			15.0 ft
1	1	<u>+</u>		holo		26.0 ft
			Depth of bottom of bore	inote		
	om of Exiporation)		3	Not to Scale)		
(Numbers refer to	depth from ground surface in fect)			ft ft	= 15	ft
	5 ft		10 ft + 0 n of screen (L2) Length of silt		Pay le	
	er Pay Length (L1)		17.0 ft. b.g.s. using Bentonite Chips.			
COMMENTS: B	ottom of porenote seal fi	OIII ZO.U II. IC	7 17.0 It. D.B.a. using Dontointo Cimps.			

HALEY & ALDRICH

## OBSERVATION WELL INSTALLATION REPORT

Well No.
LBA-MW3
Boring No.
HA-114a

TEDITIENT	III	NST	ALLATION REP	ORT		HA-114a	
PROJECT	PORT OF ROCHES	TER		H&A FIL	E NO. 70819-		
	ROCHESTER, NEW		<del></del>	PROJECT	M. VA	LENTINE	
	LABELLA ASSOCI			FIELD RI	EP. R. DEI	DRICK	
	GEOLOGIC ENTER				STALLED 5/25/20	000	
	L. TODD			WATER I	LEVEL		_
Ground El.	261.92 ft	Location	N: 1187851.82		☐ Guard Pipe	e	
El. Datum	City		E: 1407798.33		Roadway I	Box	
SOIL/ROCK	BOREHOLE		Type of protective cover	r/lock	Roadw	vay Box	_
CONDITIONS	BACKFILL						
CONDITIONS	BACKFIELD		Height/Depth of top of above/below ground sur		adway box		ft
			Height/Depth of top of above/below ground sur		. *	0.3	ſt
			4 Type of protective casin	ıg:	N	one	
			Length				ft
,			Inside Diameter		*		in
			Depth of bottom of gua	rd pipe/roadv	way box		.ft
				an af Casla	Top of Seal (ft)	Thickness (ft)	
		- 1 1		oe of Seals	0.0	1.0	
				Concrete		12.0	ŕ
		LI	Ben	tonite Seal	1.0	12.0	
Gray brown silty			Type of riser pipe:		Р	VC	
Periodic sole visionic de Co	Bentonite/		Inside diameter of r	iser pipe		2.0	in
SAND, slag, brick	Quartz Sand		Type of backfill aro		Benton	ite Chips	
FILL	Quartz Sand						
200-000000	14.0		← Diameter of borchole			4-1/4	in
		†	Depth to top of well scr	reen		15.0	_ft
Gray brown clayey SILT			Type of screen		SCHEDU	ILE 40 PVC	-
ALLUVIUM			Screen gauge or size	e of openings		0.010	in_
1		L2	Diameter of screen			2.0	in_
-	19.0		Type of backfill around	d screen	Quar	tz Sand	-
Brown silty SAND,							
some gravel.			Depth of bottom of wel	ll screen		25.0	_ft
GLACIAL TILL		1					
		L3	Bottom of Silt trap			**	_ft
			Depth of bottom of bor	rehole		25.0	_ ft
	om of Exploration)			(No. 1 . C. 1 )			
(Numbers refer to d	depth from ground surface in feet)		10 ft + 0	(Not to Scale)	= 24.7	n	
	14.7 ft		$\frac{10}{\text{th of screen (L2)}} + \frac{0}{\text{Length of sil}}$		= 24.7 Pay len		
COMMENTS:	r Pay Length (L1)	rent	an or seroon (152)	,			
Comments. —							



### APPENDIX B

Results of Laboratory Soil Testing

- 700

Haley & Aldrich of New York

Pruject: Port of Rochester Project #: 70819-000 Client: LaBella Associates, P.C. Subject: Data Table of Recent Explorations

TABLE B-1 - TEST DATA - RECENT SUBSURFACE INVESTIGATIONS

Date: 23-Jun-00 Crented By: MSV Checked By: SEW

<u> </u>	PROJECT
HA-101 HA-101 HA-122 HA-122 HA-123 HA-123	EXPLORATION
(FT) 251.8 252.8 253.6	SURFACE
NORTHING EASTING (FT) (FT)	LOCATION
EASTING (FT)	NOI
	DEPTH
(%) (%) 87.3	NATURAL
WL 105	AT
Wp 38	LABO ATTERBERG LIMITS (%)
1P 31 31	LABORATORY TESTS TOTAL TS (%) UNIT
WEIGHT (PCF)	TOTAL UNIT
7	SHEA
Remolded	SHEAR STRENGTH (TSF)
PP/2	I (TSF)
OTHERS 4% <#200 98% <#200 80% <#200	

Haley & Aldrich of New York
Project: Pot of Rochester
Project #: 70819-000
Client: LaBella Associates, P.C.
Subject: Data Table of Existing Explorations

TABLE B-2 - TI

Date: 31-Jan-00
Created By: BEBa
Checked By: SEW

TES'I
TEST DATA - J
À
(-)
RLI
IER S
SUB
SUE
ŒΑ
Œ
Z
ARLIER SUBSURFACE INVESTIGATIONS
TG/
II
SNC

PROJECT EXPLORATION IDENTIFICATION		Stutson Street B101	iter Main	H&A #7616 December-87				B105	and the second s					B107		THE PARTY OF THE P																		The state of the s		
ELEVATION	(FT)	249						221.4						220.4																						
LOCATION	NORTHING EASTING	1185395						1185455						1185470																						
	EASTING	759165						759057						759019																						
DEPTH	(FT)	16.7	16.8	16.9		17.2	17.4	11.2	11.3		11.5	-	•	6	6.2	6.3	6.6	6.8	2	73		7.5		-	7	3 0	i	10.4	07	10.7	=	-	112		11.5	117
WATER	(%)	49.2	41.4	34.1	34.2	34.7	35.8	44.1	51.6		45.1		41./	30.5	35.7	43.5	37.7	30		40.7		41.9		40	32.9	44.8	1	38.4	20.7	37.7	39.7	30 /	29.4		28.1	3.06
AT	WL				34.4							3	39.4											37.6								22.0	33.9			
ATTERBERG LIMITS (%)	WP				27.3								29.6											28.8								3	23			
TOTAL UNIT	IP				7.1								9.8											8.8									4.9			
TOTAL	WEIGHT (PCF)	103	100					92.6						013	21.0			97.8							96.9	99,4										
IDEX	TV		0	0.14			0.2		0.09		0.06							0.1		2	0.07	0.08			0.07		0.09	0.08		0.06	0.07		000	0.00	0.09	007
IDEX STRENGTH (TSF)	SV	7		0.21	0.01				0.08	0.01	0.09	0.01			007	0.07		0.21	0.04	2	0.00	0.09	0.02				0.0	0.09	0.01	0.08	0.08	0.01	000	0.01	0.1	0.02
(TSF)	PP/2		0	0.2			0.23	oraco.	0.02		0.01				000	0.00		0.06		000	0.02	0.03			0.04		0.03	0.03		0.01	0.01		3	0.04	0.01	2
	OTHERS				101-35%	HST 90 0 = 1111	0.00						LOI = 5.6%	UU = 0.13 TSF		0.01	UII = 0.07 TSF	000						LOI = 4.1%			LOI = 4.8%									

# Haley & Aldrich of New York

Project: Port of Rochester
Project #: 70819-000
Client: LaBella Associates, P.C.
Subject: Data Table of Existing Explorations

# TABLE B-2 - TEST DATA - EARLIER SUBSURFACE INVESTIGATIONS

Date: 31-Jan-00 Created By: BEBa Checked By: SEW

AFFORY TESTS    TOTAL   IDEX STRENGTH (TSF)     WEIGHT   WEIGHT       ID5.3   0.17   0.1   0.1     105.3   0.17   0.1   0.1     0.08   0.14   0.0     0.09   0.04   0.0     0.09   0.05   0.0     0.09   0.05   0.0     0.09   0.05   0.0     0.09   0.05   0.0     0.09   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00   0.00   0.0     0.00
0 0 0 0
0 0 0 0 0 7

E 11 2 12

# Haley & Aldrich of New York

Project: Port of Rochester Project #: 70819-000 Client: LaBella Associates, P.C. Subject: Data Table of Existing Explorations

The state of the state state state state state of the

TABLE B-2 - TEST DATA - EARLIER SUBSURFACE INVESTIGATIONS

Date: 31-Jan-00
Created By: BEBa
Checked By: SEW

PROJECT	IDENTIFICATION	ELEVATION			DEPIH	CONTENT	Α.	ATTERBERO LIMITS (%)	(%)	WEIGHT	IDEX S	IDEX STRENGTH (TSF)	(HST	OTHERS
		(FT)	NORTHING (FT)	EASTING	(F)	(%)	WL	WP	P	(PCF)	VT	SV	PP/2	OTTIENS
Stutson Street	DA-B-101	275.00	1186450	756550.001								7	ļ	
Bridge	DN-B-102	273.13	1186450	756550.001		7 7944 7 1000					1		.	
NYSDOT	DN-B-103	272.44	1186450	756550.001										
December-9/	DN-B-3	216.77	1185260.09	758819.15										
	DN-B-4	216.22	1185182.4	758779.05										
	DN-B-5	225.60	1185115.4	758737.87										
	DN-B-51	219.10	1185214.8	758998.7										
	DN-B-52	220.91	1185179.6	758984.2										
	DN D 54	221.30	1185141.6	758969.1	-									
	DN B 55	88.222	1185010.8	758947.22				D.O.T. LAB	DATA NOT	D.O.T. LAB DATA NOT AVAILABLE	(#)			
	DA BO	22 1 20	11070121	/38933.4										
	EH B I	70.107	1184912.1	759236.98										
	1-d-ti,	269.19	11051017	/28269.1										
	11 a Ha	06.067	1162000	750545 (2								-		
	ET B 13	250.89	1184939.6	759545.62										
	FH-B-13	253 18	11851675	750057 78										
	FH-B-14	251.97	1185098.5	760109 9								-		
	FH-B-201	289.76	1185247.36	758604.89		1000								
	FH-B-202	288.08	1185316.02	758630.65										
	FH-B-203	291.08	1185224.7	758591.8										
	FH-B-305	253.05	1184888.39	759408.73										
	FH-B-306	253.97	1184816.52	759408.82										
	FH-B-307	251.77	1184906.29	759381.4										
	FH-B-308	251.77	1184858	759294.24										
	FH-B-309	251.60	1184917.01	759230.91										
	FH-B-310	251.51	1184910.43	759225.38										
	FH-B-311	251.44	1184925.8	/59340.53										
	21C-Q-D3	250.40	11849//.85	759281.94										
	FH-B-7	251 47	11849016	750088 06										
	FH-B-8	250.78	1185053.7	759323.52								-		
Protection Project	D94-1	224.33	1189750	761500	0.0-2.0									GRAIN SIZE
Army Corn					0.0-8.0		2							GRAIN SIZE
April-95	D94-2	277 33	1188762	761356	00.0-22.0		34	3 2	5					
-	200	101100	1100102		5.0-7.0		3/	21	10			-	1	CD A DA CHOO
														OLVARIA SIZE
	D94-3	238.33	1187239	760364	10.0-12.0	69.9								GRAIN SIZE
												-		LOI = 7.6%
Rehabilitation of	D79-6	238.43	1188337.56	760567.11 12.0-12.7	120-127							-		
East Pier					16.3-17.8		6	23	17			-		GRAIN SIZE
Army Corp					31.3-32.8						-			GRAIN SIZE

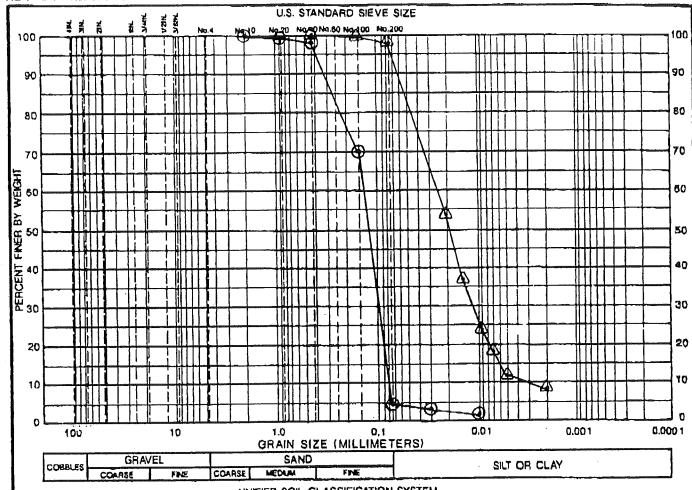
NOTES: 1. SPT and probe blow counts are recorded on the subsurface exploration logs included in Appendix ???



### APPENDIX C

### **Records of Earlier Subsurface Explorations**

- C-1 Stutson Street Water Main
- C-2 Genesee River Crossing
- C-3 Stutson Street Bridge
- C-4 Dredge Probes Army Corp of Engineers
- C-5 Wave Surge Protection Project
- C-6 Rehabilitation of East Pier
- C-7 Lake Avenue Improvements



UNIFIED	SOIL	CI.	ASSIFICATION	SYSTEM

SYMBOL	EXPL, NO.	SAMPLE NO.	DEPTH (feet)	SAMPLE SOURCE	PROPOSED USE	SAMPLE DESCRIPTION
0	HAIDI	7	10-12			Gray brown fine to meduur SAND, tr SIH and organie
۵	HAIOI	/7	60-62		·	Gray brown SILT, little clay, trace fine sand.

SŸMBOL	EXPL.	SAMPLE NO.	Сп	C o	NATURAL WATER CONTENT(%)	ATTERBERG L	(MITS (%) I p	LOI (% by wgt.)	
	- Monte de la constante de la				-				



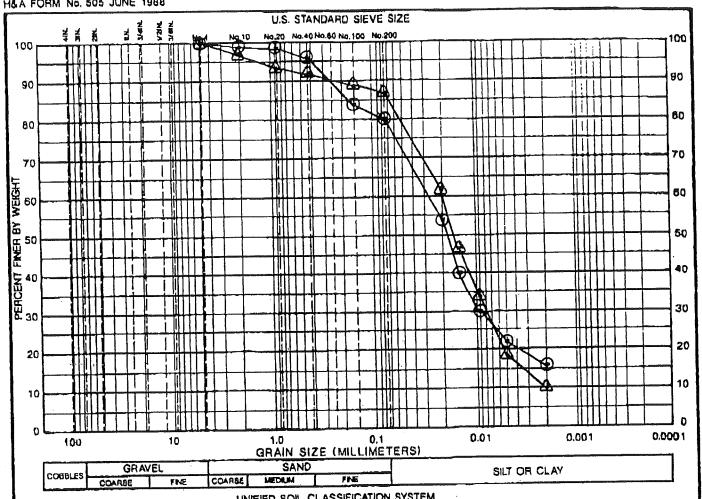
Haley & Aldrich, Inc.

Consulting Geotechnical Engineers, Geologists and Hydrogeologists

GRAIN SIZE DISTRIBUTION

FILE NO.

DATE:



	UNIFIED	SOIL	CLASSIFICATION	SYSTEM
--	---------	------	----------------	--------

SYMBOL	EXPL. NO.	SAMPLE NÓ.	DEPTH ((eat)	SAMPLE SOURCE	PROPOSED USE	SAMPLE DESCRIPTION
0	HA122	11	30-32			Gray brown clayer SILT little fine sand, little organ
Δ	HA 123	10	24-26			Graybrown, SILT, little sand.
	* * *			•		

ľ												
	SYMBOL	EXPL. NO.	SAMPLE NO.	Cu	°C o	NATURAL WATER CONTENT(%)	ATTERBERG L	IMITS (%)	LOI (% by wgt.)			
II												
l												



Haley & Aldrich, Inc.

Consulting Geotechnical Engineers, Geologists and Hydrogeologists

GRAIN SIZE DISTRIBUTION

FILE NO.

DATE:



### APPENDIX D

### Historic (Sanborn) Maps

- D-1 Site Map with 1892 Sanborn Overlay
- D-2 Site Map with 1912 Sanborn Overlay
- D-3 Site Map with 1924 Sanborn Overlay
- D-4 Site Map with 1950 Sanborn Overlay
- D-5 Site Map with 1967 Sanborn Overlay

