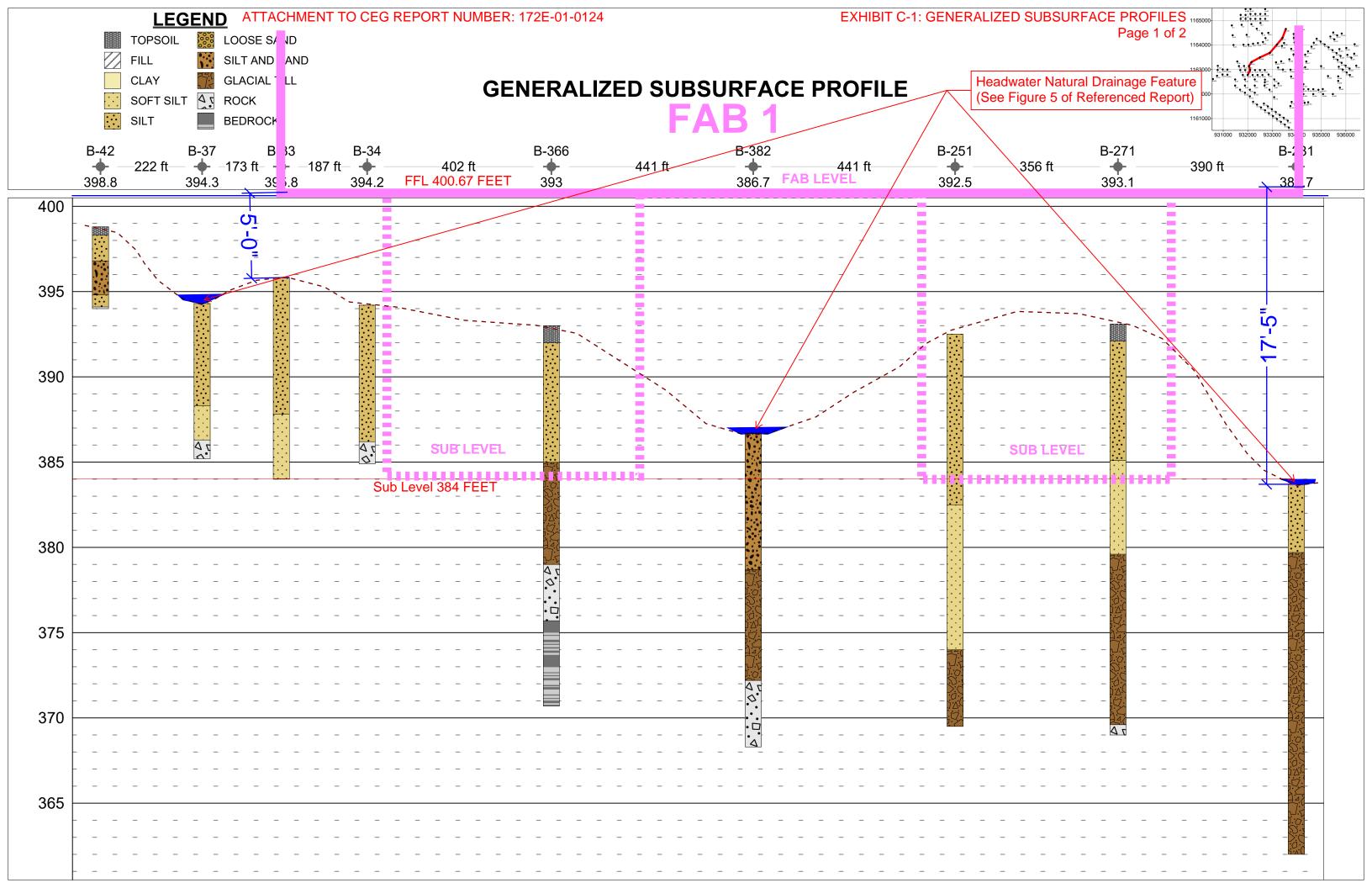
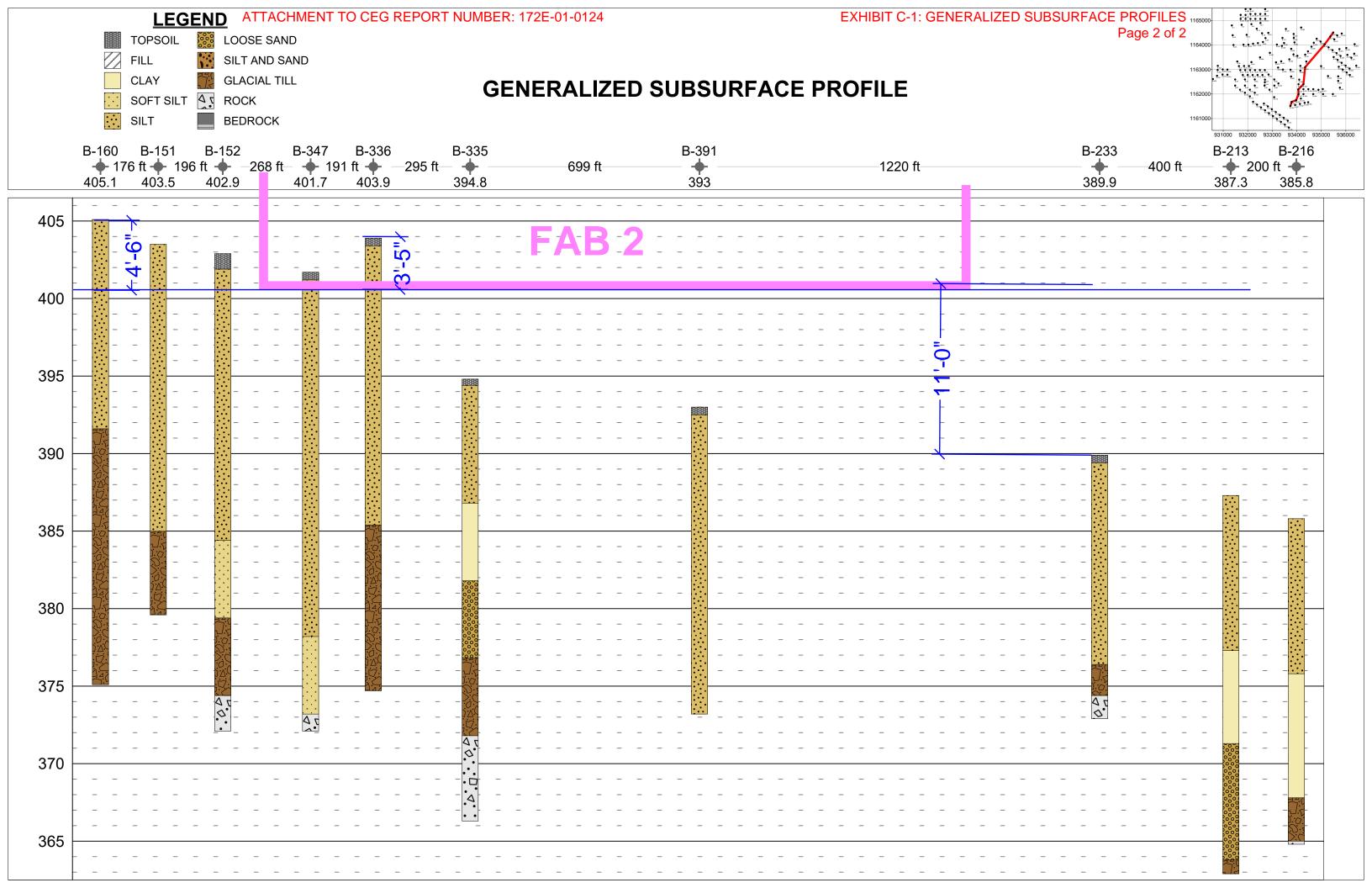


# **Appendix C**Miscellaneous Exhibits

Exhibit C-1 Generalized Soil Profiles Exhibit C-2 ASCE7 Hazards Report







## **ASCE Hazards Report**

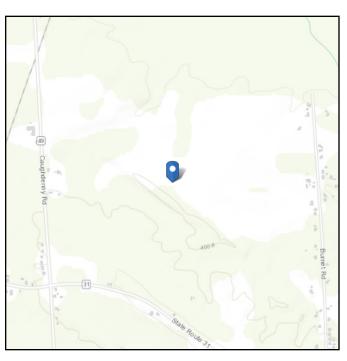
Address:

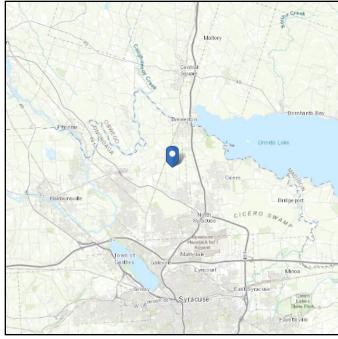
No Address at This Location

Standard: ASCE/SEI 7-16 Latitude: 43.190766
Risk Category: III Longitude: -76.157611

Soil Class: D - Stiff Soil Elevation: 392.9035682946986 ft

(NAVD 88)

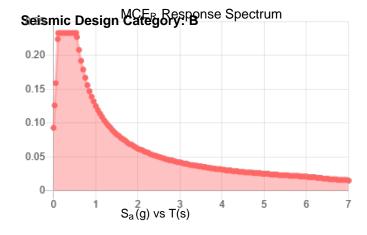


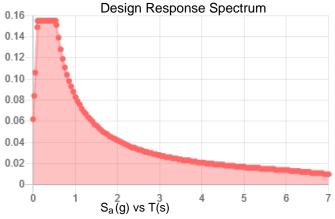


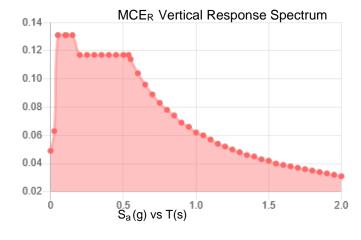


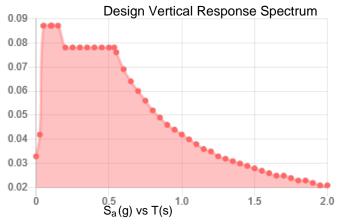
#### Seismic

Site Soil Class: Results:	D - Stiff Soil			
S <sub>s</sub> :	0.146	S <sub>D1</sub> :	0.083	
$S_1$ :	0.052	T <sub>L</sub> :	6	
F <sub>a</sub> :	1.6	PGA:	0.073	
F <sub>v</sub> :	2.4	PGA <sub>M</sub> :	0.117	
S <sub>MS</sub> :	0.233	F <sub>PGA</sub> :	1.6	
S <sub>M1</sub> :	0.125	l <sub>e</sub> :	1.25	
$S_{DS}$ :	0.155	$C_v$ :	0.7	









Data Accessed: Thu Feb 01 2024

**Date Source:** 

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

EXHIBIT C-2: ASCE 7 HAZARDS REPORT Page 3 of 3



The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE Hazard Tool.

CME Report No. 28062B-04-0724



6035 Corporate Drive East Syracuse, New York 13057 (315) 701-0522 (315) 701-0526 (Fax)

www.cmeassociates.com

### **Transmittal**

July 16, 2024

Ramboll (Client) 94 New Karner Road Albany, New York Phone: 315.420.8439

Attn: Andy Philips, Sr. Project Manager

Andy.Philips@Ramboll.com

Re: Micron Campus

Clay, New York

CME Project No.: 28062-05

Gentlepeople:

Enclosed you will find....

Number of Copies
1 Report Number
28062B-04-0724 Description
Geotechnical Data Report – Third Phase

The above report was emailed to Andy Philips at Andy. Philips@Ramboll.com on 07/16/2024.

Respectfully submitted,

**CME** Associates, Inc.

Anas N. Anasthas, P.E.

Senior Geotechnical Engineer

AA.js



6035 Corporate Drive East Syracuse, New York 13057 (315) 701-0522 (315) 701-0526 (Fax)

www.cmeassociates.com

July 16, 2024

Ramboll 94 New Karner Road Albany, New York Phone: 315.420.8439

Attn: Andy Philips, Sr. Project Manager

Andy.Philips@Ramboll.com

Re: Geotechnical Data Report – Third Phase

Micron Campus Clay, New York

CME Report No. 28062B-04-0724

Page 1 of 4

#### 1.0 INTRODUCTION

CME Associates, Inc. (CME) was retained by Ramboll (Client) to provide subsurface exploration and geotechnical services for the subject project. In Spring 2024, CME conducted a limited subsurface exploration at the subject project site as part of the third phase exploration program.

The Scope of Basic Services and this report have been provided pursuant to CME Proposal/Agreement No.: 05.7126, Addendum 3, dated 04/07/2023, authorized by Client via Ramboll PO# 1950006347, dated 04/14/2023, and subsequent CME Change Order No. 2, authorized via Ramboll PO# 1950007864, dated 03/25/2024. This report provides a summary of the third phase exploration activities conducted at the subject project site.

Please note, the first phase exploration at this site was conducted by CME in May/June 2023 and CME's deliverables consisted of the previously issued *Geotechnical Data Report - Revision 1*, labeled CME Report Number: 28062B-01-0523R1, dated 06/20/2023. The second phase exploration at this site was conducted by CME in September/October 2023 and CME's deliverables consisted of the previously issued *Geotechnical Data Report - Second Phase*, labeled CME Report Number: 28062B-03-1223, dated 12/08/2023.

#### 2.0 EXPLORATION METHODOLOGY

#### 2.1 Exploration Layout and Utility Clearance

The exploration locations were selected by the Client and staked by Thew Associates (Thew). Following the field stakeout, CME contacted UDig NY to clear public utilities at the exploration locations. Private utilities at the exploration locations were cleared by Thew. No utility conflicts were noted at the exploration locations.

The attached *Exploration Location Plans* depict the approximate locations of the third phase explorations. Elevation at grade at the exploration locations, along with Northing and Easting coordinates, was provided by Thew. Please see the attached *Elevation and Coordinates Tables* prepared using the survey data provided by Thew.

A New York State Certified Woman-Owned Business Enterprise (WBE)

CME Report No.: 28062B-04-0724

Page 2 of 4



#### 2.2 Test Borings

A total of 134 Test Borings were completed by CME and a Subcontractor to CME. The Test Borings were advanced using either a Central Mine Equipment Model 550X, Model 55, or Model 45, ATV-mounted, rotary exploration drill rig, equipped with 3-1/4" I.D. hollow stem augers. Soil sampling was conducted using a 140-pound hammer dropping through 30 inches to drive a 2" O.D. split barrel sampler in general conformance with ASTM Standard Practice D1586. Rock coring was performed in general conformance with ASTM Standard Practice D2113. Undisturbed Shelby Tube sampling was conducted in general conformance with ASTM Standard Practice D1587. All Borings were backfilled with auger cuttings to nearly match existing grades.

Soil samples were logged and visually classified in the field by the Driller or an on-site Geologist, and a portion of each soil sample was placed and sealed in a glass jar. Bedrock cores were placed and secured in a wooden box. The soil and rock classifications were later reviewed by a CME Engineer in CME's East Syracuse AASHTO re:source<sup>1</sup> Accredited Laboratory. The visual soil classifications were made using a modified Burmister Classification System, as practiced by CME, and as generally described in the attached document entitled *General Information & Key to the Test Boring Logs*. The *Test Boring Logs* and *Bedrock Core Photographs* are also attached to this report.

#### 2.3 Auger Probes

A total of 5 Auger Probes were completed by CME at explorations locations labeled B-522, B-524, B-525, B-527, and B-528. The Auger Probes were advanced to depths where auger refusal was encountered on probable bedrock. The Auger Probes were advanced using a Central Mine Equipment Model 550X, ATV-mounted, rotary exploration drill rig, equipped with 3-1/4" I.D. hollow stem augers. The *Auger Probe Logs* are attached to this report.

#### 2.4 Groundwater Monitoring Wells

A total of 9 Groundwater Monitoring Wells, labeled W-10, W-11, W-12, W-13, W-14, W-16, W-17, W-18, and W-19, were installed in or near Test Borings B-505, B-522, B-546, B-557, B-564, B-604, B-618, B-676, and B-683, respectively. Please refer to the attached *Groundwater Monitoring Well Logs* for details of the well installation.

As part of the first phase exploration, 3 Groundwater Monitoring Wells, labeled W-1, W-2 and W-3, were installed in or near Test Borings B-129, B-24, and B-227, respectively. As part of the second phase exploration, 6 Groundwater Monitoring Wells, labeled W-4, W-5, W-6, W-7, W-8 and W-9, were installed in or near Test Borings B-337, B-391, B-370, B-400, B-420, and B-422, respectively.

Periodic monitoring of the groundwater level in the wells was performed by CME. Please refer to the attached *Groundwater Observation Summary Table* for groundwater levels observed, thus far.

#### 2.5 Infiltration Testing

A total of 5 Infiltration Tests, labeled IT-TP301, IT-TP302, IT-TP305, IT-B565, and IT-B611, were performed. The tests were performed in general conformance with the requirements of the New York State Stormwater Management Design Manual, Appendix D: Infiltration Testing. The test details and results are given in the attached *Infiltration Test Reports*.

<sup>&</sup>lt;sup>1</sup> **AASHTO re:source** – American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory, a Federal Agency having jurisdiction to assess laboratory competency according to the Standards of the United States of America. CME East Syracuse accreditation includes testing of Portland Cement Concrete, Aggregate and Soil Materials. <a href="https://www.AASHTOresource.org">www.AASHTOresource.org</a>.

CME Report No.: 28062B-04-0724

Page 3 of 4



#### 2.6 Test Pits

A total of 17 Test Pits were excavated using a Link Belt Model LNK 27 excavator, equipped with a 24-inch-wide general-purpose bucket. The Test Pits were excavated and backfilled by a Subcontractor to CME. The backfill consisted of excavated materials placed in 2 to 3 feet thick lifts, with each lift compacted using the excavator bucket. CME Engineer Astitwa Sharma, E.I.T. was on-site to observe the Test Pit excavation, take photographs, and prepare Test Pit Logs. The *Test Pit Logs* and *Test Pit Photographs* are attached to this report.

Soil samples were logged and visually classified in the field by Astitwa Sharma. The visual soil classifications were made using the modified Burmister Classification System.

In-situ Vane Shear Tests were performed at various depths in the Test Pits utilizing a Humbolt H-60 field testing apparatus. Pocket Penetrometer Testing was also performed in the Test Pits. Please refer to the attached *Vane Shear Test and Pocket Penetrometer Test Summary Tables* for test results.

#### 2.7 Field Soil Resistivity Testing

Field soil resistivity testing at a total of 24 survey points identified on the attached *Exploration Location Plans* were completed by CME. CME utilized a Miller 400D Digital Soil Resistivity Meter to conduct soil resistivity testing. At each point the line of probes were oriented to avoid trees and to minimize grade elevation change. All lines were surveyed in areas free of standing water or mud. The soil resistivity tests were performed in general conformance with ASTM G57 Standard Test Method for Measurement of Soil Resistivity using the Wenner Four – Electrode Method. Probe spacings of 4 feet to 20 feet were used along all survey lines. Probe depths were approximately 2.5 inches.

Field soil resistivity data and calculated Resistivity ( $\Omega$ •cm) are provided in the attached *Field Soil Resistivity Observations Summary Table*. Please see attached *Field Soil Resistivity Photographs* for groundcover conditions at the time of survey.

#### 2.8 Laboratory Testing

Laboratory testing was performed on selected soil samples, consisting of Natural Moisture Content, Atterberg Limits, Particle Size Analysis, One-Dimensional Consolidation, Unconfined Compressive Strength of Cohesive Soil, Moisture-Density Relationship (Proctor Compaction), Rock Core Compression, and California Bearing Ratio (CBR), in CME's East Syracuse Laboratory. Please refer to the attached *Laboratory Test Summary Report* for test methods and results.

#### 3.0 STANDARD OF CARE

CME endeavored to conduct services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the industry currently practicing in the same locality and under similar conditions as this project. No warranty, either expressed or implied, is made or intended by CME's proposal, contract, and written or oral reports, all of which warranties are hereby expressly disclaimed. CME shall not be responsible for the acts or omissions of the Client, its contractors, agents, and consultants. CME may rely upon information supplied by Client, its contractors, agents, and consultants or information available from generally accepted reputable sources, without independent verification, and CME assumes no responsibility for the accuracy thereof.

#### 4.0 CLOSING

CME's services have been provided according to the requirements of the referenced CME Proposal/Agreement. No other representations, expressed or implied, are intended or made with respect to the information provided herein, including but not limited to, its suitability for use by others.

CME Report No.: 28062B-04-0724

Page 4 of 4



Respectfully Submitted,

**CME** Associates, Inc.

Anas N. Anasthas, P.E.

Senior Geotechnical Engineer

Reviewed by:

**CME** Associates, Inc.

Marcus A. Rotundo, P.E. Senior Principal Engineer

#### **Attachment Listing:**

Exploration Location Plans (3 of 3)

Coordinates and Elevations Tables (4 of 4)

Laboratory Test Summary Report (33 of 33)

Infiltration Test Reports (5 of 5)

Test Pit Logs (17 of 17)

Test Pit Photographs (17 of 17)

Vane Shear Test and Pocket Penetrometer Test Summary Tables (2 of 2)

Field Soil Resistivity Observations Summary Table (1 of 1)

Field Soil Resistivity Photographs (12 of 12)

Groundwater Observation Summary Table (1 of 1)

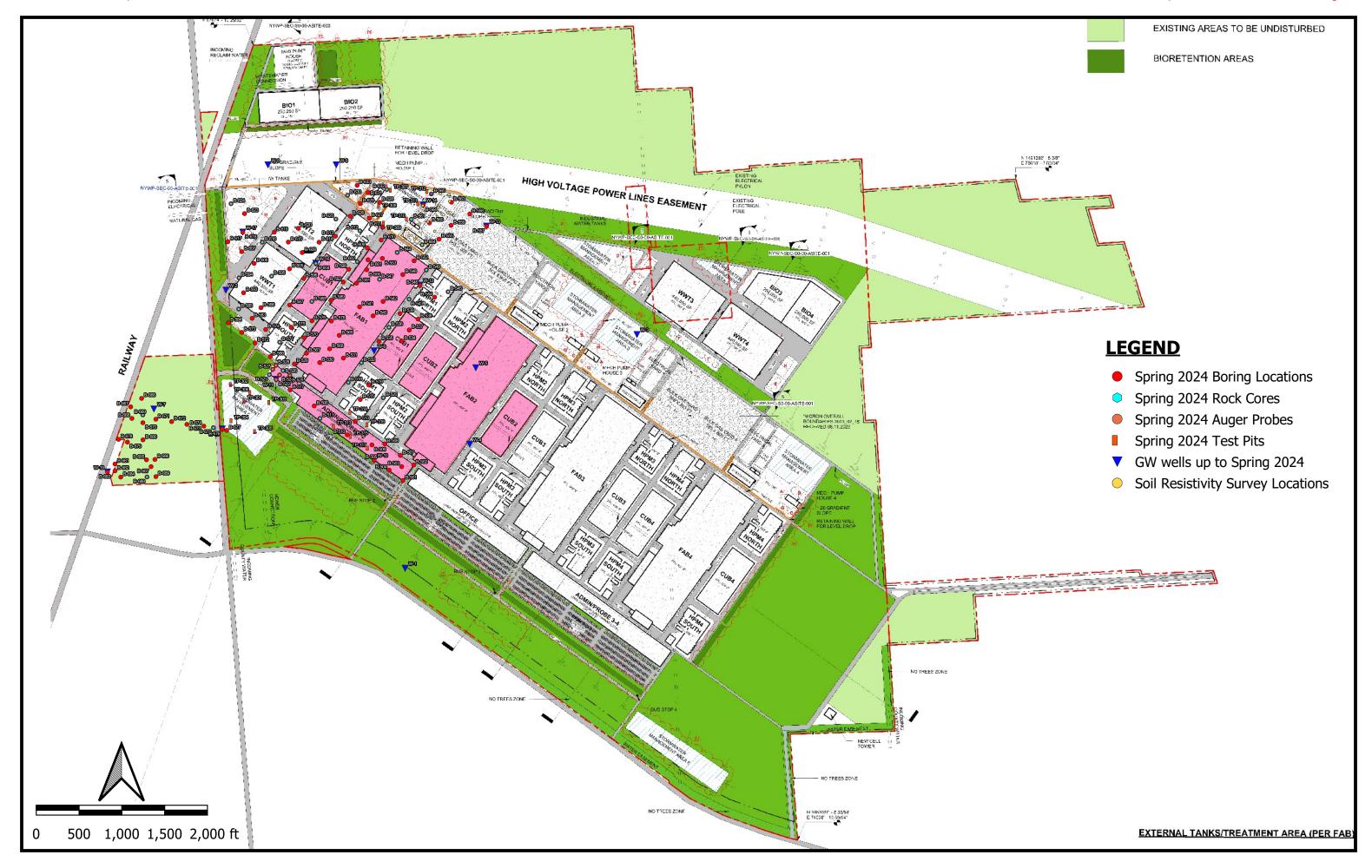
Groundwater Monitoring Well Logs (9 of 9)

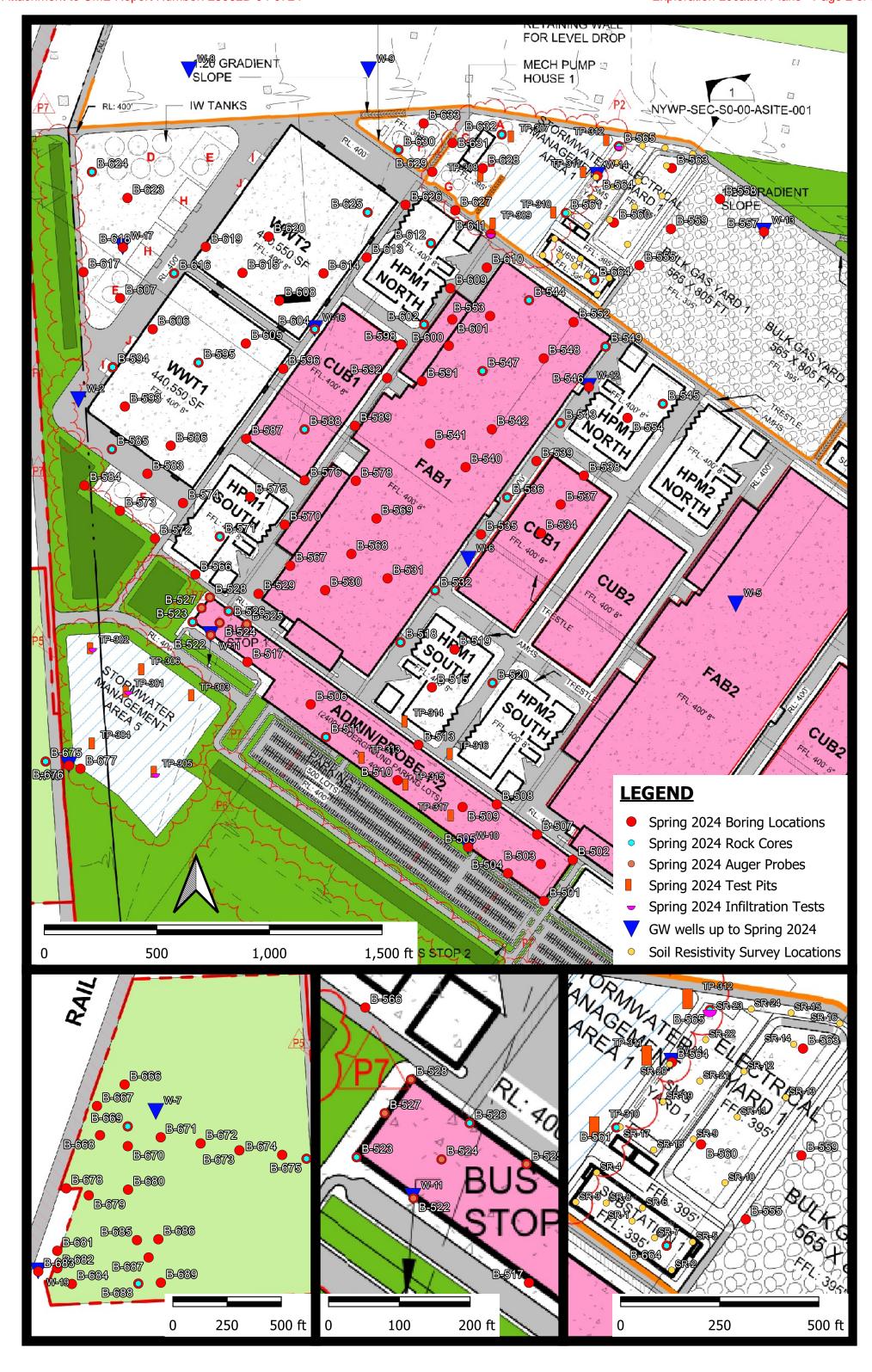
Bedrock Core Photographs (62 of 62)

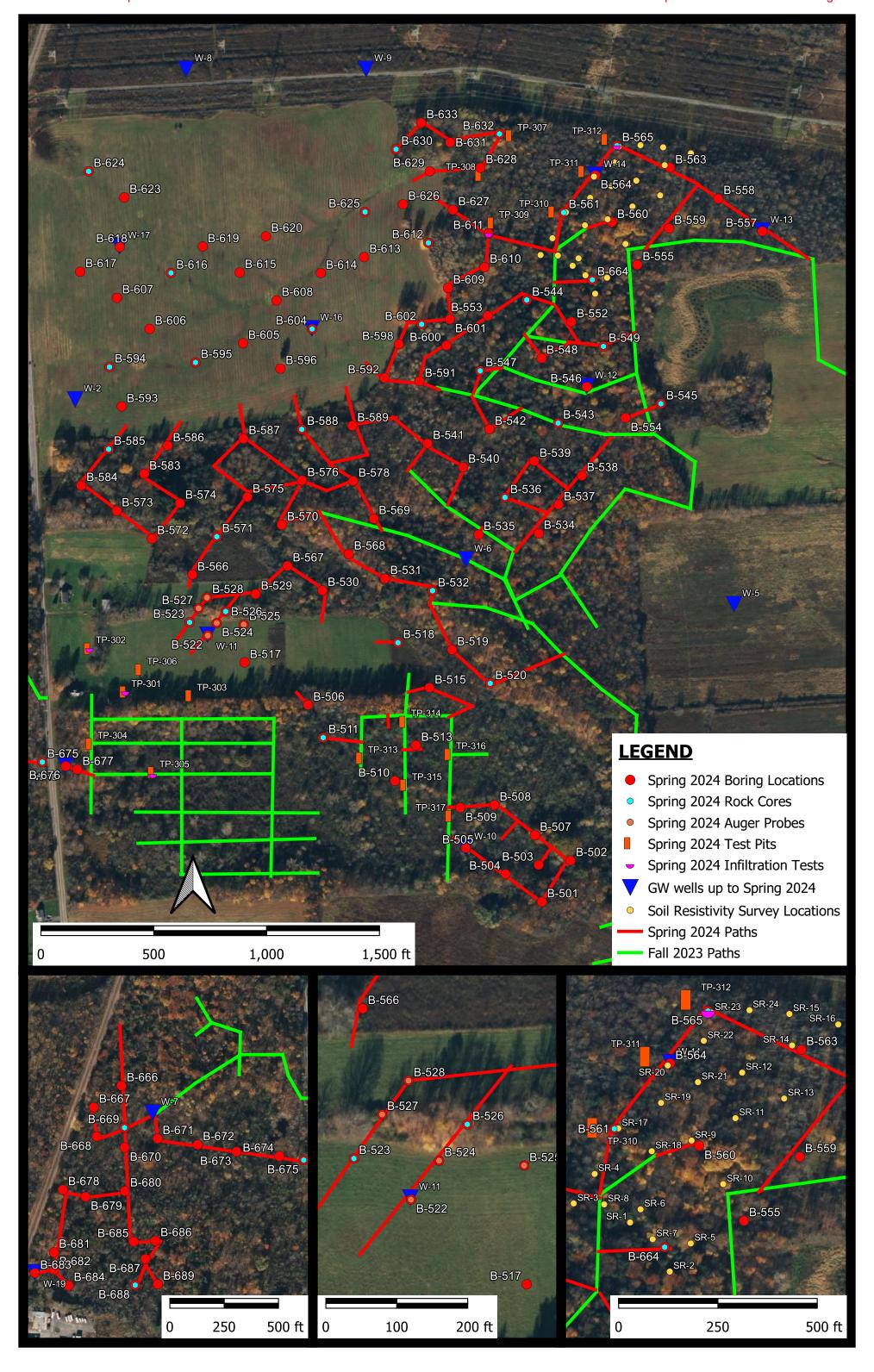
Auger Probe Logs (5 of 5)

Test Boring Logs (201 of 201)

General Information & Key to Test Boring Logs (4 of 4)







COORDINATES AND ELEVATION TABLE					PAGE 1 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-501	43.18771	-76.15857	1161775.3	933487.8	405.5	Test Boring - Third Phase
B-502	43.18821	-76.15809	1161958.1	933616.8	400.4	Test Boring - Third Phase
B-503	43.18816	-76.15862	1161938.5	933473.1	400.8	Test Boring - Third Phase
B-504	43.18805	-76.15917	1161896.9	933326.7	404.4	Test Boring - Third Phase
B-505	43.18837	-76.15983	1162015.7	933151.5	406.1	Test Boring - Third Phase
B-506	43.19012	-76.16244	1162648.3	932451.8	399.6	Test Boring - Third Phase
B-507	43.18852	-76.15868	1162069.8	933458.7	403.8	Test Boring - Third Phase
B-508	43.18889	-76.15935	1162206.0	933279.3	404.7	Test Boring - Third Phase
B-509	43.18886	-76.15992	1162194.4	933126.8	404.7	Test Boring - Third Phase
B-510	43.18919	-76.16100	1162313.0	932838.6	405.2	Test Boring - Third Phase
B-511	43.18972	-76.16219	1162503.9	932519.2	400.6	Test Boring - Third Phase
B-513	43.18962	-76.16065	1162467.2	932929.6	402.3	Test Boring - Third Phase
B-515	43.19032	-76.16042	1162726.0	932989.4	395.4	Test Boring - Third Phase
B-517	43.19064	-76.16349	1162838.3	932170.9	395.2	Test Boring - Third Phase
B-518	43.19087	-76.16094	1162925.1	932849.7	393.4	Test Boring - Third Phase
B-519	43.19078	-76.16004	1162890.7	933091.6	394.9	Test Boring - Third Phase
B-520	43.19037	-76.15941	1162744.3	933259.3	395.7	Test Boring - Third Phase
B-522	43.19097	-76.16410	1162955.1	932008.4	393.7	Auger Probe - Third Phase
B-522A	43.19097	-76.16410	1162955.1	932008.4	393.7	Test Boring - Third Phase
B-523	43.19113	-76.16440	1163013.4	931927.2	393.5	Test Boring - Third Phase
B-524	43.19112	-76.16395	1163009.4	932047.5	394.5	Auger Probe - Third Phase
B-525	43.19110	-76.16350	1163005.4	932167.8	396.4	Auger Probe - Third Phase
B-526	43.19126	-76.16380	1163064.0	932086.7	396.9	Test Boring - Third Phase
B-527	43.19130	-76.16425	1163074.8	931968.2	394.4	Auger Probe - Third Phase
B-528	43.19143	-76.16411	1163122.2	932005.3	395.8	Auger Probe - Third Phase
B-529	43.19147	-76.16330	1163140.7	932221.4	395.6	Test Boring - Third Phase
B-530	43.19151	-76.16219	1163155.0	932516.5	391.4	Test Boring - Third Phase
B-531	43.19165	-76.16115	1163209.8	932792.7	401.7	Test Boring - Third Phase
B-532	43.19150	-76.16036	1163155.6	933004.0	396.5	Test Boring - Third Phase
B-534	43.19219	-76.15859	1163409.5	933474.5	390.4	Test Boring - Third Phase
B-535	43.19218	-76.15959	1163403.2	933207.0	390.3	Test Boring - Third Phase
B-536	43.19263	-76.15915	1163568.5	933325.1	387.2	Test Boring - Third Phase
B-537	43.19254	-76.15826	1163537.6	933563.3	392.5	Test Boring - Third Phase
B-538	43.19289	-76.15787	1163664.1	933665.6	388.1	Test Boring - Third Phase
B-539	43.19307	-76.15866	1163729.4	933455.8	387.5	Test Boring - Third Phase
B-540	43.19300	-76.15984	1163700.5	933140.5	389.7	Test Boring - Third Phase
B-541	43.19329	-76.16043	1163805.2	932983.2	385.3	Test Boring - Third Phase
B-542	43.19346	-76.15940	1163871.4	933256.4	384.7	Test Boring - Third Phase
B-543	43.19353	-76.15826	1163898.7	933559.3	392.1	Test Boring - Third Phase
B-544	43.19503	-76.15877	1164442.3	933421.2	381.6	Test Boring - Third Phase
B-545	43.19376	-76.15655	1163982.3	934014.8	392.6	Test Boring - Third Phase
B-546	43.19397	-76.15778	1164057.2	933686.8	394.5	Test Boring - Third Phase
B-547	43.19417	-76.15955	1164126.9	933214.9	389.0	Test Boring - Third Phase
B-548	43.19432	-76.15853	1164183.7	933487.2	393.4	Test Boring - Third Phase

COORDINATES AND ELEVATION TABLE					PAGE 2 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-549	43.19446	-76.15750	1164237.3	933761.9	391.3	Test Boring - Third Phase
B-552	43.19476	-76.15803	1164345.9	933620.5	390.3	Test Boring - Third Phase
B-553	43.19484	-76.15942	1164372.0	933247.7	383.2	Test Boring - Third Phase
B-554	43.19359	-76.15714	1163918.8	933858.4	393.8	Test Boring - Third Phase
B-555	43.19545	-76.15693	1164597.7	933911.6	386.4	Test Boring - Third Phase
B-557	43.19585	-76.15485	1164746.0	934464.4	382.0	Test Boring - Third Phase
B-558	43.19625	-76.15558	1164893.2	934270.2	382.0	Test Boring - Third Phase
B-559	43.19589	-76.15640	1164761.2	934051.7	385.4	Test Boring - Third Phase
B-560	43.19597	-76.15735	1164787.4	933797.2	388.0	Test Boring - Third Phase
B-561	43.19609	-76.15815	1164828.6	933584.7	383.5	Test Boring - Third Phase
B-563	43.19663	-76.15638	1165028.5	934056.6	381.1	Test Boring - Third Phase
B-564	43.19654	-76.15762	1164993.5	933725.9	380.8	Test Boring - Third Phase
B-565	43.19690	-76.15726	1165127.2	933822.0	381.2	Test Boring - Third Phase
B-566	43.19171	-76.16435	1163224.1	931938.8	392.2	Test Boring - Third Phase
B-567	43.19181	-76.16277	1163265.9	932362.0	389.1	Test Boring - Third Phase
B-568	43.19195	-76.16175	1163317.7	932633.2	395.8	Test Boring - Third Phase
B-569	43.19238	-76.16133	1163474.0	932744.3	389.6	Test Boring - Third Phase
B-570	43.19231	-76.16286	1163446.3	932336.4	387.4	Test Boring - Third Phase
B-571	43.19217	-76.16394	1163393.0	932048.7	391.3	Test Boring - Third Phase
B-572	43.19215	-76.16502	1163386.7	931760.4	390.3	Test Boring - Third Phase
B-573	43.19249	-76.16560	1163507.0	931604.3	393.5	Test Boring - Third Phase
B-574	43.19258	-76.16455	1163542.6	931885.6	389.1	Test Boring - Third Phase
B-575	43.19265	-76.16343	1163568.2	932182.2	385.8	Test Boring - Third Phase
B-576	43.19285	-76.16252	1163642.4	932425.9	385.4	Test Boring - Third Phase
B-578	43.19284	-76.16167	1163639.3	932652.2	383.4	Test Boring - Third Phase
B-583	43.19294	-76.16514	1163673.5	931726.6	388.7	Test Boring - Third Phase
B-584	43.19280	-76.16619	1163618.7	931446.3	393.5	Test Boring - Third Phase
B-585	43.19324	-76.16573	1163782.7	931569.0	394.1	Test Boring - Third Phase
B-586	43.19328	-76.16475	1163797.8	931830.8	388.7	Test Boring - Third Phase
B-587	43.19336	-76.16349	1163828.5	932167.0	385.0	Test Boring - Third Phase
B-588	43.19347	-76.16252	1163869.3	932424.4	384.4	Test Boring - Third Phase
B-589	43.19351	-76.16168	1163885.2	932649.7	383.8	Test Boring - Third Phase
B-591	43.19405	-76.16056	1164083.0	932946.8	384.1	Test Boring - Third Phase
B-592	43.19409	-76.16114	1164098.0	932790.2	383.0	Test Boring - Third Phase
B-593	43.19376	-76.16551	1163971.4	931626.7	392.4	Test Boring - Third Phase
B-594	43.19424	-76.16571	1164147.1	931572.9	392.9	Test Boring - Third Phase
B-595	43.19429	-76.16428	1164167.8	931952.6	390.4	Test Boring - Third Phase
B-596	43.19421	-76.16287	1164137.2	932329.8	391.7	Test Boring - Third Phase
B-598	43.19450	-76.16090	1164246.1	932855.7	383.5	Test Boring - Third Phase
B-600	43.19448	-76.16011	1164242.5	933066.4	383.4	Test Boring - Third Phase
B-601	43.19480	-76.16005	1164357.5	933081.6	383.1	Test Boring - Third Phase
B-602	43.19474	-76.16052	1164335.8	932955.8	384.9	Test Boring - Third Phase
B-604	43.19469	-76.16234	1164315.1	932470.9	391.4	Test Boring - Third Phase
B-605	43.19452	-76.16349	1164252.1	932163.4	390.2	Test Boring - Third Phase

COORDINATES AND ELEVATION TABLE					PAGE 3 of 4	
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-606	43.19470	-76.16504	1164315.8	931751.1	393.2	Test Boring - Third Phase
B-607	43.19508	-76.16558	1164451.2	931604.9	393.9	Test Boring - Third Phase
B-608	43.19504	-76.16293	1164439.5	932311.9	387.7	Test Boring - Third Phase
B-609	43.19518	-76.16008	1164497.5	933071.8	391.7	Test Boring - Third Phase
B-610	43.19543	-76.15947	1164587.0	933235.5	382.7	Test Boring - Third Phase
B-611	43.19584	-76.15940	1164737.5	933253.3	380.6	Test Boring - Third Phase
B-612	43.19573	-76.16040	1164696.8	932986.3	391.6	Test Boring - Third Phase
B-613	43.19556	-76.16147	1164632.9	932700.0	390.0	Test Boring - Third Phase
B-614	43.19537	-76.16219	1164563.4	932508.9	386.2	Test Boring - Third Phase
B-615	43.19538	-76.16354	1164564.3	932148.3	391.8	Test Boring - Third Phase
B-616	43.19538	-76.16468	1164561.8	931845.2	392.5	Test Boring - Third Phase
B-617	43.19540	-76.16619	1164566.8	931441.5	393.0	Test Boring - Third Phase
B-618	43.19570	-76.16553	1164679.1	931617.1	392.7	Test Boring - Third Phase
B-619	43.19570	-76.16415	1164679.8	931985.0	392.3	Test Boring - Third Phase
B-620	43.19582	-76.16310	1164725.5	932265.3	391.3	Test Boring - Third Phase
B-623	43.19630	-76.16545	1164897.8	931638.4	392.1	Test Boring - Third Phase
B-624	43.19662	-76.16604	1165013.5	931480.7	389.8	Test Boring - Third Phase
B-625	43.19611	-76.16145	1164832.5	932705.8	385.8	Test Boring - Third Phase
B-626	43.19620	-76.16082	1164866.3	932873.8	385.4	Test Boring - Third Phase
B-627	43.19613	-76.15999	1164844.0	933093.2	383.0	Test Boring - Third Phase
B-628	43.19664	-76.15953	1165029.4	933217.0	381.4	Test Boring - Third Phase
B-629	43.19660	-76.16037	1165011.9	932991.2	383.3	Test Boring - Third Phase
B-630	43.19687	-76.16093	1165109.7	932843.2	381.7	Test Boring - Third Phase
B-631	43.19695	-76.16003	1165140.0	933080.9	384.5	Test Boring - Third Phase
B-632	43.19705	-76.15921	1165179.3	933300.1	383.8	Test Boring - Third Phase
B-633	43.19719	-76.16051	1165229.6	932953.9	380.9	Test Boring - Third Phase
B-664	43.19527	-76.15768	1164533.4	933711.1	389.8	Test Boring - Third Phase
B-666	43.19039	-76.17000	1162738.1	930435.9	399.1	Test Boring - Third Phase
B-667	43.19012	-76.17048	1162638.2	930307.9	399.4	Test Boring - Third Phase
B-668	43.18975	-76.17043	1162504.6	930320.9	399.5	Test Boring - Third Phase
B-669	43.18986	-76.16995	1162543.3	930449.2	399.9	Test Boring - Third Phase
B-670	43.18961	-76.16995	1162452.2	930450.4	400.0	Test Boring - Third Phase
B-671	43.18972	-76.16938	1162493.4	930601.6	400.3	Test Boring - Third Phase
B-672	43.18964	-76.16869	1162465.2	930787.1	400.4	Test Boring - Third Phase
B-673	43.18955	-76.16802	1162433.3	930964.3	400.7	Test Boring - Third Phase
B-674	43.18949	-76.16728	1162411.8	931161.5	401.4	Test Boring - Third Phase
B-675	43.18944	-76.16686	1162396.2	931275.0	403.9	Test Boring - Third Phase
B-676	43.18939	-76.16647	1162377.2	931378.8	404.3	Test Boring - Third Phase
B-677	43.18935	-76.16628	1162362.7	931429.5	403.8	Test Boring - Third Phase
B-678	43.18908	-76.17102	1162257.1	930166.7	398.4	Test Boring - Third Phase
B-679	43.18899	-76.17063	1162224.9	930270.0	395.9	Test Boring - Third Phase
B-680	43.18906	-76.16995	1162253.8	930451.2	399.5	Test Boring - Third Phase
B-681	43.18829	-76.17118	1161971.8	930123.6	395.6	Test Boring - Third Phase
B-682	43.18807	-76.17118	1161890.8	930126.1	393.3	Test Boring - Third Phase

COORDINATES AND ELEVATION TABLE						PAGE 4 of 4
Exploration ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Exploration Phase and Type
B-683	43.18803	-76.17151	1161873.3	930035.9	394.8	Test Boring - Third Phase
B-684	43.18787	-76.17093	1161817.9	930193.0	394.0	Test Boring - Third Phase
B-685	43.18842	-76.16980	1162019.1	930492.6	397.0	Test Boring - Third Phase
B-686	43.18843	-76.16943	1162021.8	930592.2	397.5	Test Boring - Third Phase
B-687	43.18820	-76.16960	1161940.2	930546.1	398.1	Test Boring - Third Phase
B-688	43.18787	-76.16978	1161819.9	930498.5	394.8	Test Boring - Third Phase
B-689	43.18788	-76.16939	1161822.8	930601.6	395.2	Test Boring - Third Phase
TP-301	43.19028	-76.16547	1162703.8	931642.8	403.1	Test Pit - Third Phase
TP-302	43.19081	-76.16606	1162895.3	931484.6	398.9	Test Pit - Third Phase
TP-303	43.19023	-76.16438	1162685.4	931933.3	400.2	Test Pit - Third Phase
TP-304	43.18965	-76.16604	1162471.8	931492.7	404.4	Test Pit - Third Phase
TP-305	43.18930	-76.16501	1162346.0	931768.3	404.0	Test Pit - Third Phase
TP-306	43.19055	-76.16521	1162800.3	931713.5	399.0	Test Pit - Third Phase
TP-307	43.19702	-76.15901	1165167.7	933354.1	382.4	Test Pit - Third Phase
TP-308	43.19654	-76.15952	1164991.0	933217.9	381.0	Test Pit - Third Phase
TP-309	43.19596	-76.15932	1164782.3	933274.4	380.6	Test Pit - Third Phase
TP-310	43.19609	-76.15831	1164828.8	933543.0	383.1	Test Pit - Third Phase
TP-311	43.19658	-76.15781	1165009.8	933676.1	380.5	Test Pit - Third Phase
TP-312	43.19697	-76.15742	1165151.1	933776.8	380.5	Test Pit - Third Phase
TP-313	43.18946	-76.16155	1162410.5	932690.4	403.6	Test Pit - Third Phase
TP-314	43.18990	-76.16083	1162571.2	932880.5	401.6	Test Pit - Third Phase
TP-315	43.18913	-76.16082	1162288.5	932885.0	405.1	Test Pit - Third Phase
TP-316	43.18950	-76.16008	1162426.2	933083.3	403.3	Test Pit - Third Phase
TP-317	43.18875	-76.16007	1162152.5	933085.3	405.4	Test Pit - Third Phase



6035 Corporate Drive East Syracuse, New York 13057 (315) 701-0522 (315) 701-0526 (Fax)

www.cmeassociates.com

#### LABORATORY TEST SUMMARY Micron Campus CME Report No.: 28062L-04-0724 July 9, 2024

Page 1 of 26

CME Representatives obtained soil and rock samples from Test Borings and Test Pits advanced as part of the Subsurface Exploration Program conducted for the subject project. Selected samples were delivered to CME's East Syracuse facility, an AASHTO re:source<sup>1</sup> accredited laboratory for various laboratory testing. The results are presented below:

Sample ID Notations: B - Test Boring, S - Sample, TP - Test Pit, R - Run

#### I. Natural Moisture Content (ASTM D2216)

Sample ID	Natural Moisture (%)	Sample ID	Natural Moisture (%)
B-517; S-2	17.9	B-560; S-4	25.3
B-531; S-2	14.9	B-560; S-5	13.4
B-532; S-4	24.0	B-560; S-6	9.7
B-534; S-1B	41.0	B-560; S-7	6.9
B-534; S-2	27.1	B-561; S-3	28.1
B-534; S-3	22.5	B-561; S-5	23.6
B-534; S-4	20.0	B-563; S-2	25.3
B-534; S-5	24.7	B-563; S-6	24.4
B-534; S-6	18.5	B-565; S-3	22.7
B-534; S-7	13.3	B-565; S-5	25.1
B-534; S-8	10.5	B-569; S-1B	20.9
B-538; S-6	23.2	B-569; S-2	23.7
B-538; S-7	19.1	B-569; S-3	21.8
B-542; S-4	20.9	B-569; S-4	11.1
B-545; S-5	26.5	B-569; S-5	9.2
B-548; S-4	25.2	B-569; S-6	8.7
B-548; S-5	23.6	B-583; S-1B	22.5
B-557; S-4	26.7	B-583; S-2	8.7
B-557; S-5	25.7	B-583; S-3	15.7
B-558; S-3	24.5	B-583; S-4	17.5
B-560; S-1B	41.7	B-587; S-4	23.0
B-560; S-2	22.2	B-592; S-5	20.5
B-560; S-3	24.0	B-602; S-4	22.5

<sup>1</sup>AASHTO re:source – American Association of State Highway & Transportation Officials (AASHTO) Materials Reference Laboratory, a Federal Agency having jurisdiction to assess laboratory competency according to the Standards of the United States of America. CME East Syracuse accreditation includes testing of Portland Cement Concrete, Aggregate and Soil Materials. www.AASHTOresource.org.

Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 2 of 26



Sample ID	Natural Moisture (%)	Sample ID	Natural Moisture (%)
B-602; S-6	20.9	B-624; S-3	21.9
B-609; S-5	21.6	B-624; S-4	21.8
B-613; S-1	22.9	B-624; S-5	19.6
B-613; S-2	22.6	B-624; S-6	24.2
B-613; S-3	22.8	B-624; S-7	25.2
B-613; S-4	24.5	B-624; S-8A	18.3
B-613; S-5	21.8	B-624; S-8B	17.3
B-613; S-6	23.8	B-626; S-5	23.8
B-613; S-7	11.0	B-632; S-1B	25.0
B-613; S-8A	28.0	B-632; S-2	23.9
B-613; S-8B	21.2	B-632; S-3	20.3
B-618; S-1B	31.8	B-632; S-4	11.2
B-618; S-2	25.9	B-632; S-5	22.6
B-618; S-3	28.6	B-632; S-6	24.7
B-618; S-4	22.6	B-671; S-2	25.9
B-618; S-5	21.0	B-680; S-1B	22.7
B-618; S-6	24.5	B-680; S-2	23.5
B-618; S-7A	22.3	B-680; S-3	22.4
B-618; S-7B	18.9	B-680; S-4	20.9
B-618; S-8	21.3	B-680; S-5	20.4
B-618; S-9	8.0	B-680; S-6	8.3
B-620; S-6	22.2	B-683; S-7	8.8
B-624; S-2	25.9		

Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 3 of 26





Sample ID	Liquid Limit	Plastic Limit	Plasticity Index	Natural Moisture	
B-534; S-2	25	20	5	27.1	
B-545; S-5	20	17	3	26.5	
B-561; S-3	30	18	12	28.1	
B-563; S-2	29	17	12	25.3	
B-618; S-7B	20	14	6	18.9	
B-624; S-7	22	13	9	25.2	
B-624; S-8A	17	12	5	18.3	
B-517; S-2		Non-Plastic		17.9	
B-532; S-4		Non-Plastic		24	
B-534; S-4		Non-Plastic		20	
B-534; S-6		Non-Plastic		18.5	
B-538; S-6		Non-Plastic		23.2	
B-538; S-7		Non-Plastic		19.1	
B-542; S-4		Non-Plastic		20.9	
B-548; S-4		Non-Plastic		25.2	
B-548; S-5		Non-Plastic		23.6	
B-557; S-4		Non-Plastic		26.7	
B-557; S-5		Non-Plastic			
B-561; S-5		Non-Plastic			
B-563; S-6		24.4			
B-565; S-5		25.1			
B-569; S-2		23.7			
B-587; S-4		23			
B-592; S-5		Non-Plastic		20.5	
B-602; S-4		22.5			
B-602; S-6		20.9			
B-613; S-4		Non-Plastic		24.5	
B-613; S-5		Non-Plastic		21.8	
B-613; S-6		Non-Plastic		23.8	
B-618; S-2		Non-Plastic		25.9	
B-618; S-5		Non-Plastic		21	
B-618; S-8		21.3			
B-620; S-6	Non-Plastic			22.2	
B-624; S-5	Non-Plastic			19.6	
B-624; S-6	Non-Plastic			24.2	
B-626; S-5	Non-Plastic			23.8	
B-632; S-4	Non-Plastic			11.2	
B-632; S-5		22.6			
B-632; S-6		24.7			
B-671; S-2		Non-Plastic		25.9	

CME Report No.: 28062L-04-0724

Page 4 of 26

III.

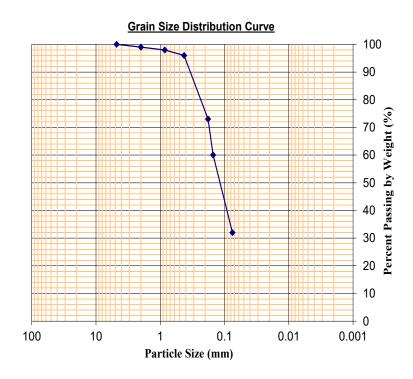
## Particle Size Analysis (ASTM D422)

<u>Sample #</u> B-531; S-2



<u>Classification</u> Brown/Orange cmf SAND, some SILT

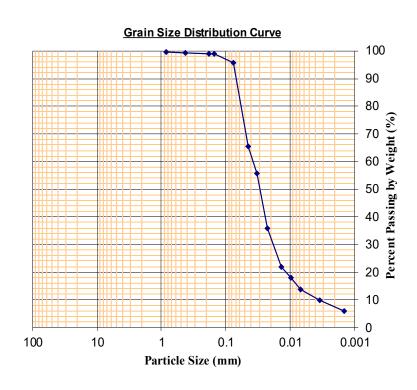
Sieve Designation	Size (mm)	Percent Passing by Weight (%)
No.4	4.750	100
No.10	2.00	99
No.20	0.850	98
No.40	0.425	96
No.80	0.180	73
No.100	0.150	60
No.200	0.075	32



<u>Sample #</u> B-538; S-7

<u>Classification</u>
Grey SILT, little CLAY, trace fine SAND

Sieve Designation	Size (mm)	Percent Passing by Weight (%)
No.20	0.850	100
No.40	0.425	99
No.80	0.180	99
No.100	0.150	99
No.200	0.075	96
Hydrometer	0.045	65
	0.033	56
	0.022	36
	0.013	22
	0.010	18
	0.007	14
	0.003	10
	0.001	6.0



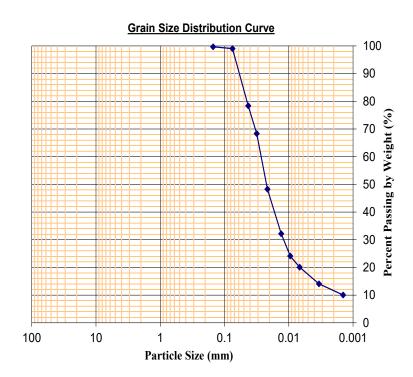
Page 5 of 26



#### <u>Sample #</u> B-558; S-3

		Percent
Sieve	Size	Passing by
<b>Designation</b>	<u>(mm)</u>	Weight (%)
No.100	0.150	100
No.200	0.075	99
Hydrometer	0.043	78
	0.031	68
	0.021	48
	0.013	32
	0.009	24
	0.007	20
	0.003	14
	0.001	10

## <u>Classification</u> Brown SILT, little CLAY, trace fine SAND

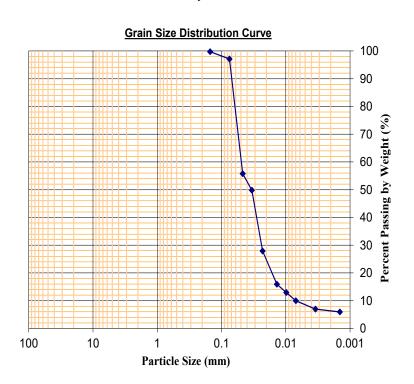


#### <u>Sample #</u> B-565; S-5

,		_
Sieve	Size	Percent Passing by
<b>Designation</b>	<u>(mm)</u>	Weight (%)
No.100	0.150	100
No.200	0.075	97
Hydrometer	0.047	56
	0.034	50
	0.023	28
	0.014	16
	0.010	13
	0.007	10
	0.003	7.0
	0.001	6.0

#### <u>Classification</u>

Brown/Grey SILT, trace CLAY, trace fine SAND



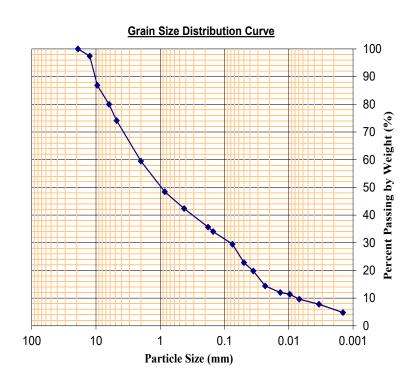
Page 6 of 26



<u>Sample #</u> B-569; S-5

<u>Classification</u>
Grey/Black cmf SAND, some mf GRAVEL, some SILT, trace CLAY

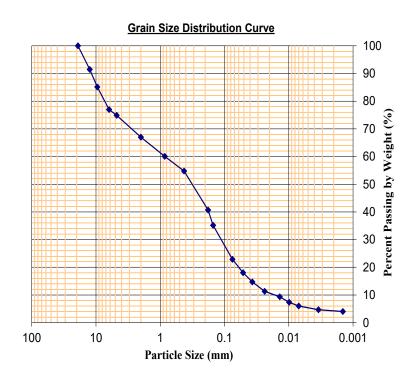
		Percent
Sieve	Size	Passing by
<b>Designation</b>	(mm)	Weight (%)
3/4"	19.0	100
1/2"	12.5	97
3/8"	9.5	87
1/4"	6.25	80
No.4	4.75	74
No.10	2.00	60
No.20	0.850	48
No.40	0.425	42
No.80	0.180	36
No.100	0.150	34
No.200	0.075	29
Hydrometer	0.050	23
	0.036	20
	0.023	14
	0.014	12
	0.010	11
	0.007	10
	0.003	7.8
	0.001	4.8



<u>Sample #</u> B-609; S-5

Classification
Brown cmf SAND, some mf GRAVEL, little SILT, trace CLAY

D 007, 5.	9	
		Percent
Sieve	Size	Passing by
<b>Designation</b>	(mm)	Weight (%)
3/4"	19.0	100
1/2"	12.5	92
3/8"	9.5	85
1/4"	6.25	77
No.4	4.75	75
No.10	2.00	67
No.20	0.850	60
No.40	0.425	55
No.80	0.180	41
No.100	0.150	35
No.200	0.075	23
Hydrometer	0.051	18
	0.037	15
	0.024	11
	0.014	9.3
	0.010	7.3
	0.007	6.0
	0.003	4.7
	0.001	4.0



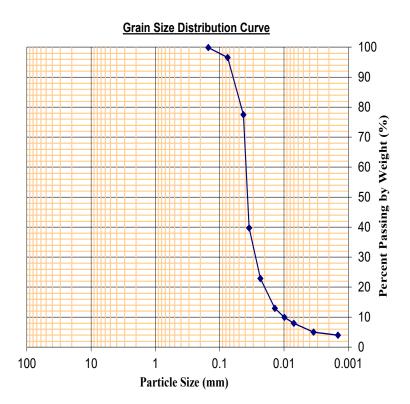
Page 7 of 26



<u>Sample #</u> B-624; S-6

•		Percent
Sieve	Size	Passing by
<b>Designation</b>	<u>(mm)</u>	Weight (%)
No.100	0.150	100
No.200	0.075	97
Hydrometer	0.043	78
	0.035	40
	0.023	23
	0.014	13
	0.010	10
	0.007	7.9
	0.003	5.0
	0.001	4.0

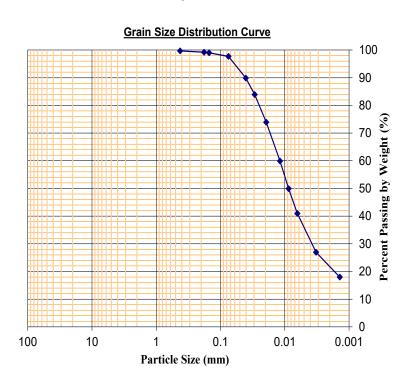
<u>Classification</u>
Grey SILT, trace CLAY, trace fine SAND



<u>Sample #</u> B-624; S-7

		Percent
Sieve	Size	Passing by
<b>Designation</b>	(mm)	Weight (%)
No.40	0.425	100
No.80	0.180	99
No.100	0.150	99
No.200	0.075	98
Hydrometer	0.040	90
	0.029	84
	0.019	74
	0.012	60
	0.009	50
	0.006	41
	0.003	27
	0.001	18

<u>Classification</u>
Grey SILT and CLAY, trace fine SAND



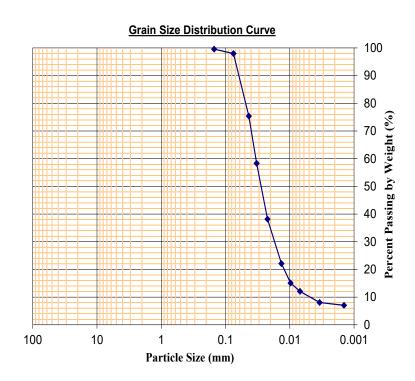
Page 8 of 26



#### <u>Sample #</u> B-632; S-6

		Percent
Sieve	Size	Passing by
<b>Designation</b>	(mm)	Weight (%)
No.100	0.150	100
No.200	0.075	98
Hydrometer	0.043	75
	0.033	58
	0.022	38
	0.013	22
	0.010	15
	0.007	12
	0.003	8.0
	0.001	7.0

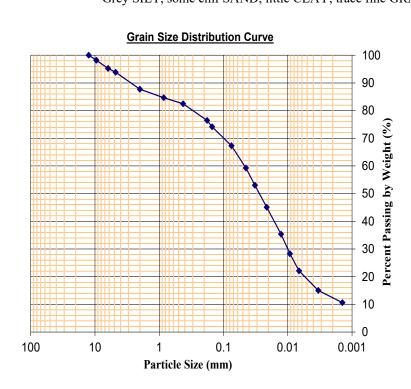
#### <u>Classification</u> Brown/Grey SILT, little CLAY, trace fine SAND



#### <u>Sample #</u> B-683; S-7

		Percent
Sieve	Size	Passing by
<b>Designation</b>	<u>(mm)</u>	Weight (%)
1/2"	12.5	100
3/8"	9.5	98
1/4"	6.25	95
No.4	4.75	94
No.10	2.00	88
No.20	0.850	85
No.40	0.425	82
No.80	0.180	76
No.100	0.150	74
No.200	0.075	67
Hydrometer	0.045	59
	0.032	53
	0.021	45
	0.013	35
	0.009	28
	0.007	22
	0.003	15
	0.001	11

<u>Classification</u>
Grey SILT, some cmf SAND, little CLAY, trace fine GRAVEL



Page 9 of 26



#### Moisture-Density Relationship (ASTM D-1557: Modified Proctor) IV.

SAMPLE LOCATION:	TP-303; S-1	DATE SAMPLED:	5/1/24
SOIL CLASSIFICATION:	Brown cmf SAND, some SILT, some cmf GRAVEL,	SAMPLE NO.:	TP-303
	little CLAY		

#### Moisture - Density Relationship Curve

#### Particle Size Analysis ASTM D422

																							Sieve Size	% Passing
																							6"	100
	150 -	1		- R											-								5"	100
						Ш	Ш		Ш	Ш		Ш			Ш			Ш	Ш				4"	100
				+++		₩	Ш	+++	Н	Н	+	Ш	+		₩			Н	Ш				3"	100
	145 -						Ш			Н					#				Ш				2"	97
															#				Ш				1-1/2"	96
						Н	$\vdash$	+	Н	Н			+		+				Ш				1"	90
	140 -					Ш		A		Ш					$\blacksquare$								3/4"	89
						Ш	Ш		N	Ш		Ш			#			ш	Ш				1/2"	85
						Н	+++			$\mathbb{N}$	+		+		++-				₩				3/8"	82
	135 -					Н	Ш			Н	A				$\blacksquare$				Ш				1/4"	78
Ë						Ш	Ш												Ш				No.4	77
(PCF)						Ш				Н		Ш							Ш				No.10	73
	130 -					Ш	Ш	+++	Ш	Н	+	Ш	+	B	+			Ш	Ш				No.20	69
						ш	Ш		ш	Ш					$\setminus$			ш	Ш				No.40	66
É						Ш	Ш			Ш					$\pm$	$\rightarrow$			Ш				No.80	55
DRY DENSITY	125 ·					Н				Н		1	•		+		-	igwedge	+++				No.100	50
_							Ш								$\blacksquare$				V.			$\mathbf{H}$	No.200	37
						Ш	Ш			Ш		_			•				Ш	X		ш		
	120 -					₩	Ш	+++	Н		4	Ш	+		₩			Н	Ш	₩				
						Ш	Ш		1						#				Ш					
						Ш	Ш			Ш					Ш				Ш			Ш		
	115 ·				+'''	111		• Ur	corre	cted	d Dry	Dens	sitv					<b>'</b> <del>   </del>	Ш			++++		
					Ŧ						-		-	s* = 2	.6									
					‡						1DD,0			_				#	Ш	Ш	Ш	Ш		
	110 -			ШЦ	<u> </u>			-		- IV								4	Ш	<del>       </del>	Щ	Ш		
	(	0 1	2	3		4		5	6		7		8	9	)	10		11		12	13	14	ļ	
								М	OIST	UR	EC	ONT	ENT	(%)	)									

	Test Procedure 1				Test Results
Test Method	✓ ASTM D-1	557 (Modifi	ed) 🗌 ASTM [	0-698 (Standard	
Procedure Used	□ A	□ B	<b>✓</b> C		Corrected MDD (PCF) = 125.8
Preparation Method	☐ Dry	✓ Moist			Corrected OMC $(\%) = 7.8$
Description of Rammer	☐ Manual	✓ Mecha	nical		
Oversize Fraction by Dry W	Veight	ı 🗌 Ne	o.4 Sieve 🗌	3/8" Sieve 🗹	3/4" Sieve
* Specific Gravity, estimate	ed				

<sup>\*\*</sup> MDD = Maximum Dry Density, OMC = Optimum Moisture Content

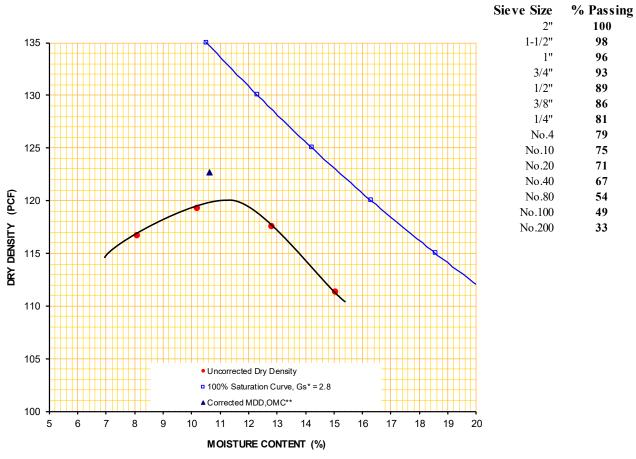
Page 10 of 26



SAMPLE LOCATION:	TP-304; S-1	DATE SAMPLED:	5/1/24
SOIL CLASSIFICATION:	Brown cmf SAND, some SILT, some cmf GRAVEL,	SAMPLE NO.:	TP-304
	trace CLAY		

#### **Moisture - Density Relationship Curve**

#### Particle Size Analysis ASTM D422



1	est Procedure		_	Test Results
Test Method	✓ ASTM D-	1557 (Modified)	ASTM D-698 (Standa	rd)
Procedure Used	□ A	□в 🔽	· c	Corrected MDD (PCF) = <b>122.7</b>
Preparation Method	☐ Dry	✓ Moist		Corrected OMC (%) = $10.6$
Description of Rammer	☐ Manual	✓ Mechanical		
Oversize Fraction by Dry Weig	ght 7 % Retained o	n No.4 Sie	eve 🗌 3/8" Sieve 🗹	] 3/4" Sieve
* Specific Gravity, estimated				
** MDD = Maximum Dry Dens	sity $OMC = Ontin$	num Moisture Co	ontent	

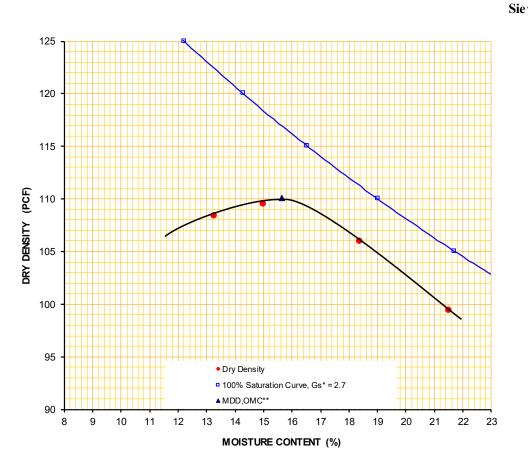
Page 11 of 26



SAMPLE LOCATION:	TP-307; S-1	DATE SAMPLED:	5/2/24
SOIL CLASSIFICATION:	Brown SILT, little CLAY, trace mf SAND	SAMPLE NO.:	TP-307

#### Moisture - Density Relationship Curve

#### Particle Size Analysis ASTM D422



e ranter,	0 110 11112
ve Size	% Passing
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
1/4"	100
No.4	100
No.10	100
No.20	100
No.40	99
No.80	98
No.100	98
No.200	97

<u>Te</u>	st Procedure			Test Results
Test Method	✓ ASTM D-1	.557 (Modifie	d) ASTM D-698 (Standard)	
Procedure Used	□ A	□ B	<b>▽</b> C	MDD(PCF) = 110.1
Preparation Method	Dry	✓ Moist		OMC(%) = 15.6
Description of Rammer	☐ Manual	✓ Mechan	ical	
Oversize Fraction by Dry Weigh	t 0 % Retained or	n 🗌 No	.4 Sieve 🗌 3/8" Sieve 🗹 3/	4" Sieve
* Specific Gravity, estimated				

\*\* MDD = Maximum Dry Density, OMC = Optimum Moisture Content

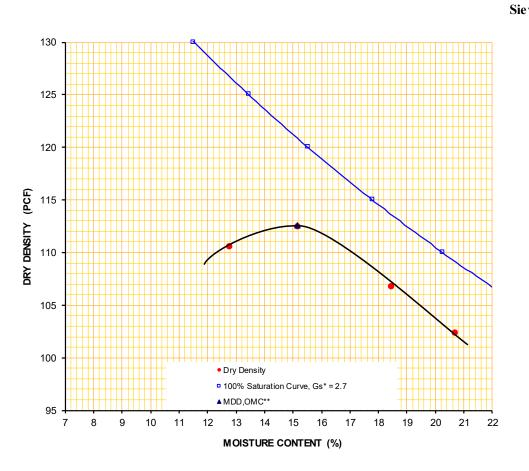
Page 12 of 26



SAMPLE LOCATION:	TP-312; S-1	DATE SAMPLED:	5/2/24
SOIL CLASSIFICATION:	Brown SILT, little CLAY, trace fine SAND	SAMPLE NO.:	TP-312

#### Moisture - Density Relationship Curve

#### Particle Size Analysis ASTM D422



	-,0,0
ve Size	% Passing
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
1/4"	100
No.4	100
No.10	100
No.20	100
No.40	100
No.80	99
No.100	99
No.200	98

Test	<b>Procedure</b>					Test Results
Test Method	✓ ASTM D-	1557 (Modifi	ed) 🗌 ASTM	D-698 (Standar	rd)	
Procedure Used	□ A	□В	<b>✓</b> C			MDD (PCF) = 112.6
Preparation Method	Dry	✓ Moist				OMC(%) = 15.2
Description of Rammer	☐ Manual	Mecha	nical			
Oversize Fraction by Dry Weight	_			_	1	
	% Retained o	n 📙 N	o.4 Sieve 📙	3/8" Sieve <b>⊻</b>	] 3/4" Sieve	
* Specific Gravity, estimated						
** MDD = Maximum Dry Density,	OMC = Optin	num Moisti	are Content			

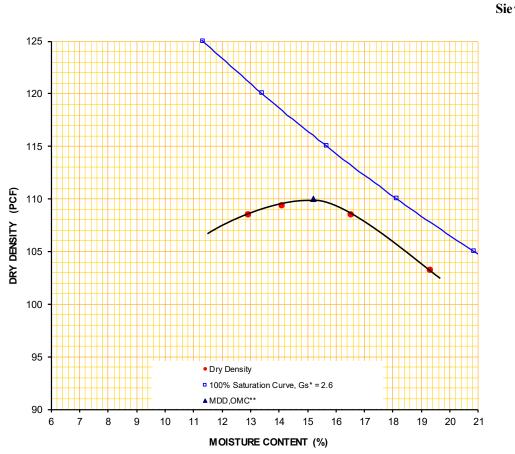
Page 13 of 26



SAMPLE LOCATION:	TP-315; S-1	DATE SAMPLED:	5/2/24
SOIL CLASSIFICATION:	Brown SILT, little CLAY, trace mf SAND	SAMPLE NO.:	TP-315

#### **Moisture - Density Relationship Curve**

#### Particle Size Analysis ASTM D422



c minus	19 119 1111 19 12
ve Size	% Passing
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
1/4"	100
No.4	100
No.10	100
No.20	100
No.40	99
No.80	98
No.100	98
No.200	96

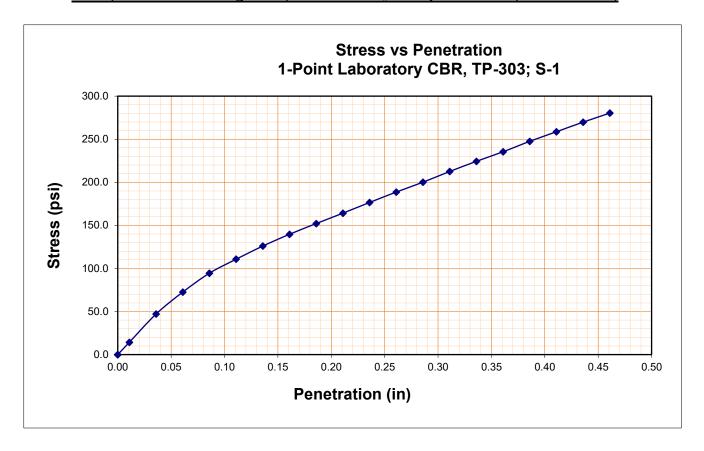
**Test Procedure Information Test Results** ASTM D-1557 (Modified) ASTM D-698 (Standard) Test Method **✓** C □ A □В Procedure Used MDD (PCF) = 110.0☐ Dry ✓ Moist OMC(%) = 15.2Preparation Method ☐ Manual ✓ Mechanical Description of Rammer Oversize Fraction by Dry Weight ☐ No.4 Sieve ☐ 3/8" Sieve ☑ 3/4" Sieve 0 % Retained on \* Specific Gravity, estimated

\*\* MDD = Maximum Dry Density, OMC = Optimum Moisture Content

Page 14 of 26



#### V. CBR (California Bearing Ratio) of Laboratory-Compacted Soils (ASTM D1883)

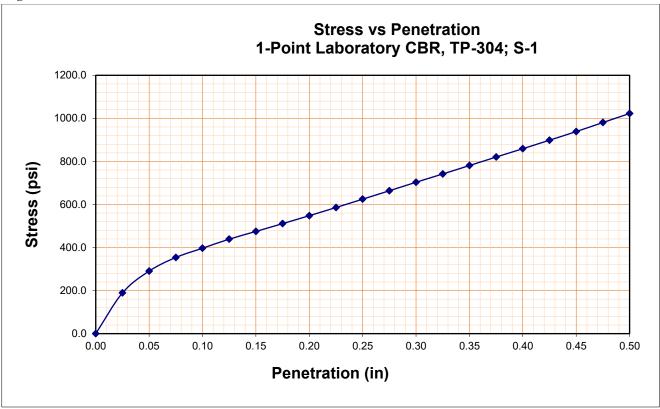


#### **Burmister Classification:** Brown cmf SAND, some SILT, some cmf GRAVEL, little CLAY

As-Molded Moisture Content (%)	6.0
As-Molded Dry Density (pcf)	117.5
No. of Blows	37
Percent Compaction, ASTM D1557	93.4
Time Soaked (hrs)	96
Swell (%)	2.5
Moisture Content After Soaking (%)	
Top 1"	17.4
Center	14.7
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	10.4
Soaked CBR @ 0.2	10.2
Surcharge Weight (lbs.)	10

Page 15 of 26



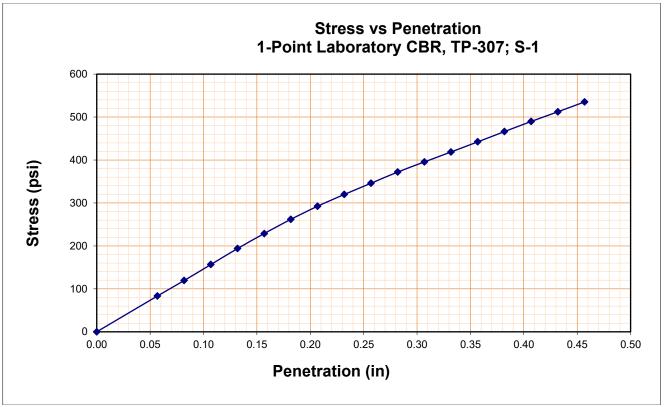


#### **Burmister Classification:** Brown cmf SAND, some SILT, some cmf GRAVEL, trace CLAY

As-Molded Moisture Content (%)	9.7
As-Molded Dry Density (pcf)	118.6
No. of Blows	42
Percent Compaction, ASTM D1557	96.7
Time Soaked (hrs)	96
Swell (%)	0.2
Moisture Content After Soaking (%)	
Top 1"	12.6
Center	12.8
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	39.7
Soaked CBR @ 0.2	36.5
Surcharge Weight (lbs.)	10

Page 16 of 26



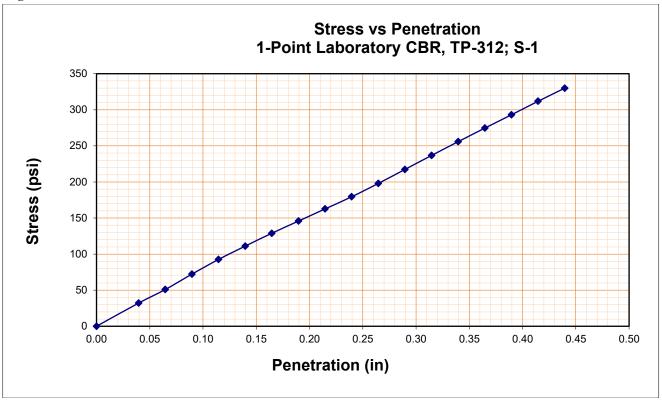


#### **Burmister Classification:** Brown SILT, little CLAY, trace mf SAND

As-Molded Moisture Content (%)	17.8
As-Molded Dry Density (pcf)	106.1
No. of Blows	40
Percent Compaction, ASTM D1557	96.3
Time Soaked (hrs)	96
Swell (%)	1.5
Moisture Content After Soaking (%)	
Top 1"	20.2
Center	18.7
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	14.5
Soaked CBR @ 0.2	19.0
Surcharge Weight (lbs.)	10

Page 17 of 26



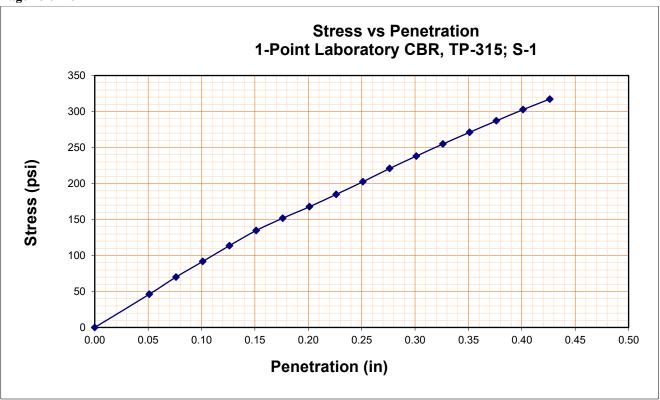


#### **Burmister Classification:** Brown SILT, little CLAY, trace fine SAND

As-Molded Moisture Content (%)	16.8
As-Molded Dry Density (pcf)	109.1
No. of Blows	37
Percent Compaction, ASTM D1557	96.9
Time Soaked (hrs)	96
Swell (%)	2.0
Moisture Content After Soaking (%)	
Top 1"	19.2
Center	18.3
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	8.0
Soaked CBR @ 0.2	10.5
Surcharge Weight (lbs.)	10

Page 18 of 26





## **Burmister Classification:** Brown SILT, little CLAY, trace mf SAND

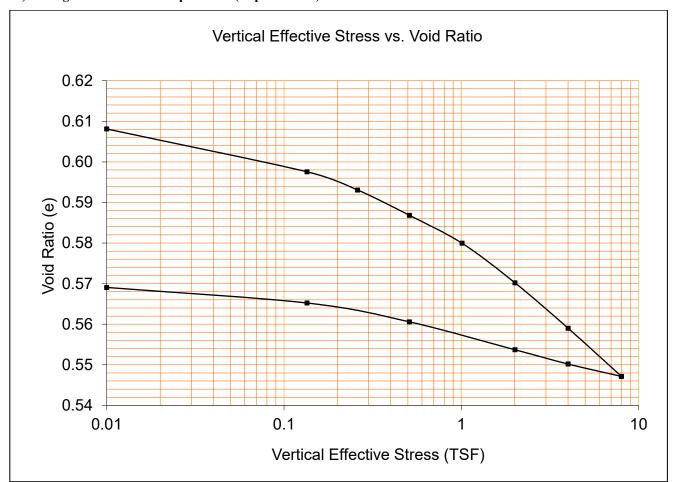
As-Molded Moisture Content (%)	16.3
As-Molded Dry Density (pcf)	105.5
No. of Blows	33
Percent Compaction, ASTM D1557	95.9
Time Soaked (hrs)	96
Swell (%)	1.9
Moisture Content After Soaking (%)	
Top 1"	20.0
Center	19.0
Ring Capacity (lbs.)	6000
Soaked CBR @ 0.1	9.2
Soaked CBR @ 0.2	11.2
Surcharge Weight (lbs.)	10

Page 19 of 26



CVE
Associates, Inc.

1) Boring: B-617 Sample: ST-1 (Depth = 15.5')



**Pre-consolidation Pressure (P')** = N.A. (Normally Consolidated)

 $\begin{array}{lll} \text{Compression Index (Cc)} & = 0.05 \\ \text{Re-compression Index (Cr)} & = 0.01 \\ \text{Initial Void Ratio (eo)} & = 0.58 \\ \text{Initial Water Content (Wn)} & = 22.17\% \\ \text{Dry Unit Weight Before Testing } (\gamma_d) & = 108.8 \text{ pcf} \\ \text{Specific Gravity} & = 2.76 \\ \end{array}$ 

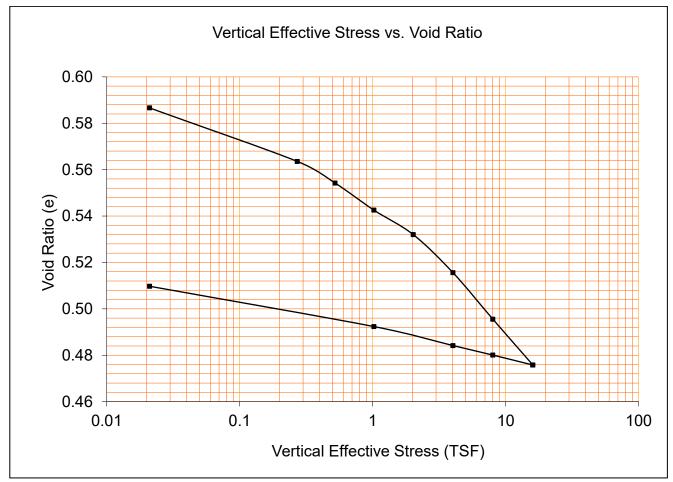
Classification: = Brown/Grey SILT, little CLAY, trace cmf SAND

Vertical Effective Stress	Coefficient of Consolidation (Cv, ft <sup>2</sup> /month)							
(tsf)	Log of Time Method	Square Root of Time Method	Average					
0.135	Not Obtainable	>100	>100					
0.260	Not Obtainable	>100	>100					
0.510	Not Obtainable	>100	>100					
1.010	Not Obtainable	>100	>100					
2.010	Not Obtainable	>100	>100					
4.010	Not Obtainable	>100	>100					
8.010	Not Obtainable	>100	>100					

Page 20 of 26

2) Boring: B-623 Sample: ST-1 (Depth = 16.8')





Pre-consolidation Pressure (P') = N.A. (Normally Consolidated)

 $\begin{array}{lll} \text{Compression Index (Cc)} & = 0.06 \\ \text{Re-compression Index (Cr)} & = 0.01 \\ \text{Initial Void Ratio (eo)} & = 0.59 \\ \text{Initial Water Content (Wn)} & = 23.2\% \\ \text{Dry Unit Weight Before Testing (}\gamma_d) & = 108.5 \text{ pcf} \\ \text{Specific Gravity} & = 2.76 \\ \end{array}$ 

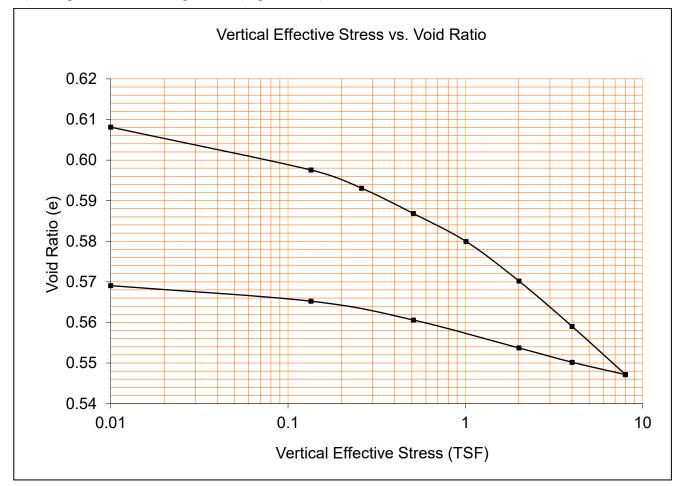
Classification: = Grey SILT, little CLAY, trace fine SAND

Vertical Effective Stress	Coefficient of Consolidation (Cv, ft²/month)							
(tsf)	Log of Time Method	Square Root of Time Method	Average					
0.271	Not Obtainable	65.13	65.13					
0.521	Not Obtainable	12.31	12.31					
1.021	Not Obtainable	16.28	16.28					
2.021	Not Obtainable	65.13	65.13					
4.021	Not Obtainable	>100	>100					
8.021	Not Obtainable	90.15	90.15					
16.021	Not Obtainable	95.85	95.85					

Page 21 of 26

3) Boring: B-623 Sample: ST-2 (Depth = 16.5')





**Pre-consolidation Pressure (P')** = N.A. (Normally Consolidated)

 $\begin{array}{lll} Compression Index (Cc) & = 0.04 \\ Re-compression Index (Cr) & = 0.01 \\ Initial Void Ratio (eo) & = 0.61 \\ Initial Water Content (Wn) & = 18.84\% \\ Dry Unit Weight Before Testing (<math>\gamma_d$ ) & = 107.1 pcf Specific Gravity & = 2.76

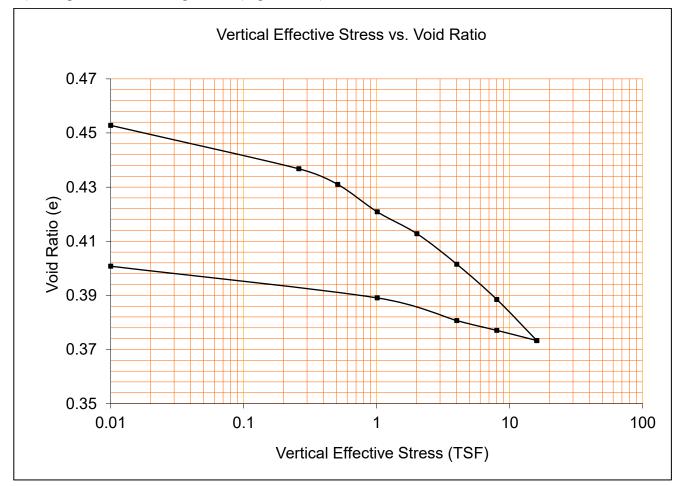
Classification: = Grey SILT, little CLAY, trace fine SAND

Vertical Effective Stress	Coefficient of Consolidation (Cv, ft <sup>2</sup> /month)							
(tsf)	Log of Time Method	Square Root of Time Method	Average					
0.135	Not Obtainable	>100	>100					
0.260	Not Obtainable	>100	>100					
0.510	Not Obtainable	>100	>100					
1.010	Not Obtainable	>100	>100					
2.010	Not Obtainable	>100	>100					
4.010	Not Obtainable	>100	>100					
8.010	Not Obtainable	>100	>100					

Page 22 of 26

4) Boring: B-624 Sample: ST-1 (Depth = 19.4')





**Pre-consolidation Pressure (P')** = N.A. (Normally Consolidated)

 $\begin{array}{lll} Compression Index (Cc) & = 0.05 \\ Re-compression Index (Cr) & = 0.01 \\ Initial Void Ratio (eo) & = 0.45 \\ Initial Water Content (Wn) & = 20.7\% \\ Dry Unit Weight Before Testing (<math>\gamma_d$ ) & = 112.4 pcf Specific Gravity & = 2.62

Classification: = Grey SILT, little CLAY, trace fine SAND

Vertical Effective Stress	Coefficient of Consolidation (Cv, ft <sup>2</sup> /month)							
(tsf)	Log of Time Method	Square Root of Time Method	Average					
0.26	Not Obtainable	90.15	90.15					
0.51	Not Obtainable	45.23	45.23					
1.01	Not Obtainable	80.41	80.41					
2.01	Not Obtainable	>100	>100					
4.01	Not Obtainable	72.17	72.17					
8.01	Not Obtainable	53.83	53.83					
16.01	Not Obtainable	95.85	95.85					

Page 23 of 26



# VII. Rock Core Compression (ASTM D7012 Method C)

# **A) Testing Conditions:**

Tested by: G.C.	Moisture Condition: Laboratory air-dry Equipment: Forney QC-400-DR
Date of Test: 6/24/2024	Load Direction: Generally perpendicular to laminations

# **B)** Core Identification and Location:

Core ID	Location	Description
B-511; R-1	15.0'-15.5'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1/4" thick), slightly to moderately weathered, thinly laminated to thinly bedded, hard.
B-518; R-1	18.2'-18.7'	Dark Grey SHALE with DOLOSTONE layers (<1/8" - 1.0" thick), slightly to moderately weathered, thinly laminated to medium hard.
B-518; R-2	22.3'-23.1'	Dark Grey SHALE with DOLOSTONE layers (<1/8" - 2.0" thick), slightly to moderately weathered, thinly laminated to medium bedded, medium hard to hard.
B-523; R-1	15.5'-16.0'	Grey DOLOSTONE with interbedded SHALE (<1/8" -4.0" thick), slightly weathered, thinly laminated to thinly bedded, medium to hard.
B-544; R-1	18.7'-19.3'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, hard.
B-547; R-1	22.1'-22.6'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.
B-547; R-2	28.8'-29.4'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.
B-549; R-1	29.1'-29.6'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.
B-561; R-1	20.8'-21.3'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), thinly laminated to thinly bedded, hard.
B-565; R-1	22.5'-23.0'	Grey DOLOSTONE with interbedded SHALE layers (<1/8" to 1" thick), thinly laminated to medium bedded, hard.
B-595; R-2	24.1'-24.6'	Grey DOLOSTONE with SHALE layers (<1/8" - 3.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.
B-604; R-1	26.7'-27.2'	Gray SHALE, weathered, bedded, hard.
B-688; R-1	17.8'-18.3'	Grey DOLOSTONE with interbedded SHALE (1/8" - 1.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.

Page 24 of 26



# C) Core Measurements:

Core ID	Core Diameter (inch)	Length (in.)	Length to Diameter	Mass (g)	Density (lb./ft³)
B-511; R-1	1.97	4.00	2.03	566.54	176
B-518; R-1	1.97	3.23	1.64	425.57	165
B-518; R-2	1.97	3.96	2.01	532.24	168
B-523; R-2	1.97	4.01	2.03	557.14	174
B-544; R-1	1.97	3.08	1.56	421.61	171
B-547; R-1	1.97	4.04	2.05	573.46	165
B-547; R-2	1.97	4.03	2.04	555.44	172
B-549; R-1	1.97	3.97	2.01	535.69	169
B-561; R-1	1.97	3.98	2.02	549.35	172
B-565; R-1	1.97	4.01	2.05	560.26	175
B-595; R-2	1.97	3.91	1.98	538.38	171
B-604; R-1	1.97	3.92	1.98	545.93	174
B-688; R-1	1.97	3.92	1.98	550.22	175

# **D)** Compression Test Results:

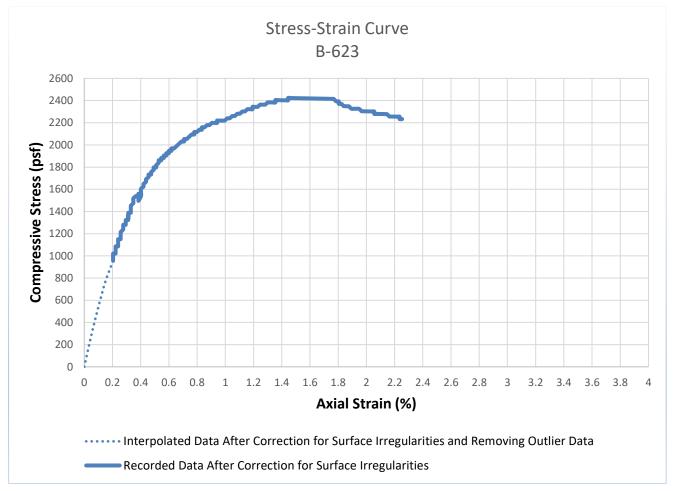
Core ID	Specimen Area (inch²)	Total Load (lbs.)	Compressive Strength (psi)	Temperature (°C)	Time to Failure (seconds)	Rate of Loading (psi/sec)
B-511; R-1	3.05	62,000	20,330	22	66	307
B-518; R-1	3.05	9,200	3,020	22	48	63
B-518; R-2	3.05	14,800	4,850	22	49	99
B-523; R-2	3.05	19,800	6,490	22	55	118
B-544; R-1	3.05	17,000	5,570	22	30	186
B-547; R-1	3.05	25,200	8,260	22	39	212
B-547; R-2	3.05	22,000	7,210	22	34	214
B-549; R-1	3.05	11,000	3,610	22	47	77
B-561; R-1	3.05	15,600	5,110	22	44	115
B-565; R-1	3.05	31,000	10,160	22	40	252
B-595; R-2	3.05	29,000	9,510	22	37	257
B-604; R-1	3.05	25,800	8,460	22	45	188
B-688; R-1	3.05	40,000	13,110	22	63	210

Page 25 of 26



## VIII. Unconfined Compressive Strength of Cohesive Soil (ASTM 2166)

1) Boring: B-623 Sample depth = 16.0'-16.5' below grade



Initial Dry Density = 112.7 pcf Water Content = 23.2 % Unconfined Compressive Strength = 2420 psf

Average Height = 5.56 in Average Diameter = 2.88 in Height-to-Diameter Ratio = 1.9

Strain Rate = 0.26 %/min Strain at Failure = 1.44 %

Note: Sample experienced slumping during sample preparation.

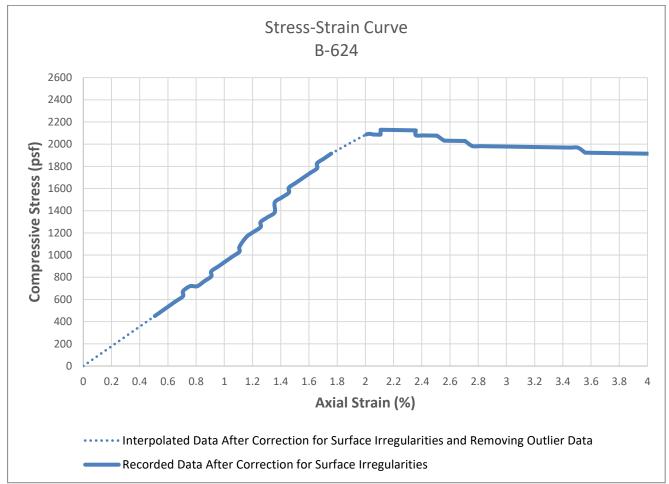


Page 26 of 26

2) Boring: B-624

Sample depth = 19.0'-19.5' below grade





Initial Dry Density = 121.0 pcf Water Content = 20.7 % Unconfined Compressive Strength = 2130 psf

Average Height = 2.00 in Average Length = 1.78 in Height-to-Length Ratio = 1.1

Strain Rate = 1.30 %/min Strain at Failure = 2.11 %

Note: Sample experienced significant slumping during sample preparation. A cube sample was prepared after the cylindrical sample could not support its own weight.



If you have any questions regarding this report please contact our office.

Hannah Kloiber
Laboratory Supervisor

Attachment: Rock Core Photographs (7 of 7)

Attachment to Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 1 of 7





B-511; R-1 Before Compression



B-511; R-1 After Compression



B-518; R-1 Before Compression



B-518; R-1 After Compression

Attachment to Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 2 of 7







B-518; R-2 Before Compression

B-518; R-2 After Compression



B-523; R-1 Before Compression



B-523; R-1 After Compression

Attachment to Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 3 of 7





B-544; R-1 Before Compression



B-544; R-1 After Compression



B-547; R-1 Before Compression



B-547; R-1 After Compression

**Attachment to Laboratory Test Summary** CME Report No.: 28062L-04-0724 Page 4 of 7

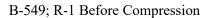




B-547; R-2 Before Compression

B-547; R-2 After Compression







B-549; R-1 After Compression

Attachment to Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 5 of 7





B-561; R-1 Before Compression



B-561; R-1 After Compression



B-565; R-1 Before Compression



B-565; R-1 After Compression

Attachment to Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 6 of 7





B-595; R-1 Before Compression



B-595; R-1 After Compression



B-604; R-1 Before Compression

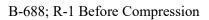


B-604; R-1 After Compression

Attachment to Laboratory Test Summary CME Report No.: 28062L-04-0724 Page 7 of 7









B-688; R-1 After Compression

						Test ID:	IT-TI	P301					
oject:	Micron Campus							CME Project No.: 28062					
	Clay, NY							Test Date:	05/02/	24			
	Ramboll						Т	est Location:	Near T	est Pit	TP-30	)1	
							Technician: Astitwa Sharma, EIT						
t Prep	paratio	n and l	<u>Dimensions</u>							-			
	(	Casing	Installed in:	<b>V</b>	Test Pi	t			Borehole				
C	Casing I	Diamete	er and Type:	3 i	inch I.I	D. HDPE	_						
A	Existin	ıg Grad	e Elevation (1	ft):							403.1	±	
В	Casing	Sticku	p Length Abo	ove Gra	de (ft):						4.00	_	
C	Top of	Casing	g Elevation (f	t):					(A+B)=		407.1		
D	Depth	to Bott	om of Test Ho	ole, Bel	ow Top	of Casing (f	t):				7.90		
			st Hole Eleva						` ,		399.2	-	
	Burmis	ster Cla	ssification of	Soil at	Botton	n of Hole:	Brown	mottled	SILT, some cr	nf SANI	D, some	cmf (	GRAVE
							trace Co						
			ype of Scour/			-				3"			
			e Pre-Soaked				05/0	1/24	Time:	13	:18	_	
	Depth	to Wate	er Level, Belo	ow Top	of Casi	ing							
			After Pre-Soa			5.85							
		Just Pr	ior to First Te	est Fillii	ng (ft):	6.40	-	Date:	05/02/24	-	Time:	13	3:10
Obse	ervatio	<u>ns</u>											
		Rui	n 1		Rui	n 2		Ru	n 2		D	1	
				ı	100			Itu	1 3		Rur	1 7	
	eal Time ıh:mm)	lapsed Time I:mm)	epth to Water evel, Below op of Casing eet)	eal Time th:mm)	Time		eal Time th:mm)	Time		eal Time lh:mm)	Time	Ι	op of Casing eet)
	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water to Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water	Top of Casing (feet)
	13:14	0:00	5.85	Real Time (hh:mm)	Elapsed Time (h:mm)		Real Time (hh:mm)	e Elapsed Time (h:mm)		Real Time (hh:mm)	:0 Elapsed Time 00 (h:mm)	Ι	Top of Casing (feet)
	13:14 13:15	0:00	5.85 5.85	Real Time (hh:mm)	0:0 Elapsed Time (h:mm)		Real Time (hh:mm)	0:0 Elapsed Time (h:mm)		Real Time (hh:mm)	0:0 Elapsed Time (h:mm)	Ι	Top of Casing (feet)
	13:14 13:15 13:16	0:00 0:01 0:02	5.85 5.85 5.85	Real Time (hh:mm)	Elapsed Time 00:0 10:0 (h:mm)		Real Time (hh:mm)	0:00 0:00 0:00 0:00 0:00 0:00		Real Time (hh:mm)	00:0 00:0 00:0 00:02	Ι	Top of Casing (feet)
	13:14 13:15 13:16 13:17	0:00 0:01 0:02 0:03	5.85 5.85 5.85 5.85	Real Time (hh:mm)	0:00 Elapsed Lime (h:mm) 0:02 0:03		Real Time (hh:mm)	0:00 0:01 0:02 0:03		Real Time (hh:mm)	0:00 0:01 0:02 0:03	Ι	Top of Casing (feet)
	13:14 13:15 13:16 13:17 13:19	0:00 0:01 0:02 0:03 0:05	5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05		Real Time (hh:mm)	0:00 ((µ:mm)) 0:02 0:03 0:05		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05	Ι	Top of Casing (feet)
	13:14 13:15 13:16 13:17	0:00 0:01 0:02 0:03	5.85 5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	0:00 Elapsed Lime (h:mm) 0:02 0:03		Real Time (hh:mm)	0:00 0:01 0:02 0:03		Real Time (hh:mm)	0:00 0:01 0:02 0:03	Ι	Top of Casing (feet)
	13:14 13:15 13:16 13:17 13:19 13:24	0:00 0:01 0:02 0:03 0:05 0:10	5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	0:00 0:00 0:01 0:02 0:03 0:05 0:10		Real Time (hh:mm)	emil (mil) 0:00 0:01 0:02 0:03 0:05 0:10		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10	Ι	Top of Casing (feet)
	13:14 13:15 13:16 13:17 13:19 13:24 13:29	0:00 0:01 0:02 0:03 0:05 0:10	5.85 5.85 5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15	Ι	Top of Casing (feet)
	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44	0:00 0:01 0:02 0:03 0:05 0:10 0:15	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	9 (Himm) (100 (Him		Real Time (hh:mm)	9 0:00 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30	Ι	Top of Casing (feet)
t Resu	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44 13:59 14:14	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	9 (mum) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45		Real Time (hh:mm)	9 (mm) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	Ι	Top of Casing (feet)
t Resu	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44 13:59 14:14	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85	Real Time (hh:mm)	9 (mum) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45			9 (mm) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45			0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	Ι	Top of Casing (feet)
t Resu	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44 13:59 14:14	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85		9 (mu:u) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Ι	Top of Casing (feet)
t Resu	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44 13:59 14:14	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85	te (feet/	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00 Run: /hour):	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Ι	Top of Casing (feet)
t Resu	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44 13:59 14:14  1lts	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85	te (feet/(inches/	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00 Run: /hour):	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water	
t Resu	13:14 13:15 13:16 13:17 13:19 13:24 13:29 13:44 13:59 14:14  1lts	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	5.85 5.85 5.85 5.85 5.85 5.85 5.85 5.85	te (feet/(inches/	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00 Run: /hour):	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	Ru erage of	0:00 0:01 0:02 0:03 0:05 0:15 0:30 0:45 1:00	Depth to Water	

						Test ID:	IT-TI	<b>P302</b>						
roject:	Micror	ı Camp	us					CME	Project No.:	28062				
	Clay, NY							Test Date:		24				
	Ramboll						Test Location: Near Test Pit TP-302							
							Technician: Astitwa Sharma, EIT							
st Prep	aratio	n and l	<u>Dimensions</u>							Į.		•		
	(	Casing	Installed in:	<b>V</b>	Test Pi	t			Borehole					
(	Casing I	Diamete	er and Type:	3 i	nch I.I	D. HDPE								
A	Existin	ıg Grad	e Elevation (f	ft):							398.9	±		
В	Casing	Sticku	p Length Abo	ove Gra	de (ft):						3.60	•		
C	Top of	Casing	g Elevation (ft	t):					(A+B)=		402.5	±		
D	Depth	to Bott	om of Test Ho	ole, Bel	ow Top	of Casing (f	t):				7.80	•		
Е	Botton	n of Tes	st Hole Elevat	tion:					. (C-D)=		394.7	±		
	Burmis	ster Cla	ssification of	Soil at	Botton	n of Hole:	Grey/B	rown cn	nf SAND, some	e SILT,	some C	OBBL	ES, littl	le
							cmf GR	AVEL						•
	Thickn	ess&T	ype of Scour/	Sedime	nt Prot	ection Layer	Installe	d:	4	4''				•
	Date an	nd Tim	e Pre-Soaked:	:			05/0	1/24	Time:	13	:30	-		
	Depth	to Wate	er Level, Belo	ow Top	of Casi	ing			•					
		Just	After Pre-Soa	ak Fillir	ng (ft):	5.65								
		Just Pr	ior to First Te	est Fillir	ng (ft):	5.65	•	Date:	5/2/2024		Time:	13	:45	
st Obs	ervatio	ns												-
		Ruı	n 1		Rui	2		Ru	2		D	- 1		1
					IXui	1 4		IXU.	n 3		Rur	14		
			r			ī						I	<b>b</b> 0	-
		ime	r			ī						I	sing	
	ime m)	d Time	r	ime m)	Time	ī	ime m)	Time		ime m)	Time	I	f Casing	
	al Time n:mm)	apsed Time mm)	r	al Time n:mm)	Time	ī	al Time n:mm)	Time		al Time 1:mm)	Time	I	p of Casing et)	
	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below	Top of Casing (feet)	
	Real Time (hh:mm)	0:00	r	Real Time (hh:mm)	Elapsed Time (h:mm)	ī	Real Time (hh:mm)	e Elapsed Time (h:mm)		Real Time (hh:mm)	Time	I	Top of Casing (feet)	
	Real Time (hh:mm)	0:00	r	Real Time (hh:mm)	0:0 Elapsed Time (h:mm)	ī	Real Time (hh:mm)	0:0 Elapsed Time (h:mm)		Real Time (hh:mm)	Elapsed Time (h:mm)	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02	r	Real Time (hh:mm)	Elapsed Time 00:0 (h:mm)	ī	Real Time (hh:mm)	0:00 0:00 0:00 0:00 0:00		Real Time (hh:mm)	00:0 0:00 0:00 0:00 0:00	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02 0:03	r	Real Time (hh:mm)	0:00 (h:mm) 0:02 0:03	ī	Real Time (hh:mm)	0:00 0:01 0:02 0:03		Real Time (hh:mm)	0:00 0:01 0:02 0:03	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05	r	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05	ī	Real Time (hh:mm)	0:00 (p:mm) 0:02 0:03 0:05		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10	r	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10	ī	Real Time (hh:mm)	email (1998) 1998		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15	r	Real Time (hh:mm)	0:00 0:00 0:01 0:02 0:03 0:05 0:10	ī	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15	r	Real Time (hh:mm)	9 (Himm) (100 (100 (100 (100 (100 (100 (100 (10	ī	Real Time (hh:mm)	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30	I	Top of Casing (feet)	-
	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	r	Real Time (hh:mm)	9 (mm) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	ī	Real Time (hh:mm)	9 (100 mm) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	I	Top of Casing (feet)	-
		0:00 0:01 0:02 0:03 0:05 0:10 0:15	r	Real Time (hh:mm)	9 (Himm) (100 (100 (100 (100 (100 (100 (100 (10	ī	Real Time (hh:mm)	9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30	I	Top of Casing (feet)	-
st Resu		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	r	Real Time (hh:mm)	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	I	Top of Casing (feet)	-
st Resu		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		9 (m::u) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	ī		9 (100 mm) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45			0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45	I	Top of Casing (feet)	-
at Resi		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	te (feet/	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00 Run: /hour):	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)		0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	I	Top of Casing (feet)	
st Resi	ults	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	te (feet/(inches/	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00 Run: /hour):	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below		
st Resi	ults	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	te (feet/(inches/	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00 Run: /hour):	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	Ru erage of	0:00 0:01 0:02 0:03 0:05 0:15 0:30 0:45 1:00	Depth to Water Level, Below		
st Resu	ults Final	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	te (feet/(inches/linch	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00  Run: /hour): /hour):	Depth to Water Level, Below Top of Casing (feet)	Ru	0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00	Depth to Water Level, Below Top of Casing (feet)	Ru crage of	9 (mm:y) 0:00 0:01 0:02 0:03 0:05 0:10 0:15 0:30 0:45 1:00  f all four ast run	Depth to Water Level, Below		

Infiltration Test R	eports - Pa	age 3 of 5
4		МЕ
<b>:</b>	<b>15 U</b>	
<b>~</b>	Assoc	iates, Inc.

						TD . TD	TO OIL	200					
						Test ID:	IT-TI						
Project:		_	us					CME	E Project No.:				
	Clay, N	VΥ							Test Date:	05/02/	24		
Client:	Rambo	11						T	est Location:	Near T	est Pit	TP-305	
								Technician: Astitwa Sharma, EIT					
est Prep	paratio	n and l	Dimensions										
-			Installed in:	$\overline{\checkmark}$	Test Pi	t			Borehole				
(		_	er and Type:	_									
	_		e Elevation (1								404.0	_	
		_	p Length Abo								3.90		
	_												
	•	_	g Elevation (ft	·							407.9	±	
	_		om of Test H		_						7.80		
Е			st Hole Eleva						` /		400.1	±	
	Burmis	ster Cla	ssification of	Soil at	Botton				ottled cmf SAN				
	some cmf GRAVEL, little COBBLES												
			ype of Scour/			-				4''			
	Date an	nd Tim	e Pre-Soaked	:			05/0	1/24	Time:	13	:45		
	Depth	to Wate	er Level, Belo	ow Top	of Casi	ng			_				
	-	Just	After Pre-Soa	ak Filliı	ng (ft):	5.90							
			ior to First Te		• • •	0.00	•	Date:	5/2/2024		Time:	14:02	
est Obs					<del>U()</del>		•			•			
cst Obs	ci vatio	Rui	n 1		Rui	1.2		Ru	n 3		Rur	1	1
		Itul			Itui			TCU.			Ital		
	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	
	14:08	0:00	5.70	R ()	0:00		R ()	0:00		R ()	0:00		
	14:09	0:01	5.70		0:01			0:01			0:01		
	14:10	0:02	5.70		0:02			0:02			0:02		
	14:11	0:03	5.70		0:03			0:03			0:03		
	14:13	0:05	5.70		0:05			0:05			0:05		
	14:18	0:10	5.70		0:10			0:10			0:10		
	14:23	0:15	5.70		0:15			0:15			0:15		
	14:38	0:30	5.70		0:30			0:30			0:30		
	14:53	0:45	5.70		0:45			0:45			0:45		
	15:08	1:00	5.70		1:00			1:00			1:00		
est Resi	<u>ılts</u>												
					Run:	Run 1	Ru	n 2	Run 3	Ru	n 4		
		I	nfiltration Ra	te (feet	/hour):	0.00							
		Infi	Itration Rate	(inches	hour):	0.00							
1	Final		ation Rate (i	`	/	0.00			Based on ave	rage of	all fou	r runs	
			`		<b>^</b>				Based on res	-			
ote(s)	1. Test ne	rformed i	n general conform	ance with	NYS Stor	mwater Managem	ent Design		, Appendix D: Infil			uirements.	
	_		oted after Run 1, in			_	_				2 1		
					<i>5</i> ···	1							

Infiltration	Test Repor	ts - Page 4 of 5
		CKAE
		CIVIE
	4,54,54	Associates, Inc.

						Test ID:	IT-B	565						
Project:	Micron	Camp	us					CME	E Project No.:	28062				
	Clay, N	NΥ							Test Date:	04/30/	24			
Client:	Rambo							Т	est Location:	Near T	est Bo	ring B-565		
									Technician:					
Test Prep	st Preparation and Dimensions													
	Casing Installed in:													
(	Casing I	Diamete	er and Type:	3	inch I.D	D. HDPE	_							
A	Existin	g Grad	e Elevation (1	ft):							381.2	±		
В	Casing	Sticku	p Length Abo	ove Gra	de (ft):						1.75			
C	Top of	Casing	g Elevation (fi	t):					. (A+B)=		383.0	±		
D	Depth 1	to Bott	om of Test Ho	ole, Bel	ow Top	of Casing (f	t):				7.00			
E			st Hole Eleva						` /		376.0	<u>.</u> ±		
	Burmis	ster Cla	ssification of	Soil at	Botton	n of Hole:	Light B	Brown/G	rey SILT, trace	fine SA	AND			
	Burmister Classification of Soil at Bottom of Hole: Light Brown/Grey SILT, trace fine SAND													
	Thickness&Type of Scour/Sediment Protection Layer Installed: 3"  Date and Time Pre-Soaked: 04/30/24 Time: 11:30													
	Date an	11	:30											
	Depth		er Level, Belo	_		-								
			After Pre-Soa											
		Just Pr	ior to First Te	st Filli	ng (ft):	2.60		Date:	5/3/2024		Time:	13:56		
Test Obs	ervatio	ns												
		Ruı	n 1		Rur	n 2		Ru	n 3	Run 4				
	Real Time (hh:mm)	Elapsed Time G (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time G (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)		
		0:01			0:01			0:01			0:01			
		0:02			0:02			0:02			0:02			
		0:03			0:03			0:03			0:03			
		0:05			0:05			0:05			0:05			
		0:10			0:10			0:10			0:10			
		0:15			0:15			0:15			0:15			
		0:30			0:30			0:30			0:30			
		0:45			0:45			0:45			0:45			
		1:00			1:00			1:00			1:00			
Test Resu	<u>ults</u>											1		
					Run:	Run 1	Ru	n 2	Run 3	Ru	n 4			
			nfiltration Ra											
Infiltration Rate (inches/hour):														
	Final	Infilti	ration Rate (i	inches/	hour):	0.00		. 🔲	Based on ave	-		ır runs		
								<b>✓</b>	Based on res					
Note(s)	_		_			_	_		, Appendix D: Infil					

Infiltration Test R	eports - Page 5 of 5
<u></u>	X CME
	Associates, Inc.

						Test ID:	IT-B	611						
Project:	Micror	ı Camp	us					CME	E Project No.:	28062				
· 	Clay, N	ΝY							Test Date:	05/03/	24			
Client:								Т	est Location:	Near T	est Bo	ring B-611		
									Technician:					
Test Prep	Test Preparation and Dimensions													
	Casing Installed in:													
(	Casing I	Diamete	er and Type:	3	inch I.D	D. HDPE								
		_	e Elevation (f	-							380.6	±		
			p Length Abo								1.70			
			g Elevation (ft								382.3	±		
			om of Test Ho								6.17			
									` ′		376.1	±		
	E Bottom of Test Hole Elevation: (C-D)= 376.1 ±  Burmister Classification of Soil at Bottom of Hole: Light Brown SILT, trace fine SAND													
	Thickness&Type of Scour/Sediment Protection Layer Installed: 3"  Date and Time Pre-Soaked: 04/30/24 Time: 10:30													
							04/3	0/24	Time:	10	:30			
	Depth		er Level, Belo	•		•								
			After Pre-Soa		• • •		•	D :	5/2/2024		T.	14.10		
			ior to First Te	st Filli	ng (ft):	2.20		Date:	5/3/2024		Time:	14:10		
Test Obs	<u>ervatio</u>		1		-	2		-	2		-	4		
	1	Ruı	1 l		Rur	12		Ru	n 3	Run 4		14		
	Real Time (hh:mm)	Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	0:0 Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	0:0 Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)	Real Time (hh:mm)	0:0 Elapsed Time (h:mm)	Depth to Water Level, Below Top of Casing (feet)		
		0:02			0:02			0:02			0:02			
		0:03			0:03			0:03			0:03			
		0:05			0:05			0:05			0:05			
		0:10			0:10			0:10			0:10			
		0:15			0:15			0:15			0:15			
		0:30			0:30			0:30			0:30			
		0:45			0:45			0:45			0:45			
Гоя <b>4</b> D	.]ta	1:00			1:00			1:00			1:00			
<u> Fest Resi</u>	<u>iits</u>				Run:	Run 1	D.,	n 2	Run 3	D.,	n 4			
		Ţ.	nfiltration Do	te (feet		IXUII I	Ku	11 4	Kull 3	Ku	111 4			
Infiltration Rate (feet/hour):  Infiltration Rate (inches/hour):														
	Final		ration Rate (i	`	/	0.00			Based on ave	rage of	f all fou	r runs		
	ı IIIAI		ation Nate (	inches/		0.00		: 🗀	Based on res	-		1 14115		
Note(s)	1. Test pe	rformed i	n general conform	ance with	NYS Stor	mwater Managem	ent Design		, Appendix D: Infil			uirements.		
	2. No infi	ltration no	oted 72 hours after	presoak o	on 04/30/2	4, infiltration testi	ng was su	spended a	at this location.					

				6035 Co	orporate Drive	SU	BSURFACI	£	Test Pit ID	<b>TP-301</b>				
		IV		East Syr	acuse, NY 13057	EXP	PLORATIO	$\mathbf{N}$	Page No.	1 of 1				
	Asso	ciates	s, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	G	Project No.	28062				
Project	Name:	Micron	Campi	ıs, Clay,	New York				Date Started	05/01/24				
Client:		Rambo							Date Finished	05/01/24				
Location				n Locati	on Plan				Surface Elev.	403.0'				
METH							GROUND	WATER O	DBSERVATIONS					
Operato			Shermar		-	Date	Time	Depth (Ft.)	1	mment				
Inspecto			a Sharm			05/01/24	9:44	6	Water seeping thro					
Equipm					27 Excavator				The state of the s					
Bucket '		Toothe												
Bucket '		24"												
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL						
Depth		Sample	e Depth		c - coarse									
Scale	Sample	(F		Depth of Change	m - medium	and - 35 to 50% / s								
(Feet)	No.	From	То	(Ft.)	f - fine	little - 10 to 20% /	trace - 0 to 10%							
0				1	Topsoil and Organic	Material (moist,	easy digging)							
1				1	Brown mottled SILT,	, some cmf SAN	D, some cmf C	GRAVEL, tra	ice COBBLES (m	oist, easy to				
2					moderate digging)									
3														
4														
5														
					D									
6					Bottom of Test Pit @	6'. Remark 3								
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Grey possible bedrock surface observed at 6 feet below grade. Test Pit Terminated after difficulty noted in digging through possible bedrock.

			6035 Co	orporate Drive	SUI	BSURFACI	E	Test Pit ID	TP-302
	, IV			racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1
As	sociate	s, Inc.	Phone:	315-701-0522	TES	T PIT LO	G	Project No.	28062
Project Name	Micro	n Camp	us, Clay,	New York				Date Started	05/01/24
Client:	Rambo	oll						Date Finished	05/01/24
Location:			on Locati					Surface Elev.	398.9'
METHOD				ON			WATER O	BSERVATION	<u>S</u>
Operator:	-	Sherma			Date	Time	Depth (Ft.)		ment
Inspector:		a Sharn			05/01/24	10:40	3.5	Water seeping throu	
Equipment:			del LNK	27 Excavator	05/01/24	10:45	4.2	About 0.8' of water	accumulated at
Bucket Type:	Toothe	ed						bottom of Test Pit	
Bucket Width	24"			VISUAL CLA	ASSIFICATIO	N OF MAT	ERIAL.	<u> </u>	
Depth	Sampl	e Depth	5 4 6	c - coarse			LKIAL		
Scale Samp		Ft.)	Depth of Change	m - medium	and - 35 to 50% / so little - 10 to 20% / t				
(Feet) No.	From	To	(Ft.)	f - fine	nuie - 10 to 20% / 1	race - 0 to 10%			
0			0.5	Topsoil and Organic					
				Brown mottled cmf S	SAND, some SIL	T, some cmf C	GRAVEL, lit	tle COBBLES (mo	ist, easy to
1				moderate digging)					
2				Boulder noted at abo	out 1' below grad	e			
2									
3			3.5						
3			3.3	Grey/Brown cmf SA	ND some SILT	some CORRI	ES little cm	f GR AVEL (catura	ted hard
4				digging)	ND, some SIL1,	some CODDL	LD, IIIIC CIII	I OKA VEL (satura	ica, nara
				Weathered Flat + El	ongated Ledge R	ock Boulders	noted		
5				Bottom of Test Pit @					
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
Remarks:									

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Dark grey weathered rock observed at about 5 feet below grade. Test Pit terminated after difficulty noted in digging through weathered rock.

				6035 Co	orporate Drive		BSURFACI		Test Pit ID	<b>TP-303</b>	
		IV			racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1	
	Asso	ciate	s, Inc.	Phone:	315-701-0522	TES	ST PIT LO	G	Project No.	28062	
Project	Name:	Micro	n Camp	us. Clav.	New York			<u> </u>	Date Started	05/01/24	
Client:		Rambo		, <u>,</u> ,					Date Finished	05/01/24	
Location	n:			on Locati	on Plan				Surface Elev.	400.2'	
METH							GROUND	WATER O	OBSERVATIONS		
Operato			Sherma		011	Date	Time	Depth (Ft.)	Comment		
Inspecto			a Sharn			05/01/24	9:13	4	Water seeping thr		
Equipm					27 Excavator	03/01/21	7.13	7	water seeping till	ough side wans	
Bucket '		Toothe			2, 2,100, 000						
Bucket		24"									
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL			
D 1		Sample	e Depth				1, 01 1,111				
Depth Scale	Sample		t.)	Depth of	c - coarse m - medium	and - 35 to 50% / s					
(Feet)	No.	From	То	Change (Ft.)	f - fine	little - 10 to 20% /	trace - 0 to 10%				
0	110.	Troin	10	(1 11)	Topsoil and Organic	Material (moist	easy digging)				
				1	Topson and Organic	material (moist,	cusy dissing)				
1					Brown mottled SILT	, some cmf SAN	D. some cmf C	GRAVEL, tra	ce COBBLES (r	noist, easy to	
					moderate digging)	,	,	,	`	, ,	
2											
3	S-1	2.0	4.0								
4											
5					Bottom of Test Pit @	5'. Remark 3					
6											
7											
8											
_											
9											
1.0											
10											
1.1											
11											
12											
12											
12											
13											
1.4											
14											
15											
13											
16											
- 10	<u> </u>	l			L						

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Grey possible bedrock surface observed at 5 feet below. Test Pit terminated after difficulty noted in digging through possible bedrock.

				6035 Co	orporate Drive	SUI	BSURFACI	E	Test Pit ID	TP-304
		IV			racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1
	<b>A</b> sso	ciates	s, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	G	Project No.	28062
Project :	Name:	Micron	Camp	us, Clay,	New York				Date Started	05/01/24
Client:		Rambo	oll						Date Finished	05/01/24
Location				on Locati					Surface Elev.	404.4'
METH				<b>IGATI</b>	ON		GROUND	WATER O	BSERVATION	IS
Operato		Daryl S				Date	Time	Depth (Ft.)		mment
Inspecto		Astitwa				05/01/24	11:34	5	Water seeping thro	
Equipm				del LNK	27 Excavator	05/01/24	11:40	6.5		accumulated at bottom
Bucket '		Toothe	ed						of Test Pit	
Bucket '	width:	24"			VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL.		
Donath		Sample	Depth					LICIAL		
Depth Scale	Sample	(F	_	Depth of Change	c - coarse m - medium	and - 35 to 50% / so				
(Feet)	No.	From	То	(Ft.)	f - fine	little - 10 to 20% /	trace - 0 to 10%			
0				0.5	Topsoil and Organic	Material (moist,	easy digging)			
				1	Dark Brown cmf SAI	ND and SILT, so	me cmf GRA	VEL (moist,	easy to moderate o	digging)
1					Reddish Brown cmf S	SAND, some SII	T, some cmf	GRAVEL (m	oist, moderate dig	gging)
				2						
2					Brown cmf SAND, so	ome SILT, some	cmf GRAVEI	L, some COB	BLES (moist, mo	derate digging)
2	G 1	2.0	4.0							
3	S-1	2.0	4.0							
4										
7				5						
5					Grey SILT, some cm	f SAND, some c	mf GRAVEL	(wet, hard die		
				6	orej zizi, some em	2 2 1 2 , 50110 0		(1100, 11110 01)	556/	
6					Same as above (satur	ated, hard diggin	 lg)			
					Weathered Flat + Ele	ongated Ledge R	ock Boulders	noted		
7										
					Bottom of Test Pit @	7.5'				
8										
0										
9										
10										
10										
11										
12										
13										
14										
1.5										
15										
16										
Remark										

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Test Pit terminated after difficulty noted in digging at 7.5 feet.
- 4.

Assoroject Name: Client: Location: METHOD O Operator:	ociates, Inc. Micron Campu	-	racuse, NY 13057	FXP				
Project Name: Client: Location: METHOD O		Phone:		12231	LORATIO	N	Page No.	1 of 1
Client: Location: METHOD O	Micron Campu	1 1101101	315-701-0522	TES	T PIT LO	G	Project No.	28062
Client: Location: METHOD O		ıs, Clay,	New York				Date Started	05/01/24
METHOD O	Ramboll						Date Finished	05/01/24
	See Exploration	n Locati	on Plan				Surface Elev.	404.0'
					GROUND	WATER O	BSERVATION	S
1	Daryl Shermar			Date	Time	Depth (Ft.)	1	nment
nspector:	Astitwa Sharm			05/01/24	12:00	4.5	Water seeping thro	
Equipment:	Link Belt Mod	lel LNK	27 Excavator					ccumulated at bottom
Bucket Type:	Toothed			05/01/24	12:06	5	of Test Pit	
Bucket Width:	24"							
			VISUAL CL	ASSIFICATIO	N OF MAT	ERIAL		
Depth Scale Sample		Depth of Change	c - coarse m - medium	and - 35 to 50% / so little - 10 to 20% /				
(Feet) No.	From To	(Ft.)	f - fine	36 : 17 : 1	1			
0		1	Topsoil and Organic	e Material (moist,	easy digging)			
1			Dark Brown mottled moderate digging)	l cmf SAND, som	e SILT, some	cmf GRAVE	L, little COBBLE	S (moist, easy to
2			moderate digging)					
3								
4		4.5	Grey cmf SAND and	d SILT some cmf	GRAVEL wi	th BOULDE	RS (saturated hard	I diaging)
5			Weathered Flat + E				No (saturated, nare	ruigging)
6								
7			Bottom of Test Pit (	@ 7'. Remark 3				
8								
9								
10								
11								
12								
13								
14								
15								
16								

- See Test Pit Photographs, attached.
   Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Test Pit terminated after difficulty noted in digging at 7 feet on possible bedrock surface. Test Pit bottom could not be observed due to accumulated water.

	N/IC	6035 Co	orporate Drive	SUI	BSURFAC	E	Test Pit ID	TP-306
	IVIC		racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1
Asso	ociates, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	G	Project No.	28062
Project Name:	Micron Camp	us Clav	New York	1120	TITLE	<u> </u>	Date Started	05/01/24
Client:	Ramboll	us, Ciuy,	TWW TOTK				Date Finished	05/01/24
Location:	See Exploration	on Locati	on Plan				Surface Elev.	399.0'
METHOD O				1	CDOLIND	WATED	BSERVATION	
			UN	<b>D</b> (				
Operator:	Daryl Sherman			Date	Time	Depth (Ft.)		nment
Inspector:	Astitwa Sharn			05/01/24	10:17	2.5	Water seeping from	
Equipment:	Link Belt Mod	del LNK	27 Excavator	05/01/24	10:25	3.5		ccumulated at bottom
Bucket Type:	Toothed			00701721	10.20	5.0	of Test Pit	
Bucket Width:	24"							
<u> </u>	•	ı	VISUAL CLA	ASSIFICATIO	N OF MAT	ERIAL	-	
Depth	Sample Depth	Depth of	c - coarse	and - 35 to 50% / se	ome - 20 to 35%			
Scale Sample	(Ft.)	Change	m - medium	little - 10 to 20% /				
(Feet) No.	From To	(Ft.)	f - fine					
0			Topsoil and Organic	Material (moist,	easy digging)			
1		1	Davida Davasara ara attila d	CHT	CAND	om CD AVE	EL Lista CODDLE	C (maint againt
1			Dark Brown mottled	SIL1, some cim	SAND, some	CIIII GRAVE	EL, IIIIIE COBBLE	s (moist, easy to
2			moderate digging)					
2								
3		3.5						
3			Same as above (satur	rated moderate to	n hard digging	·)		
4		4.5	barrie as above (sata	aucu, moderate t	3 mara angging	,		
			Bottom of Test Pit @	9 4.5'. Remark 3				
5								
6								
7								
_								
8								
9								
9								
10								
11								
12								
13								
14								
•								
15								
16								

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Grey possible bedrock surface observed at 4.5 feet below. Test Pit terminated after difficulty noted in digging through possible bedrock.

				6035 Co	orporate Drive	SU	BSURFACI	E	Test Pit ID	TP-307
		IV		East Syr	racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1
	Asso	ociate	s, Inc.	Phone:	315-701-0522	TES	ST PIT LO	G	Project No.	28062
Project	Name:	Micro	n Camp	us, Clay,	New York				Date Started	05/03/24
Client:		Rambo							Date Finished	05/03/24
Location	n:	See Ex	ploration	on Locati	on Plan				Surface Elev.	382.4'
METH	HOD O	F INV	VEST	<b>IGATI</b>	ON		GROUND	WATER O	BSERVATION	S
Operato	or:	Daryl S	Sherma	n		Date	Time	Depth (Ft.)	Con	ment
Inspecto	or:	Astitw	a Sharn	na, EIT		05/02/24	10.07		About 3.5' of water	accumulated at Test
Equipm	ent:	Link B	elt Mo	del LNK	27 Excavator	05/03/24	10:07	8	Pit bottom	
Bucket	Type:	Toothe	ed							
Bucket	Width:	24"								
	•			•	VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL	-	
Depth		_	e Depth	Depth of	c - coarse	and - 35 to 50% / s	ome - 20 to 35%			
Scale	Sample		t.)	Change	m - medium	little - 10 to 20% /				
(Feet)	No.	From	То	(Ft.)	f - fine					
0				0.5	Topsoil and Organic			<del> </del>	- ; ,	. — . — . —
1					Brown mottled SILT	, little fine SANI	), little CLAY	(moist, easy	digging)	
1										
2										
2										
3	S-1	2.0	4.0							
	5 1	2.0	1.0							
4										
				5						
5					Brown/Grey SILT, li	ttle CLAY, little	cmf SAND, tr	race mf GRA	VEL, trace COBBI	LES (wet, easy
					to moderate digging)					•
6										
7										
8					(Saturated below abo	out 8')				
9										
10				10.5						
10				10.5	Pinkish Grey cmf SA	ND some omf (	SDAVEL 1;++1.	SII T trace	CORRIES (coture	ted moderate
11					digging)	and, some chil C	JICA V LL, IIIII	. SIL1, Hace	CODDLES (Saiura	neu, mouerate
11					Bottom of Test Pit @	) 11 5'				
12					Doublin of Test 1 it w	11.0				
13										
14										
15										
16				<u> </u>						
Remar	l-a.									

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Nearly horizontal clay seams observed between 5 to 8 feet below grade.
- 4. Nearly horizontal Clay seams noted between 6 to 8 feet.

		RAE	6035 Co	orporate Drive	SUI	BSURFACI	E	Test Pit ID	TP-308
		IVIC		racuse, NY 13057	EXPLORATION			Page No.	1 of 1
	<b>Asso</b>	ciates, Inc.	Phone: 3	315-701-0522	TES	TEST PIT LOG			28062
Project	Name:	Micron Camp	us, Clay,	New York	•		Project No.  Date Started	05/03/24	
Client:		Ramboll						Date Finished	05/03/24
Locatio	n:	See Exploration	on Locati	on Plan				Surface Elev.	381.0'
		F INVEST				GROUND	WATER O	BSERVATION	S
Operate		Daryl Sherma			Date	Time	Depth (Ft.)		ment
Inspecto		Astitwa Sharn			05/03/24	10:43	10	Water seeping throu	
Equipm		Link Belt Mod		27 Excavator				About 2.5' of water	
Bucket		Toothed			05/03/24	10:47	9	Pit bottom	
	Width:								
				VISUAL CL	ASSIFICATIO	N OF MAT	ERIAL	!	
Depth Scale	Sample	Sample Depth (Ft.)	Depth of Change	c - coarse m - medium	and - 35 to 50% / so little - 10 to 20% /				
(Feet)	No.	From To	(Ft.)	f - fine	nttle 10 to 2070 /	uace 0 to 1070			
0				Topsoil and Organic	Material (moist,	easy digging)			
			1						. — - — - —
1				Brown mottled SILT	f, little fine SANI	O, little CLAY	(moist, easy	digging)	
2									
3									
4			5						
5				Same as above (wet,	easy digging)				
6									
7									
8									
9			10						
10			10	Grey SILT, some CI		AND, little cn	nf GRAVEL,	trace COBBLES,	trace BOULDER
11				(saturated, easy to m					
12				Bottom of Test Pit @	<u>v</u> 11.5				
13									
14									
15									
16									
Remar	ze•		-						

- See Test Pit Photographs, attached.
   Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.

		N/I		6035 Co	orporate Drive	SUI	BSURFACI	E	Test Pit ID	TP-309
		IVI		East Syr	acuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1
	Asso	ociates,	Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	G	Project No.	28062
Project	Name:	Micron (	Campı	ıs, Clay,	New York	•		Date Started	05/03/24	
Client:		Ramboll		Ī					Date Finished	05/03/24
Location	n:	See Expl	loratio	n Locati	on Plan				Surface Elev.	380.6'
METH	HOD O	F INVI	ESTI	GATI	ON		GROUND	WATER O	BSERVATION	S
Operato	r:	Daryl Sh	ermar	1		Date	Time	Depth (Ft.)	Com	ment
Inspecto	r:	Astitwa S	Sharm	a, EIT		05/03/24	9:20	4	Water seeping throu	gh side walls
Equipm	ent:	Link Bel	t Mod	lel LNK	27 Excavator	05/02/24	0.20	1.1	About 1' of water ac	cumulated at bottom
Bucket '	Туре:	Toothed				05/03/24	9:30	11	of Test Pit	
Bucket '	Width:	24"								
		1			VISUAL CLA	ASSIFICATIO	N OF MAT	ERIAL	•	
Depth		Sample D		Depth of	c - coarse	and - 35 to 50% / so	ome - 20 to 35%			
Scale	Sample	(Ft.)		Change	m - medium	little - 10 to 20% /				
(Feet)	No.	From	То	(Ft.)	f - fine					
0				0.5	Topsoil and Organic					. — - — - — -
					Light Brown mottled	SILT, little cmf	SAND, little (	CLAY, trace	fine GRAVEL (mo	ist, easy
1					digging)					
2										
3										
				4						
4					Reddish Brown cmf	SAND, some SIL	T, little CLA	Y (wet, easy	to moderate digging	g)
_				5	D CH T 1'1	C C A NED 1741 - C	N A X 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7			. — - — - —
5					Brown SILT, little cr	mf SAND, little (	CLAY (wet, m	oderate diggi	ing)	
6										
7										
7										
0										
8				9						
					Grey SILT, some CL	AV little emf C	AND little core	of CD A VICI	tropo COPDI EC. 4	roce POH DED
9					•			ıı UKAVEL,	uace COBBLES, U	Tace DOULDER
10					(wet to saturated, mo	ouerate to nard di	gging)			
10										
11										
11										
12					Bottom of Test Pit @	0 12'				
12					Doubli of Test Elf @	£ 14				
13										
13										
14										
14										
15										
13										
16										
Remar		<u> </u>								

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.

				6035 Co	orporate Drive	SUI	BSURFACI	$\mathbf{E}$	Test Pit ID	<b>TP-310</b>			
		IV			acuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1			
	Asso	ciates	s, Inc.	Phone: 3	315-701-0522	TES	T PIT LO	G	Project No.	28062			
Project	Name:	Micron	Campi	us, Clay,	New York				Date Started	05/03/24			
Client:		Rambo							Date Finished	05/03/24			
Location				on Locati					Surface Elev.	383.1'			
METH	IOD O	F INV	EST	GATI	ON		GROUND	WATER O	BSERVATIO	NS			
Operato	r:	Daryl S	Shermai	n		Date	Time	Depth (Ft.)	Co	omment			
Inspecto		Astitwa				05/03/24	11:48	4		m sides of Test Pit			
Equipm	ent:	Link B	elt Mod	lel LNK	27 Excavator	05/03/24	12:00	12	Water rising from	bottom of Test Pit			
Bucket '		Toothe	d										
Bucket '	Width:	24"											
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL					
Depth		Sample		Depth of	c - coarse	and - 35 to 50% / so	ome - 20 to 35%						
Scale	Sample	(F		Change	m - medium	little - 10 to 20% /							
(Feet)	No.	From	То	(Ft.)	f - fine								
0				0.5	Topsoil and Organic								
4					Dark Brown SILT, so	ome CLAY, trace	tine SAND (	wet, easy dig	ging)				
1													
2													
2													
3													
3				4									
4			Brown mottled SILT and CLAY, trace fine SAND (wet, easy to moderate digging)										
							(						
5													
6													
7													
0													
8													
0													
9				10									
10					Grey SILT, some CL	ΔV trace fine S	AND (saturate	d moderate	diagina)				
10					ofey Sill 1, some Cl.	AT, trace fine 5.	TIVD (saturate	d, moderate	uiggiiig)				
11													
11													
12					Bottom of Test Pit @	12'							
13													
14													
15													
1.5													
16													

- See Test Pit Photographs, attached.
   Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.

				6035 Co	orporate Drive	SUE	SURFACI	$\mathbf{E}$	Test Pit ID	<b>TP-311</b>			
		IVI		East Syr	acuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1			
	<b>A</b> SSC	ciates	, Inc.	Phone: 3	315-701-0522	TES	T PIT LO	J	Project No.	28062			
Project 1	Name:	Micron	Campu	ıs, Clay,	New York				Date Started	05/03/24			
Client:		Rambol	1						Date Finished	05/03/24			
Location	n:	See Exp	oloratio	n Locati	on Plan				Surface Elev.	380.5'			
METH	O doi	F INV	ESTI	GATI	ON		<b>GROUND</b>	WATER O	<b>BSERVATIO</b>	NS			
Operato	r:	Daryl S	herman	1		Date	Time	Depth (Ft.)	C	omment			
Inspecto	r:	Astitwa	Sharm	a, EIT		05/03/24	12:16	2.5	Water seeping from bottom				
Equipm	ent:	Link Be	elt Mod	lel LNK	27 Excavator	05/03/24	12:30	10.5	About 0.5' of wat	er accumulated at			
Bucket '	Туре:	Toothed	1			03/03/24	12.30	10.5	bottom of Test Pi	t			
Bucket '	Width:	24"											
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL					
Depth		Sample	Depth	Depth of	c - coarse	and - 35 to 50% / so	ma 20 to 35%						
Scale	Sample	(Ft		Change	m - medium	little - 10 to 20% / to							
(Feet)	No.	From	To	(Ft.)	f - fine								
0				0.5	Topsoil and Organic								
					Brown mottled SILT,	, little CLAY, tra	ce fine SAND	(moist, easy	digging)				
1													
2													
2				2									
2				3	Carra as alsays (see				— . — . —				
3					Same as above (wet, easy digging)								
4													
4													
5													
C													
6													
7													
8													
				9									
9					Grey mottled SILT, s	some CLAY, trac	e fine SAND (	(saturated, ea	sy to medium di	gging)			
4.0													
10													
11					D CT . D'. ©	. 1.11							
11					Bottom of Test Pit @	11.							
12													
12													
13													
13													
14													
= •													
15													
16													
			<u> </u>										

- See Test Pit Photographs, attached.
   Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.

				6035 Co	orporate Drive	SU	BSURFACI	E	Test Pit ID	<b>TP-312</b>			
		IV			racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1			
	Asso	ciates	s, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	$\mathbf{G}$	Project No.	28062			
Project	Name:	Micron	Campi	us, Clay,	New York				Date Started	05/03/24			
Client:		Rambo	oll						Date Finished	05/03/24			
Location	n:	See Ex	ploratio	on Locati	on Plan				Surface Elev.	380.5'			
METH	O doi	F INV	EST	GATI	ON		GROUND	WATER O	BSERVATIO	NS			
Operato	r:	Daryl S	Shermai	n		Date	Time	Depth (Ft.)	C	omment			
Inspecto	r:	Astitwa	a Sharn	na, EIT		05/03/24	12:58	None Noted					
Equipm	ent:	Link B	elt Mod	lel LNK	27 Excavator								
Bucket		Toothe	ed										
Bucket	Width:	24"											
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL					
Depth		Sample		Depth of	c - coarse	and - 35 to 50% / s	ome - 20 to 35%						
Scale	Sample	(F		Change	m - medium	little - 10 to 20% /							
(Feet)	No.	From	То	(Ft.)	f - fine								
0				0.5	Topsoil and Organic				: <del></del> -, —				
4					Brown mottled SILT	, little CLAY, tra	ace fine SAND	(wet, easy di	igging)				
1													
2													
2													
3	S-1	2.0	4.0										
3	5 1	2.0	1.0										
4													
5													
6													
				7									
7					Grey SILT and CLA	Y, trace fine SAI	ND (wet to sat	urated, easy t	o moderate digg	ing)			
0													
8													
0													
9													
10					Bottom of Test Pit @	10'							
10					Dottom of Test I it @	10							
11													
12													
13													
14													
15													
1.0													
16													

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Side walls caved in before taking Test Pit photographs.4. Nearly horizontal Clay seams noted between 6 to 8 feet.

				6035 Co	orporate Drive		BSURFACI		Test Pit ID	<b>TP-313</b>		
		V			acuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1		
	Asso	ciates	, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	G	Project No.	28062		
Project	Name:	Micron	Campı	us, Clay,	New York				Date Started	05/02/24		
Client:		Rambo	11						Date Finished	05/02/24		
Location	n:	See Exp	ploratio	n Locati	on Plan				Surface Elev.	403.6'		
METH	O doi	F INV	ESTI	GATI	ON		GROUND	WATER O	BSERVATIO	NS		
Operato	r:	Daryl S	Shermar	n		Date	Time	Depth (Ft.)	Co	omment		
Inspecto	r:	Astitwa	Sharm	na, EIT		05/02/24	12:21	10	Water seeping thr	ough side walls		
Equipm	ent:	Link Be	elt Mod	lel LNK	27 Excavator							
Bucket '	Гуре:	Toothe	d									
Bucket '	Width:	24"										
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL				
Depth		Sample	Depth	Depth of	c - coarse	and - 35 to 50% / s	oma 20 to 35%					
Scale	Sample	(Ft	t.)	Change	m - medium	little - 10 to 20% /						
(Feet)	No.	From	To	(Ft.)	f - fine							
0				0.5	Topsoil and Organic							
			Brown SILT, some fine SAND, trace CLAY (moist, easy digging)									
1												
				2								
2			Same as above (wet, easy)									
2												
3												
4				- 4	Reddish Brown cmf S	CAND come CII	T trace CL A	V trace CP A	VEL (moist one	v diaging)		
4				5	Reduisii biowii ciiii k	SAND, Some Sir	LI, made CLA	i, nace GKA	VEL (IIIOISI, eas	y digging)		
5					Brown cmf SAND, se	ome SILT some	cmf GRAVEI	little COR	BLES trace CLA	Y (wet to		
3					saturated, moderate d		chii Giaiv Ei	z, muc cobi	BLES, trace CE	ii (wet to		
6					saturated, infoacrate e	···55····5)						
7					See Remark 3							
8												
9				9.5			— - — - —					
					See Remark 4							
10					Bottom of Test Pit @	10'						
1.1												
11												
12												
12												
13												
13												
14												
15												
16												

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Large weathered rock of about 16"x16"x8" in dimension noted at about 9.5' below grade.
- 4. Nearly horizontal Clay seams noted between 6 to 8 feet.

				6035 Co	orporate Drive	SUBSURFACE			<b>Test Pit ID</b>	<b>TP-314</b>	
		V		East Syr	racuse, NY 13057	EXP	<b>LORATIO</b>	N	Page No.	1 of 1	
	Asso	ciates	, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	$\mathbf{G}$	Project No.	28062	
Project	Name:	Micron	Campi	us, Clay,	New York				Date Started	05/02/24	
Client:		Rambo							Date Finished	05/02/24	
Location				n Locati	on Plan				Surface Elev.	401.6'	
METH							GROUND	WATER O	BSERVATION	S	
Operato		Daryl S				Date	Time	Depth (Ft.)	Cor	nment	
Inspecto		Astitwa				05/02/24	9:55	None Noted			
Equipm		Link B	elt Mod	lel LNK	27 Excavator						
Bucket '	Туре:	Toothe	d								
Bucket '		24"									
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL			
Depth		Sample	Depth	Depth of	c - coarse	1 25 . 500/ /	20 . 25%				
Scale	Sample	(F		Change	m - medium	and - 35 to 50% / s little - 10 to 20% /					
(Feet)	No.	From	To	(Ft.)	f - fine	Ittle - 10 to 20% /	trace - 0 to 10%				
0				0.5	Topsoil and Organic	Material (moist,	easy digging)	•			
					Light Brown SILT, so				igging)		
1											
2											
3											
4					Grey/Brown, Same as	s above (wet, eas	sy to medium o	digging)			
_											
5											
6											
7											
,				8							
8					Grey, Same as above	(wet_moderate)	to hard diggine	<u></u>			
0					Rock fragments noted		to nara digging	8)			
9					Bottom of Test Pit @						
						). Itemanic s					
10											
10											
11											
12											
13											
14											
15											
1.											
16											

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Test Pit terminated after difficulty noted in digging through possible weathered rock.
- 4.

				6035 C	orporate Drive	SUI	BSURFACI	E	Test Pit ID	<b>TP-315</b>			
		IV			racuse, NY 13057	EXP	LORATIO	N	Page No.	1 of 1			
	<b>A</b> sso	ciates	s, Inc.	Phone:	315-701-0522	TES	ST PIT LO	G	Project No.	28062			
Project	Name:	Micron	Camp	us. Clav.	New York	1220	711120		Date Started	05/02/24			
Client:		Rambo							Date Finished	05/02/24			
Location	n:			on Locati	on Plan			Surface Elev.	405.1'				
			•	IGATI			GROUND	WATER O	BSERVATIO				
Operato		Daryl S				Date	Time	Depth (Ft.)		omment			
Inspecto		-		na, EIT		05/02/24	10:27	3	Water seeping thr				
Equipm					27 Excavator	03/02/21	10.27	3	water seeping till	ough side wans			
Bucket '		Toothe			2, 2								
Bucket		24"											
2 4 4 1 4 1	***************************************				VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL	<u> </u>				
Depth		Sample	Depth	5 1 6	c - coarse								
Scale	Sample		t.)	Depth of Change	m - medium	and - 35 to 50% / so							
(Feet)	No.	From	То	(Ft.)	f - fine	little - 10 to 20% /	trace - 0 to 10%						
0					Topsoil and Organic	Material (moist,	easy digging)						
				1		` ` `	,						
1					Light Brown mottled	SILT, some mf	SAND, trace (	CLAY (wet, e	easy to moderate	digging)			
									-				
2	S-1	2.0	3.5										
3				3.5									
					Grey/Brown mottled SILT, some mf SAND, little CLAY (wet, easy to moderate digging)								
4													
5													
6				7	C D 1.4								
7				7	See Remark 4	CH /F	CAND 1341 C	T A 37	CD AVEL (				
7					Grey/Brown mottled	SIL1, some mf S	SAND, little C	LAY, trace (	JRAVEL (wet, e	asy to moderate			
8					digging)								
0													
9					Bottom of Test Pit @	0' Romark 5							
9					Dottom of Test 1 it @	9. Remark 3							
10													
10													
11													
11													
12													
13													
14													
15													
16													

- See Test Pit Photographs, attached.
   Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Side walls caved in before taking Test Pit photographs.4. Nearly horizontal Clay seams noted between 6 to 8 feet.
- 5. Test Pit terminated after difficulty noted in digging through dense COBBLES/BOULDER.

				6035 Co	orporate Drive	SUI	BSURFACI	Test Pit ID	<b>TP-316</b>					
		V			acuse, NY 13057	EXP	LORATIO	<b>Page No.</b> 1 of 1						
	Asso	ciates	s, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	Project No.	28062					
Project	Name:	Micron	Campi	us, Clay,	New York	•		Date Started	05/02/24					
Client:		Rambo	11						Date Finished	05/02/24				
Location	n:	See Ex	ploratio	on Locati	on Plan				Surface Elev.	403.3'				
METH	O doi	F INV	EST	<b>GATI</b>	ON		GROUND	WATER O	BSERVATIO	NS				
Operato	r:	Daryl S	Shermai	n		Date	Time	Depth (Ft.)	Co	omment				
Inspecto	r:	Astitwa	a Sharm	na, EIT		05/02/24	11:45	10	Water seeping thr	ough bottom				
Equipm	ent:	Link B	elt Mod	lel LNK	27 Excavator									
Bucket '	Гуре:	Toothe	d											
Bucket '	Width:	24"												
		VISUAL CLASSIFICATION OF MATERIAL												
Depth		Sample	Depth	Depth of	c - coarse	and - 35 to 50% / s	oma 20 to 250/							
Scale	Sample	(F	t.)	Change	m - medium	little - 10 to 20% / s								
(Feet)	No.	From	To	(Ft.)	f - fine	10 to 20707	0 10 10 70							
0				0.5	Topsoil and Organic									
					Brown mottled SILT	, some fine SAN	D, trace CLAY	Y (moist, easy	digging)					
1														
2														
2														
3														
4														
4				5										
5					Brown mottled SILT	r, some fine SAND, little CLAY, trace ROOTS (wet, easy to moderate digging)								
3					Diowii mothed SIE1	, some fine 57 if v	D, Intile CE/11	, muce Roo	15 (wet, easy to	moderate digging)				
6														
7														
8				8.5										
					Brown SILT, some fi	ine SAND, trace	GRAVEL, tra	ce CLAY (w	et, moderate digg	ging)				
9				9.5										
					Brown mf SAND, so	me SILT, little c	mf GRAVEL	(wet, modera	te to hard digging	g)				
10					Bottom of Test Pit @	10'								
11														
10														
12														
13														
13														
14														
17														
15														
16														
_														

#### Remarks:

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Test Pit terminated after difficulty noted in digging through dense COBBLES/BOULDER.

				6035 Co	orporate Drive	SUI	BSURFACI	Test Pit ID TP-317		
		IV		East Syr	acuse, NY 13057	EXP	LORATIO	<b>Page No.</b> 1 of 1		
	<b>A</b> sso	ciates	s, Inc.	Phone: 3	315-701-0522	TES	ST PIT LO	G	Project No.	28062
Project	Name:	Micron	Campi	us, Clay,	New York			Date Started	05/02/24	
Client:		Rambo							Date Finished	05/02/24
Location				n Locati	on Plan				Surface Elev.	405.4'
METH							GROUND	WATER O	BSERVATION	IS
Operato			Shermar			Date	Time	Depth (Ft.)	1	mment
Inspecto		-	a Sharm			05/02/24	11:09	2.5	Water seeping thro	
Equipm					27 Excavator					
Bucket '		Toothe								
Bucket '		24"								
					VISUAL CLA	SSIFICATIO	N OF MAT	ERIAL	<u> </u>	
Donth		Sample	e Depth		c - coarse					
Depth Scale	Sample	(F		Depth of Change	m - medium	and - 35 to 50% / so				
(Feet)	No.	From	To	(Ft.)	f - fine	little - 10 to 20% /	trace - 0 to 10%			
0					Topsoil and Organic	Material (moist,	easy digging)			
				1	1	,	, 66 6,			
1					Brown SILT, some fi	ne SAND, little	CLAY (wet, ea	asy to moder	ate digging)	
2										
3										
				4						
4					Same as above (wet,	easy digging)				
5										
_				66			<del></del>	6.00 4.4		· <del></del>
6					Brown SILT, some fi	ne SAND, little	CLAY, trace c	mt GRAVE	L (wet, easy to mo	derate digging)
-				7.5						
7				7.5	Danson and CD AVE		ID same CH I	C 1:41- COD	DI EC tos se DOU	I DED (mot bond
8					Brown cmf GRAVEI	L, some cmi SAN	ND, some SIL I	, nuie COB	BLES, trace BOU	LDER (wet, nard
0					digging)					
9										
10										
10					Test Pit bottom @ 10	).5'				
11										
12										
13										
										•
14										
15										
16										

#### Remarks:

- 1. See Test Pit Photographs, attached.
- 2. Test Pit excavated and backfilled by a subcontractor to CME, utilizing a Link Belt Model LNK 27 excavator, equipped with a 24" wide bucket with teeth.
- 3. Test Pit terminated after difficulty noted in digging through dense COBBLES/BOULDER.

Test Pit Photographs
Page **1** of **17** 





Figure 1: Test Pit TP-301



Figure 2: Materials excavated from TP-301

Test Pit Photographs Page **2** of **17** 





Figure 3: Test Pit TP-302



Figure 4: Materials excavated from TP-302

Test Pit Photographs
Page **3** of **17** 





Figure 5: Test Pit TP-303



Figure 6: Materials excavated from TP-303

Test Pit Photographs Page **4** of **17** 





Figure 7: Test Pit TP-304



Figure 8: Materials excavated from TP-304

Test Pit Photographs
Page **5** of **17** 





Figure 9: Test Pit TP-305



Figure 10: Materials excavated from TP-305

Test Pit Photographs
Page **6** of **17** 





Figure 11: Test Pit TP-306



Figure 12: Materials excavated from TP-306

Test Pit Photographs
Page **7** of **17** 





Figure 13: Test Pit TP-307



Figure 14: Materials excavated from TP-307

Test Pit Photographs
Page **8** of **17** 





Figure 15: Test Pit TP-308



Figure 16: Materials excavated from TP-308

Test Pit Photographs Page **9** of **17** 





Figure 17: Test Pit TP-309



Figure 18: Materials excavated from TP-309

Test Pit Photographs
Page **10** of **17** 





Figure 19: Test Pit TP-310



Figure 20: Materials excavated from TP-310

Test Pit Photographs
Page **11** of **17** 





Figure 21: Test Pit TP-311



Figure 22: Materials excavated from TP-311

Test Pit Photographs
Page **12** of **17** 





Figure 23: Test Pit TP-312



Figure 24: Materials excavated from TP-312

Test Pit Photographs
Page **13** of **17** 





Figure 25: Test Pit TP-313



Figure 26: Materials excavated from TP-313

Test Pit Photographs
Page **14** of **17** 



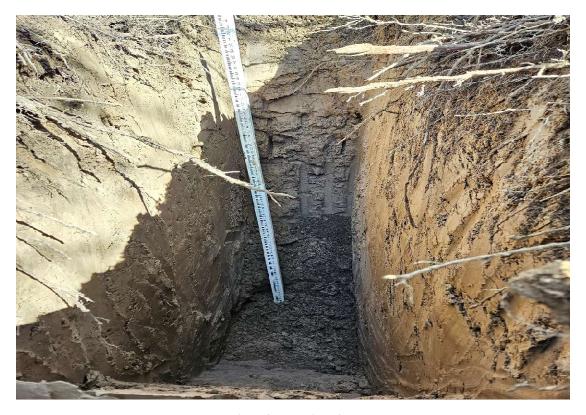


Figure 27: Test Pit TP-314



Figure 28: Materials excavated from TP-314

Test Pit Photographs
Page **15** of **17** 





Figure 29: Test Pit TP-315



Figure 30: Materials excavated from TP-315

Test Pit Photographs
Page **16** of **17** 





Figure 31: Test Pit TP-316



Figure 32: Materials excavated from TP-316

Test Pit Photographs
Page **17** of **17** 





Figure 33: Test Pit TP-317



Figure 34: Materials excavated from TP-317

### **Vane Shear Test and Pocket Penetrometer Test Summary Tables**

#### **In-situ Vane Shear Test Readings**

	Depth	Т	EST 1	Т	EST 2	TEST 3			
TESP PIT ID	(ft)	Peak (psf)	Residual (psf)	Peak (psf)	Residual (psf)	Peak (psf)	Residual (psf)		
TP-301	3.5	1,044	543	1,003	501	1,420	794		
TP-303	2.5	1,337	961	1,295	794	1,880	794		
17-303	3.5	1,337	877	1,253	835	877	522		
TP-307	2.5	2,444	794	2,611	773	2,151	773		
TP-308	2.5	1,880	919	2,799	1,128	1,838	835		
17-306	4	794	209	626	334	710	794 794 794 522 773		
TP-309	2	1,880	731	1,775	794	1,546	606		
TP-310	2.5	3,258	1,671	5,013	1,921	4,261	2,214		
11-310	4	1,838	919	2,130	1,337	2,556	835		
TP-311	2.5	2,005	835	1,786	668	1,963	752		
117-311	3.5	1,546	585	1,504	459	1,796	626		
TP-312	2	3,342	1,336	2,924	1,587	2,506	1,253		
TP-313	2	439	292	585	292	710	376		
TP-314	2.5	752	209	877	209	835	209		
117-514	3.5	606	251	877	292	501	251		
TP-315	3	647	251	272	125	459	209		
TP-316	2.5	522	251	835	376	794	313		
11-210	5	1,190	Note 1	1,525	Note 1	627	Note 1		
TP-317	2.5	689	376	794	355	1,211	418		
11-21/	3.5	835	459	710	397	982	459		

Note 1: Test pit was too deep to enter and perform the traditional vane shear test. The test was performed from grade using extension rods. The Residual reading could not be obtained with this method.

## **Vane Shear Test and Pocket Penetrometer Test Summary Tables**

**In-situ Pocket Penetrometer Readings** 

	Depth					
TEST PIT ID	(ft)	TEST 1 (tsf)	TEST 2 (tsf)	TEST 3 (tsf)		
TP-301	3.5	0.50	0.50	0.75		
TP-303	2.5	0.50	0.25	1.00		
17-303	3.5	0.25	0.25	0.50		
TP-307	2.5	1.25	2.50	1.75		
TP-308	2.5	1.38	0.88	2.00		
17-306	4.0	1.50	0.75	1.25		
TP-309	2.0	0.75	0.75	1.50		
17-309	3.0	3.00	1.00	1.25		
TP-310	2.5	4.25	1.75	1.75		
11-310	4.0	0.75	1.00	0.50		
TP-311	2.5	3.00	3.00	3.50		
11-311	3.5	1.00	0.25	1.88		
TP-312	2.0	3.00	1.75	2.38		
TP-313	2.0	2.75	1.25	1.13		
TP-314	2.5	0.67	1.00	0.50		
117-314	3.5	0.67	1.00	1.00		
TP-316	2.5	1.25	1.00	3.75		
TP-317	2.5	1.50	1.25	1.87		
11-21/	3.5	0.38	1.00	0.38		

### FIELD SOIL RESISTIVITY OBSERVATIONS SUMMARY TABLE

		Probe Spacing												
	20 ft (610 cm)		16 ft (4	88 cm)	12 ft (3	66 cm)	8 ft (2	44 cm)	4 ft (12	22 cm)				
Date:	Survey Point ID	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ ( <b>Ω•cm</b> )	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ (Ω•cm)	R (Ω)	ρ (Ω•cm)			
5/31/2024	SR-1	10.10	38,700	11.70	35,900	18.30	42,100	40.10	61,500	175.00	134,000			
5/31/2024	SR-2	3.66	14,000	4.73	14,500	4.96	11,400	12.00	18,400	76.90	58,900			
5/31/2024	SR-3	3.72	14,300	4.04	12,400	4.36	10,000	5.16	7,910	8.82	6,760			
5/31/2024	SR-4	3.48	13,300	3.19	9,780	3.74	8,600	5.71	8,750	27.10	20,800			
5/31/2024	SR-5	3.67	14,100	4.01	12,300	5.33	12,300	7.11	10,900	34.80	26,700			
5/31/2024	SR-6	9.77	37,400	9.24	28,300	15.30	35,200	39.20	60,100	144.00	110,000			
5/31/2024	SR-7	4.64	17,800	5.28	16,200	6.61	15,200	9.84	15,100	26.90	20,600			
5/31/2024	SR-8	5.86	22,500	6.26	19,200	7.09	16,300	10.70	16,400	36.00	27,600			
6/3/2024	SR-9	12.80	49,100	19.50	59,800	32.80	75,400	64.50	98,900	187.00	143,000			
6/3/2024	SR-10	8.69	33,300	12.00	36,800	18.50	42,500	37.50	57,500	96.20	73,700			
6/3/2024	SR-11	6.11	23,400	7.12	21,800	9.23	21,200	19.30	29,600	95.20	73,000			
6/3/2024	SR-12	3.93	15,100	4.12	12,600	4.87	11,200	6.69	10,300	15.60	12,000			
6/3/2024	SR-13	4.51	17,300	4.78	14,700	5.52	12,700	8.09	12,400	20.00	15,300			
6/3/2024	SR-14	2.09	8,010	2.26	6,930	2.50	5,750	3.43	5,260	7.51	5,760			
6/3/2024	SR-15	2.36	9,050	2.51	7,700	2.91	6,690	3.61	5,530	6.41	4,910			
6/3/2024	SR-16	2.04	7,820	2.32	7,110	2.64	6,070	3.62	5,550	8.46	6,490			
6/4/2024	SR-17	5.81	22,300	4.17	12,800	5.91	13,600	19.70	30,200	145.00	111,000			
6/4/2024	SR-18	5.40	20,700	5.89	18,100	5.19	11,900	15.40	23,600	88.20	67,600			
6/4/2024	SR-19	5.91	22,700	7.19	22,000	9.28	21,300	14.40	22,100	23.60	18,100			
6/4/2024	SR-20	3.08	11,800	3.13	9,600	3.29	7,570	3.98	6,100	6.80	5,210			
6/4/2024	SR-21	3.30	12,600	3.53	10,800	3.73	8,580	4.68	7,170	8.45	6,480			
6/4/2024	SR-22	3.09	11,800	3.09	9,470	3.37	7,750	3.97	6,090	7.45	5,710			
6/4/2024	SR-23	3.14	12,000	3.24	9,930	3.57	8,210	4.10	6,290	6.34	4,860			
6/4/2024	SR-24	2.89	11,100	3.04	9,320	3.41	7,840	4.23	6,490	11.90	9,120			

#### Notes:

See Field Soil Resistivity Photographs for Surface Cover Conditions

 $R = Resistance (\Omega)$  from field test data

A = Probe spacing in centimeters (cm)

 $\rho$  = Resistivity ( $\Omega$ •cm) calculated by formula:  $\rho = 2 \cdot \pi \cdot A \cdot R$ , rounded to 3 significant figures

Survey Conditions	Weather	Temperature	Date of Last Rainfall
5/31/2024	Sunny	50-65 °F	5/27/2024
6/3/2024	Sunny	65-70 °F	5/27/2024
6/4/2024	Sunny	65-75 °F	5/27/2024

### Page **1** of **12**



Figure 1: Survey Line SR-1



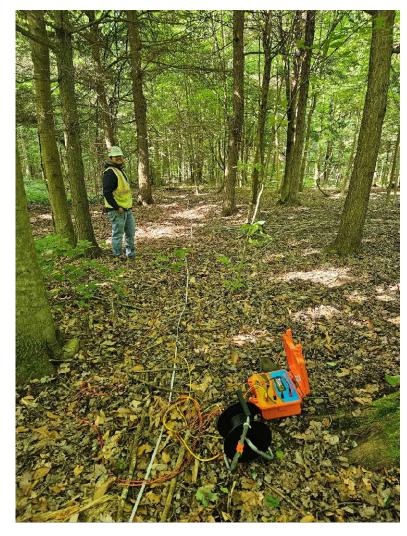


Figure 2: Survey Line SR-2

### Page **2** of **12**



Figure 3: Survey Line SR-3





Figure 4: Survey Line SR-4

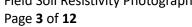




Figure 5: Survey Line SR-5





Figure 6: Survey Line SR-6





Figure 7: Survey Line SR-7





Figure 8: Survey Line SR-8

### Field Soil Resistivity Photographs Page **5** of **12**



Figure 9: Survey Line SR-9





Figure 10: Survey Line SR-10

### Field Soil Resistivity Photographs Page **6** of **12**



Figure 11: Survey Line SR-11



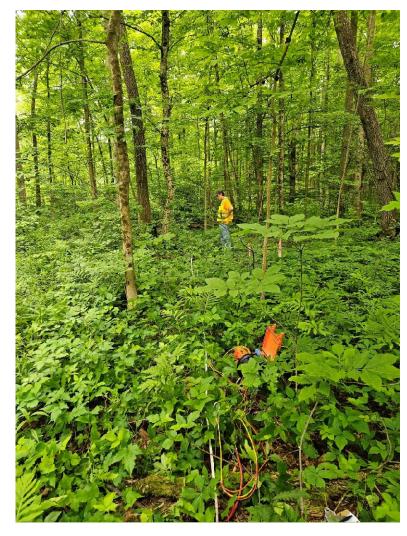


Figure 12: Survey Line SR-12

### Field Soil Resistivity Photographs Page **7** of **12**



Figure 13: Survey Line SR-13



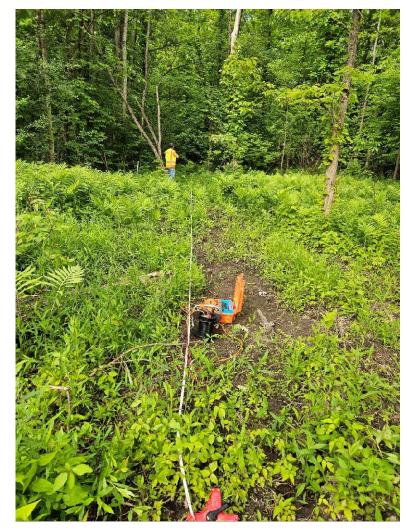


Figure 14: Survey Line SR-14

### Field Soil Resistivity Photographs Page **8** of **12**



Figure 15: Survey Line SR-15 (picture taken after probes were packed up)





Figure 16: Survey Line SR-16

### Field Soil Resistivity Photographs Page **9** of **12**



Figure 17: Survey Line SR-17





Figure 18: Survey Line SR-18

# Field Soil Resistivity Photographs Page **10** of **12**



Figure 19: Survey Line SR-19





Figure 20: Survey Line SR-20

# Field Soil Resistivity Photographs Page **11** of **12**



Figure 21: Survey Line SR-21



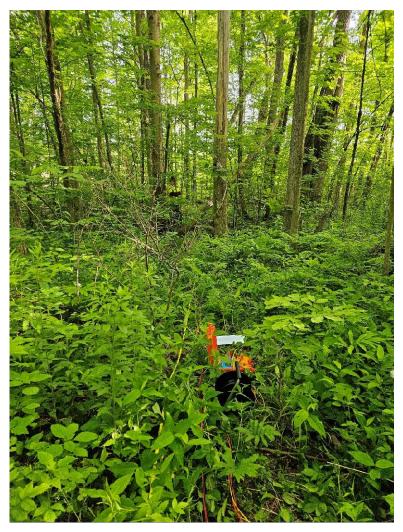


Figure 22: Survey Line SR-22

# Field Soil Resistivity Photographs Page **12** of **12**



Figure 23: Survey Line SR-23





Figure 24: Survey Line SR-24

						Obse	rved Groun	dwater Elev	ation and I	Depth Belov	w Grade (Fe	et)						
Boring ID	B-129		B-	24	B-227		B-337		B-391 B-370		370	B-400		B-420		B-422		
Elev. at																		
Grade (ft)	41	8.8	39	4.6	38	9.3	40	3.5	393		39	3.7	39	9.6	39	0.9	382	
WELL ID	W	'-1	W	<b>I-2</b>	W	'-3	W	<b>'-4</b>	W	/-5	W	<b>/-6</b>	W	-7	W	-8	W-9	
DATE	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth
4/19/2023	418.7	0.1			385.5	3.8												
4/21/2023			393.8	0.8														
5/16/2023	416.1	2.7	392.5	2.1	385.7	3.6												
5/17/2023	416.0	2.8	391.8	2.8	386.4	2.9												
6/12/2023	414.6	4.2	386.8	7.8	385.3	4.0												
10/5/2023	415.2	3.6	389.2	5.4	386.4	2.9												
11/9/2023	416.4	2.4	394.2	0.4	386.2	3.1	398.4	5.1	392.3	0.7	388.7	5	398.5	1.1	388.7	2.2	379.4	2.6
11/17/2023	417.8	1.0	394.4	0.2	387.1	2.2	398.9	4.6	392.1	0.9	389.8	3.9	398.5	1.1	386.7	4.2	377.0	5.00
1/16/2024	418.0	0.8	394.0	0.6	388.8	0.5	401.8	1.7	392.6	0.4	391.1	2.6	398.8	0.8	389.3	1.6	377.9	4.1
5/14/2024	417.9	0.9	394.4	0.3	388.7	0.6	400.5	3.1	392.5	0.5	390.4	3.3	398.8	0.8	389.6	1.4	380.9	1.1
5/28/2024	415.9	2.9	391.5	3.1	387.1	2.2	400.0	3.6	391.3	1.7	389.1	4.6	397.2	2.4	385.3	5.6	379.4	2.6
7/11/2024	418.5	0.3	394.3	0.3	388.3	1.0	398.7	4.8	392.3	0.7	388.1	5.6	398.9	0.7	388.5	2.4	381.0	1.0
								-				-						
Boring ID	B-5	505	B-!	522	B-5	546	B-5	557	B-5	564	В-6	604	В-6	518	В-6	576	В-6	583
Elev. at												· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·	
Grade (ft)	40	6.1	39	3.7	39	4.5	3	32	38	0.8	39	1.4	39	2.7	40	4.3	39	4.8
WELL ID	W	-10	W	-11	W-12		W	-13	W	-14	W-16		W-17		W-18		W-19	
DATE	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth	Elev.	Depth

380.6

379.8

380.4

0.2

1.1

0.4

391.0

389.1

390.0

0.4

2.3

1.4

392.1

391.1

391.9

0.6

1.6

0.8

400.3

398.6

397.2

4.0

5.7

7.1

392.7

392.0

393.1

2.1

2.8

1.7

Note: Groundwater Observation Well W-15 was not installed due to access restrictions.

390.2

389.5

390.9

3.5

4.2

2.8

391.2

388.4

385.3

3.3

6.1

9.2

381.6

380.3

381.1

0.4

1.7

0.9

5/14/2024

5/28/2024

7/11/2024

405.9

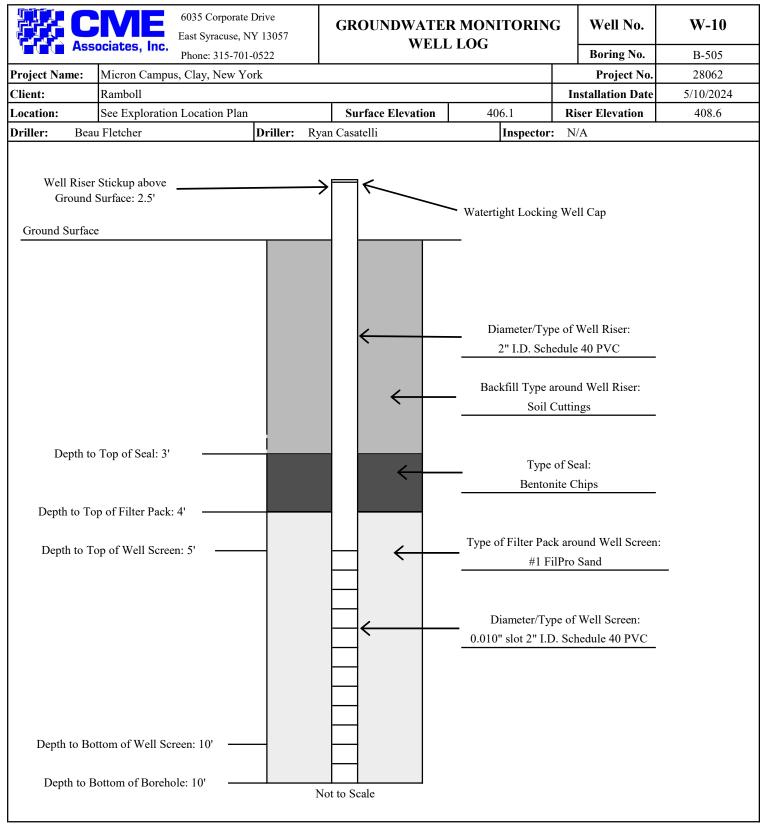
405.0

405.4

0.3

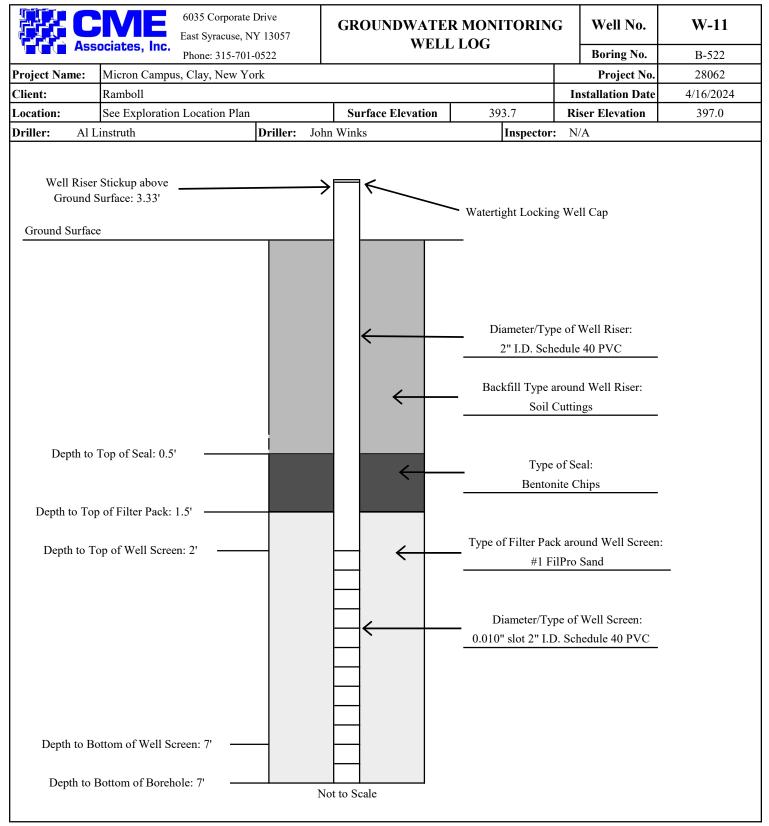
1.1

0.7

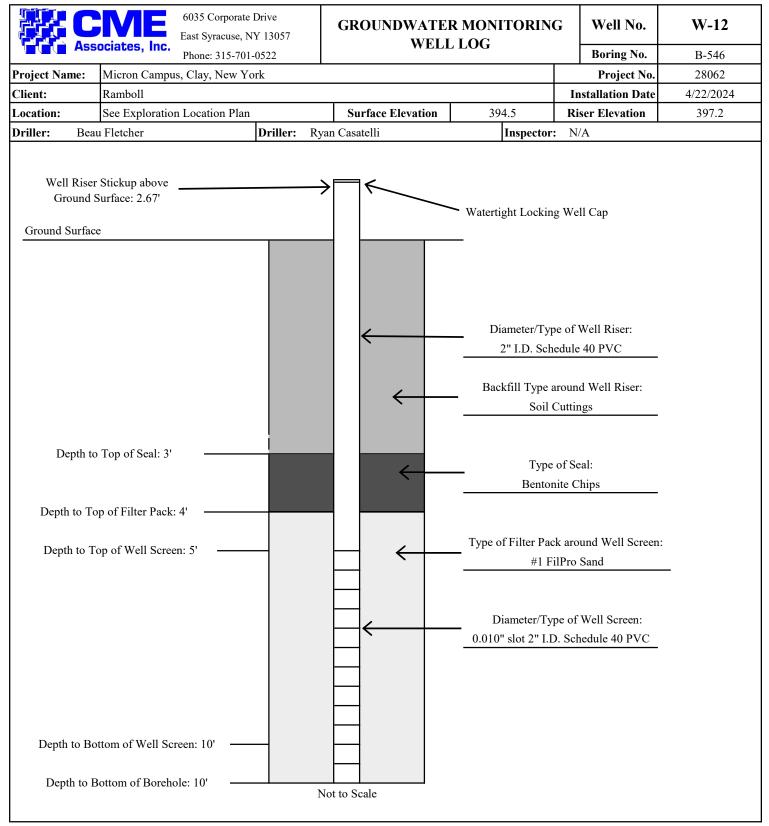


#### Remarks:

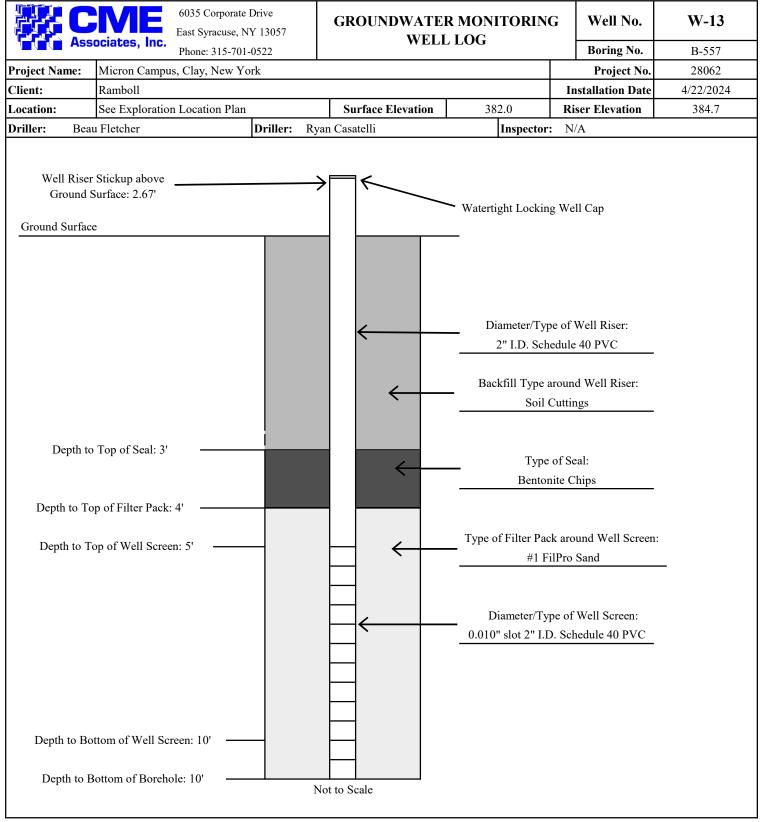
1. See Test Boring Log B-505 for soil information.



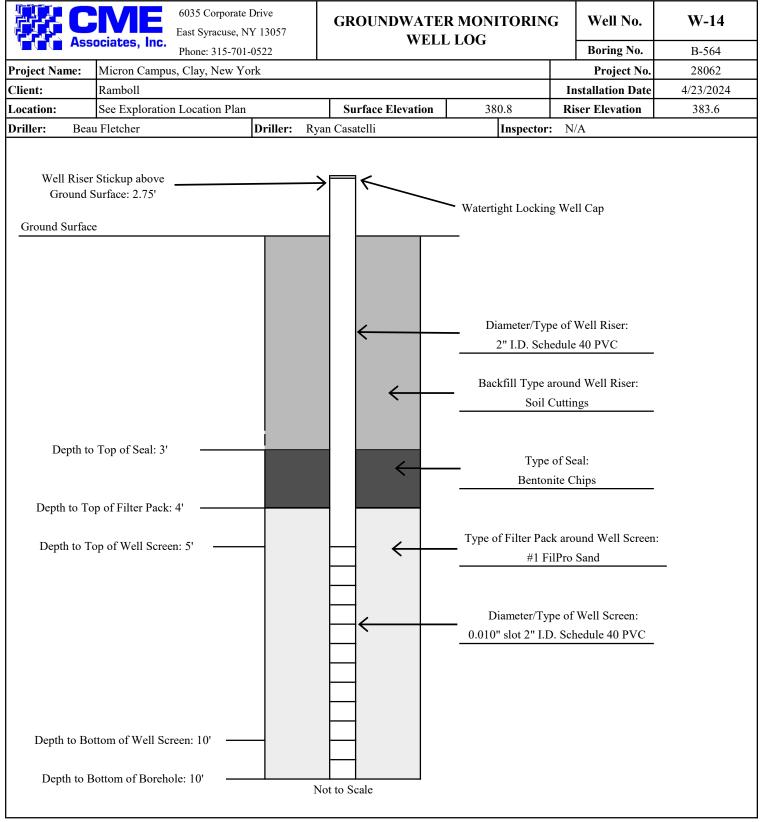
1. See Test Boring Log B-522 for soil information.



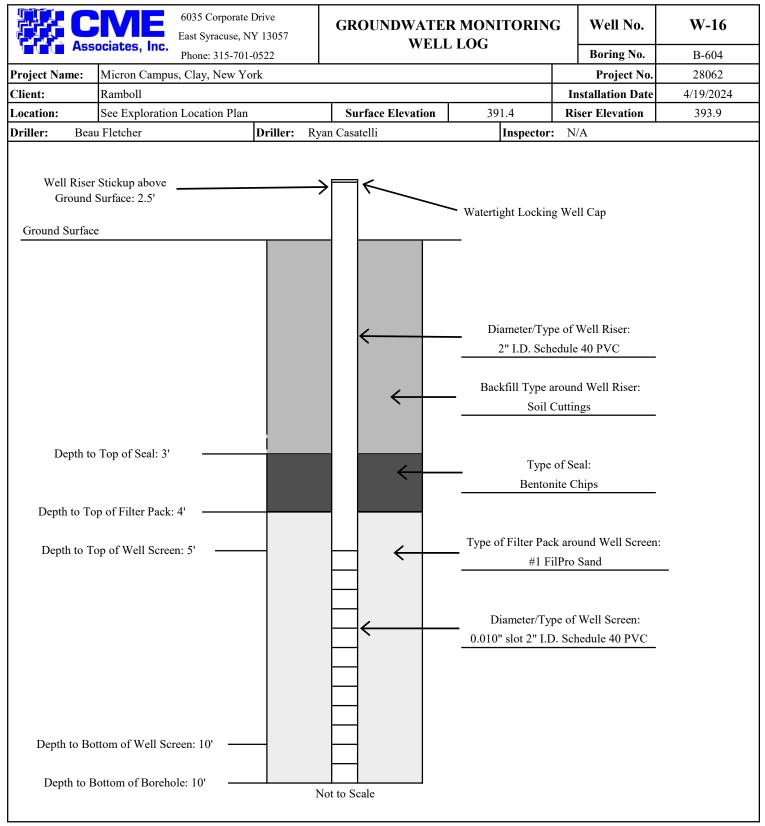
1. See Test Boring Log B-546 for soil information.



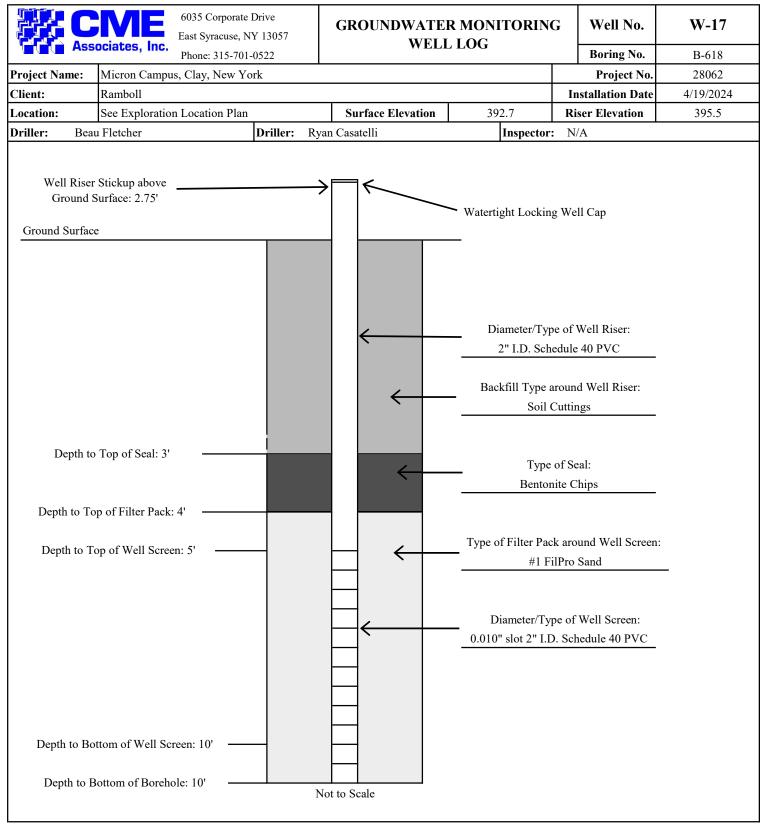
1. See Test Boring Log B-557 for soil information.



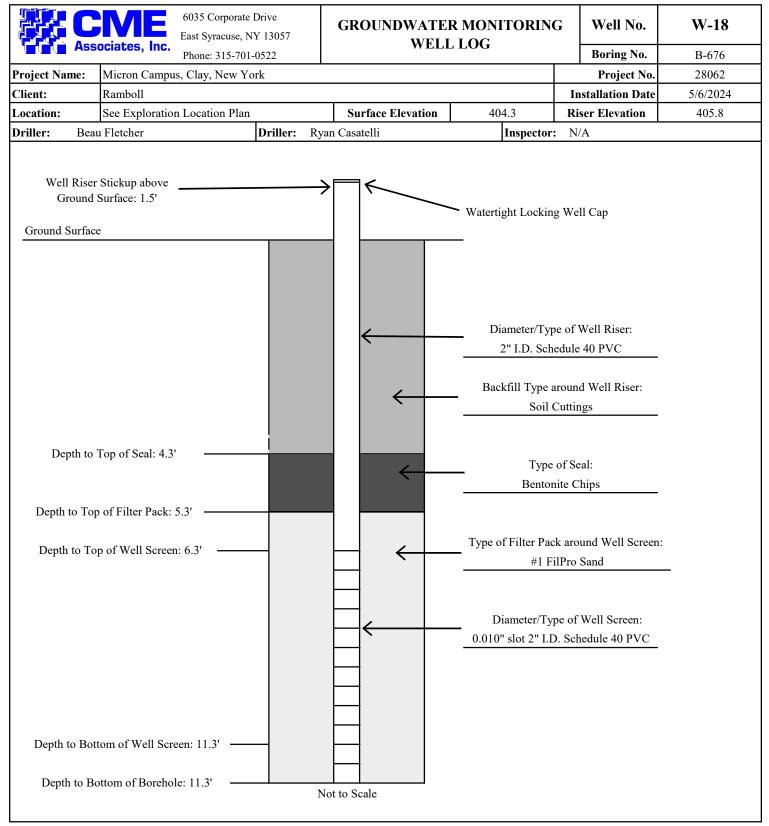
1. See Test Boring Log B-564 for soil information.



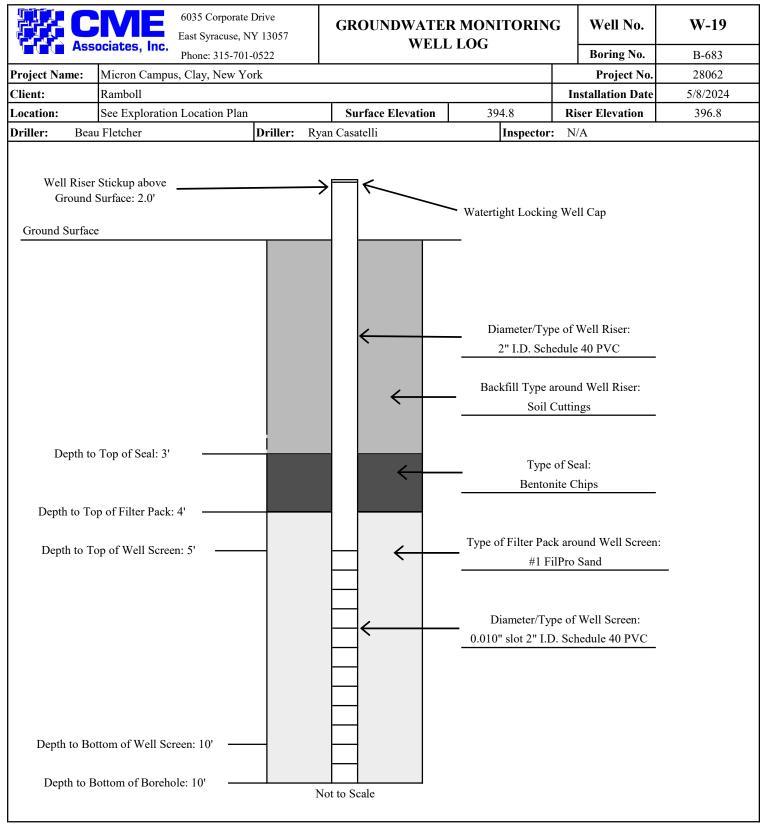
1. See Test Boring Log B-604 for soil information.



1. See Test Boring Log B-618 for soil information.



1. See Test Boring Log B-676 for soil information.



1. See Test Boring Log B-683 for soil information.

CME Project No: 28062



Photograph 1

Boring:

B-511

Run 1

Depth

15.0' - 20.0'

See Photographs Nos. 2 and 3 for detailed views.



Photograph 2

B-511

Run 1

1

Top

Depth

15.0' - 17.5'



Photograph 3

B-511

Run 1

Bottom

Depth

17.5' - 20.0'

CME Project No: 28062



Photograph 4

Boring:

B-511

Run 2

Depth

20.0' - 25.0'

See Photographs Nos. 5 and 6 for detailed views.



Photograph 5

B-511

Run 2

Top

Depth

20.0' - 22.5'



Photograph 6

B-511

Run 2

Bottom

Depth

22.5' - 25.0'

CME Project No: 28062



Photograph 7

Boring:

B-518

Run 1

Depth

14.4' - 19.4'

See Photographs Nos. 8 and 9 for detailed views.



Photograph 8

B-518

Run 1

Top

Depth

14.4' - 16.9'



Photograph 9

B-518

Run 1

Bottom

Depth

16.9' - 19.4'

CME Project No: 28062



Photograph 10

Boring:

B-518

Run 2

Depth

19.4' - 24.4'

See Photographs Nos. 11 and 12 for detailed views.



Photograph 11

B-518

Run 2

Top

Depth

19.4' - 21.9'



Photograph 12

B-518

Run 2

Bottom

Depth

21.9' - 24.4'

CME Project No: 28062



Photograph 13

Boring:

B-520

Run 1

Depth

29.1' - 34.1'

See Photographs Nos. 14 and 15 for detailed views.



Photograph 14

B-520

Run 1

Top

Depth

29.1' - 31.6'



Photograph 15

B-520

Run 1

Bottom

Depth

31.6' - 34.1'

CME Project No: 28062



Photograph 16

Boring

B-520

Run 2

Depth 34.1' -39.1' See Photographs Nos. 17 and 18 for detailed views.



Photograph 17

B-520

Run 2

Top

Depth

34.0' - 36.6'



Photograph 18

B-520

Run 2

Bottom

Depth

36.6' - 39.1'

CME Project No: 28062



Photograph 19

Boring

B-523

Run 1

Depth 7.2' - 12.2'

See Photographs Nos. 20 and 21 for detailed views.



Photograph 20

B-523

.

Run 1

Top

Depth

7.2' - 9.7'



Photograph 21

B-523

Run 1

Bottom

Depth

9.7' - 12.2'

CME Project No: 28062



Photograph 22

Boring

B-523

Run 2

Depth 12.2' - 17.2'

See Photographs Nos. 23 and 24 for detailed views.



Photograph 23

B-523

Run 2

2

Top

Depth 12.2' - 14.7'



Photograph 24

B-523

Run 2

Bottom

Depth

14.7' -17.2'

CME Project No: 28062



Photograph 25

Boring

B-526

Run 1

Depth

13.5' - 18.5'

See Photographs Nos. 26 and 27 for detailed views.



Photograph 26

B-526

Run 1

Top

Depth

13.5' - 16.0'



Photograph 27

B-526

Run 1

Bottom

Depth

16.0' - 18.5'

CME Project No: 28062



Photograph 28

Boring

B-526

Run 2

Depth 18.5' - 23.5' See Photographs Nos. 29 and 30 for detailed views.



Photograph 29

B-526

Run 2

Top

Depth

18.5' - 21.0'



Photograph 30

B-526

Run 2

Bottom

Depth

21.0' - 23.5'

CME Project No: 28062



Photograph 31

Boring

B-532

Run 1

Depth

24.0' - 29.0'

See Photographs Nos. 32 and 33 for detailed views.



Photograph 32

B-532

Run 1

Top

Depth

24.0' - 26.5'



Photograph 33

B-532

Run 1

Bottom

Depth

26.5' - 29.0'

CME Project No: 28062



Photograph 34

Boring:

B-532

Run 2

Depth

29.0' - 34.0'

See Photographs Nos. 35 and 36 for detailed views.



Photograph 35

B-532

Run 2

Top

Depth

29.0 - 31.5'



Photograph 36

B-532

Run 2

Bottom

Depth

31.5' - 34.0'

CME Project No: 28062



Photograph 37

Boring:

B-536

Run 1

Depth

16.0' - 21.0'

See Photographs Nos. 38 and 39 for detailed views.



Photograph 38

B-536

Run 1

Top

Depth 16.0' - 18.5'



Photograph 39

B-536

Run 1

Bottom

Depth

18.5' - 21'

CME Project No: 28062



Photograph 40

Boring:

B-536

Run 2

Depth 21.0-' 26.0'

See Photographs Nos. 41 and 42 for detailed views.



Photograph 41

B-536

F

Run 2

Top

Depth

21.0' - 23.5'



Photograph 42

B-536

Run 2

Bottom

Depth

23.5' - 26.0'

CME Project No: 28062



Photograph 43

Boring

B-543

Run 1

Depth 20.2' -25.2'

See Photographs Nos. 44 and 45 for detailed views.



Photograph 44

B-543

Run 1

1

Top

Depth

20.2' - 22.7'



Photograph 45

B-543

Run 1

Bottom

Depth

22.7' - 25.2'

CME Project No: 28062



Photograph 46

Boring

B-543

Run 2

Depth 25.2' - 30.2'

See Photographs Nos. 47 and 48 for detailed views.



Photograph 47

B-543

.

Run 2

Top

Depth

25.2' - 27.9'



Photograph 48

B-543

Run 2

Bottom

Depth

27.9' - 30.2'

CME Project No: 28062



Photograph 49

Boring

B-544

Run 1

Depth 15.5' - 20.5'

See Photographs Nos. 50 and 51 for detailed views.



Photograph 50

B-544

R

Run 1

Top

Depth

15.5' - 18.0'



Photograph 51

B-544

Run 1

Bottom

Depth

18.0' -20.5'

CME Project No: 28062



Photograph 52

Boring

B-544

Run 2

Depth

20.5' - 25.5'

See Photographs Nos. 53 and 54 for detailed views.



Photograph 53

B-544

Run 2

2

Top

Depth

20.5' - 23.0'



Photograph 54

B-544

Run 2

Bottom

Depth

23.0' - 25.5'

CME Project No: 28062



Photograph 55

Boring

B-545

Run 1

Depth 25.7' - 30.7' See Photographs Nos. 56 and 57 for detailed views.



Photograph 56

B-545

Run 1

Top

Depth

25.7' - 28.2'



Photograph 57

B-545

Run 1

Bottom

Depth

28.2' - 30.7'

CME Project No: 28062



Photograph 58

Boring

B-545

Run 2

Depth 30.7' - 35.7'

See Photographs Nos. 59 and 60 for detailed views.



Photograph 59

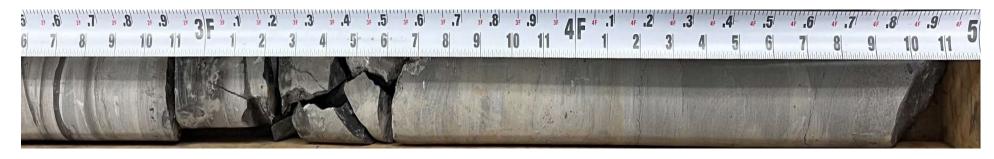
B-545

Run 2

Top

Depth

30.7' - 33.2'



Photograph 60

B-545

Run 2

Bottom

Depth

33.2' - 35.7'

Attachment to CME Report No: 28062B-01-0624



Photograph 61 Boring: B-547 Run 1 Depth 21.0' - 26.0' See Photographs Nos. 62 and 63 for detailed views.



**Photograph 62** B-547 Run 1 Top Depth 21.0' - 23.5'



**Photograph 63** B-547 Run 1 Bottom Depth 23.5' - 26.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 64

Boring:

B-547

Run 2

Depth

26.0' - 31.0'

See Photographs Nos. 65 and 66 for detailed views.



Photograph 65

B-547

Run 2

n 2

Top

Depth

26.0' - 28.5'



Photograph 66

B-547

Run 2

Bottom

Depth

28.5' - 31.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 67 Boring: B-549 Run 1 Depth 25.1' - 30.1' See Photographs Nos. 68 and 69 for detailed views.



**Photograph 68** B-549 Run 1 Top Depth 25.1' - 27.6'



**Photograph 69** B-549 Run 1 Bottom Depth 27.6' - 30.1'

Attachment to CME Report No: 28062B-01-0624



Photograph 70

Boring:

B-549

Run 2

Depth

30.1' - 35.1'

See Photographs Nos. 71 and 72 for detailed views.



Photograph 71

B-549

Run 2

Top

Depth

30.1' - 32.6'



Photograph 72

B-549

Run 2

Bottom

Depth

32.6' - 35.1'

Attachment to CME Report No: 28062B-01-0624



Photograph 73

Boring:

B-561

Run 1

20.4' - 25.4' Depth

See Photographs Nos. 74 and 75 for detailed views.



Photograph 74

B-561

Run 1

Top

Depth

20.4' - 22.9'



Photograph 75

B-561

Run 1

Bottom

Depth

22.9.' - 25.4'

Attachment to CME Report No: 28062B-01-0624



Photograph 76

Boring

B-561

Run 2

Depth 25.4' -30.4'

See Photographs Nos. 77 and 78 for detailed views.



Photograph 77

B-561

Run 2

ı 2

Top

Depth

25.4' - 27.9'



Photograph 78

B-561

Run 2

Bottom

1

Depth

27.9' - 30.4'

Attachment to CME Report No: 28062B-01-0624



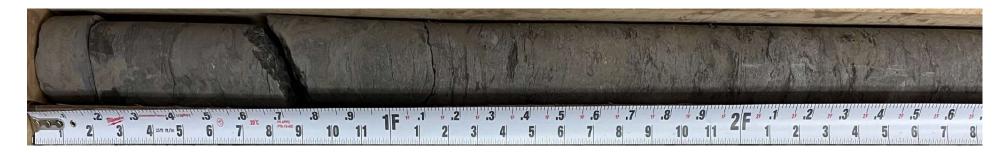
Photograph 79

Boring

B-565

Run 1

Depth 18.0' - 23.0' See Photographs Nos. 80 and 81 for detailed views.



Photograph 80

B-565

Run 1

Top

Depth

18.0' - 20.5'



Photograph 81

B-565

Run 1

Bottom

Depth

20.5' - 23.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 82

Boring

B-565

Run 2

Depth

23.0' - 28.0'

See Photographs Nos. 83 and 84 for detailed views.



Photograph 83

B-565

Run 2

Top

Depth

23.0' - 25.5'



Photograph 84

B-565

Run 2

Bottom

Depth

25.5' -28.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 85

Boring

B-571

Run 1

Depth 9.5' - 14.5' See Photographs Nos. 86 and 87 for detailed views.



Photograph 86

B-571

Run 1

Top

Depth

9.5' - 12.0'



Photograph 87

B-571

Run 1

Bottom

Depth

12.0' - 14.5'

Attachment to CME Report No: 28062B-01-0624



Photograph 88

Boring

B-571

Run 2

Depth

14.5' - 19.5'

See Photographs Nos. 89 and 90 for detailed views.



Photograph 89

B-571

Run 2

Top

Depth

14.5' - 17.0'



Photograph 90

B-571

Run 2

Bottom

Depth

17.0' - 19.5'

Attachment to CME Report No: 28062B-01-0624



Photograph 91

Boring

B-585

Run 1

Depth

11.0' - 16.0'

See Photographs Nos. 92 and 93 for detailed views.



Photograph 92

B-585

Run 1

Top

Depth

11.0' - 13.5'



Photograph 93

B-585

Run 1

Bottom

Depth

13.5' - 16.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 94

Boring:

B-585

Run 2

Depth 16.0' - 21.0' See Photographs Nos. 95 and 96 for detailed views.



Photograph 95

B-585

Run 2

Top

Depth

16.0 - 18.5'



Photograph 96

B-585

Run 2

Bottom

Depth

18.5' - 21.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 97

Boring:

B-588

Run 1

Depth 11.0' - 16.0' See Photographs Nos. 98 and 99 for detailed views.



Photograph 98

B-588

Run 1

Top

Depth

11.0' - 13.5'



Photograph 99

B-588

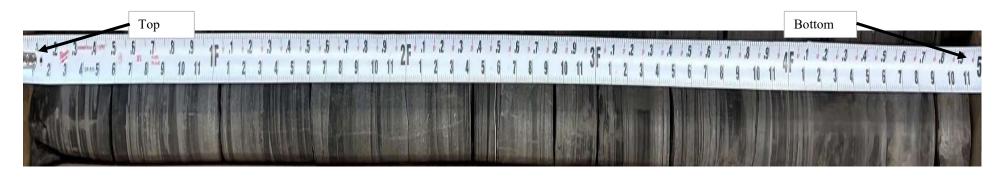
Run 1

Bottom

Depth

13.5' - 16.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 100

Boring:

B-588

Run 2

Depth 16.0-' 21.0'

See Photographs Nos. 101 and 102 for detailed views.



Photograph 101

B-588

Run 2

Top

Depth

16.0' - 18.5'



Photograph 102

B-588

Run 2

Bottom

Depth

18.5' - 21.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 103

Boring

B-594

Run 1

Depth 19.5' -24.5'

See Photographs Nos. 104 and 105 for detailed views.



Photograph 104

B-594

Run 1

Top

Depth

19.5' - 22.0'



Photograph 105

B-594

Run 1

Bottom

Depth

22.0' - 24.5'

Attachment to CME Report No: 28062B-01-0624



Photograph 106

Boring

B-594

Run 2

Depth

24.5' - 29.5'

See Photographs Nos. 107 and 108 for detailed views.



Photograph 107

B-594

Run 2

Top

Depth

24.5' - 27.0'



Photograph 108

B-594

Run 2

Bottom

Depth

27.0' - 29.5'

Attachment to CME Report No: 28062B-01-0624



Photograph 109

**Boring** 

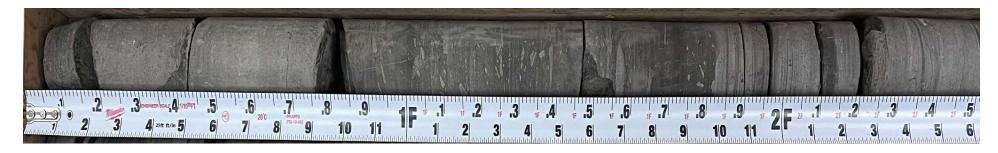
B-595

Run 1

Depth

18.6' - 23.6'

See Photographs Nos. 110 and 111 for detailed views.



Photograph 110

B-595

Run 1

Top

18.6' - 21.1'



Photograph 111

B-595

Run 1

Bottom

Depth

Depth

21.1' -23.6'

Attachment to CME Report No: 28062B-01-0624



Photograph 112

Boring

B-595

Run 2

Depth 23.6' - 28.6'

See Photographs Nos. 113 and 114 for detailed views.



Photograph 113

B-595

Run 2

Top

Depth

23.6 - 26.1



Photograph 114

B-595

Run 2

Bottom

Depth

26.1' - 28.6'

Attachment to CME Report No: 28062B-01-0624



Photograph 115

Boring

B-602

Run 1

Depth 21.8' - 26.8' See Photographs Nos. 116 and 117 for detailed views.



Photograph 116

B-602

Run 1

Top

Depth

21.8' - 24.3'



Photograph 117

B-602

Run 1

Bottom

Depth

24.3' - 26.8'

Attachment to CME Report No: 28062B-01-0624



Photograph 118

Boring

B-602

Run 2

Depth

26.8' - 31.8'

See Photographs Nos. 119 and 120 for detailed views.



Photograph 119

B-602

Run 2

Top

Depth

26.8' - 29.3'



Photograph 120

B-602

Run 2

Bottom

Depth

28.3' - 31.8'

Attachment to CME Report No: 28062B-01-0624



Photograph 121 Boring: B-604 Run 1 Depth 25.0' - 30.0' See Photographs Nos. 122 and 123 for detailed views.



**Photograph 122** B-604 Run 1 Top Depth 25.0' - 27.5'



**Photograph 123** B-604 Run 1 Bottom Depth 27.5' - 30.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 124

Boring:

B-604

Run 2

Depth 30.0' - 35.0' See Photographs Nos. 125 and 126 for detailed views.



Photograph 125

B-604

Run 2

Top

Depth

30.0' - 32.5'



Photograph 126

B-604

Run 2

Bottom

Depth

32.5' - 35.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 127

Boring:

B-612

Run 1

Depth 23.6' - 28.6'

See Photographs Nos. 128 and 129 for detailed views.



Photograph 128

B-612

Run 1

1

Top

Depth

23.6' - 26.1'



Photograph 129

B-612

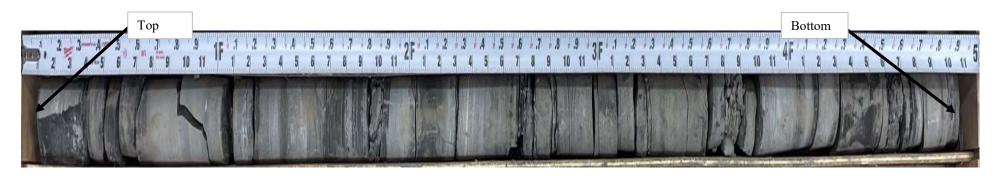
Run 1

Bottom

Depth

26.1' - 28.6'

Attachment to CME Report No: 28062B-01-0624



Photograph 130

Boring:

B-612

Run 2

Depth

28.6' - 33.6'

See Photographs Nos. 131 and 132 for detailed views.



Photograph 131

B-612

Run 2

Top

Depth

28.6' - 31.1'



Photograph 132

B-612

Run 2

Bottom

Depth

31.1' - 33.6'

Attachment to CME Report No: 28062B-01-0624



Photograph 133 Boring: B-616 Run 1 Depth 24.2' - 29.2' See Photographs Nos. 134 and 135 for detailed views.



**Photograph 134** B-616 Run 1 Top Depth 24.2' - 26.7'



**Photograph 135** B-616 Run 1 Bottom Depth 26.7' - 29.2'

Attachment to CME Report No: 28062B-01-0624



Photograph 136

Boring

B-616

Run 2

Depth 29.2' -34.2'

See Photographs Nos. 137 and 138 for detailed views.



Photograph 137

B-616

Run 2

Top

Depth

29.2' - 31.7'



Photograph 138

B-616

Run 2

Bottom

Depth

31.7' - 34.2'

Attachment to CME Report No: 28062B-01-0624



Photograph 139

Boring

B-624

Run 1

Depth 24.1' - 29.1'

See Photographs Nos. 140 and 141 for detailed views.



Photograph 140

B-624

Run 1

Top

Depth

24.1' - 26.6'



Photograph 141

B-624

Run 1

Bottom

Depth

26.6' - 29.1'

Attachment to CME Report No: 28062B-01-0624



Photograph 142

Boring

B-624

Run 2

Depth 29.1' - 34.1' See Photographs Nos. 143 and 144 for detailed views.



Photograph 143

B-624

Run 2

Top

Depth

29.1' - 31.6'



Photograph 144

B-624

Run 2

Bottom

Depth

31.6' - 34.1'

Attachment to CME Report No: 28062B-01-0624



Photograph 145

Boring

B-625

Run 1

Depth 16.0' - 21.0' See Photographs Nos. 146 and 147 for detailed views.



Photograph 146

B-625

Run 1

Top

Depth

16.0' - 18.5'



Photograph 147

B-625

Run 1

Bottom

Depth

18.5' - 21.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 148

Boring

B-625

Run 2

Depth 21.0' - 26.0'

See Photographs Nos. 149 and 150 for detailed views.



Photograph 149

B-625

Run 2

Top

Depth

21.0' - 23.5'



Photograph 150

B-625

Run 2

Bottom

Depth

23.5' - 26.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 151

Boring

B-630

Run 1

Depth 22.0' - 27.0'

See Photographs Nos. 152 and 153 for detailed views.



Photograph 152

B-630

Run 1

1

Top

Depth

22.0' - 24.5'



Photograph 153

B-630

Run 1

Bottom

Depth

24.5' - 27.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 154

Boring:

B-630

Run 2

Depth

27.0' - 32.0'

See Photographs Nos. 155 and 156 for detailed views.



Photograph 155

B-630

Run 2

Top

Depth

27.0 - 29.5'



Photograph 156

B-630

Run 2

Bottom

Depth

29.5' - 32.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 157

Boring:

B-632

Run 1

Depth 22.0' - 27.0'

See Photographs Nos. 158 and 159 for detailed views.



Photograph 158

B-632

Run 1

Top

Depth

22.0' - 24.5'



Photograph 159

B-632

Run 1

Bottom

Depth

24.5' - 27.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 160

Boring:

B-632

Run 2

Depth

27.0' - 32.0'

See Photographs Nos. 161 and 162 for detailed views.



Photograph 161

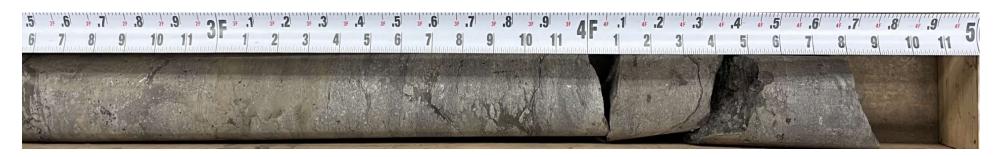
B-632

Run 2

Top

Depth

27.0' - 29.5'



Photograph 162

B-632

Run 2

Bottom

n

Depth

29.5' - 32.0'

See Photographs Nos. 164 and 165 for detailed views.

### **Bedrock Core Photographs**

Attachment to CME Report No: 28062B-01-0624



25.1' - 30.1'

Photograph 164

Photograph 163

B-664

Boring

Run 1

B-664

1

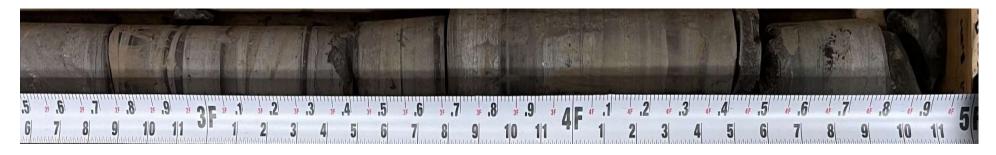
Top

Run 1

Depth

Depth

25.1' - 27.6'



Photograph 165

B-664

Run 1

Bottom

Depth

27.6' - 30.1'

Attachment to CME Report No: 28062B-01-0624



Photograph 166

Boring

B-664

Run 2

Depth 30.1' - 35.1'

See Photographs Nos. 167 and 168 for detailed views.



Photograph 167

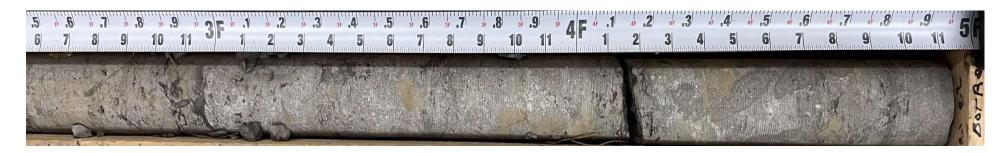
B-664

Run 2

.

Top

Depth 30.1' - 32.6'



Photograph 168

B-664

Run 2

Bottom

Depth

32.6' - 35.1'

Attachment to CME Report No: 28062B-01-0624



Photograph 169

Boring

B-669

Run 1

Depth 13.2' - 18.2' See Photographs Nos. 170 and 171 for detailed views.



Photograph 170

B-669

Run 1

Top

Depth

13.2' - 15.7'



Photograph 171

B-669

Run 1

Bottom

Depth

15.7' - 18.2'

Attachment to CME Report No: 28062B-01-0624



Photograph 172

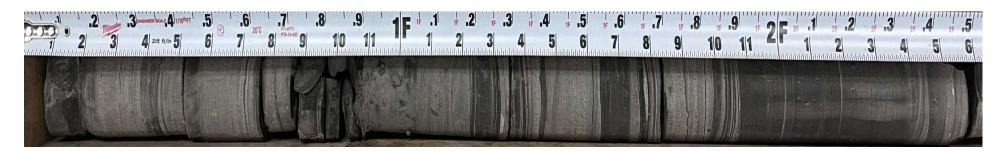
Boring

B-669

Run 2

Depth 18.2' - 23.2'

See Photographs Nos. 173 and 174 for detailed views.



Photograph 173

B-669

Run 2

Top

Depth

18.2' - 20.7'



Photograph 174

B-669

Run 2

Bottom

Depth

20.7' - 23.2'

Attachment to CME Report No: 28062B-01-0624



Photograph 175

Boring

B-675

Run 1

Depth 10.5' - 15.5'

See Photographs Nos. 176 and 177 for detailed views.



Photograph 176

B-675

Run 1

Top

Depth

10.5' - 13.0'



Photograph 177

B-675

Run 1

Bottom

Depth

13.0' - 15.5'

Attachment to CME Report No: 28062B-01-0624



Photograph 178

Boring

B-675

Run 2

Depth

15.5' - 20.5'

See Photographs Nos. 179 and 180 for detailed views.



Photograph 179

B-675

Run 2

Top

Depth

15.5' - 18.0'



Photograph 180

B-675

Run 2

Bottom

Depth

18.0' - 20.5'

Attachment to CME Report No: 28062B-01-0624



Photograph 181

Boring

B-688

Run 1

Depth 16.0' - 21.0'

See Photographs Nos. 182 and 183 for detailed views.



Photograph 182

B-688

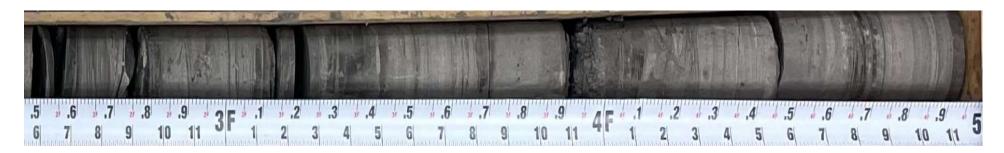
I

Run 1

Top

Depth

16.0' - 18.5'



Photograph 183

B-688

Run 1

Bottom

Depth

18.5' - 21.0'

Attachment to CME Report No: 28062B-01-0624



Photograph 184

Boring

B-688

Run 2

Depth

21.0' - 26.0'

See Photographs Nos. 185 and 186 for detailed views.



Photograph 185

B-688

Run 2

Top

Depth

21.0' - 23.5'



Photograph 186

B-688

Run 2

Bottom

Depth

23.5' - 26.0'

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

15

16

17

18

19

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

15

16

17

18

19

Remarks:

15

16

17

18

15

16

17

18

Remarks:

15

16

17

18

Test Boring Logs - Page 1 of 201

**B-501** 

1 of 2

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

S. Clay, New York

S. C

Associates, Inc. Phone: 315-701-0522

Project Name: Micron Campus, Clay, New York

Client: Ramboll

Location: See Exploration Location Plan

TEST BORING LOG

Project No. 28062

Project No. 05/09/24

Date Started 05/09/24

O5/09/24

Surface Elev. 405.5'

METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: While Drilling Inspector: Other: 05/09/24 None Noted 23.7 **Drill Rig:** 2" OD Split Barrel 05/09/24 Before Casing Removed None Noted 23.7 CME 55 Soil Sampler: ATV 05/09/24 After Casing Removed 4.5 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/09/24 caved @ 4.7 out

After Casing Removed LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or То RQD % No. From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) Rec. (in.) (Ft.) f - fine 1A 0.0 1.0 SS/16 1-2-3-4 Topsoil and Organic Material (moist) 0 5 Brown SILT, little CLAY (moist, medium stiff) 1 1B 1.0 2.0 2 2 2.0 SS/17 4-5-6-7 Brown/Grey mottled SILT, trace CLAY, trace fine SAND (wet, stiff) 11 4.0 3 4 3 4.0 6.0 SS/11 4-2-5-7 Brown SILT, trace CLAY, trace fine SAND (wet, medium stiff) 7 5 6.0 4 8.0 SS/17 8-8-8-10 Brown SILT, trace CLAY (moist, very stiff) 6 16 7 8 5 8.0 10.0 SS/20 6-7-10-10 Similar as above (moist, very stiff) 17 9 10 11 12 13 SS/14 13.5 15.0 3-5-7 Grey/Brown/Red mf GRAVEL, little cmf SAND, little SILT (wet, 12 6 14 medium compact) 15 16 17 18 7 18.5 SS/0 50@0" 18.5 No Recovery - Split Spoon Refusal 50 +19

Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 2 of 201

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315, 701, 0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-501

 Page No.
 2 of 2

 Project No.
 28062

Log OF BORING SAMPLES		G 1 D 4			315-701-0522		TEST BURING	LUG	Project No.	280	062	
Depth of   Part   Par		th Sample CFt.)  Sample						VISUAL CLAS	SIFICATION (			
Continued from Page 1   Continued from Page 1	Scale	Sample	Sample (F	e Depth ft.)	Type / Sample	Blows on Sampler	Change	c - coarse m - medium	little - 10 to 20% / trace - 0 to 10%			SPT "N" or RQD %
22												
23	21											
8 23.5 23.7 SS/2 50@2" Grey onf GRAVEL, little cmf SAND, trace SILT (moist, very 5 monact)  1	22											
24   Compact) Bottom of Boring @ 23.7'  28   29   30   31   32   33   34   35   36   37   38   39   40   41   42   43   44	23	8	23.5	23.7	SS/2	50@2"		Grey cmf GRAVEL, little	cmf SAND, trace	SILT (moist, very		50+
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44								compact)				
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44												
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44												
29       30       31       32       33       34       35       36       37       38       39       40       41       42       43       44												
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44												
31 32 33 34 35 36 37 38 39 40 41 42 43 44												
32 33 34 35 36 37 38 39 40 41 42 43 44												
33       34       35       36       37       38       39       40       41       42       43       44												
34       35       36       37       38       39       40       41       42       43       44												
35       36       37       38       39       40       41       42       43       44												
37 38 39 40 41 42 43 44												
38       39       40       41       42       43       44	36											
39       40       41       42       43       44	37											
40       41       42       43       44	38											
41 42 43 44	39											
42 43 44												
43 44												
1 45 1 1 1 1 1 1 1 1 1 1	44	1										

Dark Grey SILT, trace cmf SAND, trace mf GRAVEL (moist, hard)

Light Grey SILT, some cmf SAND, trace fine GRAVEL (moist,

31

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

hard)

Auger Refusal @ 20.4'
Bottom of Boring @ 20.4'

7-10-21

27-30-50@4"

SS/18

SS/18

15.0

19.8

13.5

18.5

6

7

13

14

15

16

17

18

No Recovery - Split Spoon Refusal

Bottom of Boring @ 18.5'

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@0"

Remarks:

6

7

18.5

18.5

SS/0

14

15

16

17

18

			p =		28062B-04-0724						Test Boring Lo		504
		M	Œ		orporate Drive racuse, NY 13057	SU	JBSURF	ACE EX	KPL(	ORATION	Page No.		of 2
	Asso	ciates	. Inc.	•	acuse, NY 13057 315-701-0522		TEST	<b>BORI</b>	NG I	LOG	Project No.		062
<b>D</b>				1 1101101 1							-		
Project	Name:			us, Clay,	New York						Date Started		10/24
Client:		Rambo									Date Finished		10/24
Location	n:			on Locati		~~~		Ī	~~		Surface Elev.		)4.4'
					INVESTIGATIO				GR	ROUNDWATER	OBSERVAT	TONS	
Driller:		Beau F			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		Ryan C	Casatelli	i	Casing Hammer:			0.7/1.0/2.1			• ' '	,	
Inspecto		~			Other:	*** 0.5. **		05/10/24		While Drilling	None Noted		3.5
Drill Rig	g:	CME 5	55		Soil Sampler:		Split Barrel	05/10/24		ore Casing Removed	None Noted		3.5
Type:		ATV			Hammer Wt:	140 lbs.		05/10/24		er Casing Removed	10.6		out
Rod Size		AWJ	D.C.T.		Hammer Fall:	30 in.		05/10/24		er Casing Removed	caved @ 13.0		out
	LO	G OF	BOR	ING SA	MPLES		<u>VI</u>	VISUAL CLASSIFICATION OF MATERIAL					
Depth		Sample	_	Type /	Blows on	Depth of	c ·	- coarse					SPT "N"
Scale	Sample		t.)	Sample	Sampler	Change		medium			% / some - 20 to 35		or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 109	%	RQD %
0	1A	0.0	1.0	SS/16	1-1-3-3	Topsoil and Organic Material (moist)							4
1 2	1B 2	1.0 2.0	2.0	SS/22	4-5-9-4		medium st	iff)		Γ, little CLAY, trac	ee ROOTS (mois	st,	14
3													
5	3	4.0	6.0	SS/16	4-5-6-7		Brown SIL	T, trace C	CLAY	(wet, stiff)			11
6 7	4	6.0	8.0	SS/20	4-7-7-7		Similar as	above (we	et, stif	ff)			14
8 9	5	8.0	10.0	SS/23	4-10-10-15		Brown SII	T, trace (	CLAY	, trace cmf SAND	(wet, very stiff)		20
10													

Grey SILT, some cmf SAND, trace fine GRAVEL (wet, stiff)

Grey SILT, some cmf SAND, little cmf GRAVEL (moist, hard)

Continued on Page 2

14

50+

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

44-50@4"

Remarks:

12

13

14

15

16

17

18

19

6

7

13.5 | 15.0 | SS/12

18.5 19.3 SS/12

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 6 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315, 701, 0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-504

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  Sample Depth			315-701-0522		TEST BURING	LUG	Project No.	28	062	
	LOG OF BORING SAMPLES  h Sample Depth (Ft.) Sample Sample Sample Sample					VISUAL CLAS	SIFICATION (				
Depth Scale (Feet)		Sample	e Depth	Type /	Blows on	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20							Continued from Page 1				
21											
22											
23	8	23.5	23.8	SS/4	50@4"		Grey SILT, some cmf SAl	ND, trace fine GR	AVEL (moist, har	rd)	50+
24							Bottom of Boring @ 23.8	,	,	,	
25											
26											
27											
28											
29	<u> </u>										
30											
31											
32											
33											
34											
35											
36											
37											
39											
40	1										
41											
42											
43											
44											
45	-										

0	3	0.0	10.0	55/20	0 10 20 10		brown bill, trace in Gravel, trace cini brave (moist, nard)	30	l
9									
10									
11									
12									
13	6	13.5	14.3	SS/8	30-50@3"		Crow SH T come and SAND trace of CDAVEL (maint hand)	50+	
14	6	13.3	14.3	33/0	30-30@3		Grey SILT, some cmf SAND, trace mf GRAVEL (moist, hard)	30+	
15									
16									
17						ļ			
18	7	10.5	10.7	00/2	50@2"		Construction of CAND and CHIT (and	50.	
19	7	18.5	18.7	SS/3	50@3"		Grey cmf GRAVEL, some cmf SAND, some SILT (moist, very compact)  Bottom of Boring @ 18.7'	50+	
20							bottom of borning @ 18.7		
	lit Spoo	n, U - 1	Undist	urbed Ti	ube, C - Core, WH - V	Weight o	f Hammer + Rod, WR - Weight of Rod		,
Remark		•			,	J	·		

Brown SILT, trace CLAY (wet, stiff)

Brown SILT, trace mf GRAVEL, trace cmf SAND (moist, hard)

14

36

6

7

4

6.0

8.0

SS/22

10.0 SS/20

5-7-7-7

6-16-20-16

Remarks:

13

14

15

16

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 9 of 201 Boring No. B-507 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 05/13/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/13/24 Surface Elev. 403.8' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Gary Richards Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: While Drilling Inspector: Other: 05/13/24 None Noted 19.4 **Drill Rig:** 2" OD Split Barrel 05/13/24 Before Casing Removed None Noted 19.4 CME 55 Soil Sampler: ATV 05/13/24 After Casing Removed 2.3 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/13/24 After Casing Removed caved @ 3.3 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 1.0 SS/16 WH-1-3-6 Topsoil and Organic Material (moist) 0 0.0 Brown SILT, trace CLAY (moist, medium stiff) 1 1B 1.0 2.0 2 2 SS/17 3-4-5-4 Brown SILT, trace CLAY (moist, stiff) 9 2.0 4.0 3 4 3 4.0 6.0 SS/16 2-6-7-7 Similar as above (wet, stiff) 13 5 6.0 4 8.0 SS/18 8-8-9-10 Similar as above (wet, very stiff) 17 6 7 8 5 8.0 10.0 SS/20 6-8-11-10 Similar as above (moist, very stiff) 19 9 10 11 12 13 13.5 15.0 SS/7 7-12-46 Dark Grey/Black weathered ROCK Fragments (Shale) and ROCK 58 6

Flour (moist)

Bottom of Boring @ 19.4'

Grey SILT, some cmf SAND, little mf GRAVEL (moist, hard)

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

33-50@5"

Remarks:

14

15

16

17

18

19

7

19.4

18.5

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 10 of 201 Boring No. B-508 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 05/09/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/09/24 Surface Elev. 404.7' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: **Casing Hammer:** Ryan Casatelli While Drilling Inspector: 05/09/24 None Noted 18.5 Other: **Drill Rig:** 2" OD Split Barrel 05/09/24 Before Casing Removed 18.5 CME 55 Soil Sampler: None Noted ATV 05/09/24 After Casing Removed Type: **Hammer Wt:** 140 lbs. 6.0 out Rod Size: AWJ **Hammer Fall:** 30 in. 05/09/24 After Casing Removed caved @ 11.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or RQD % From То Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) SS/19 Brown SILT, trace CLAY, trace ORGANIC MATERIAL, trace 0.0 2.0 1-1-2-4 3 fine SAND (moist, soft) 1 2 2 SS/20 Brown/Grey mottled SILT, little CLAY (moist, medium stiff) 2.0 4.0 3-3-3-4 6 3 4 3 4.0 6.0 SS/14 Brown SILT, trace cmf SAND, trace fine GRAVEL (wet, stiff) 9 5-4-5-6 5 6.0 4 8.0 SS/20 3-4-5-8 Brown SILT, trace CLAY (wet, stiff) 9 6 7 8 5 8.0 10.0 SS/15 3-4-8-13 Similar as above (moist, stiff) 12 9 10 11 12 13 Grey SILT, some mf GRAVEL, trace cmf SAND (moist, hard) 13.5 15.0 SS/12 20-26-30 56 6 14

Grey SILT, little fine GRAVEL, trace cmf SAND (moist, hard)

Bottom of Boring @ 18.8'

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@4"

Remarks:

15

16

17

18

19

7

18.5

18.8

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 11 of 201 Boring No. B-509 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Project No. 28062 Phone: 315-701-0522 **Date Started** 05/10/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/10/24 Surface Elev. 404.7' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli **Casing Hammer:** While Drilling Inspector: 05/10/24 20.7 23.5 Other: **Drill Rig:** 2" OD Split Barrel 05/10/24 Before Casing Removed 20.7 23.5 CME 55 Soil Sampler: ATV 05/10/24 After Casing Removed None Noted Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/10/24 After Casing Removed caved @ 2.6 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % No. From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) Rec. (in.) (Ft.) f - fine 1A 1.0 SS/16 1-WH-2-3 Topsoil and Organic Material (moist) 0.0 Brown/Grey SILT, little CLAY, trace fine SAND, trace ROOTS 1 1B 1.0 2.0 (moist, soft) 2 2 2.0 SS/18 6-7-7-7 Brown SILT, trace fine SAND (wet, stiff) 14 4.0 3 4 3 4.0 6.0 SS/20 4-5-5-6 Brown SILT, trace mf SAND (wet, stiff) 10 5 6.0 4 8.0 SS/23 3-8-13-17 Brown SILT, trace fine SAND (moist, very stiff) 21 6 7 8 5 8.0 10.0 SS/20 5-7-25-11 Brown SILT, little mf GRAVEL, little cmf SAND (wet, hard) 32 9 10 11 12 13 SS/18 13.5 15.0 14-11-27 Brown SILT, little cmf GRAVEL, trace cmf SAND (moist, hard) 38 6 14

compact)

Continued on Page 2

Grey cmf GRAVEL and SILT, little cmf SAND (moist, very

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@4"

Remarks:

15

16

17

18

19

7

20.0

18.5

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 12 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Associates, Inc.
Phone: 315-701-0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-509

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES			315-701-0522		TEST BORING L	JUG	Project No.	2806	52	
	LOG OF BORING SAMPLES  Sample Depth (Ft.)  Sample  Sample  Sample  Sample  Sample						VISUAL CLASS	SIFICATION (			
Depth Scale (Feet)		Sample	e Depth	Type /	Blows on	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20							Continued from Page 1				
21											
22						<u></u> -					
23	8	23.5	23.8	SS/3	50@3"		Grey SILT, some cmf SAN	ND, little cmf GRA	AVEL (moist, hard)		50+
24							Bottom of Boring @ 23.8'				
25	1						Bottom of Boring @ 23.0				
26											
27											
28											
29											
30											
31											
32											
33											
34											
35	1										
36											
37											
38											
39	]										
40											
42											
43											
44											
45	†										

Grey SILT, little cmf GRAVEL, trace cmf SAND (moist, hard)

Continued on Page 2

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@5"

Remarks:

15

16

17

18

19

7

18.5

18.9

Test Boring Logs - Page 14 of 201

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-510

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  pth Sample Depth Type / Blows on				315-701-0522		TEST BURING	LUG	Project No.	28062
							VISUAL CLAS	SIFICATION (		
Depth Scale (Feet)	Sample No.			Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%	SPT "N' or RQD %
20							Continued from Page 1			
21 22										
23	8	23.5	23.8	SS/4	50@4"		Cross CH T little rest CD A	VEL two a amf S	AND (maint hand)	50+
24	o	23.3	23.8	33/4	30@4		Grey SILT, little mf GRA	VEL, trace citi SA	AND (moist, nard)	30+
25										
26										
27										
28	9	28.5	29.3	SS/*	41-50@4"		Grey SILT, little CLAY, t	race mf GRAVEL	, trace cmf SAND	50+
29							(moist, hard) Bottom of Boring @ 29.3		,	
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
15		1	1			1	i			1

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 15 of 201 Boring No. B-511 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 Micron Campus, Clay, New York 05/08/24 Project Name: **Date Started** Client: Ramboll **Date Finished** 05/09/24 Surface Elev. 400.6' Location: See Exploration Location Plan **GROUNDWATER OBSERVATIONS** METHODS OF INVESTIGATION Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: None Noted 15.0 Inspector: Other: NO-Core 05/09/24 While Drilling Drill Rig: Soil Sampler: 2" OD Split Barrel 05/09/24 Before Casing Removed None Noted 15.0 CME 55 ATV **Hammer Wt:** 05/09/24 After Casing Removed 1.0 \* Type: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/09/24 After Casing Removed caved @ 5.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % (Feet) No. Per 6 Inches little - 10 to 20% / trace - 0 to 10%Rec. (in.) (Ft.) f - fine 1A 0.0 1.5 SS/16 WH-1-2-0 Topsoil and Organic Material (moist) 0 3 1 1B Brown/Red SILT, some cmf GRAVEL, little CLAY, little cmf 1.5 2.0 2 SAND (moist, soft) 2 2.0 4.0 SS/17 8-7-5-6 Brown SILT, little cmf GRAVEL, trace cmf SAND (wet, stiff) 12 3 3 4 4.0 6.0 SS/6 5-12-10-11 Brown SILT, some cmf GRAVEL, trace woody ORGANIC 22 MATERIAL, trace cmf SAND (wet, very stiff) 5 4 6.0 8.0 SS/12 9-11-10-11 Brown SILT, some mf GRAVEL, little cmf SAND (moist, very 21 6 stiff) 7 Brown SILT, some cmf SAND, little cmf GRAVEL (wet, very stiff) 8 5 8.0 10.0 SS/5 10-13-12-21 25 9 10 11 12 13 6 13.5 14.5 SS/12 29-50@6" Dark Grey/Black SILT, some highly weathered ROCK Fragments 50 +(Shale) (wet, hard) 14

Auger Refusal @ 15.0'. Set up to core.

4 Pieces, 11" Chips and Fragments

30 sec - 1:00 min/ft, no water loss

bedded, hard.

18.4' - 18.2'.

and 18.1'-18.2'.

Continued on Page 2

Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1/4"

thick), slightly to moderately weathered, thinly laminated to thinly

SILT seam with weathered ROCK Fragments @ 15.5' - 15.6' and

Broken and fractured zones @ 15.6'-16.0', 16.5'-16.6', 17.3''-17.8'

Recovery:  $42''/60'' = 70\% \mid RQD: 13''/60'' = 22\%$ 

22%

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

NQ-Core

**Remarks:** \* Water added to boring for coring.

15

16

17

18

19

R-1

15.0

20.0

C/42

Test Boring Logs - Page 16 of 201

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-511

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BURING	LUG	Project No.	280	062
							VISUAL CLAS	SIFICATION (			
Depth Scale (Feet)	Sample	No.         From         To         Rec. (in.)         Per 6 Inches         (Ft.)         f - fine         little - 10 to 20% / trace - 0 to 10%           Continued from Page 1         Continued from Page 1         Continued from Page 1         Continued from Page 1							SPT "N" or RQD %		
20	140.	110111	10	ACC. (III.)	1 ci o inches	(Pt.)				ıro	KQD 70
21	R-2	20.0	25.0	C/57	NQ-Core		Dark Grey SHALE with in thick), slightly weathered,	nterbedded DOLO	STONE (<1/8" - 2		57%
22							medium hard to hard.  Broken and fractured zone	-	-		
23							21.1' - 21.2'. VOID with CALCITE crys				
24							Recovery: 57"/60" = 95% 29 Pieces, 5" Chips and Fr	ragments	= 57%		
25							40 sec - 1:30 min/ft, no we Coring conducted in 4th g	gear, 1500 rpm, 60	00 psi down pressu	re.	
26							Bottom of Boring @ 25.0	tom of Boring @ 25.0'			
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45	I		l			I	1				

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 17 of 201 Boring No. B-513 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Phone: 315-701-0522 Project No. 28062 Micron Campus, Clay, New York **Date Started** 05/13/24 Project Name: Client: Ramboll **Date Finished** 05/13/24 Surface Elev. 402.3' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Gary Richards Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli **Casing Hammer:** While Drilling Inspector: Other: 05/13/24 None Noted 9.3 **Drill Rig:** CME 55 Soil Sampler: 2" OD Split Barrel 05/13/24 Before Casing Removed 9.3 None Noted ATV 05/13/24 After Casing Removed None Noted Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/13/24 After Casing Removed caved @ 7.2 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Blows on Depth c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or То f - fine RQD % No. From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) Rec. (in.) (Ft.) 1A 1.0 SS/18 WH-2-2-3 Topsoil and Organic Material (moist) 0 0.0 4 Brown SILT, trace fine SAND, trace CLAY (moist, medium stiff) 1 1B 1.0 2.0 2 2 2.0 SS/19 6-6-7-9 Brown SILT, trace CLAY (wet, stiff) 13 4.0 3 4 3 4.0 6.0 SS/18 5-14-11-12 Brown SILT, some mf GRAVEL, little cmf SAND (moist, very 25 5 6.0 4 8.0 SS/19 6-14-9-12 Grey/Brown cmf GRAVEL, some SILT, trace cmf SAND (wet, 23 6 medium compact) 7 8 5 8.0 8.9 SS/9 5-50@5" Brown/Dark Grey/Black SILT, some highly weathered ROCK 50 +Fragments (Shale) (moist, hard) 9 6 9.3 9.3 SS/0 50@0" SHALE Fragments in tip of spoon - Split Spoon and Auger 50+ Refusal @ 9.3' Bottom of Boring @ 9.3' 10 11 12 13 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 18 of 201 Boring No. **B-515** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Project No. 28062 Phone: 315-701-0522 **Date Started** 04/17/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/17/24 Surface Elev. 395.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** While Drilling Inspector: Other: 04/17/24 16.5 13.5 **Drill Rig:** 2" OD Split Barrel 04/17/24 Before Casing Removed None Noted 23.5 **CME 550X** Soil Sampler: ATV 04/17/24 After Casing Removed 5.2 Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/17/24 After Casing Removed caved @ 6.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) Topsoil and Organic Material (moist, medium stiff) 1A 0.3 SS/17 WH-1-2-5 0.0 3 2.0 Brown SILT, trace cmf SAND, trace fine GRAVEL (moist, soft) 1B 0.3 1 2 2 2.0 SS/17 4-5-5-6 Brown SILT, little mf GRAVEL, trace cmf SAND (moist, stiff) 10 4.0 3 4 3 4.0 6.0 SS/14 3-7-7-5 Brown cmf GRAVEL and SILT, some cmf SAND (wet, medium 14 compact) 5 6.0 4 8.0 SS/17 6-10-10-9 Brown SILT and cmf GRAVEL, some cmf SAND (wet, medium 20 6 compact) 7 8 5 8.0 10.0 SS/15 7-7-8-11 Brown/Grey SILT and cmf GRAVEL, little cmf SAND (wet, very 15 stiff) 9 10 11 12 13 13.5 15.0 SS/14 12-26-36 Grey SILT, trace cmf SAND, trace fine GRAVEL (moist, hard) 62 6 14

Grey ROCK Fragments (Shale) and ROCK Flour (moist)

Continued on Page 2

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

36-50@2"

Remarks:

15

16

17

18

19

7

19.2

18.5

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 19 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315, 701, 0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-515

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES				315-701-0522		TEST BORING LO	JG	Project No.	28062
							VISUAL CLASSI	FICATION C		
Depth Scale (Feet)	Sample No.	Sample	e Depth Ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	% / some - 20 to 35% 0% / trace - 0 to 10%	SPT "N" or RQD %
20							Continued from Page 1			
21										
22										
23	0	22.5	22.0	00/4	50.05"					<b>50</b> .
24	8	23.5	23.9	SS/4	50@5"		Similar as above (moist) Bottom of Boring @ 23.9'			50+
25										
26										
27										
28										
29										
30	_									
31										
32										
33										
34										
35	<u> </u>									
36										
37										
38										
39										
40	1									
41										
42										
43										
44										
45										

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 20 of 201 Boring No. B-517 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 04/16/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/16/24 Surface Elev. 395.2' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** While Drilling Inspector: Other: 04/16/24 None Noted 9.2 **Drill Rig: CME 550X** Soil Sampler: 2" OD Split Barrel 04/16/24 Before Casing Removed None Noted 9.2 ATV 04/16/24 After Casing Removed 5.2 Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/16/24 After Casing Removed caved @ 5.5 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % (Feet) Per 6 Inches little - 10 to 20% / trace - 0 to 10%No. Rec. (in.) (Ft.) f - fine 1A 0.3 SS/15 1-1-2-3 Topsoil and Organic Material (moist, medium stiff) 0 0.0 3 Brown SILT, little cmf GRAVEL, trace cmf SAND, trace ROOTS 2.0 1B 0.3 1 (moist, soft) 2 2 2.0 SS/7 1-1-3-2 Brown SILT, little mf GRAVEL, trace cmf SAND (wet, medium 4.0 4 stiff) 3 4 3 4.0 6.0 SS/13 1-4-7-7 Brown SILT, little mf GRAVEL, trace CLAY, trace cmf SAND 11 (wet, stiff) 5 6.0 Brown SILT and cmf GRAVEL, trace cmf SAND, trace CLAY 4 8.0 SS/16 3-5-7-8 12 6 (wet, stiff) 7 8 5 8.0 8.9 SS/7 7-50@5" Grey/Brown ROCK Fragments (Limestone) and SILT, trace cmf 50 +SAND (wet) 9 Auger Refusal @ 9.2' Bottom of Boring @ 9.2' 10 11 12 13 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

18

Т	<del>o</del> .	ATV	-		Hamman W4.	140 11-		After Casing Removed	1 5 *	01-4	
Type:		ATV			Hammer Wt:	ξ					
Rod Siz		AWJ	D.C.T.		Hammer Fall:	30 in.					
	LO	G OF	BOR	ING SA	MPLES	Deptil of					
Depth		_	Depth	Type /	Blows on	Depth of	c - coarse			SPT "N"	
Scale	Sample	(F	t.)	Sample	Sampler	Change	m - medium	and - 35 to 50	% / some - 20 to 35	% or	
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		0% / trace - 0 to 109	% RQD %	
0	1A	0.0	0.8	SS/13	WH-1-2-2		Topsoil and Organic			3	
	1B	0.8	2.0				Brown SILT, some cr	mf SAND, little mf GR	AVEL, trace CL	ΔAY	
1							(wet, soft)				
2	2	2.0	4.0	SS/15	3-3-4-4		Brown/Grey CLAY a	nd cmf SAND, little m	f GRAVEL, littl	e SILT 7	
							(wet, medium stiff)				
3											
						[ <u>-</u> -[					
4	3	4.0	6.0	SS/19	8-14-10-7		Brown/Grey cmf SAN	ND and mf GRAVEL, s	some SILT, trace	e CLAY 24	
							(wet, medium compac				
5							•				
6	4	6.0	8.0	SS/13	7-11-12-12		Similar as above (wet	, medium compact)		23	
7											
8	5	8.0	10.0	SS/11	6-7-8-12	I	Dark Grev cmf SANI	and weathered ROCK	Fragements, so	ome 15	
Ü		0.0	10.0	22/11	0 / 0 12		SILT (moist, medium		<b>- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</b>		
9							oner (moist, mearam	compact)			
10											
10											
11											
11											
12						}	. —				
12											
13											
13	_	13.5	142	SS/9	42-50@4"	,	Danis C	ROCK Fragments, sor	CH T (:t)	50.	
1.4	6	13.3	14.3	33/9	42-30@4		•	•	ne Silli (moist)	50+	
14	D 1	111	10.4	CIEC	NO C		Auger Refusal @ 14.4	ith interbedded DOLO	CTONE 1	<1/0" 200/	
1.5	R-1	14.4	19.4	C/56	NQ-Core		•		•		
15							, · · · ·	moderately weathered	, miniy iaminate	cu,	
1.5							medium hard.	0 146 156			
16							v	zone @ 14.6' - 15.6'.	0. 10 0		
								! fractures @ 16.5', 18.		δ'.	
17							•	93%   RQD: 23"/60" =	38%		
l .							20 Pieces, 2" Chips a	_			
18							1:00 - 2:00 min/ft, no				
							-	4th gear, 1500 rpm, 65			
19	R-2	19.4	24.4	C/58	NQ-Core		•	ith interbedded DOLO	•		
						2.0" thick), slightly to moderately weathered, thinly laminated to				ed to	
20							Continued on Page 2				
00 0	1:4 C	11 1	T 1	.1 1 TC	1	X / - : - 1- 4 - C	Hammar   Dod W/D	W-:-1-4 -f D - J			

**Remarks:** \* Water added to boring for coring.

Test Boring Logs - Page 22 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-518

 Page No.
 2 of 2

 Project No.
 28062

LOG OF BORING SAMPLES  Sample Double						<u></u>	TEST BORE OF		Project No.	28062
	LO	G OF	BOR	ING SA	AMPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL	
Depth Scale (Feet)	Sample No.	No.         From         To         Rec. (in.)         Per 6 Inches         (Ft.)         f - fine         little - 10 to 20% / trace - 0 to 10%           Continued from Page 1         Continued from Page 1         Continued from Page 1         Continued from Page 1							SPT "N" or RQD %	
20	110.	110111	10	ACC. (III.)	1 ci o ilicites	(Fl.)		ntue - 10 to 2	.070 / trace - 0 to 1070	KQD %
21							medium bedded, medium Broken and fractured zone	e @ 19.7'-19.8' an	d 21.9'-22.2'.	
22							Weathered horizontal frac Recovery: 58"/60" = 97% RQD: 32"/60" = 53%			
23							16 Pieces, 4" Chips and Fi 40 seconds - 1:00 min/ft, r			
24							Coring conducted in 4th g Bottom of Boring @ 24.4	gear, 1500 rpm, 65	0 psi down pressure.	
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45	]									

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 23 of 201 Boring No. B-519 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 05/10/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/10/24 Surface Elev. 394.9' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara 05/10/24 None Noted 8.0 Other: **Drill Rig: CME 45** 2" OD Split Barrel 05/10/24 Before Casing Removed 18.0 Soil Sampler: None Noted ATV 05/10/24 After Casing Removed None Noted Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/10/24 After Casing Removed caved @ out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.7 SS/17 1-WH-1-7 Topsoil and Organic Material (moist) 0.0 Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC 1B 0.7 2.0 1 MATERIAL (moist, soft) 2 2 2.0 SS/18 4-6-5-3 Brown/Grey SILT, trace CLAY, trace fine SAND (wet, stiff) 11 4.0 3 4 3 4.0 6.0 SS/16 5-6-11-11 Brown SILT, trace CLAY (wet, very stiff) 17 5 4 6.0 8.0 SS/15 Brown SILT, trace fine GRAVEL, trace cmf SAND, trace CLAY 12 6 5-6-6-9 (wet, stiff) 7 8 5 8.0 10.0 SS/14 3-17-17-17 Red/Brown SILT, some cmf GRAVEL, little cmf SAND, trace 34 CLAY (moist, hard) 9 Augers like Cobble beginning @ 8.7' 10 11 12 SS/16 18-10-22-25 32 13 6 13.0 15.0 Grey SILT, little mf GRAVEL, trace cmf SAND (moist, hard) 14

Augers very hard beginning @ 16.2'

Bottom of Boring @ 18.9'

Grey SILT and cmf GRAVEL, little cmf SAND (moist, hard)

Grey SILT, little mf GRAVEL, trace cmf SAND (moist, hard)

50 +

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

38-50@5"

50-50@5"

SS/11

SS/11

17.4

18.9

15

16

17

18

19

7

8

16.5

18.0

	METHODS	OF INVESTIGATION	ON		GROUNDWATER	OBSERVAT	IONS
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.	Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:	Ryan Casatelli	Casing Hammer:		Date	Time	Depth (Ft.)	Casing At (Ft.)
Inspector:		Other:	NQ-Core	05/08/24	While Drilling	14.3	28.5
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel	05/08/24	Before Casing Removed	None Noted	39.1
Type:	ATV	Hammer Wt:	140 lbs.	05/08/24	After Casing Removed	2.5 *	out
Rod Size:	AWJ	Hammer Fall:	30 in.	05/08/24	After Casing Removed	caved @ 3.5	out

**Date Finished** 

**Surface Elev.** 

05/08/24

395.7'

Type.		7 1 1 V			Halling Wt.	140 103.		ci Casing Removed	2.3		ut
Rod Siz	æ:	AWJ			Hammer Fall:	30 in.	05/08/24 Aft	ter Casing Removed	caved @ 3.5	01	ut
		G OF	BOR	ING SA	AMPLES			SSIFICATION (	F MATERIA	$\overline{\mathbf{L}}$	
			Depth		I			T			
Depth	C1-		t.)	Type /	Blows on	Depth of	c - coarse	1 25 4- 50	20, / 20, 4- 250	,	SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)	m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		or RQD %
0	1A	0.0	1.0	SS/18	1-WH-4-6	(11.)	Topsoil and Organic Mat	•	1070 / trace - 0 to 1070	D	4
U	1A	0.0	1.0	33/10	1- W11-4-0		Topson and Organic Mai	terrar (morst)			4
1	1B	1.0	2.0				Brown SILT, trace fine S	SAND, trace ROOT	S (wet, medium s	stiff)	
2	2	2.0	4.0	SS/17	6-8-8-6		Brown SILT, trace fine S	SAND, trace CLAY	(wet, very stiff)		16
3											
4	3	4.0	6.0	SS/10	4-4-6-7		Brown/Grey CLAY, little SAND (wet, stiff)	e SILT, trace mf GI	RAVEL, trace cm	nf	10
5											
6	4	6.0	8.0	SS/19	7-9-11-12		Grey/Brown SILT, some stiff)	cmf GRAVEL, tra	ce cmf SAND (w	et, very	20
7							,				
8	5	8.0	10.0	SS/19	6-8-11-11		Grey/Brown SILT, trace	CLAY (wet, very s	tiff)		19
9											
10											
11											
12											
13	6	13.5	15.0	SS/20	8-8-9		Brown/Orange/Grey SIL	T little CLAV trac	ea cmf SAND (m	oist	17
14		13.3	13.0	33/20	0-0-7		very stiff)	1, muc CLA1, trac	C CHII SAND (III	0151,	1 /
15											
16											
17											
18	_										
19	7	18.5	20.0	SS/16	6-11-15		Grey SILT, little cmf SA	ND, trace fine GRA	AVEL (moist, ver	ry stiff)	26
20	1						Continued on Page 2				

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \* Water added to boring for coring.

Client:

Location:

Ramboll

See Exploration Location Plan

Test Boring Logs - Page 25 of 201

6035 Corporate Drive
East Syracuse, NY 13057

# SUBSURFACE EXPLORATION TEST BORING LOG

Boring No. B-520
Page No. 2 of 2
Project No. 28062

Associates, Inc. Phone: 315-701-0522					315-701-0522	Project No. 28062					)62
LOG OF BORING SAMPLES							VISUAL CLASSIFICATION OF MATERIAL				
Depth Scale (Feet)	Sample No.		e Depth	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	of c - coarse ge m - medium and - 35 to 50% / some - 20 to 35%			SPT "N" or RQD %	
20	110.	TTOIN	10	rece. (iii.)	Ter o menes	(1 t.)	Continued from Page 1	natio 10 to 1	20/07 trace 0 to 10/0		RQD //
21							Augers harder beginning	@ 20.0'			
22											
23											
24	8	23.5	24.7	SS/14	23-28-50@3"		Grey highly weathered RO	OCK Fragments (S	Shale), little SILT (	(moist)	50+
25											
26											
27											
28	9	28.5	29.1	SS/6	30-50@1"		Similar as above (moist)				50+
29							Split Spoon and Auger Re				
30	R-1	29.1	34.1	C/60	NQ-Core		Dark Grey DOLOSTONE - 1" thick), slightly weath		•		40%
31							medium hard to hard. SILT seam (1/4" thick) @		40		
32							Recovery: 60"/60" = 100 25 Pieces, 0" Chips and F		= 40%		
33	R-2	34.1	39.1	C/58	NQ-Core		1:30 min/ft, no water loss Coring conducted in 4th g Grey DOLOSTONE with				53%
35	K 2	34.1	37.1	C/30	TVQ Colc		thick), slightly weathered, medium hard to hard.		•	2.0	3370
36							Broken and fractured zone SILT seam with weathered		ts @ 36.5' - 36.7'.		
37							Weathered zones @ 37.3' Recovery: 58"/60" = 97%	RQD: 32"/60" =	= 53%		
38							17 Pieces, 8" Chips and F. 1:30 min/ft, no water loss		20 J		
39							Coring conducted in 4th g Bottom of Boring @ 39.1		IO psi down pressi	ire.	
40	1										
41											
42											
43											
44											
45	1										

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 26 of 201 Boring No. **B-522A** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Phone: 315-701-0522 Project No. 28062 **Date Started** 04/17/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/17/24 Surface Elev. 393.7' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks Casing Hammer: While Drilling Inspector: Other: 04/17/24 4.2 6.0 **Drill Rig: CME 550X** Soil Sampler: 2" OD Split Barrel 04/17/24 Before Casing Removed 4.2 6.0 ATV 04/17/24 After Casing Removed 4.2 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/17/24 After Casing Removed caved @ 5.7 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % (Feet) Per 6 Inches little - 10 to 20% / trace - 0 to 10%No. Rec. (in.) (Ft.) f - fine 1A 0.3 SS/14 1-2-5-7 Topsoil and Organic Material (moist) 0.0 7 0.3 2.0 Brown SILT, some cmf GRAVEL, trace cmf SAND, trace ROOTS 1B 1 (moist, medium stiff) 2 2 2.0 SS/19 3-3-9-3 Brown SILT, some cmf GRAVEL, trace cmf SAND (wet, stiff) 12 4.0 3 4 3 4.0 6.0 SS/17 5-5-5-5 Brown cmf GRAVEL and SILT, some cmf SAND (wet, medium 10 compact) 5 SS/9 4 6.0 7.0 3-6-50@0" Grey/Brown SILT, little mf GRAVEL, little cmf SAND, trace 50+ 6 CLAY (wet, hard) 7 Split Spoon and Auger Refusal @ 7.0' Bottom of Boring @ 7.0' 8 9 10 11 12 13 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 27 of 201 Boring No. B-523 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 Micron Campus, Clay, New York **Date Started** 04/16/24 Project Name: Client: Ramboll **Date Finished** 04/16/24 Surface Elev. 393.5' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks Casing Hammer: NQ-Core Inspector: Other: 04/16/24 While Drilling 7.0 7.2 Drill Rig: **CME 550X** Soil Sampler: 2" OD Split Barrel 04/16/24 Before Casing Removed 3.0 \* 7.2 ATV 04/16/24 After Casing Removed 2.0 \* Type: Hammer Wt: 140 lbs. out caved @ 4.2 Rod Size: AWJ **Hammer Fall:** 30 in. 04/16/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) Topsoil and Organic Material (moist) 1A 0.0 0.3 SS/9 0 2-3-4-7 0.3 2.0 Dark Brown SILT, little mf GRAVEL, trace cmf SAND, trace 1B 1 ROOTS (moist, medium stiff) 2 2 2.0 SS/5 4-3-3-2 Brown SILT, trace mf GRAVEL, trace cmf SAND (moist, medium 4.0 6 stiff) 3 4 3 4.0 6.0 SS/3 2-2-6-5 Black/Grey cmf GRAVEL (moist, loose) 5 4 6.0 6.9 **SS/5** 7-50@5" Black/Grey ROCK Fragments (Limestone), trace SILT (wet) 50+ 6 7 7.2 Auger Refusal @ 7.2' - Set up to core Grey DOLOSTONE with interbedded SHALE (<1/8" -4.0" thick), R-1 7.2 12.2 C/59 97% NQ-Core 8 slightly weathered, thinly laminated to thinly bedded, medium hard to hard. 9 Weathered horizontal fractures @ 9.0', 9.5' and 10.8'. Recovery: 59"/60" = 98% RQD: 58"/60" = 97% 10 32 Pieces, 0" Chips and Fragments 11 55 sec/ft, no water loss Coring conducted in 5th gear, 2000 rpm, 700 psi down pressure. 12 R-2 12.2 17.2 C/56 NQ-Core Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" -83% 4.0" thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard. 13 Weathered zone (1/2" thick) @ 13.9'. Recovery: 56''/60'' = 93%14 RQD: 50"/60" = 83%

22 Pieces, 1" Chips and Fragments

Coring conducted in 5th gear, 2000 rpm, 700 psi down pressure.

55 sec/ft, no water loss

Bottom of Boring @ 17.2'

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \*Water added to boring for coring.

15

16

17

18

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 28 of 201 Boring No. B-526 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 04/17/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/17/24 Surface Elev. 396.9' Location: See Exploration Location Plan METHODS OF INVESTIGATION GROUNDWATER OBSERVATIONS Al Linstruth Driller: 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks Casing Hammer: Inspector: Other: NQ-Core 04/17/24 While Drilling 12.7 13.5 Drill Rig: **CME 550X** Soil Sampler: 2" OD Split Barrel 04/17/24 Before Casing Removed 7.2 \* 13.5 ATV **Hammer Wt:** 04/17/24 After Casing Removed 6.8 \* Type: 140 lbs. out AWJ Rod Size: **Hammer Fall:** 30 in. 04/17/24 After Casing Removed caved @ 10.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From То little - 10 to 20% / trace - 0 to 10% RQD % Per 6 Inches (Feet) No. (Ft.) f - fine Rec. (in.) 1A 0.0 0.2 SS/15 2-2-2-2 Topsoil and Organic Material (moist) Brown SILT, trace fine SAND, trace ROOTS (moist, medium stiff) 1B 0.2 2.0 1 2 2 2.0 SS/17 2-8-8-8 Brown SILT, trace CLAY, trace fine SAND (wet, very stiff) 4.0 16 3 4 3 4.0 6.0 SS/10 7-6-7-6 Brown SILT, trace CLAY (wet, stiff) 13 5 4 6.0 8.0 SS/15 3-2-1-2 Brown SILT, trace CLAY (wet, soft) 3 6 7 SS/14 Brown/Black SILT and ROCK Fragments (Shale), little cmf SAND, 8 5 8.0 10.0 4-20-9-16 29 trace fine GRAVEL (wet, very stiff) 9 10 11 12 13

No Recovery. Spoon Refusal - Set up to core

Recovery: 57"/60" = 95%

27 Pieces, 4" Chips and Fragments

RQD: 44"/60" = 73%

50 sec/ft, no water loss

Continued on Page 2

Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -

2.0" thick), slightly weathered, thinly laminated to thinly bedded,

medium hard to hard. Broken and fractured zone @ 13.7' - 14.0'.

Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure.

1/4" thick), slightly weathered, thinly laminated, medium bedded, medium hard. Broken and fractured zones @ 19.8', 20.7' - 20.8',

Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -

Weathered horizontal fractures @ 14.4', 15.3' and 15.7'.

73%

85%

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@0"

NQ-Core

NQ-Core

**Remarks:** \* Water added to boring for coring.

23.5

13.5

18.5

13.5

13.5

18.5

6

R-1

R-2

14

15

16

17

18

19

SS/0

C/57

C/59

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 29 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-526

 Page No.
 2 of 2

 Project No.
 28062

					315-701-0522		TEST DOKING		Project No.		062		
LOG OF BORING SAMPLES							VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale	Sample	(F	e Depth	Type / Sample	Blows on Sampler	Depth of Change	m - medium		0% / some - 20 to 35%		SPT "N"		
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%		RQD %		
20							and 22.4' - 22.5'. Recovery: 59"/60" = 98%						
21							RQD: 51"/60" = 85%						
22							21 Pieces, 5" Chips and Fi 50 sec/ft, no water loss	ragments					
23							Coring conducted in 5th g Bottom of Boring @ 23.5	gear, 2100 rpm, 70	00 psi down pressu	re.			
24							Bottom of Boring @ 23.3						
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 30 of 201 Boring No. B-529 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 04/16/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/16/24 Surface Elev. 395.6' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** While Drilling Inspector: Other: 04/16/24 7.4 6.0 **Drill Rig:** 2" OD Split Barrel 04/16/24 Before Casing Removed 11.8 14.8 **CME 550X** Soil Sampler: ATV 04/16/24 After Casing Removed 5.9 Type: Hammer Wt: 140 lbs. out caved @ 7.2 Rod Size: AWJ **Hammer Fall:** 30 in. 04/16/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.3 SS/13 Topsoil and Organic Material (moist) 0.0 1-1-1-2 2.0 Brown SILT, trace fine SAND, trace ROOTS (moist, soft) 1B 0.3 1 2 2 2.0 SS/11 1-3-2-1 Brown SILT, trace fine SAND (wet, medium stiff) 5 4.0 3 4 3A 4.0 5.5 SS/12 4-3-2-11 Dark Grey/Brown cmf GRAVEL, some SILT, little cmf SAND 5 (wet, loose) 5 3B 5.5 6.0 Grey cmf GRAVEL, little cmf SAND, trace SILT (moist) Grey/Brown SILT, some cmf GRAVEL, little cmf SAND (wet, 4 6.0 8.0 SS/13 8-11-7-5 18 6 very stiff) 7 8 5 8.0 10.0 **SS/8** 11-7-10-4 Grey SILT and cmf GRAVEL, some cmf SAND (wet, medium 17 compact) 9 Augers gravelly beginning @ 8.0' 10 11 12 12.5 12.7 SS/3 50@3" Grey ROCK Fragments (Dolostone) and ROCK Flour (moist) 50+ 13 14

Spoon and Auger Refusal @ 14.8'

Bottom of Boring @ 14.8'

50 +

 $SS - Split \ Spoon, \ U - Undisturbed \ Tube, \ C - Core, \ WH - Weight \ of \ Hammer + Rod, \ WR - Weight \ of \ Rod$ 

50@0"

15

16

17

18

19

7

14.8

14.8

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 31 of 201 Boring No. B-530 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 05/10/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/10/24 Surface Elev. 391.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall Casing Hammer: While Drilling Inspector: C. O'Hara Other: 05/10/24 9.3 12.8 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 05/10/24 Before Casing Removed 7.4 17.6 ATV 05/10/24 After Casing Removed 4.3 Type: **Hammer Wt:** 140 lbs. out caved @ 6.7 Rod Size: AWJ **Hammer Fall:** 30 in. 05/10/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" c - coarse Depth Blows on Type / Depth of (Ft.) Scale Sampler Sample m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine Topsoil and Organic Material (moist) 1A 0.0 0.7 SS/12 WH-1-1-5 2.0 Brown SILT, trace CLAY, trace ROOTS (moist, soft) 1B 0.7 1 2 2 2.0 SS/15 5-5-5-5 Brown/Grey mottled SILT, trace CLAY (wet, stiff) 10 4.0 3 4 3 4.0 6.0 SS/14 12-14-12-7 Brown SILT, trace CLAY (moist, very stiff) 26 5 Grey SILT, some CLAY, little cmf GRAVEL, trace cmf SAND 4 6.0 8.0 SS/12 3-5-7-14 12 6 (moist, stiff) 7 8 5 8.0 10.0 SS/13 10-10-20-50 Grey SILT, little CLAY, trace cmf SAND, trace fine GRAVEL 30 (moist, hard) 9 10 11 12 Augers hard @ 12.6' SS/\* 12.8 14.8 25-12-15-18 Grey/Black SILT, some highly weathered ROCK Fragments (Shale), 27 13 trace CLAY (moist, very stiff) 14 15 Augers very hard beginning @ 15.3' to 16.3'

Grey weathered ROCK Fragments (Shale) and ROCK Flour (moist)

Black SHALE Fragments (moist) Auger Refusal @ 17.6'

Bottom of Boring @ 17.8'

50+

50+

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@4"

50@2"

**Remarks:** \* recovery length not measured

16.7

17.8

16.3

17.6

SS/4

SS/1

7

8

16

17

18

Remarks:

17

18

Dark Grey weathered ROCK Fragments, little SILT (moist)

Continued on Page 2

48

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

13-22-26

Remarks:

15

16

17

18

19

7

18.5

20.0

Test Boring Logs - Page 34 of 201

Associates, Inc. 6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-532

 Page No.
 2 of 2

 Project No.
 28062

LOG OF BORING SAMPLES								Project No. 2	28062				
	LOG OF BORING SAMPLES  Sample Depth Type / Blows on						VISUAL CLAS	SIFICATION (	OF MATERIAL				
Depth Scale (Feet)	Sample No.	_	_	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%	SPT "N' or RQD %			
20	110.	Tiom	10	Rec. (III.)	Ter o menes	(1 t.)	Continued from Page 1	Ittle 10 to 2	0.0707 trace 0.001070	KQD 70			
21													
22													
23	8	23.5	23.8	SS/4	50@4"		Dark Grey ROCK Fragme	ents (Shale), trace	ROCK Flour (moist)	50+			
24	R-1	24.0	29.0	C/55	NQ-Core		Auger Refusal @ 24.0'. S Dark Grey SHALE with in		STONE layers (<1/8" -	68%			
25							2.0" thick), moderately we bedded, medium hard.		•				
26							Broken and fractured zon						
27							Weathered horizontal fracture @ 26.9'. SILT seam (~1/4" thick) @ 27.4'.						
28							Recovery: 55"/60" = 92%   RQD: 41"/60" = 68%						
						14 Pieces, 4" Chips and Fragments  1:00 - 2:00 min/ft, no water loss  Coving any hysted in 4th again 1500 man 650 mg down programs							
29	R-2	29.0	34.0	C/59	NQ-Core		Coring conducted in 4th gear, 1500 rpm, 650 psi down pressure.  Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -						
30							4.0" thick), slightly weathered, laminated to medium bedded, medium hard to hard.						
31							Weathered horizontal frac						
32							Recovery: 59"/60" = 98% 20 Pieces, 1" Chips and F		90%				
33							1:25 - 1:50 min/ft, no wat Coring conducted in 4th g		50 psi down pressure.				
34							Bottom of Boring @ 34.0	•	, , , , , , , , , , , , , , , , , , ,				
							Bottom of Bornig @ 34.0						
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
15													

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 35 of 201 Boring No. **B-534** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/25/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/25/24 Surface Elev. 390.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** Inspector: C. O'Hara Other: 04/25/24 While Drilling 2.5 15.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/25/24 Before Casing Removed 20.8 Soil Sampler: 5.5 ATV 04/25/24 After Casing Removed 5.7 Type: Hammer Wt: 140 lbs. out AWJ Rod Size: **Hammer Fall:** 30 in. 04/25/24 After Casing Removed caved @ 10.2 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample and - 35 to 50% / some - 20 to 35% Sampler m - medium Sample Change From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.0 0.3 SS/12 Topsoil and Organic Material (moist) 1-2-1-1 3 2.0 Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC 1B 0.3 1 MATERIAL (moist, soft) 2 2 2.0 SS/13 Brown/Grey mottled SILT, little CLAY (wet, medium stiff) 4.0 2-3-3-3 6 3 4 3 4.0 6.0 SS/15 Brown SILT, trace CLAY (wet, medium stiff) 7 3-3-4-4 5 4 6.0 8.0 SS/20 3-5-7-6 Similar as above (wet, stiff) 12 6 7 SS/21 8 5 8.0 10.0 4-5-5-7 Similar as above (wet, stiff) 10 9 10 11 12 SS/16 Grey/Brown SILT, some CLAY, trace cmf SAND, trace fine 6 13.0 15.0 1-2-1-1 3 13 GRAVEL (wet, soft) 14

Grey/Brown SILT, little cmf SAND, little mf GRAVEL, trace

Dark Grey/Black cmf GRAVEL, little cmf SAND, little SILT, trace

CLAY (wet, very stiff)

CLAY (wet, very compact)

Continued on Page 2

Augers gravelly beginning @ 15.7'

17

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

WR-6-11-4

50@3"

7

8

15.0

18.0

17.0

18.3

SS/8

SS/3

15

16

17

18

19

Test Boring Logs - Page 36 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-534

 Page No.
 2 of 2

 Project No.
 28062

							TEST BORING	LUG	Project No.	28	062
	LOG OF BORING SAMPLES						VISUAL CLAS	SIFICATION (	OF MATERIAI		
Depth			e Depth	Type /	Blows on	Depth of	c - coarse				SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)	m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		or RQD %
20	1,0.	110111		ree: (iii)	Ter o menes	(11.)	Continued from Page 1	intuo 10 to 1	20,0, 11400 0 10 10,0		1142 70
21	9	20.8	21.6	SS/6	8-50@4"	ļ	Auger Refusal @ 20.8' Black weathered ROCK F	Gragments (Shala)	some SILT (wet)		50+
21		20.8	21.0	33/0	8-30@4		Bottom of Boring @ 21.6	'	some Sill (wet)		30+
22											
23											
24											
25											
26											
27											
28											
29											
30	-										
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 37 of 201 Boring No. **B-535** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/25/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/26/24 Surface Elev. 390.3' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/25/24 None Noted 6.0 **Drill Rig: CME 55** 2" OD Split Barrel 04/25/24 Before Casing Removed 16.8 Soil Sampler: 7.0 ATV 04/26/24 After Casing Removed 2.0 8.0 Type: **Hammer Wt:** 140 lbs. Rod Size: AWJ **Hammer Fall:** 30 in. 04/26/24 After Casing Removed caved @ 6.1 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A SS/13 WH-1-1-3 Topsoil and Organic Material (moist) 0.0 0.8 Brown/Grey mottled SILT, trace CLAY (moist, soft) 1B 0.8 2.0 1 2 2 SS/16 Similar as above (moist, medium stiff) 2.0 4.0 4-4-4-4 8 3 4 3 4.0 6.0 SS/12 4-4-7-9 Brown SILT, trace CLAY (moist, stiff) 11 5 6.0 7-7-6-6 4 8.0 SS/14 Similar as above (moist, stiff) 13 6 7 Brown SILT, trace CLAY, trace mf SAND (wet, stiff) 8 5 8.0 10.0 SS/17 4-4-6-5 10 9 10 11 12 Augers gravelly beginning @ 12.8' SS/12 6 13.0 15.0 WR-4-4-15 Grey mf GRAVEL, little SILT (wet, loose) 8 13 14

Augers like Rock beginning @ 16.2'

Bottom of Boring @ 17.1'

Black ROCK Fragments (Shale) (wet) Auger Refusal @ 16.8'

50 +

 $SS-Split\ Spoon,\ U-Undisturbed\ Tube,\ C-Core,\ WH-Weight\ of\ Hammer+Rod,\ WR-Weight\ of\ Rod$ 

50@3"

SS/1

Remarks:

15

16

17

18

19

7

16.8

17.1

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 38 of 201 Boring No. **B-536** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. 28062 Phone: 315-701-0522 Project No. 04/26/24 Micron Campus, Clay, New York **Date Started** Project Name: Client: Ramboll **Date Finished** 04/26/24 Surface Elev. 387.2' Location: See Exploration Location Plan METHODS OF INVESTIGATION GROUNDWATER OBSERVATIONS Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: Inspector: Other: NQ-Core 04/26/24 While Drilling 7.5 13.5 Drill Rig: Soil Sampler: 2" OD Split Barrel 04/26/24 Before Casing Removed None Noted 26.0 CME 55 ATV 04/26/24 After Casing Removed 2.5 \* Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/26/24 After Casing Removed caved @ 7.6 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % (Feet) No. Per 6 Inches little - 10 to 20% / trace - 0 to 10%Rec. (in.) (Ft.) f - fine Topsoil and Organic Material (moist) 1A 0.0 0.5 SS/18 WH-1-2-4 0 3 0.5 2.0 Brown/Grey mottled SILT, trace CLAY (moist, soft) 1B 1 2 2 2.0 SS/16 8-8-7-11 Brown SILT, trace fine SAND, trace CLAY (wet, very stiff) 15 4.0 3 4 3 4.0 6.0 SS/22 2-4-3-3 Brown/Grey SILT, trace CLAY (wet, medium stiff) 7 5 4 6.0 8.0 SS/16 2-2-3-2 Brown SILT, little CLAY (wet, medium stiff) 5 6 7 2-4-11-6 8 5A 8.0 9.0 SS/16 Grey/Brown CLAY, some mf GRAVEL, little SILT, trace cmf 15 SAND (wet, very stiff) Black highly weathered ROCK Fragments (Shale) (wet) 9 5B 9.0 10.0 10 11 12 13

Similar as above (wet)

hard to hard.

Auger Refusal @ 16.0'. Set up to core.

*Broken and fractured zone* @ 16.0' - 17.2'. Recovery: 55"/60" = 92% | RQD: 42"/60" = 70%

15 Pieces, 14" Chips and Fragments

1:00 - 2:00 min/ft, no water loss

Continued on Page 2

Grey DOLOSTONE with interbedded SHALE layers (<1/8' - 2"

Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.

thick), slightly weathered, thinly laminated to thinly bedded, medium

50 +

70%

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@1"

NQ-Core

**Remarks:** \* Water added to boring for coring.

13.5

16.0

6

R-1

14

15

16

17

18

19

13.6

21.0

SS/1

C/55

Test Boring Logs - Page 39 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315, 701, 0522

### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-536

 Page No.
 2 of 2

 Project No.
 28062

Associates, Inc. Phone: 315-701-0522					315-701-0522		TEST BORING I	LOG	Project No.	28062
	LOG OF BORING SAMPLES						VISUAL CLASS	SIFICATION O		
Depth		1		Type /	Blows on	Depth of	c - coarse		<u> </u>	SPT "N'
Scale	Sample	(F	t.)	Sample	Sampler	Change	m - medium		% / some - 20 to 35%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	0% / trace - 0 to 10%	RQD %
20							Continued from Fage 1			
21	R-2	21.0	26.0	C/57	NQ-Core		Grey DOLOSTONE with a thick), slightly weathered,	thinly laminated to	o thinly bedded, me	
22							hard to hard. Weathered z Recovery: $57''/60'' = 95\%$		5'.	
23							RQD: 32"/60" = 53% 21 Pieces, 2" Chips and Fr	ragments		
24							1:00 min/ft, no water loss Coring conducted in 4th g	oar 1500 rnm 70	O nei down praecura	,
25	_						Coring conducted in 4in g	еат, 1300 грт, 70	o psi down pressure	•
26							Bottom of Boring @ 26.0'			
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45	1									

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 40 of 201 Boring No. B-537 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/25/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/25/24 Surface Elev. 392.5' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** Inspector: C. O'Hara Other: 04/25/24 While Drilling 9.0 13.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/25/24 Before Casing Removed 22.0 Soil Sampler: 7.8 ATV 04/25/24 After Casing Removed 3.5 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/25/24 After Casing Removed caved @ 8.6 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) 1A SS/17 1-WH-2-2 Topsoil and Organic Material (moist) 0.0 0.5 Brown SILT, little CLAY, trace ROOTS (moist, soft) 1B 0.5 2.0 1 2 2 2.0 SS/16 Brown/Grey mottled SILT, little CLAY (moist, stiff) 4.0 2-4-4-5 8 3 4 3 4.0 6.0 SS/14 2-2-2-3 Brown SILT, trace CLAY (moist, medium stiff) 4 5 6.0 4 8.0 SS/13 4-4-5-5 Similar as above (wet, stiff) 9 6 7 8 5 8.0 10.0 SS/15 4-5-6-6 Similar as above (wet, stiff) 11 9 10 11 12 SS/14 Grey/Brown SILT, little CLAY (wet, soft) 6 13.0 15.0 1-2-1-4 3 13 14

soft)

(wet)

(wet, stiff)

Augered like Cobble @ 18.5'

Continued on Page 2

Grey SILT, some CLAY, little cmf SAND, little mf GRAVEL (wet,

Grey SILT, some CLAY, trace cmf SAND, trace fine GRAVEL

Black highly weathered ROCK Fragments (Shale), some SILT

11

18

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

1-2-1-WH

WR-4-7-10

6-9-9-26

7

8

9

15.0

17.0

19.0

17.0

19.0

21.0

SS/15

SS/14

SS/7

15

16

17

18

19

Test Boring Logs - Page 41 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-537

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522						TEST BOKING	LUG	Project No.	280	)62
	LOG OF BORING SAMPLES						VISUAL CLAS	SIFICATION O			
Depth Scale (Feet)	Sample No.	Sample	e Depth	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20				()		()	Continued from Page 1	10.002	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		ζ- /۷
21											
22	10	22.0	22.0	SS/0	50@0"		Black ROCK Fragments ( Refusal @ 22.0'		of Split Spoon. Aug	er	50+
23							Bottom of Boring @ 22.0	•			
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											

2" OD Split Barrel

04/24/24

While Drilling

04/24/24 Before Casing Removed

3.0

8.5

10.0

17.3

וווו או	g.	CIVIE 4	+3		Son Sampier:		Spiit Barrer			Casing Removed	6.3	1	7.3
Type:		ATV			Hammer Wt:				out				
Rod Siz		AWJ			Hammer Fall:	30 in.					caved @ 9.5		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASS	IFICATION C	OF MATERIA	L	
Depth		Sample	e Depth	Type /	Blows on	Depth of	c	- coarse					SPT "N"
Scale	Sample		ł.)	Sample	Sampler	Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	f - fine		little - 10 to 2	0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.7	SS/12	WH-1-2-5	<u> </u>	Topsoil an						3
	1B	0.7	2.0				Brown/Gro	ey mottled	I SILT,	little CLAY, trac	e ROOTS (mois	st, soft)	
1													
2	2	2.0	4.0	SS/14	3-5-7-8		Brown/Gro	ey mottled	I SILT,	trace CLAY (mo	oist, stiff)		12
3													
				~~									
4	3	4.0	6.0	SS/15	4-5-5-5		Brown SII	T, trace C	CLAY, t	race fine SAND	(moist, stiff)		10
	4												
5													
6	4	6.0	8.0	SS/16	4-5-9-9		Daorra CII	T two as C	T A V (	moist stiff			14
6	4	0.0	8.0	33/10	4-3-9-9		Drown SII	zi, trace C	LAI (	moist, stiff)			14
7													
,													
8	5	8.0	10.0	SS/13	2-2-2-3		Grey SILT	little CI	ΔV (we	et, medium stiff)			4
0	3	0.0	10.0	55/15	2-2-2-3		GICY SIL1	, muc CL	AI (WC	t, medium sum)			-
9													
10	6	10.0	12.0	SS/14	2-2-2-2		Grev SILT	. trace CI	AY (we	et, medium stiff)			4
10		10.0	12.0	22,1.				, 02		ou, 1110 ordini surri)			
11													
12	7	12.0	14.0	SS/*	WH-1-WR-1		Grey SILT	, little CL	AY, tra	ce fine SAND (v	vet, very soft)		1
											•		
13													
14	8	14.0	16.0		3-6-8-40		Dark Grey	/Black hig	ghly wea	athered ROCK F	ragments (Shale	) and	14
							SILT (wet	)					
15													
16							Augers ha						
							Augers ver	-					
17	9	17.3	17.5	SS/0	50@3"					tip of Split Spoor	ı. Split Spoon a	nd	50+
] , -							Auger Ref						
18							Bottom of	Boring @	17.3'				]
19													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \* recovery length not measured

Driller:

Inspector:

Drill Rig:

K. Crandall

C. O'Hara

CME 45

**Casing Hammer:** 

Soil Sampler:

Other:

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 43 of 201 Boring No. B-539 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/25/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/25/24 Surface Elev. 387.5' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. Depth (Ft.) **Date** Time Casing At (Ft.) Driller: K. Crandall Casing Hammer: C. O'Hara While Drilling Inspector: Other: 04/25/24 1.0 8.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/25/24 Before Casing Removed 8.2 15.7 Soil Sampler: ATV 04/25/24 After Casing Removed 2.2 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/25/24 After Casing Removed caved @ 7.3 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.4 SS/16 WH-1-3-4 Topsoil and Organic Material (moist) 0.0 4 2.0 Brown SILT, trace CLAY, trace ROOTS (moist, medium stiff) 1B 0.4 1 2 2 2.0 SS/15 3-5-5-4 Brown/Grey mottled SILT, trace CLAY (moist, stiff) 10 4.0 3 4 3 4.0 6.0 SS/11 4-5-5-4 Similar as above (moist, stiff) 10 5 6.0 4 8.0 SS/13 3-3-3-2 Grey/Brown SILT, trace CLAY (wet, medium stiff) 6 6 7 Grey SILT, little CLAY (moist, medium stiff) 8 5 8.0 10.0 SS/17 2-2-3-2 5 9 10 11 Augers gravelly beginning @ 11.0' Augers harder beginning @ 11.5' 12 SS/11 29 6 13.0 15.0 11-16-13-9 Dark Grey/Black ROCK Fragments (Dolostone) (wet) 13 14

Augers harder beginning @ 15.3'

Bottom of Boring @ 15.7'

Split Spoon and Auger Refusal @ 15.7'

50+

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@0"

15

16

17

18

19

7

15.7

15.7

SS/0

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 44 of 201 Boring No. **B-540** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/26/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/26/24 Surface Elev. 389.7' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/26/24 5.0 15.0 **Drill Rig: CME 55** 2" OD Split Barrel 04/26/24 Before Casing Removed 19.1 Soil Sampler: 6.9 ATV 04/26/24 After Casing Removed 7.0 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/26/24 After Casing Removed caved @ 7.8 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) 1A 0.0 0.3 SS/14 Topsoil and Organic Material (moist) 1-1-1-5 2.0 Brown SILT, trace CLAY (moist, soft) 1B 0.3 1 2 2 2.0 SS/17 3-5-5-5 10 4.0 Similar as above (moist, stiff) 3 4 3 4.0 6.0 SS/13 Similar as above (moist, stiff) 10 4-6-4-3 5 6.0 4 8.0 SS/15 4-6-7-6 Brown SILT, trace CLAY, trace fine SAND (moist, stiff) 13 6 7 Brown SILT, trace CLAY, trace cmf SAND (wet, stiff) 8 5 8.0 10.0 SS/18 4-4-5-6 9 9 10 11 12 SS/17 WR-WH-3-5 Grey/Brown CLAY, some SILT, trace cmf SAND, trace fine 6 13.0 15.0 3 13 GRAVEL (wet, soft) 14

stiff)

Grey CLAY, some SILT, little mf GRAVEL, trace cmf SAND (wet,

Black highly weathered ROCK Fragments (Shale), some SILT (wet)

Split Spoon and Auger Refusal @ 19.1'

Bottom of Boring @ 19.1'

12

50 +

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

5-7-5-4

20-50@5"

50@0"

Remarks:

7

8

9

15.0

18.0

19.1

17.0

9.0

19.1

SS/3

SS/0

15

16

17

18

19

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 45 of 201 Boring No. B-541 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 04/26/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/26/24 Surface Elev. 385.3' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/26/24 11.7 13.0 **Drill Rig: CME 55** 2" OD Split Barrel 04/26/24 Before Casing Removed 19.1 Soil Sampler: 5.0 ATV 04/26/24 After Casing Removed 4.5 8.0 Type: **Hammer Wt:** 140 lbs. Rod Size: AWJ **Hammer Fall:** 30 in. 04/26/24 After Casing Removed caved @ 11.1 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) 1A 0.3 SS/14 Topsoil and Organic Material (moist) 0.0 1-1-1-5 2.0 Brown SILT, little CLAY (moist, soft) 1B 0.3 1 2 2 2.0 SS/17 5-9-9-9 Brown/Grey mottled SILT, trace CLAY (moist, very stiff) 18 4.0 3 4 3 4.0 6.0 SS/13 8-7-7-7 Brown SILT, trace fine SAND, trace CLAY (moist, stiff) 14 5 6.0 4 8.0 SS/14 9-7-5-5 Brown SILT, trace CLAY (wet, stiff) 12 6 7 8 5 8.0 10.0 SS/15 4-4-4-4 Brown/Grey SILT, little CLAY (wet, stiff) 8 9 10 11 12 SS/10 6 13.0 15.0 1-3-5-6 Brown/Grey SILT, little mf GRAVEL, trace cmf SAND, trace 8 13 CLAY (wet, stiff) 14

Augers gravelly beginning @ 15.5'

Augers harder beginning @ 17.3'

Bottom of Boring @ 19.1'

Split Spoon and Auger Refusal @ 19.1'

Black highly weathered ROCK Fragments (Dolostone), some SILT

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

31-50@5"

50@0"

SS/11

SS/0

19.6

19.7

15

16

17

18

19

7

8

18.7

19.6

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

15

16

17

18

19

	METHODS C	OF INVESTIGATION	ON	GROUNDWATER OBSERVATIONS					
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.	Date	Time	Donth (Et.)	Cosing At (Et.)		
Driller:	Ryan Casatelli	Casing Hammer:		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Inspector:		Other:	NQ-Core	04/25/24	While Drilling	5.3	13.5		
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel	04/25/24	Before Casing Removed	None Noted	30.1		
Type:	ATV	Hammer Wt:	140 lbs.	04/25/24	After Casing Removed	4.2 *	out		
Rod Size:	AWJ	Hammer Fall:	30 in.	04/25/24	After Casing Removed	8.6	out		

Rod Size	e:	AWJ			Hammer Fall:	30 in.	04/25/24 Afte	er Casing Removed	8.6	out		
	LO	G OF	BOR	ING SA	MPLES	VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale	Sample	(F	Depth	Type / Sample	Blows on Sampler	Depth of Change	m - medium		% / some - 20 to 35%	SPT "N" or		
(Feet)	No.	From 0.0	To 2.0	Rec. (in.) SS/15	Per 6 Inches WH-1-1-1	(Ft.)	f - fine Brown SILT, little CLAY		0% / trace - 0 to 10% EL. trace cmf SAN	RQD % D. 2		
1	1	0.0	2.0	55/13	WILLI		trace ORGANIC MATER		DE, trace chir Starv			
2	2	2.0	4.0	SS/19	2-4-5-7		Brown/Grey mottled SILT MATERIAL (moist, stiff)		ce ORGANIC	9		
4	3	4.0	6.0	SS/23	4-4-4-5		Brown SILT, trace CLAY	(wet, stiff)		8		
5												
6	4	6.0	8.0	SS/18	6-5-5-5		Brown SILT, trace CLAY	(wet, stiff)		10		
7												
8	5	8.0	10.0	SS/17	3-6-7-6		Brown SILT, trace CLAY	, trace fine SAND	(wet, stiff)	13		
9												
10												
11												
12						ļ						
13	6	13.5	15.0	SS/12	6-6-5		Grey SILT, some mf GRA	VEL, trace cmf S	AND. trace CLAY	11		
14							(wet, stiff)	,	,			
15												
16												
17												
18	7	18.5	18.9	SS/5	50@5"		Grey highly weathered RC	OCK Fragments (S	hale) (wet)	50+		
19	,	10.5	10.7	55/5	3003		olo, mgm, weamered Re	our rugments (D.	imio, (wor)	301		
20							Continued on Page 2					

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \*Water added to boring for coring.

Test Boring Logs - Page 48 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315,701,0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-543

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BURING	ւսց	Project No.	28	062
	LOG OF BORING SAMPLES						VISUAL CLAS	SIFICATION (	=		
Depth Scale	Sample	Sample (F	e Depth	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%	)	SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine	little - 10 to 2	20% / trace - 0 to 10%		RQD %
20 21 22	R-1	20.2	25.2	C/58	NQ-Core		Continued from Page 1  Auger Refusal @ 20.2'. S  Grey DOLOSTONE with thick), slightly weathered, medium hard to hard. Weather and the second s	interbedded SHAl thinly laminated t athered horizontal	o medium bedded I fractures @ 22.2	l,	67%
23							24.2'. Broken and fracture Recovery: 58"/60" = 97% 18 Pieces, 3" Chips and Fi 1:00 min/ft, no water loss Coring conducted in 4th g	RQD: 40"/60" =   ragments   ragment, 1500 rpm, 70	= 67% 00 psi down pressi		
25 26 27	R-2	25.2	30.2	C/57	NQ-Core		Grey DOLOSTONE with thick), slightly weathered, hard to hard. Weathered 1 27.3 - 27.4 and 29.1'. Broand 28.8' - 28.9'.	thinly laminated t	o thinly bedded, res @ 25.7', 25.9',	nedium	58%
28							Recovery: 57"/60" - 95% 24 Pieces, 4" Chips and Fi 1:00 min/ft, no water loss	-	58%		
29							Coring conducted in 4th g	gear, 1500 rpm, 70	00 psi down pressi	ure.	
30							Bottom of Boring @ 30.2				
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44	1										

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 49 of 201 Boring No. **B-544** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/24/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/24/24 Surface Elev. 381.6' Location: See Exploration Location Plan METHODS OF INVESTIGATION GROUNDWATER OBSERVATIONS Driller: Beau Fletcher Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: Inspector: NO-Core 04/24/24 While Drilling 5.0 13.5 Other: Drill Rig: Soil Sampler: 2" OD Split Barrel 04/24/24 Before Casing Removed None Noted 30.5 CME 55 ATV 04/24/24 After Casing Removed 2.4 \* Type: Hammer Wt: 140 lbs. out AWJ Rod Size: **Hammer Fall:** 30 in. 04/24/24 After Casing Removed caved @ 11.5 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change RQD % From То Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC 0 1 0.0 2.0 SS/14 WH-1-3-4 4 MATERIAL (moist, medium stiff) 1 2 2 SS/20 3-3-5-5 Brown SILT, trace CLAY (moist, stiff) 2.0 4.0 8 3 4 3 4.0 6.0 SS/22 Brown SILT, trace CLAY (wet, stiff) 9 2-4-5-4 5 4 6.0 8.0 SS/19 4-5-8-6 Brown SILT, trace CLAY, trace fine SAND (wet, stiff) 13 6 7 8 5 8.0 10.0 SS/12 4-3-11-13 Brown cmf GRAVEL, some SILT, trace cmf SAND (wet, medium 14 compact) 9 10 11 12 6 12.5 15.0 SS/13 12-12-12 Grey/Brown cmf GRAVEL, some cmf SAND, trace SILT (wet, 24 13 medium compact) 14

Auger Refusal @ 15.5'. Set up to core.

17 Pieces, 9" Chips and Fragments

1:00 min/ft, no water loss

Continued on Page 2

Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0"

thick), slightly weathered, thinly laminated to thinly bedded, hard.

Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.

Broken and fractured zones @ 16.4' - 16.6' and 17.5' - 18.5'. Weathered zones (1/2" - 3 1/4" thick) @ 16.7' and 18.3'.

Recovery:  $60''/60'' = 100\% \mid ROD: 24''/60'' = 40\%$ 

40%

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

NQ-Core

**Remarks:** \*Water added to boring for coring.

20.5

C/60

15

16

17

18

19

R-1

15.5

Test Boring Logs - Page 50 of 201

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-544

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BUKING	LUG	Project No.	28	062		
	LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.		e Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	R-2	20.5		C/60	NQ-Core	(- 11)	Continued from Page 1 Grey DOLOSTONE with				83%		
21					-		thick), slightly weathered, Broken and weathered zon	thinly laminated thes @ 21.5' - 21.6	to thinly bedded,	hard.			
22							Recovery: 60"/60" = 100" RQD: 50"/60" = 83%						
23							17 Pieces, 2" Chips and Fi 1:00 min/ft, no water loss Coring conducted in 4th g		00 nei down nroes	uro			
25							Coring Conducted in 4in g	ear, 1300 rpm, 70	oo psi aown press	ure.			
26							Bottom of Boring @ 25.5						
27													
28													
29													
30													
31													
32													
34													
35	<u> </u>												
36													
37													
38													
39													
40													
42													
43													
44													
45	1												

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 51 of 201 Boring No. **B-545** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 04/26/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/26/24 Surface Elev. 392.6' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: While Drilling Inspector: NQ-Core 04/26/24 4.2 23.5 Other: **Drill Rig:** 2" OD Split Barrel 04/26/24 Before Casing Removed None Noted 35.2 CME 55 Soil Sampler: ATV 04/26/24 After Casing Removed 4.2 \* Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/26/24 After Casing Removed caved @ 9.1 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" c - coarse Depth Blows on Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change RQD % From То Per 6 Inches f - fine little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) Rec. (in.) 2.0 SS/16 1-2-4-5 Brown/Grey mottled SILT, trace CLAY (moist, medium stiff) 0.0 6 1 2 2 2.0 SS/18 6-6-5-6 Brown SILT, trace CLAY (wet, stiff) 4.0 11 3 4 3 4.0 6.0 SS/20 Brown SILT, little CLAY (wet, stiff) 8 4-4-4-4 5 4 6.0 8.0 SS/16 Brown SILT, trace CLAY (wet, stiff) 8 6 2-4-4-5 7 8 5 8.0 10.0 SS/21 3-3-3-4 Similar as above (wet, medium stiff) 6 9 10

Brown/Grey SILT, little cmf SAND, little CLAY, trace fine

Grey cmf GRAVEL, little SILT, trace cmf SAND (wet, loose)

GRAVEL (wet, stiff)

Continued on Page 2

8

7

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

3-3-5

2-3-4

**Remarks:** \* Water added to boring for coring.

20.0

11

12

13

14

15

16

17

18

19

13.5

18.5

6

7

15.0

SS/14

SS/6

Test Boring Logs - Page 52 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone 315 701 0533

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-545

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522 LOG OF BORING SAMPLES						TEST BURING	LUG	Project No.	28062
	LO	G OF	BOR	ING SA	MPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL	
Depth Scale (Feet)	Sample No.		e Depth et.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%	SPT "N or RQD %
<ul><li>20</li><li>21</li><li>22</li></ul>							Continued from Page 1			
23 24	8	23.5	25.0	SS/16	13-35-35		Dark Grey weathered RO	CK Fragments (De	olostone) (wet)	70
25 26 27	R-1	25.7	30.7	C/60	NQ-Core		Auger Refusal @ 25.7'. S Grey DOLOSTONE with thick), slightly weathered, hard to hard.	interbedded SHA laminated to thin	ly bedded, medium	77%
28 29 30							Weathered and broken zo SILT seam @ 26.8' - 27.1 Recovery: 60"/60" = 100 16 Pieces, 5" Chips and F 1:00 - 2:30 min/ft, no wat Coring conducted in 4th s	'. %   RQD: 46"/60" ragments <i>er loss</i>	= 77%	
31 32	R-2	30.7	35.7	C/59	NQ-Core	Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.  Grey DOLOSTONE with interbedded SHALE layers (1/8" - 2" thick), slightly weathered, laminated to medium bedded, medium hard to hard.  Weathered and broken zone @ 31.8' - 32.0'.  CALCITE deposit (~ 1" thick) @ 34.2'.				
33 34 35							Recovery: 59"/60" = 98% 9 Pieces, 2" Chips and Fra 1:00 min/ft, no water loss Coring conducted in 4th §	agments		2.
36							Bottom of Boring @ 35.7	,		
37 38										
39										
41										
42 43										
44										

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 53 of 201 Boring No. **B-546** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/22/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/22/24 Surface Elev. 394.5' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: While Drilling Inspector: Other: 04/22/24 14.0 18.5 04/22/24 **Drill Rig: CME 550X** Soil Sampler: 2" OD Split Barrel Before Casing Removed 11.5 22.5 ATV 04/22/24 After Casing Removed None Noted Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/22/24 After Casing Removed caved @ 5.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % No. From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) Rec. (in.) (Ft.) f - fine 1A 1.0 SS/16 1-WH-4-7 Topsoil and Organic Material (moist) 0.0 4 1 1B 1.0 2.0 Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, medium stiff) 2 2 2.0 SS/22 6-8-7-7 Brown/Grey mottled SILT, trace CLAY, trace fine SAND (wet, very 15 4.0 stiff) 3 4 3 4.0 6.0 SS/18 2-3-3-4 Brown SILT, trace CLAY (wet, medium stiff) 6 5 6.0 4 8.0 SS/20 1-2-2-3 Brown SILT, little CLAY (wet, medium stiff) 6 4 7 Brown/Red SILT, little CLAY, little cmf SAND, trace fine SS/17 8 5 8.0 10.0 8-7-2-4 9 GRAVEL (wet, stiff) 9 10 11 12 13 13.5 15.0 **SS/8** 10-11-16 Brown SILT and cmf GRAVEL, little cmf SAND, trace CLAY 27 6 14 (wet, very stiff)

Grey mf GRAVEL, little cmf SAND, little SILT (wet, medium

19

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

compact)

Continued on Page 2

7-7-12

Remarks:

15

16

17

18

19

7

18.5

20.0 SS/11

Test Boring Logs - Page 54 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-546

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BORING I	<i>1</i> 00	Project No.	280	062
	LOG OF BORING SAMPLES  pth Sample Depth Type / Blows on						VISUAL CLASS	SIFICATION (			
Depth Scale (Feet)	Sample No.	ample No.         (Ft.)         Sample Sampler         Change (Ft.)         m - medium         and - 35 to 50% / some - 20 to 35%           No.         From To Rec. (in.)         Per 6 Inches         (Ft.)         f - fine         little - 10 to 20% / trace - 0 to 10%							SPT "N" or RQD %		
20							Continued from Page 1				
21											
22	8	22.5	22.5	SS/0	50@0"		Split Spoon and Auger Ret	fusal @ 22 5'			50+
23		22.3	22.3	33/0	30@0		Split Spoon and Auger Ref Bottom of Boring @ 22.5'	usui & 22.5			301
24											
25											
26											
27											
28											
29	-										
30											
32											
33											
34											
35	_										
36											
37											
38											
39 40											
41											
42											
43											
44											
45	1										

2" OD Split Barrel 04/25/24 Before Casing Removed

31.0

None Noted

		CIVIL	, ,		Son Sampler.			Before Cashig Removed	None Noted	31.0
Type:		ATV			Hammer Wt:	Fall: 30 in. 04/25/24 After Casing Removed caved @ 8.1 out				
Rod Size	e:	AWJ			Hammer Fall:	30 in.	04/25/24	After Casing Removed	caved @ 8.1	out
	LO	G OF	BOR	ING SA	AMPLES		VISUAL C	LASSIFICATION C	F MATERIAL	
D 4		Sample								CDT IINII
Depth	G 1	Sample (F		Type /	Blows on	Depth of	c - coarse	1 25 4 50	20 . 250	SPT "N"
Scale	Sample	From	To	Sample	Sampler Per 6 Inches	Change	m - medium f - fine		% / some - 20 to 35%	or
(Feet)	No.			Rec. (in.)		(Ft.)			0% / trace - 0 to 10%	RQD %
0	1	0.0	2.0	SS/17	1-1-4-5			CLAY, trace ORGANIC	MATERIAL (Wet,	5
							medium stiff)			
1										
2	2	2.0	4.0	SS/18	5-5-5-6		Brown SILT, trace C	CLAY (wet, stiff)		10
3										
4	3	4.0	6.0	SS/24	4-4-4-5		Brown/Grey SILT, to	race CLAY (wet, stiff)		8
5										
6	4	6.0	8.0	SS/16	4-5-6-9	Similar as above (wet, stiff)				11
	•	0.0	0.0	55/10	1307	Similar as above (wet, smr)				11
7										
/										
	~	0.0	10.0	00/10	7555		D CH T 1'41 C	OT A \$7.7		10
8	5	8.0	10.0	SS/19	7-5-5-5		Brown SILT, little C	LAY (wet, stiff)		10
9										
10										
11										
12										
13										
	6	13.5	15.0	SS/4	3-2-3		Brown/Grev SILT. 1	ittle mf GRAVEL, trace	cmf SAND, trace	5
14	Ü	10.0	10.0	22,	020		CLAY (wet, medium		· · · · · · · · · · · · · · · · · · ·	
17							CLITT (wet, meatan	1 30111)		
15										
13										
10						·	Augonod commille	ainnina (0.16 0)		
16							Augered gravelly be	ginning @ 16.0°		
1										
17										
1										
18										
1	7	18.5	18.8	SS/3	50@3"		Grey/Black cmf GRA	AVEL, little cmf SAND	, trace SILT (wet, ve	ery 50+
19							compact)			
1										
20							Continued on Page 2	2		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \*Water added to boring for coring.

Drill Rig:

**CME 55** 

Soil Sampler:

Test Boring Logs - Page 56 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315, 701, 0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-547

 Page No.
 2 of 2

 Project No.
 28062

<b>Associates, Inc.</b> Phone: 315-701-0522					315-701-0522	Project No. 28062						
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample   Sample   Depth   Type / Sample   Sample   Sample   Sample   Sampler   Per 6 Inches				Sampler	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%				
20	NO.	Pioni	10	Rec. (III.)	rei o inches	(Ft.)	Continued from Page 1	ntue - 10 to 2	20% / trace - 0 to 10%	RQD %		
21 22	R-1	21.0	26.0	C/56	NQ-Core		Auger Refusal @ 21.0'. Set up to core.  Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 1" thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.					
23 24							Broken and fractured zone Weathered horizontal frac Recovery: 56"/60" = 93% 22 Pieces, 8" Chips and F.	etures @ 21.4', 21. 5   RQD: 17"/60" =	.7', 22.6' and 23.2'.			
25							1:00 min/ft, no water loss					
26	R-2	26.0	31.0	C/59			Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.  Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to thinly bedded, medium					
27							hard to hard.  Weathered horizontal frac	atuma @ 27.0'				
28							Recovery: 59"/60" = 98% 10 Pieces, 4" Chips and F	6   RQD: 54"/60" =	= 90%			
29							1:00 min/ft, no water loss					
30	! !						Coring conducted in 4th g	gear, 1500 rpm, 70	)O psi down pressure.			
31							Bottom of Boring @ 31.0	,				
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45	1					1						

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 57 of 201 Boring No. **B-548** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/22/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/22/24 Surface Elev. 393.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/22/24 6.8 13.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/22/24 Before Casing Removed 20.8 Soil Sampler: 5.3 ATV 04/22/24 After Casing Removed None Noted Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/22/24 After Casing Removed caved @ out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.5 SS/11 Topsoil and Organic Material (moist) 0.0 1-1-3-5 Brown SILT, trace CLAY (moist, medium stiff) 1B 0.5 2.0 1 2 2 2.0 SS/14 3-4-5-5 Brown/Grey mottled SILT, trace CLAY (moist, stiff) 9 4.0 3 4 3 4.0 6.0 SS/13 3-4-5-5 Brown SILT, little CLAY (moist, stiff) 9 5 6.0 4 8.0 SS/12 2-1-4-5 Brown SILT, trace CLAY (wet, medium stiff) 5 6 7 8 5 8.0 10.0 SS/14 4-5-6-5 Similar as above (wet, stiff) 11 9 10 11 Augers harder like Cobble @ 12.0' 12 15.0 SS/9 7-25-23-30 Grey/Brown cmf GRAVEL and SILT, trace cmf SAND (wet, 13 6 13.0 48 compact) 14

Grey/Brown cmf GRAVEL, some SILT, trace cmf SAND (wet,

cmf SAND (moist) Continued on Page 2

Black highly weathered ROCK Fragments (Shale) and SILT, trace

41

 $SS - Split \ Spoon, \ U - Undisturbed \ Tube, \ C - Core, \ WH - Weight \ of \ Hammer + Rod, \ WR - Weight \ of \ Rod$ 

17-23-18-30

15

16

17

18

19

7A

7B

18.0

18.5

18.5

20.0

SS/12

Test Boring Logs - Page 58 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-548

 Page No.
 2 of 2

 Project No.
 28062

						Project No. 28062						
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth	epth Sample Depth Type / Blows on						c - coarse				SPT "N"	
Scale	Sample	From	t.) To	Sample	Sampler	Depth of Change	m - medium		0% / some - 20 to 35%		or	
(Feet)	No.	From	10	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%		RQD %	
							Augers harder beginning	@ 20.8'				
21	8	20.8	20.8	SS/0	50@0"		Split Spoon Refusal - No I	Recovery			50+	
22							Bottom of Boring @ 20.8'					
22												
23												
24												
24												
25	1											
2.6												
26												
27												
20												
28												
29												
30	•											
30												
31												
32												
32												
33												
34												
<i>3</i> i												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45	1											

Boring No. **B-549** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/22/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/22/24 Surface Elev. 391.3' Location: See Exploration Location Plan

METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: While Drilling Inspector: NQ-Core 04/22/24 9.5 25.1 Other: **Drill Rig:** 2" OD Split Barrel 04/22/24 Before Casing Removed None Noted 35.1 **CME 550X** Soil Sampler: ATV 3.8 \* 04/22/24 After Casing Removed Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/22/24 After Casing Removed caved @ 5.4 out

LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) and - 35 to 50% / some - 20 to 35% Scale Sample Sampler m - medium Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) 1A 0.5 SS/17 WH-2-3-5 Topsoil and Organic Material (moist) 0.0 5 Brown/Grey mottled SILT, little CLAY, trace fine SAND (moist, 2.0 1B 0.5 1 medium stiff) 2 2 2.0 SS/20 6-5-6-6 Brown/Grey mottled SILT, little CLAY (moist, stiff) 4.0 11 3 4 3 4.0 6.0 SS/24 3-4-3-3 Brown SILT, trace CLAY (wet, medium stiff) 7 5 6.0 4 8.0 SS/19 3-3-4-4 Similar as above (wet, medium stiff) 7 6 7 8 5 8.0 10.0 SS/20 2-3-4-6 Similar as above (wet, medium stiff) 7 9 10 11 12 13 13.5 15.0 SS/16 2-4-4 Brown/Red SILT and mf SAND, trace CLAY (wet, stiff) 8 6 14 15 16 17 18 7 20.0 SS/12 8-14-12 Dark Grey cmf GRAVEL, some SILT, little cmf SAND (wet, very 18.5 26 19 stiff)

Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \*Water added to boring for coring.

Test Boring Logs - Page 60 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone 315, 701, 0523

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-549

 Page No.
 2 of 2

 Project No.
 28062

	<b>Associates, Inc.</b> Phone: 315-701-0522					Project No. 28062						
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.		e Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%				
<ul><li>20</li><li>21</li><li>22</li></ul>							Continued from Page 1					
<ul><li>23</li><li>24</li></ul>	8	23.5	25.0	SS/12	27-26-31		Dark Grey cmf GRAVEL cmf SAND, trace SILT (w		-	ace 57		
25 26	R-1	25.1	30.1	C/57	NQ-Core		•	et up to core. interbedded SHALE layers (<1/8" - 2", thinly laminated to thinly bedded, medium				
27 28							Broken and fractured zond broken zone (1/2" thick) @ Recovery: 57"/60" = 95% 16 Pieces, 3" Chips and F	② 25.9'. SILT sear o   RQD: 39"/60"	m (1/8" thick) @ 27	7.8'.		
30	R-2	30.1	35.1	C/60	NQ-Core		1:15 min/ft, no water loss Coring conducted in 4th g Grey DOLOSTONE with thick), slightly weathered,	interbedded SHA	LE layers (<1/8" - 1			
31 32 33							medium hard to hard.  Recovery: 60"/60" = 100'  RQD: 60"/60" = 100%  11 Pieces, 0" Chips and Filippe 1:00 min/ft, no water loss	ragments				
34							Coring conducted in 4th g	ear, 1700 rpm, 70	00 psi down pressui	re.		
35 36							Bottom of Boring @ 35.1					
37 38												
39 40												
41 42												
43 44												
45		1				1						

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 61 of 201 Boring No. B-552 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/22/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/22/24 Surface Elev. 390.3' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/22/24 5.4 6.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/22/24 Before Casing Removed 22.8 Soil Sampler: 7.0 ATV 04/22/24 After Casing Removed 3.7 Type: **Hammer Wt:** 140 lbs. out AWJ Rod Size: **Hammer Fall:** 30 in. 04/22/24 After Casing Removed caved @ 8.5 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) and - 35 to 50% / some - 20 to 35% Scale Sample Sampler m - medium Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) 1A 0.5 SS/12 1-2-3-2 Topsoil and Organic Material (moist) 0.0 5 Brown SILT, trace CLAY, trace cmf SAND, trace ORGANIC 1B 0.5 2.0 1 MATERIAL (moist, medium stiff) 2 2 2.0 SS/13 Brown SILT, some CLAY (moist, medium stiff) 7 4.0 2-4-3-3 3 4 3 4.0 6.0 SS/18 2-1-1-2 Brown CLAY and SILT (moist, soft) 2 5 6.0 4 8.0 SS/15 1-1-1-1 Brown SILT, some CLAY (wet, soft) 2 6 7 8 5 8.0 10.0 SS/13 1-4-5-5 Brown SILT, trace CLAY (wet, stiff) 9 9 10 11 12 SS/11 6 13.0 15.0 2-1-3-2 Similar as above (wet, medium stiff) 13 4 14

Similar as above (wet, stiff)

SAND (wet, medium stiff)

Continued on Page 2

Brown/Grey SILT, some mf GRAVEL, little CLAY, trace cmf

9

7

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

3-5-4-4

2-3-4-3

Remarks:

7

8

15.0

17.0

17.0

19.0

SS/16

SS/14

15

16

17

18

19

Test Boring Logs - Page 62 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-552

 Page No.
 2 of 2

 Project No.
 28062

Associates, Inc. Phone: 315-701-0522 LOG OF BORING SAMPLES							TEST BORING L	.OG	Project No.	28062			
						VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.					Sample Depth (Ft.) Blows on Depth of Change m - medium and - 35 to 50% / some - 20 to 35%							SPT "N or RQD %
20	1101			ree (iii)	1010 11010	(2.1)	Continued from Page 1	10.00	3707 11400 0 10 1070	1100 %			
22						ļ	Augers harder beginning (						
<ul><li>23</li><li>24</li></ul>	9	23.0	23.7		19-50@2"		Grey cmf GRAVEL, some compact)  Auger Refusal @ 23.7'		SAND (wet, very	50+			
25							Bottom of Boring @ 23.7'						
<ul><li>26</li><li>27</li></ul>													
28													
29													
30													
31													
33													
34													
35 36													
37													
38													
39 40													
41													
42													
43 44													
45													

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 63 of 201 Boring No. B-553 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. 28062 Phone: 315-701-0522 Project No. Project Name: Micron Campus, Clay, New York 04/25/24 **Date Started** Client: Ramboll **Date Finished** 04/25/24 Surface Elev. 383.2' Location: See Exploration Location Plan **GROUNDWATER OBSERVATIONS** METHODS OF INVESTIGATION Driller: H. Lyon 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** Inspector: C. O'Hara Other: 04/25/24 While Drilling 3.0 6.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 04/25/24 Before Casing Removed 3.4 12.8 After Casing Removed ATV **Hammer Wt:** 140 lbs. 04/25/24 2.1 Type: out **Rod Size:** AWJ **Hammer Fall:** 30 in. 04/25/24 After Casing Removed caved @ 3.8 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % (Feet) No. Per 6 Inches little - 10 to 20% / trace - 0 to 10%Rec. (in.) (Ft.) f - fine Topsoil and Organic Material (moist) 1A 0.0 0.5 SS/13 1-WH-5-5 0 5 Brown/Grey/Orange mottled SILT, trace CLAY (moist, medium 1B 0.5 2.0 1 2 2 2.0 SS/14 5-5-5-4 Brown SILT, little mf GRAVEL, trace cmf SAND, trace CLAY 10 4.0 (moist, stiff) 3 4 3 4.0 6.0 SS/16 5-16-33-22 Dark Grey/Brown ROCK Fragments (Shale), little cmf SAND, 49 trace fine GRAVEL, trace SILT (moist) 5 Augers like Cobble beginning @ 3.5' 4 6.0 8.0 SS/144-11-12-19 Brown mf GRAVEL and SILT, some cmf SAND (wet, medium 23 6 compact) 7 SS/15 8 5 8.0 10.0 7-14-17-14 Brown cmf GRAVEL and cmf SAND, trace SILT (wet, compact) 31 9 10 11 Grey ROCK Fragments (Shale) (wet) SS/2 50 +12 6 12.2 12.4 50@2" Auger Refusal @ 12.8' 7 12.9 12.9 SS/0 50@0" No Recovery, Split Spoon and Auger Refusal @ 12.9' 50+ 13 Bottom of Boring @ 12.9' 14

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

15

16

17

18

19

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 64 of 201 Boring No. **B-554** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/24/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/24/24 Surface Elev. 393.8' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. Depth (Ft.) **Date** Time Casing At (Ft.) Driller: K. Crandall Casing Hammer: While Drilling Inspector: C. O'Hara Other: 04/24/24 2.0 8.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/24/24 Before Casing Removed 11.0 22.4 Soil Sampler: ATV 04/24/24 After Casing Removed 4.0 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/24/24 After Casing Removed caved @ 8.3 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) and - 35 to 50% / some - 20 to 35% Scale Sample Sampler m - medium Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.5 SS/12 1-WH-1-1 Topsoil and Organic Material (moist) 0.0 Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, 2.0 1B 0.5 1 2 2 SS/16 Brown SILT, trace CLAY (moist, medium stiff) 2.0 4.0 2-4-4-5 8 3 4 3 4.0 6.0 SS/13 3-2-2-4 Similar as above (moist, medium stiff) 4 5 6.0 4 8.0 SS/15 3-4-3-4 Similar as above (moist, medium stiff) 7 6 7 Similar as above (moist, medium stiff) 8 5 8.0 10.0 SS/17 3-3-4-5 7 9 10 11 Augers harder like Cobble @ 11.0' 12 SS/14 5-20-18-16 Brown cmf SAND, some SILT, trace fine GRAVEL (moist, 6 13.0 15.0 38 13 compact) 14

Brown/Grey cmf SAND and SILT, little fine GRAVEL (wet,

medium compact)

Continued on Page 2

11

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

WH-3-8-16

Remarks:

15

16

17

18

19

7

18.0

20.0

SS/16

Test Boring Logs - Page 65 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315, 701, 0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-554

 Page No.
 2 of 2

 Project No.
 28062

<b>Associates, Inc.</b> Phone: 315-701-0522						Project No. 2806					062	
LOG OF BORING SAMPLES							VISUAL CLASSIFICATION OF MATERIAL					
Depth Scale (Feet)	Sample No.	Sample	Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	and - 35 to 50% / some - 20 to 35% little - 10 to 20% / trace - 0 to 10%			
20	110.	110111	10	100. (III.)	Tor o mones	(11.)	Continued from Page 1	nuc 10 to 2	25,5 / 11400 0 10 10 /0		RQD %	
21 22	8	21.0	22.4	SS/10	31-30-50@5"		Augers like Rock beginnin Grey highly weathered RO (moist, hard)		Shale), some SILT	- — -	50+	
23	9	22.4	23.7		38-42-27-50@2"		Auger Refusal @ 22.4' Similar as above (wet)				69	
24							Bottom of Boring @ 23.7					
25	<u> </u>											
26												
27												
28												
29												
30	1											
31												
32												
33												
34												
35												
36												
37												
38												
39												
40	1											
41												
42												
43												
44												
45												

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 66 of 201 Boring No. **B-555** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 05/03/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/03/24 Surface Elev. 386.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall Casing Hammer: While Drilling Inspector: C. O'Hara Other: 05/03/24 5.7 8.0 **Drill Rig: CME 45** 2" OD Split Barrel 05/03/24 Before Casing Removed 20.7 Soil Sampler: 7.3 ATV 05/03/24 After Casing Removed 6.7 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/03/24 After Casing Removed caved @ 13.5 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A SS/13 WH-1-1-2 Topsoil and Organic Material (moist) 0.0 0.6 Brown SILT, some CLAY, trace fine SAND (moist, soft) 1B 0.6 2.0 1 2 2 2.0 SS/14 Brown/Grey mottled CLAY, little SILT (moist, medium stiff) 4.0 1-2-4-3 6 3 4 3 4.0 6.0 SS/12 1-2-3-3 Brown/Grey mottled CLAY, some SILT (moist, medium stiff) 5 5 6.0 4 8.0 SS/11 3-4-4-5 Brown SILT, trace CLAY (wet, stiff) 8 6 7 8 5 8.0 10.0 SS/24 4-4-5-7 Similar as above (wet, stiff) 9 9 10 11 12 SS/18 13 6 13.0 15.0 2-3-3-3 Brown SILT, little CLAY (wet, medium stiff) 6 14

Dark Grey/Black SILT and cmf GRAVEL, little CLAY, trace cmf

SAND (moist, very stiff)

Continued on Page 2

19

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

8-9-10-9

Remarks:

15

16

17

18

19

7

18.0

20.0

SS/11

Test Boring Logs - Page 67 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-555

 Page No.
 2 of 2

 Project No.
 28062

Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
Scale	Sample	(F	t.)	Sample	Sampler	Change	m - medium		0% / some - 20 to 35%		or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%		RQD %
20							Augers like Rock beginnin	ng @ 20.5'			
21	8	20.7	20.7	SS/0	50@0"		Split Spoon and Auger Re	fusal @ 20.7'			50+
							Bottom of Boring @ 20.7				
22											
23											
24											
25	_										
26											
27											
20											
28											
29											
20											
30											
31											
32											
33											
2.4											
34											
35	_										
2.5											
36											
37											
20											
38											
39											
40											
40											
41											
42											
42											
43											
44											
45											

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 68 of 201 Boring No. B-557 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/22/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/22/24 Surface Elev. 382.0' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: While Drilling Inspector: Other: 04/22/24 11.0 13.5 Drill Rig: Soil Sampler: 2" OD Split Barrel 04/22/24 Before Casing Removed 3.0 23.8 CME 55 ATV 04/22/24 After Casing Removed 4.6 Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/22/24 After Casing Removed caved @ 8.4 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % (Feet) No. From Per 6 Inches f - fine little - 10 to 20% / trace - 0 to 10%Rec. (in.) (Ft.) 0.0 1.0 SS/14 WH-1-3-3 Topsoil and Organic Material (moist) 1A 4 Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC 1 1B 1.0 2.0 MATERIAL (moist, medium stiff) 2 2 2.0 SS/17 Brown/Grey mottled SILT, trace CLAY (moist, stiff) 4.0 4-4-4-5 8 3 4 3 4.0 6.0 SS/23 Brown SILT, trace CLAY (wet, stiff) 8 3-4-4-5 5 Brown SILT, trace CLAY (wet, stiff) 4 6.0 8.0 SS/24 8 6 4-4-4-5 7 Brown SILT, little CLAY (wet, medium stiff) 8 5 8.0 10.0 SS/19 1-2-3-5 5 9 10 11 12 13 SS/12 13.5 15.0 1-6-9 Grey/Brown cmf GRAVEL, little SILT, trace cmf SAND, trace 15 6 CLAY (wet, medium compact) 14

compact)

Continued on Page 2

Grey mf GRAVEL, some cmf SAND, trace SILT (wet, medium

16

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

6-8-8

Remarks:

15

16

17

18

19

7

18.5

SS/20

20.0

Test Boring Logs - Page 69 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-557

 Page No.
 2 of 2

 Project No.
 28062

Associates, Inc. Phone: 315-701-0522					315-701-0522	Project No. 28062							
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.						Depth of Change m - medium and - 35 to 50% / some - 20 to 35% (Ft.) f - fine little - 10 to 20% / trace - 0 to 10%						
<ul><li>20</li><li>21</li></ul>							Continued from Page 1						
22 23													
24	8	23.5	23.8	SS/4	50@4"		Grey/Black highly weathered ROCK Fragments (Shale) (moist) Bottom of Boring @ 23.8'						
<ul><li>25</li><li>26</li></ul>													
27													
28 29													
30													
32													
33 34													
35													
<ul><li>36</li><li>37</li></ul>													
38													
39 40													
41 42													
43													
44													

 $SS-Split\ Spoon,\ U-Undisturbed\ Tube,\ C-Core,\ WH-Weight\ of\ Hammer+Rod,\ WR-Weight\ of\ Rod$ 

Remarks:

15

16

17

18

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 71 of 201 Boring No. **B-559** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/22/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/22/24 Surface Elev. 385.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS Driller:** H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara 04/22/24 3.5 4.0 Other: **Drill Rig: CME 45** 2" OD Split Barrel 04/22/24 Before Casing Removed 9.0 18.9 Soil Sampler: ATV 04/22/24 After Casing Removed 4.0 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/22/24 After Casing Removed caved @ 11.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) and - 35 to 50% / some - 20 to 35% Scale Sample Sampler m - medium Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. (Ft.) f - fine Rec. (in.) 1A 0.5 SS/14 Topsoil and Organic Material (moist) 0.0 1-1-2-5 3 2.0 Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, 1B 0.5 1 2 2 2.0 SS/15 Brown/Grey mottled SILT, trace CLAY, trace ROOTS (moist, 4.0 3-3-3-4 6 medium stiff) 3 4 3 4.0 6.0 SS/13 WH-2-2-3 Brown SILT, trace CLAY (wet, medium stiff) 4 5 4 6.0 8.0 SS/15 2-4-4-3 Similar as above (wet, stiff) 8 6 7 3-5-3-4 8 5 8.0 10.0 SS/13 Similar as above (wet, stiff) 8 9 10 11 Augers gravelly beginning @ 11.3' 12 SS/11 Grey cmf GRAVEL, some SILT, little cmf SAND, trace CLAY 6 13.0 15.0 6-24-47-17 71 13 (wet, very compact) 14

Augers like COBBLE @ 17.7'

Bottom of Boring @ 18.9'

GRAVEL, little cmf SAND, little SILT (wet)

Dark Grey highly weathered ROCK Fragments (Shale), some mf

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

8-50@5"

Remarks:

15

16

17

18

19

7

18.0

18.9

SS/10

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 72 of 201 Boring No. **B-560** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 04/23/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/23/24 Surface Elev. 388.0' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS Driller:** H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/23/24 13.5 18.0 **Drill Rig: CME 45** 2" OD Split Barrel 04/23/24 Before Casing Removed 20.2 Soil Sampler: 9.3 ATV 04/23/24 After Casing Removed None Noted Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/23/24 After Casing Removed caved @ 8.1 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.2 Topsoil and Organic Material (moist) 0.0 SS/6 1-1-1-2 Brown SILT, trace CLAY, trace ORGANIC MATERIAL (moist, 1B 0.2 2.0 1 2 2 2.0 SS/16 Brown SILT, trace CLAY (moist, stiff) 14 4.0 4-8-6-5 3 4 3 4.0 6.0 SS/13 Similar as above (moist, stiff) 11 4-5-6-6 5 6.0 4 8.0 SS/10 3-1-1-2 Brown SILT, trace CLAY, trace fine SAND (moist, soft) 2 6 7 Augers gravelly beginning @ 7.8' Brown SILT and cmf GRAVEL, little cmf SAND, trace CLAY SS/11 8 5 8.0 10.0 5-11-14-14 25 (wet, very stiff) 9 10 11 Augers harder beginning @ 11.6' 12 SS/8 15-12-12-10 Brown/Grey SILT, some cmf GRAVEL, trace cmf SAND (wet, 6 13.0 15.0 24 13 very stiff) 14

compact)

Continued on Page 2

Grey cmf GRAVEL, little SILT, trace cmf SAND (wet, very

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@4"

15

16

17

18

19

7

18.0

18.3

SS/4

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 73 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-560

 Page No.
 2 of 2

 Project No.
 28062

	<b>Ass</b>	ociate	s, Inc.	Phone:	315-701-0522		TEST BUKING	LUG	Project No.	280	062
					AMPLES		VISUAL CLAS	SIFICATION (			
Depth Scale (Feet)	Sample No.	Sample	e Depth	Type / Sample	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%	)	SPT "N" or RQD %
20	INO.	TTOIII	10	Rec. (in.)	i ei o menes	(Fl.)	Continued from Page 1	nuic - 10 (0 2	5070 / Hace - 0 to 10%	+	<i>κ</i> νν %
21	8	20.0	20.2	SS/2	50@2"		Dark Grey ROCK Fragme @ 20.2'		oon and Auger Rej	fusal	
							Bottom of Boring @ 20.2				
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40	-										
41											
42											
43											
44											
45	_										

Test Boring Logs - Page 74 of 201

/ tttaoriiri	on to c	AVIL IXC	portiv	arriber.	20002D-04-0724	_					Test boiling Log	o i ago	7 1 01 201
					orporate Drive	SI	JBSURF	ACE EX	(PL	ORATION	Boring No.	B-	561
		IV		East Sy	racuse, NY 13057			F BORI			Page No.	1	of 2
	Asso	ociates	s, Inc.	Phone:	315-701-0522		IESI	DUKI	NG.	LUG	Project No.	28	3062
Project	Name:	Micror	n Camp	us, Clay,	New York						Date Started	04/	24/24
Client:		Rambo	oll								Date Finished	04/	24/24
Location	n:	See Ex	ploratio	on Locati	ion Plan						Surface Elev.	38	33.5'
		ME	THO	DS OF	INVESTIGATIO	N			GF	ROUNDWATER	R OBSERVAT	IONS	
Driller:		H. Lyo	n		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Cocine	At (Ft.)
Driller:		K. Cra			Casing Hammer:					Time	_	Casing	At (Ft.)
Inspecto		C. O'H			Other:	NQ-Co		04/24/24		While Drilling	None Noted		0.0
Drill Ri	g:	CME 4	15		Soil Sampler:		Split Barrel	04/24/24		ore Casing Removed	5.4 *	2	0.4
Type:		ATV			Hammer Wt:	140 lbs.		04/24/24		er Casing Removed	12 *	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		04/24/24		er Casing Removed	caved @ 20.0		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	OF MATERIA	L	_
Depth		Sample	Depth	Type /	Blows on	Depth of	c -	- coarse					SPT "N"
Scale	Sample	(F	t.)	Sample	Sampler	Change		medium		and - 35 to 50	0% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10°	%	RQD %
0	1A	0.0	0.5	SS/13	1-1-2-5	ļ				erial (moist)			3
	1B	0.5	2.0							, trace fine SAND	, trace ORGANI	C.	
1							MATERIA	AL (moist,	soft)				
		2.0	4.0	99/10	2.5.		D (G	CY		GTT TO CO.			
2	2	2.0	4.0	SS/18	3-4-5-4		Brown/Gre	ey CLAY,	little	SILT (moist, stiff)	)		9
2													
3													
4	2	4.0	6.0	00/10	2 2 2 2		D /C	CLAN	1574	CH T ODC	ANICMATERI	A T	4
4	3	4.0	6.0	SS/12	3-2-2-3			•		SILT, trace ORGA	ANIC MATERIA	AL	4
5							(moist, me	aium stiff	)				
3													
6	4	6.0	8.0	SS/14	2-2-3-5		Brown SII	T little (	TAV	(moist, medium st	iff)		5
	7	0.0	0.0	33/14	2-2-3-3		DIOWILDIL	i, muc C	LAI	(moist, meatum st	.111)		3
7													
,													
8	5	8.0	10.0	SS/13	3-5-5-6		Brown/Gre	ev SILT. t	race (	CLAY (moist, stiff)	)		10
		0.0	10.0	DB/ 13			Diown or	, 51 <b>2</b> 1, t	ruce .	CEITI (moist, stiff,	,		10
9													
10													
11													
12													
13													
	6	13.5	15.0	SS/16	2-2-3		Brown/Gre	ey SILT, 1	ittle (	CLAY (wet, mediu	m stiff)		5
14													
15													
16													
1													
17													
10													
18	7 ^	10 =	10.2	SS/12	2.4.50@4"		Cime!1a · ·	o <b>h</b> o ( ::	oist)				50.
19	7A 7B	18.5 19.3	19.3 19.8	33/12	2-4-50@4"	}	Similar as			e cmf SAND, little	SII T (wat vom		50+
19	7B 7B	19.3	19.8					JKA VEL	, som	c chii sand, iitle	SILI (wel, ver)	(	
20	/ 15	19.3	17.8				compact)	D 1					

20 Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

\*Water added to boring for coring.

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 75 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-561

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST DOKING		Project No.	28062
	LO	G OF	BOR	ING SA	MPLES	ws on Depth of C - coarse				
Depth Scale	Sample		e Depth t.)	Type / Sample	Blows on Sampler	Depth of Change   CFL)   C - coarse				SPT "N"
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	_		little - 10 to 2	20% / trace - 0 to 10%	RQD %
20	R-1	20.4	25.4	C/60	NQ-Core		Continued from Page 1 compact) Auger Refusal Grey DOLOSTONE with	@ 20.4'. Set up to interbedded SHA	<i>core.</i> LE layers (<1/8" - 2	92%
22							thick), thinly laminated to Recovery: 60"/60" = 1000 RQD: 55"/60" = 92%		rd.	
<ul><li>23</li><li>24</li></ul>							16 Pieces, 1" Chips and Fi 1:00 min/ft, no water loss Coring conducted in 4th g		00 nci down praccur	20
25	R-2	25.4	30.4	C/60	NQ-Core		Grey DOLOSTONE, fresh	_		100%
26	K-2	23.4	30.4	C/00	NQ-Core		Recovery: 60"/60" = 100% RQD: 60"/60" = 100%	6	naru.	100%
27							4 Pieces, 0" Chips and Fra 1:00 min/ft, no water loss Coring conducted in 4th g		00 psi down pressur	re.
28								,		
29	1						D 6D 6 20 41			
30							Bottom of Boring @ 30.4			
32										
33										
34										
35										
36										
<ul><li>37</li><li>38</li></ul>										
39										
40										
41										
42										
43 44										
45										

140 lbs.

Hammer Wt:

		t Syracuse, NY 13057	TECT	r dadt	NG LOG	Page No.	1 of 2		
Ass	ociates, Inc. Pho	ne: 315-701-0522	ILS	DOKI	NG LUG	Project No.	28062		
<b>Project Name:</b>	Micron Campus, Cl	lay, New York				Date Started	04/22/24		
Client:	Ramboll			Date Finished 04/22/24					
Location:	See Exploration Lo	cation Plan				Surface Elev.	381.1'		
	METHODS (	OF INVESTIGATIO	ON	GROUNDWATER OBSERVATIONS					
Driller:	Beau Fletcher	Casing:	3 ¼" ID H.S.A.	Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller:	Ryan Casatelli	Casing Hammer:		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Inspector:		Other:		04/22/24	While Drilling	7.0	13.0		
D .11 D.	C3 55 55	0.11.0	011 OD C 114 D 1	0.4/00/04	DCC D	C O *	22.2		
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel	04/22/24	Before Casing Removed	6.0 *	23.3		

04/22/24 After Casing Removed

**B-563** 

out

1.0 \*

Type.		4 1 1 V			Halling Wt.	140 103.		ci Casing Removed	1.0		ut
Rod Siz	e:	AWJ			Hammer Fall:	30 in.	04/22/24 Afte	er Casing Removed	caved @ 7.0	0	ut
		GOF	BOR	ING S	AMPLES			SIFICATION (		L	
		T			I		I VISCIE CEIR		/		1
Depth			Depth	Type /	Blows on	Depth of	c - coarse				SPT "N"
Scale	Sample		t.)	Sample	Sampler	Change	m - medium		% / some - 20 to 35		or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		0% / trace - 0 to 10	%	RQD %
0	1A	0.0	0.5	SS/11	1-2-4-4	ļ	Topsoil and Organic Mate				6
	1B	0.5	2.0				Brown/Grey mottled SIL7	Γ, trace CLAY, tra	ce cmf SAND (r	noist,	
1							medium stiff)				
2	2	2.0	4.0	SS/24	3-2-3-4		Brown SILT, trace CLAY	, trace fine GRAV	EL, trace cmf S	AND	5
							(moist, medium stiff)				
3											
4	3	4.0	6.0	SS/24	2-3-4-4		Brown/Grey/Orange mott	led CLAY, some S	ILT (moist, med	dium	7
							stiff)		(,		•
5											
6	4	6.0	8.0	SS/18	3-3-4-3		Brown/Grey/Orange SIL7	Γ some CLΔV (we	et medium stiff)		7
	_	0.0	0.0	55/10	3343		Brown, Grey, Grange BiE	r, some CLITT (we	t, meatum stim)		,
7											
_ ′											
0	_	0.0	10.0	00/04	2 4 4 4		Day (Car (Oassas SH 7	CIAN (	4 1: 4:00		0
8	5	8.0	10.0	SS/24	3-4-4-4		Brown/Grey/Orange SIL7	I, trace CLAY (we	t, medium stiff)		8
9											
	1										
10											
11											
12											
13											
	6	13.5	15.0	SS/17	1-2-2-2		Grey SILT, little CLAY (	wet, medium stiff)			4
14											
15	7	15.0	17.0	SS/18	2-2-2-2		Grey SILT, trace fine SA	ND. trace CLAY (1	moist, medium s	stiff)	4
15	,	15.0	17.0	<i>BB</i> / 10			Grey Silli, trace line Sill	rib, dace CEIII (	inoist, incurain s	,,,,,,	
16											
10											
17	8	17.0	10.0	SS/15	1-2-4-4						6
17	8	17.0	19.0	33/13	1-2-4-4		Con SH T Amon CLAY	(			6
1.0							Grey SILT, trace CLAY (	wet, meaium stiff)			
18						1					
						1					
19						1					
	ļ					1					
20	Ī	1		1	Ī	1	Continued on Page 2				1

20 Continued on Page 2 SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

Type:

ATV

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 77 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-563

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST DOKING		Project No.	28	062
	LO	G OF	BOR	ING SA	AMPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL		
Depth Scale (Feet)	Sample No.		e Depth et.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20							Continued from Page 1				
21											
22						ļ					
23	9	23.0	23.0	SS/1	50@1"		Augers harder beginning Grey weathered ROCK Fr Split Spoon and Auger Re	agments (Shale) (	wet)		50+
24							Bottom of Boring @ 23.3'	usui @ 25.5			
25											
26											
27											
28											
29											
30	<u>.</u>										
31											
32											
33											
34											
35	1										
36											
37											
38											
39											
40	†										
41											
42											
43											
44											
45	1										

Similar as above (wet, very stiff)

Bottom of Boring @ 18.5'

compact)

at 18.5'

Grey cmf GRAVEL, little cmf SAND, little SILT (wet, medium

Black ROCK Fragments (Shale) Split Spoon and Auger Refusal

16

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

5-6-10-33

50@1"

**Remarks:** \* recovery length not measured

14

15

16

17

18

19

7A

7B

8

15.0

16.3

18.5

16.3

17.0

18.6

SS/16

SS/1

Attachm	ent to C	ME Re	port N	umber: 2	28062B-04-0724					Test Boring Logs	s - Page	79 of 201
				6035 Co	orporate Drive	SI	IRSTIRE	ACE EX	KPLORATION	Boring No.	B-	565
		IV		East Syı	cacuse, NY 13057					Page No.	1	of 2
	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		IESI	I BUKI	NG LOG	Project No.	28	062
Project	Name:	Micror	Camp	us, Clay,	New York					Date Started	04/2	23/24
Client:		Rambo	oll							Date Finished	04/2	23/24
Location	n:			on Locati						Surface Elev.		31.2'
		ME	THO	DS OF	INVESTIGATIO				GROUNDWATE	R OBSERVAT	IONS	
Driller:			letcher		Casing:	3 ¼" ID	H.S.A.	Date	Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		Ryan C	Casatell	i	Casing Hammer:	NO G				_		
Inspecto		CME			Other:	NQ-Cor		04/23/24	While Drilling	4.0 None Noted		4.0
Drill Ri Type:	g:	CME 5	))		Soil Sampler: Hammer Wt:	2 OD s	Split Barrel	04/23/24	Before Casing Removed After Casing Removed	3.0 *		1.0
Rod Siz	٥.	AWJ			Hammer Fall:	30 in.	•	04/23/24		caved @ 8.0		out
Kou Siz			R∩D		MPLES	30 III.	VI		LASSIFICATION			out
<u> </u>	LU	r		LIG SA			V 1	BUAL C	LASSIFICATION	OF WIATERIA	.IL	1
Depth	g ,		e Depth et.)	Type /	Blows on	Depth of		- coarse	1 25 - 5	00/ / 20 : 27	0/	SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		medium f - fine		0% / some - 20 to 35° 20% / trace - 0 to 10°		or RQD %
0	1A	0.0	0.5	SS/14	WH-2-3-5	(11.)			Material (moist)	20% / trace - 0 to 10;	70	5 5
	1B	0.5	2.0	55/14	WII 2 3 3	·			CLAY, trace fine SAND	) (moist_medium	stiff)	
1									32111, www 1mio 2111 (2	(1110100, 1110010111	30111)	
2	2	2.0	4.0	SS/20	6-5-6-6		Brown/Gre	ey SILT, t	race CLAY (wet, stiff)			11
								•				
3												
4	3	4.0	6.0	SS/18	5-5-6-6		Similar as	above (we	et, stiff)			11
5												
			0.0	00/16	4 4 ~ 4		D (C	OH T		7.4.3.TD /		
6	4	6.0	8.0	SS/16	4-4-5-4		Brown/Gre	ey SILT, t	race CLAY, trace fine S	SAND (wet, stiff)	)	9
7												
7												
8	5	8.0	10.0	SS/20	WH-1-1-1		Similar as	ahova (w	at coft)			2
8	3	0.0	10.0	33/20	VV 11-1-1-1		Sillilai as	above (wi	21, 5011)			2
9												
10	6	10.0	12.0	SS/20	1-1-2-2		Similar as	above (we	et, soft)			3
									., ,			
11												
12	7	12.0	14.0	SS/20	1-2-3-9			•	race cmf SAND, trace v	weathered ROCK		5
							Fragments	(wet, med	dium stiff)			
13												
								~~				
14	8	14.0	16.0	SS/14	6-5-7-21				and weathered ROCK	Fragments (Shale	e),	12
1.5							trace SILT	, trace cm	of SAND (wet, stiff)			
15												
16												
10							1					

Split Spoon and Auger Refusal @ 18.0. Set up to core.

thick), thinly laminated to medium bedded, hard.

Recovery: 60"/60" = 100% Continued on Page 2

Grey DOLOSTONE with interbedded SHALE layers (<1/8" to 1"

50+

100%

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

50@0"

NQ-Core

Remarks: \*Water added to boring for coring.

18.0

18.0 23.0

SS/0

C/60

17

18

19

7

R-1

18.0

Test Boring Logs - Page 80 of 201

6035 Corporate Drive East Syracuse, NY 13057

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-565

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BURING	ւսց	Project No.	280	062
	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  Sample Depth (Ft.) Sample Sampler  No. From To Box (in) Page (in)						VISUAL CLAS	SIFICATION (	OF MATERIAL	,	
Depth Scale (Feet)		Sample	Depth	Type /	Blows on	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20 21 22							Continued from Page 1 RQD: 60"/60" = 100% 6 Pieces, 0" Chips and Fra 1:00 min/ft, no water loss Coring conducted in 4th g	agments		ere.	
23 24 25	R-2	23.0	28.0	C/60	NQ-Core		Grey DOLOSTONE with thick), slightly weathered, medium hard to hard.  Weathered zone (~ 1/2" the Recovery: 60"/60" = 1009	interbedded SHAl thinly laminated t	LE layers (<1/8" - o medium bedded,	6"	85%
26 27							21 Pieces, 0" Chips and Fi 1.0 min/ft, no water loss Coring conducted in 4th	ragments		ure.	
28							Bottom of Boring @ 28.0	,			
29											
30											
31											
32											
34											
35											
36											
37											
38											
39											
41											
42											
43											
44											
45	I										

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

16

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 82 of 201 Boring No. B-567 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Phone: 315-701-0522 Project No. 28062 Micron Campus, Clay, New York **Date Started** 05/10/24 Project Name: Client: Ramboll **Date Finished** 05/10/24 Surface Elev. 389.1' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS Driller:** 3 ¼" ID H.S.A. H. Lyon Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** C. O'Hara While Drilling Inspector: Other: 05/10/24 0.6 4.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 05/10/24 Before Casing Removed 1.0 6.5 ATV 05/10/24 After Casing Removed 1.8 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/10/24 After Casing Removed caved @ 5.2 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Blows on Depth c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine Topsoil and Organic Material (moist) 1A 0.0 0.3 SS/13 1-1-2-5 0 3 2.0 Brown SILT, trace CLAY, trace fine SAND, trace ORGANIC 1B 0.3 1 MATERIAL (moist, soft) 2 2 2.0 SS/10 8-7-4-5 Brown/Grey cmf GRAVEL, little cmf SAND, little SILT (moist, 11 4.0 medium compact) 3 4 3 4.0 6.0 SS/17 6-4-5-9 Grey cmf GRAVEL, some SILT, little cmf SAND, trace CLAY 9 (moist, stiff) 5 6.0 4 6.3 SS/250@4" Dark Grey/Black highly weathered ROCK Fragments (Shale) (moist) 50+ 6 7 Augers very hard beginning @ 6.2'. 5 6.5 6.5 SS/0 50@0" Shale fragments in tip of Split Spoon. Auger Refusal @ 6.5' 50+ Bottom of Boring @ 6.5' 8 9 10 11 12 13 14 15 16

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 83 of 201 Boring No. B-568 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 05/13/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/13/24 Surface Elev. 395.8' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall Casing Hammer: Inspector: C. O'Hara Other: 05/13/24 While Drilling 13.9 1.0 Drill Rig: **CME 45** 2" OD Split Barrel 05/13/24 Before Casing Removed 14.9 16.0 Soil Sampler: ATV 05/13/24 After Casing Removed Type: **Hammer Wt:** 140 lbs. 7.8 out AWJ Rod Size: **Hammer Fall:** 30 in. 05/13/24 After Casing Removed caved @ 8.1 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change RQD % From To Per 6 Inches little - 10 to 20% / trace - 0 to 10% (Feet) No. (Ft.) f - fine Rec. (in.) 0.0 2.0 SS/5 1-1-1-1 Topsoil and Organic Material (moist) 1 2 2 2.0 SS/14 3-5-5-5 Brown SILT, trace fine SAND, trace CLAY (moist, stiff) 10 4.0 3 4 3 4.0 6.0 SS/12 3-2-2-3 Red/Brown SILT, little mf GRAVEL, trace cmf SAND, trace CLAY (moist, medium stiff) 5 6.0 4 8.0 SS/17 4-6-7-8 Brown cmf SAND, some mf GRAVEL, trace SILT (moist, 13 6 medium compact) 7 Augers like Cobble beginning @ 6.0'. Brown cmf SAND, some cmf GRAVEL, trace SILT (moist, medium 8 5 8.0 10.0 SS/13 6-7-8-9 15 compact) 9 10 11 Augers hard beginning @ 11.4' 12 SS/12 18-36-50@3" Grey SILT, trace cmf SAND, trace CLAY (moist, hard) 6 13.0 14.3 50+ 13 14 15 7 15.0 15.4 SS/4 50@5" Grey SILT, some mf GRAVEL, trace cmf SAND, trace CLAY 50 +

(moist, hard)

(moist, hard)

Bottom of Boring @ 16.9'

Dark Grey SILT, little mf GRAVEL, little CLAY, trace cmf SAND

50+

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

38-50@5"

16

17

18

19

16.0

16.9

SS/10

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 84 of 201 Boring No. **B-569** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/26/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/26/24 Surface Elev. 389.6' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/26/24 7.5 13.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 04/26/24 Before Casing Removed 6.4 13.8 ATV 04/26/24 After Casing Removed 2.8 Type: Hammer Wt: 140 lbs. out caved @ 6.2 Rod Size: AWJ **Hammer Fall:** 30 in. 04/26/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.7 SS/15 WH-1-6-7 Topsoil and Organic Material (moist) 0 0.0 2.0 Brown SILT, trace CLAY, trace fine SAND (moist, medium stiff) 1B 0.7 1 2 2 2.0 SS/16 6-6-5-4 Brown SILT, trace CLAY (moist, stiff) 4.0 11 3 4 3 4.0 6.0 SS/17 3-4-5-7 Grey/Brown, Similar as above (moist, stiff) 9 5 4 6.0 8.0 SS/16 7-5-9-5 Brown SILT, some mf GRAVEL, trace cmf SAND, trace CLAY 14 6 (wet, stiff) 7 Augers gravelly beginning @ 7.5' 2-4-3-5 Grey/Black cmf SAND, some mf GRAVEL, some SILT, trace 8 5 8.0 10.0 SS/13 7 CLAY (moist, loose) 9 10 Augers harder beginning @ 10.8' 11 12 SS/5 Dark Grey/Black highly weathered ROCK Fragments (Shale) and 6 13.0 13.7 14-50@1" 50+ 13 SILT, little cmf SAND (moist) 7 Black ROCK Fragments (Shale) 14 13.8 13.9 SS/1 50@1" 50 +Split Spoon and Auger Refusal @ 13.8'

Bottom of Boring @ 13.8'

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

15

16

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 85 of 201 Boring No. B-570 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 Micron Campus, Clay, New York **Date Started** 05/13/24 Project Name: Client: Ramboll **Date Finished** 05/13/24 Surface Elev. 387.4' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: 3 ¼" ID H.S.A. H. Lyon Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall Casing Hammer: While Drilling Inspector: C. O'Hara Other: 05/13/24 None Noted 8.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 05/13/24 Before Casing Removed 10.8 12.8 ATV 05/13/24 After Casing Removed 5.7 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/13/24 After Casing Removed caved @ 6.0 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % No. Per 6 Inches f - fine little - 10 to 20% / trace - 0 to 10%(Feet) Rec. (in.) (Ft.) 1A 0.0 0.9 SS/18 1-1-2-16 Topsoil and Organic Material (moist) 0 3 Brown SILT, some fine SAND (moist, soft) 1 1B 0.9 2.0 2 2 2.0 4.0 SS/16 5-7-7-7 Brown SILT, trace fine SAND, trace CLAY (moist, stiff) 14 3 4 3 4.0 6.0 SS/15 3-2-7-10 Brown/Red SILT, some cmf SAND, little cmf GRAVEL (wet, stiff) 5 6.0 6 4A 6.7 SS/14 12-11-10-7 Brown cmf GRAVEL and cmf SAND, trace SILT (wet, medium 21 compact) 7 4B 6.7 8.0 Grey cmf SAND and cmf GRAVEL, trace SILT (wet, medium compact) Grey cmf GRAVEL and SILT, little cmf SAND (moist, medium 8 5 8.0 10.0 SS/13 5-5-6-7 11 compact) 9 10 Augers hard beginning @ 10.5 11 12 6 12.8 13.0 SS/1 50@2" Black SHALE Fragments in tip of spoon 50+ Split Spoon and Auger Refusal @ 12.8' 13 Bottom of Boring @ 13.0' 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 86 of 201 Boring No. B-571 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 Micron Campus, Clay, New York 04/18/24 **Date Started** Project Name: Client: Ramboll **Date Finished** 04/18/24 Surface Elev. 391.3' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Al Linstruth Driller: Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** Inspector: Other: NO-Core 04/18/24 While Drilling 7.5 8.0 Drill Rig: Soil Sampler: 2" OD Split Barrel 04/18/24 Before Casing Removed 9.0 CME 550X 9.5 ATV **Hammer Wt:** 04/18/24 After Casing Removed 3.2 Type: 140 lbs. out AWJ caved @ 7.8 Rod Size: **Hammer Fall:** 30 in. 04/18/24 After Casing Removed out VISUAL CLASSIFICATION OF MATERIAL LOG OF BORING SAMPLES Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10% (Feet) No. (Ft.) f - fine Rec. (in.) 0.0 2.0 SS/17 Brown SILT, trace CLAY (moist, medium stiff) 0 1-1-3-3 1 2 2 2.0 SS/15 Brown/Grey SILT, trace cmf SAND (wet, medium stiff) 7 4.0 2-3-4-2 3 4 3 4.0 6.0 SS/11 1-1-1-1 Brown SILT, trace CLAY (moist, soft) 2 5 6 4A 6.0 7.9 SS/8 WH-1-1-37 Grey/Brown SILT and cmf GRAVEL, trace cmf SAND, trace CLAY 2 7 Grey ROCK Fragments (Shale) and ROCK Flour) 4B 7.9 8.0 8 5 8.0 8.3 SS/2 50@3" Similar as above (moist) 50 +9 Auger Refusal @ 9.5'. Set up to core. Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -10 R-1 70% 9.5 14.5 C/56 NQ-Core 1/4" thick), slightly weathered, laminated to medium bedded, medium hard to hard. SILT seams (1/8" - 2.0" thick) @ 10.5' - 10.7', 11 11.9', 12.8', 12.9' and 13.0'. Recovery: 56''/60'' = 93%12 RQD: 42"/60" - 70% 15 Pieces, 0" Chips and Fragments 13 50 sec/ft, no water loss Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure. 14 R-2 14.5 19.5 C/60NQ-Core Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -62% 15 4.0' thick), slightly weathered, thinly laminated to medium bedded,

medium hard to hard.

50 sec/ft, no water loss

Bottom of Boring @ 19.5'

16.9', 17.0', 17.2', 17.4' - 17.5'.

15 Pieces, 4" Chips and Fragments

Weathered horizontal fractures (1/8' - 1" thick) @ 16.5', 16.7',

Coring conducted in 5th gear, 2100 rpm, 700 psi down pressure.

CALCITE veins (1/4" - 1" thick) @ 18.8' and 19.3' - 19.4'.

Recovery:  $60''/60'' = 100\% \mid RQD: 37''/60'' = 62\%$ 

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

16

17

18

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 87 of 201 Boring No. B-572 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 04/18/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/18/24 Surface Elev. 390.3' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** While Drilling Inspector: Other: 04/18/24 1.1 4.0 **Drill Rig: CME 550X** Soil Sampler: 2" OD Split Barrel 04/18/24 Before Casing Removed 5.9 8.0 ATV 04/18/24 After Casing Removed None Noted Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/18/24 After Casing Removed caved @ out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Blows on Depth c - coarse Type / Depth of (Ft.) Sampler Scale Sample m - medium and - 35 to 50% / some - 20 to 35% Sample Change or То RQD % (Feet) From Per 6 Inches f - fine little - 10 to 20% / trace - 0 to 10%No. Rec. (in.) (Ft.) Brown SILT, little cmf SAND (moist, medium stiff) 2.0 SS/15 1-1-4-3 0 0.0 5 1 2 2 2.0 SS/14 4-3-2-1 Grey/Brown cmf GRAVEL, some SILT, little cmf SAND (wet, 5 4.0 loose) 3 SS/11 4 3A 4.0 5.0 1-1-31-51 Grey cmf GRAVEL and SILT, little cmf SAND (wet, compact) 32 5 3B 5.0 6.0 Grey highly weathered ROCK Fragments, some SILT (wet) Grey highly weathered ROCK Fragments (moist) 6 4 6.0 6.2 SS/250@2" 50+ 7 8.0 8 5 8.2 SS/2 50@2" Similar as above (moist) 50 +Bottom of Boring @ 8.2' 9 10 11 12 13 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 88 of 201 Boring No. B-573 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/29/24 **Date Started** Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/29/24 Surface Elev. 393.5' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/29/24 3.8 6.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 04/29/24 Before Casing Removed 4.0 8.7 ATV 04/29/24 After Casing Removed 3.5 Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/29/24 After Casing Removed caved @ 5.5 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.4 SS/16 Topsoil and Organic Material (moist) 0 0.0 1-1-2-6 3 2.0 Brown SILT, trace CLAY, trace fine SAND (moist, soft) 1B 0.4 1 2 2 SS/15 7-8-6-4 Brown SILT, trace CLAY (moist, stiff) 14 2.0 4.0 3 4 3 4.0 6.0 SS/16 4-3-3-5 Similar as above (wet, medium stiff) 6 5 4A 6.0 6.5 SS/12 6-9-12-18 Brown cmf GRAVEL, some cmf SAND, little SILT (moist, medium 21 6 7 Black/Grey weathered ROCK Fragments (Shale), little SILT, little 4B 6.5 8.0 cmf SAND (moist) 8 5 8.0 8.4 SS/5 50@5" Similar as above (moist) 50 +SS/11 Black weathered ROCK Fragments (Shale) 6A 8.7 9.3 22-25-50@4" 50+ 9 6B 9.3 10.1 Black ROCK Fragments (Shale) 10 Split Spoon and Auger Refusal @ 10.1' Bottom of Boring @10.1' 11 12 13 14 15 16

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

17

18

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** 1. Offset 7.0' west to B-574A and sampled at 5.1' auger refusal.

15

16

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 90 of 201 Boring No. B-575 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 05/10/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/10/24 Surface Elev. 385.8' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** C. O'Hara While Drilling Inspector: Other: 05/10/24 None Noted 6.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 05/10/24 Before Casing Removed None Noted 8.2 ATV 05/10/24 After Casing Removed None Noted Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 05/10/24 After Casing Removed caved @ out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % From Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.7 SS/16 1-WH-2-4 Topsoil and Organic Material (moist) 0.0 Brown CLAY, some SILT, trace fine SAND (moist, soft) 2.0 1B 0.7 1 2 2 2.0 SS/12 3-4-7-16 Brown/Grey SILT and highly weathered ROCK Fragments (Shale) 11 4.0 (moist, stiff) 3 4 3 4.0 6.0 SS/21 6-8-8-10 Dark Grey, Similar as above (moist, very stiff) 16 5 6 4A 6.0 7.0 SS/15 12-12-50@3" Similar as above (moist, hard) 50 +7 4B 7.0 7.3 Grey ROCK Fragments (Shale) Augers like Rock @ 7.9' 8 5 8.0 8.2 SS/1 50@2" Similar as above - Split Spoon and Auger Refusal @ 8.2' Bottom of Boring @ 8.2' 9 10 11 12 13 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

18

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

16

17

18

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

15

16

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 93 of 201 Boring No. **B-583** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/29/24 Micron Campus, Clay, New York **Date Started** Project Name: Client: Ramboll **Date Finished** 04/29/24 Surface Elev. 388.7' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: H. Lyon Casing: 3 1/4" ID H.S.A. Depth (Ft.) **Date** Time Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/29/24 2.0 2.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 04/29/24 Before Casing Removed 2.1 7.5 ATV 04/29/24 After Casing Removed 1.9 Type: **Hammer Wt:** 140 lbs. out caved @ 4.5 Rod Size: AWJ **Hammer Fall:** 30 in. 04/29/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Blows on Depth c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine Topsoil and Organic Material (moist) 1A 0.7 SS/11 WH-1-2-6 0 0.0 3 2.0 Brown SILT, little CLAY, trace ORGANIC MATERIAL (moist, 1B 0.7 1 2 2 2.0 SS/13 4-6-7-5 13 4.0 Grey/Red/Brown cmf GRAVEL, some cmf SAND, little SILT (moist, medium compact) 3 Augers like Cobble starting @ 3.5' 4 3 4.0 6.0 SS/12 Grey/Brown cmf GRAVEL, some SILT, little cmf SAND (moist, 8 5-4-4-8 loose) 5 6.0 Grey/Brown cmf GRAVEL, some cmf SAND, some SILT (wet, 4 6.7 SS/88-50@2" 50 +6 very compact) 7 8 5 7.5 7.5 SS/0 50@0" Split Spoon and Auger Refusal @ 7.5' 50 +Bottom of Boring @ 7.5' 9 10 11 12 13 14 15 16 17

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 94 of 201 Boring No. **B-584** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 04/29/24 Micron Campus, Clay, New York **Date Started** Project Name: Client: Ramboll **Date Finished** 04/29/24 Surface Elev. 393.5' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: K. Crandall 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 04/29/24 None Noted 8.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 04/29/24 Before Casing Removed 11.9 7.1 ATV 04/29/24 After Casing Removed 4.4 Type: **Hammer Wt:** 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/29/24 After Casing Removed caved @ 8.8 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Blows on Depth c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine 1A 0.0 0.5 SS/12 WH-1-1-5 Topsoil and Organic Material (moist) 2.0 Brown SILT, trace CLAY (moist, soft) 1B 0.5 1 2 2 2.0 SS/18 6-5-4-5 Similar as above (moist, stiff) 9 4.0 3 4 3 4.0 6.0 SS/16 5-9-10-12 Brown SILT, trace CLAY, trace fine SAND (moist, very stiff) 19 5 4 6.0 8.0 SS/21 11-15-20-21 Similar as above (moist, hard) 35 6 7 Augered harder beginning @ 7.5' Brown SILT, trace CLAY (moist) 8 5A 8.0 8.4 SS/11 13-21-34-41 55 Brown/Grey cmf GRAVEL, some cmf SAND, trace SILT (moist, 5B 8.4 10.0 9 very compact) Augers gravelly beginning @ 8.5' 10 Augers like cobble starting @ 9.5' 11 11.9 12.8 SS/241-50@4" Black ROCK Fragments (Shale) - Split Spoon Refusal @ 12.8' 50 +12 6 Bottom of Boring @ 12.8' 13 14

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

15

16

17

18

ttachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 95 of 201 Boring No. B-585 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. 28062 Phone: 315-701-0522 Project No. Micron Campus, Clay, New York **Date Started** 05/01/24 Project Name: Client: Ramboll **Date Finished** 05/01/24 Surface Elev. 394.1' Location: See Exploration Location Plan METHODS OF INVESTIGATION GROUNDWATER OBSERVATIONS Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli Casing Hammer: Inspector: NQ-Core 05/01/24 While Drilling None Noted 11.0 Other: 05/01/24 Drill Rig: Soil Sampler: 2" OD Split Barrel Before Casing Removed None Noted 21.0 CME 55 ATV 05/01/24 After Casing Removed 3.6 \* Type: Hammer Wt: 140 lbs. out AWJ Rod Size: **Hammer Fall:** 30 in. 05/01/24 After Casing Removed caved @ 11.4 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From То RQD % Per 6 Inches (Feet) No. (Ft.) f - fine little - 10 to 20% / trace - 0 to 10% Rec. (in.) 1A 1.0 SS/19 Topsoil and Organic Material (moist) 0 0.0 1-1-3-5 Brown/Grey SILT, little CLAY, trace ROOTS (moist, medium 1 1B 1.0 2.0 2 2 2.0 SS/20 5-6-7-6 Brown/Grey SILT, trace CLAY (moist, stiff) 13 4.0 3 4 3 4.0 6.0 SS/23 Brown SILT, trace CLAY (wet, stiff) 11 6-6-5-6 5 4 6.0 8.0 SS/20 2-3-5-11 Similar as above (wet, stiff) 8 6 7 9-11-10-5 8 5 8.0 10.0 SS/14 Brown/Grey weathered ROCK Fragments (Shale), little SILT, trace 21 cmf SAND (moist) 9 10 11 Auger Refusal @ 11.0'. Set up to core. Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -R-1 11.0 16.0 C/5833% NQ-Core 1/2" thick), slightly to moderately weathered, thinly laminated to 12 thinly bedded, medium hard. Broken and fractured zones @ 11.8'-12.3', 12.9'-13.3', 13.8'-14.2', 13 and 15.0'-15.2'. 14 Weathered zones @ 12.6', 13.4'-13.5' and 14.2'-14.4'. Recovery:  $58''/60'' = 97\% \mid RQD: 20''/60'' = 33\%$ 

11 Pieces, 13" Chips and Fragments

thinly bedded, medium hard to hard.

Weathered zone (3/4" thick) @ 19.3'.

Recovery:  $60''/60'' = 100\% \mid RQD: 36''/60'' = 60\%$ 

Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.

2.0" thick), slightly to moderately weathered, thinly laminated to

Dark Grey SHALE with interbedded DOLOSTONE layers (<1/8" -

Broken and fractured zones @ 16.7'-16.8', 17.2'-17.9', 18.7'-18.8',

60%

1:00 min/ft, no water loss

and 19.9'-20.0'.

Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

NQ-Core

**Remarks:** \* Water added to boring during coring.

C/60

15

16

17

18

19

R-2

16.0

21.0

Test Boring Logs - Page 96 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-585

 Page No.
 2 of 2

 Project No.
 28062

	<b>Ass</b>	ociates	s, Inc.	Phone: 3	315-701-0522		IESI BURING I	LUG	Project No.	280	62
	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  Sample Depth Type / Blows on						VISUAL CLAS	SIFICATION O			
Depth Scale	Sample	Sample Depth Type / Blows on					c - coarse m - medium		% / some - 20 to 35%		SPT "N" or
(Feet)		From	To		Per 6 Inches	Change (Ft.)	f - fine		0% / trace - 0 to 10%		RQD %
20							Continued from Page 1				
							13 Pieces, 10" Chips and				
21							1:00 min/ft, no water loss		10: 1		
22							Coring conducted in 4th g Bottom of Boring @ 21.0	ear, 1700 rpm, 70	0 psi aown pressur	e.	
							8				
23											
24											
24											
25											
2.5											
26											
27											
28											
29											
30											
31											
31											
32											
33											
33											
34											
35											
33											
36											
o=											
37											
38											
39											
40											
41											
42											
42											
43											
4.4											
44											
45											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

16

17

18

Attachment to CME Report Number: 28062B-04-0724 Test Boring Logs - Page 98 of 201 Boring No. B-587 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 1 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 Micron Campus, Clay, New York **Date Started** 05/02/24 Project Name: Client: Ramboll **Date Finished** 05/02/24 Surface Elev. 385.0' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: 3 ¼" ID H.S.A. H. Lyon Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: K. Crandall **Casing Hammer:** While Drilling Inspector: C. O'Hara Other: 05/02/24 1.8 6.0 **Drill Rig: CME 45** Soil Sampler: 2" OD Split Barrel 05/02/24 Before Casing Removed 2.8 11.5 ATV 05/02/24 After Casing Removed 2.8 Type: Hammer Wt: 140 lbs. out caved @ 5.5 Rod Size: AWJ **Hammer Fall:** 30 in. 05/02/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" c - coarse Depth Blows on Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change or From То RQD % Per 6 Inches little - 10 to 20% / trace - 0 to 10%(Feet) No. Rec. (in.) (Ft.) f - fine Topsoil and Organic Material (moist) 1A 0.3 SS/14 WH-WH-4-9 0 0.0 4 2.0 Brown/Grey SILT, trace CLAY, trace fine SAND (moist, medium 1B 0.3 1 2 2 2.0 SS/16 8-8-9-7 Brown/Grey mottled SILT, trace CLAY (moist, very stiff) 17 4.0 3 4 3 4.0 6.0 SS/15 7-8-7-7 Brown SILT, little fine SAND, trace CLAY (wet, stiff) 15 5 6.0 Brown SILT, trace fine SAND, trace CLAY (wet, stiff) 4 8.0 SS/24 4-5-4-4 9 6 7 8 5A 8.0 8.6 SS/14 6-14-16-10 Similar as above (wet, hard) 30 Black/Brown weathered ROCK Fragments (Shale), little cmf SAND, 5B 8.6 10.0 9 trace SILT (moist) Augered gravelly beginning @ 8.3' 10 11 Augered harder beginning @ 11.4' SS/0 11.5 11.5 50@0" Split Spoon and Auger Refusal @ 11.5' 50+ 6 Bottom of Boring @ 11.5' 12 13 14

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

15

16

17

18

Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.

3.0" thick), slightly weathered, thinly laminated to thinly bedded,

Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.

Recovery:  $60''/60'' = 100\% \mid RQD: 60''/60'' = 100\%$ 

medium hard to hard.

Continued on Page 2

1:00 min/ft, no water loss

10 Pieces, 0" Chips and Fragments

Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" -

100%

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

NQ-Core

**Remarks:** \*Water added to boring for coring

21.0

16.0

C/60

R-2

16

17

18

CRAE	6035 Corporate Drive
CIVIE	East Syracuse, NY 13057
Associates, Inc.	Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-588

 Page No.
 2 of 2

 Project No.
 28062

	<b>Ass</b>	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BURING I	LUG	Project No.	280	062
	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  Sample Depth Type / Blows on						VISUAL CLAS	SIFICATION (	OF MATERIAL		
Depth Scale	Sample	Sample (F	e Depth t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%		RQD %
21							Bottom of Boring @ 21.0'				
							Bottom of Boring @ 21.0				
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40	1										
41											
42											
43											
44											
45	†										

				6035 Co	orporate Drive	SI	IRSURF	ACE EX	ZPI .	ORATION	Boring No.	В-	589
		IV			racuse, NY 13057			Γ BORI			Page No.	1	of 1
	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		1691	DUKI	NG	LUG	Project No.	28	062
Project	Name:	Micror	ı Camp	us, Clay,	New York						Date Started	05/0	02/24
Client:		Rambo	oll								Date Finished	05/0	02/24
Location	n:			on Locati							Surface Elev.		3.8'
		ME	THO		INVESTIGATIO				GF	ROUNDWATER	OBSERVAT	IONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		K. Cra			Casing Hammer:						_		
Inspecto		C. O'H			Other:	211 OD (	7 12 TO 1	05/02/24		While Drilling	1.0		2.0
Drill Ri	g:	CME 4	15		Soil Sampler: Hammer Wt:	2" OD S	Split Barrel	05/02/24 05/02/24		ore Casing Removed ter Casing Removed	3.8 2.6		4.1
Type: Rod Siz	٥.	AWJ			Hammer Fall:	30 in.		05/02/24		ter Casing Removed	caved @ 3.2		out
Kou Siz			ROR	ING SA	AMPLES	<u> </u>	VI			SSIFICATION C			, at
		I				+			LAD		) NIATEKIA		
Depth	G 1		e Depth t.)	Type /	Blows on	Depth of		- coarse		1 25 4 50	20. 25	0/	SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		medium - fine			0% / some - 20 to 35 0% / trace - 0 to 10		or RQD %
0	1A	0.0	0.8	SS/16	1-WH-1-2	(1 t.)			Mat	terial (moist)		,,,	1
	1B	0.8	2.0			ļ				Y (moist, soft)			
1								,		, ,			
2	2	2.0	4.0	SS/14	4-5-5-12		Brown/Gre	ey mottled	SIL	T, trace mf SAND,	trace CLAY (m	oist,	10
							stiff)						
3													
4	3	4.0	6.0	SS/15	7-12-10-10		Brown/Gre	ey mottled	SIL	T, trace CLAY (mo	oist, stiff)		22
5													
	4	6.0	9.0	00/10	7.0.10.10		D CII	Т +	71 43	V (:-t			10
6	4	6.0	8.0	SS/18	7-9-10-10		Brown SIL	1, trace C	LA 1	Y (moist, very stiff)			19
7													
'							Augered gr	ravelly he	oinni	ing @ 75'			
8	5	8.0	10.0	SS/12	6-11-14-14					cmf SAND, trace S	ILT (wet, mediu	ım	25
		0.0	10.0	22/12	0 11 11 1		compact)	0141,22		2711.27, 111100.2	121 (1100)		
9							, , , , , , , , , , , , , , , , , , ,						
10													
11													
12						ļ	.						
10		12.0	12.2	00.2	50.00°		D1. 1.1.1	1 .1	1 7	OOK E	71 1 . \ / \		50
13	6	13.0	13.3	SS/2	50@3"		Black high Bottom of	ly weathe	red R	ROCK Fragments (S	snale) (wet)		50+
1.4							Bottom of	Boring @	15.3	•			
14													
15													
13													
16													
17													
18													
19													
	1												
20													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

trace cmf SAND (wet)

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 103 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-591

 Page No.
 2 of 2

 Project No.
 28062

	<b>Associates, Inc.</b> Phone: 315-701-0522						Project No. 28062							
					AMPLES	VISUAL CLASSIFICATION OF MATERIAL								
Depth		T			Blows on		c - coarse			SPT				
Scale	Sample	Sample Depth (Ft.) Type /		Type /	Sampler	Depth of Change	m - medium	and - 35 to 50	0% / some - 20 to 35%	or				
(Feet)	Sample (Ft.) Sample No. From To Rec. (in.)		Per 6 Inches	(Ft.)	f - fine		20% / trace - 0 to 10%	RQD						
20						(,	Continued from Page 1							
							Augers harder beginning	@ 20.6'						
21	8	21.1	21.2	SS/1	50@1"		Black Rock Fragments (S)			50				
							Split Spoon and Auger Re							
22							Bottom of Boring @ 21.1	7.1.5.1.1						
							Dottom of Dormg C 2111							
23														
24														
25														
26														
27														
28														
29														
•	1													
30														
21														
31														
32														
32														
33														
34														
35														
36														
37														
38														
•														
39														
40	1													
40														
41														
41														
42														
42														
43														
73														
44														
• •														
45	İ													

				6035 Co	orporate Drive	SI	JBSIJRF	ACE EX	(PI	ORATION	Boring No.	B-	592
East Syracuse, NY 13057								S BORI	Page No.	,			
Associates, Inc. Phone: 315-701-0522							1631	DOKI	UU.	LUG	Project No.		
Project Name: Micron Campus, Clay, New York								Date Started					
Client: Ramboll										Date Finished			
Location	n:			on Locati				1	~ -		Surface Elev.		33.0'
- ···				DS OF	INVESTIGATIO				Gh	ROUNDWATER	OBSERVAT	TONS	
Driller:		H. Lyon K. Crandall			Casing: Casing Hammer:	3 ¼" ID H.S.A.		Date		Time	Depth (Ft.)	Casing At (Ft.)	
Driller: Inspector:		C. O'H			Other:					While Drilling	2.8		5.0
Drill Rig:		C. O Hara CME 45			Soil Sampler:	2" OD S	Split Barrel	05/02/24		ore Casing Removed			6.5
Type:		ATV			Hammer Wt:	140 lbs.		05/02/24		er Casing Removed	4.3		out
Rod Siz	e:	AWJ		Hammer Fall:		30 in.		05/02/24			caved @ 6.0	out	
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C		SIFICATION C	F MATERIA	L	
Depth		Sample	e Depth		Blows on		C	COarse					SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		c - coarse a - medium and - 35 to 50% / some - 20 to 35%					or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		little - 10 to 2	0% / trace - 0 to 10°	%	RQD %
0	1A	0.0	0.6	SS/17	WH-1-1-4	L				erial (moist)			2
	1B	0.6	2.0							, trace fine SAND	, trace ORGANI	[C	
1							MATERIA	L (moist,	soft)	)			
•	_		4.0	aa 4 <b>-</b>			D G11	<b></b> 1					
2	2	2.0	4.0	SS/15	4-4-4		Brown SIL	T and cm	f SA	ND, trace fine GRA	AVEL (wet, stiff	7)	8
2													
3													
4	3	4.0	6.0	SS/13	6-7-7-6		Brown/Gre	w mottled	CII 7	T, trace CLAY, trac	ca fina SAND (v	vot	14
-	3	4.0	0.0	33/13	0-7-7-0		stiff)	y mourcu	SIL.	1, trace CLA1, trac	ce fille SAND (V	vci,	14
5	t						Still)						
6	4	6.0	8.0	SS/11	8-8-10-7		Similar as above (wet, very stiff)						
7													
_	_												
8	5	8.0	10.0	SS/14	3-3-3-4		Grey, Similar as above (wet, medium stiff)						6
0													
9													
10	+												
10													
11													
12						[	T —						
13	6	13.0	15.0	SS/8	7-4-4-3		Grey cmf (	GRAVEL,	, little	e SILT, little cmf S	AND (wet, loose	e)	8
14													
15	}												
13													
16							Augers has	rder heoin	nino	@ 16.2'			
10	7	16.5	16.5	SS/0	50@0"		~	ers harder beginning @ 16.2' Spoon and Auger Refusal @ 16.5'					50+
17		- 0.0	-0.5	==, 0			Bottom of			v.			
								8 3					
18													
19													
20	<u> </u>												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

				6035 Co	orporate Drive	SI	JBSURF.	ACE EX	(PL	ORATION	Boring No.	B-	593	
East Syracuse, NY 13057						TEST	Page No.		of 1					
Associates, Inc. Phone: 315-701-0522							IESI	DOKI	110	LUG	Project No.	28	3062	
	Project Name: Micron Campus, Clay, New York								Date Started	04/	29/24			
Client: Ramboll									Date Finished		30/24			
Location:See Exploration Location PlanSurface Elev.392.4METHODS OF INVESTIGATIONGROUNDWATER OBSERVATIONS												92.4'		
D				DS OF			TT G .		GR	KOUNDWATER	OBSERVAT	TONS		
				Casing: Casing Hammer:	3 ¼" ID H.S.A. Date Time			Time	Depth (Ft.) Cas		g At (Ft.)			
	Inspector:		C. O'Hara		Other:			04/29/24	While Drilling		2.1		5.0	
Drill Rig:		CME 45			Soil Sampler:	2" OD S	Split Barrel	04/30/24		ore Casing Removed			13.0	
Type:		ATV			Hammer Wt:	140 lbs.	-	04/30/24			4.5		out	
	Rod Size:		AWJ		Hammer Fall:					er Casing Removed			out	
LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL														
Depth	G 1 D 4					C	- COarse					SPT "N"		
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		c - coarse m - medium and - 35 to			0% / some - 20 to 35	%	or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)					20% / trace - 0 to 109	%	RQD %	
0	1A	0.0	0.7	SS/14	WR-2-3-4	ļ				erial (moist)			5	
	1B	0.7	2.0					T, trace C	CLAY	, trace fine SAND	(moist, medium	l		
1							stiff)							
2	2	2.0	4.0	SS/12	5-6-7-6		Brown/Gra	w mottlad	CII	Γ, trace CLAY (mo	viet etiff)		13	
2		2.0	4.0	33/12	3-0-7-0		Diowii/Gio	y mouncu	SIL	i, trace CLAT (IIIo	71st, sti11 <i>)</i>		13	
3														
4	3	4.0	6.0	SS/13	4-4-2-2		Brown SILT, trace CLAY (moist, medium stiff)							
							, , , , , , , , , , , , , , , , , , , ,							
5														
				~~										
6	4	6.0	8.0	SS/16	4-5-6-7		Similar as above (wet, stiff)							
7														
/														
8	5	8.0	10.0	SS/15	12-14-16-11		Brown SILT, trace CLAY, trace cmf SAND (moist, hard)						30	
		0.0	10.0	55,10	12 1 1 10 11		Brown Sill, trace Clat, trace cili Sand (moist, nard)							
9														
10														
11							Augers harder beginning @ 11.0'							
12														
12														
13	6A	13.0	14 8	SS/11	14-12-8-11		Brown CLAY, some SILT, trace cmf SAND (wet, very stiff)						20	
	011	10.0	10	~~/11	1.12011		DIOWII CLAT, SOING SILT, HACE CHII SAIND (WEL, VELY SHII)							
14														
	6B	14.8	15.0	SS/11			Black cmf SAND, some SILT (wet)							
15														
16	7	16.0	16.1	SS/1	50@2"		Black ROCK Fragments (Shale) - Auger Refusal @ 16.0'						50+	
1.7							Bottom of Boring @ 16.2'							
17														
18														
10														
19														

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

				6035 C	orporate Drive	SI	IBSURF	ACE EX		ORATION	Boring No.	B	-594
		<b>TY</b>	Ę		racuse, NY 13057			S BORI			Page No.		of 2
		ociates		I mone.	315-701-0522		1631	DOKI	1001		Project No.		8062
Project	Name:			us, Clay,	New York						Date Started		01/24
Client:		Rambo									Date Finished		02/24
Locatio	n:			on Locati		NT.			~-	OIBIDIT!	Surface Elev.		92.9'
- 411					INVESTIGATIO		a .		GR	OUNDWATER	R OBSERVAT	TONS	
Driller:			letcher		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Driller: Inspect		Ryan C	Casatell	1	Casing Hammer: Other:	NQ-Cor		05/02/24	,	While Drilling	9.3	1	3.5
Drill Ri		CME 5	55		Soil Sampler:	-	e Split Barrel	05/02/24		re Casing Removed			26.5
Type:	<b>5</b> •	ATV	),,		Hammer Wt:	140 lbs.	-	05/02/24		r Casing Removed	3.4 *		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/02/24		r Casing Removed	caved @ 7.9		out
	LO	G OF	BOR	ING SA	AMPLES		VI			SIFICATION (		L	
Depth		1	e Depth		Blows on			- coarse	1				SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	0% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 109		RQD %
0	1A	0.0	1.0	SS/17	WH-WH-2-3		Topsoil an	d Organic	Mate	rial (moist)			2
						ļ <u> </u>	<u>                                     </u>						
1	1B	1.0	2.0				Brown/Gre	ey SILT, l	ittle C	LAY (moist, soft)	)		
		2.0	4.0	00/16	2 4 2 4		D CH	T 111 C	T A 3.7		.:00		7
2	2	2.0	4.0	SS/16	3-4-3-4	Brown SILT, little CLAY (moist, medium stiff)							
3													
3						Brown SILT, trace CLAY (wet, stiff)							
4	3	4.0	6.0	SS/23	4-5-6-9	6-9 Brown SILT, trace CLAY (wet, stiff)							
,		1.0	0.0	00,20	1507	-9 Brown SILT, trace CLAY (wet, stiff)							
5	1					Brown SILT, trace CLAY (wet, stiff)							
6	4	6.0	8.0	SS/20	6-8-8-10		Brown SIL	T, trace C	CLAY	(wet, very stiff)			16
7													
0	_	0.0	10.0	00/10	<b>5</b> 000		C::1	a <b>l</b> a a a	.4	4:66)			1.0
8	5	8.0	10.0	SS/19	5-8-8		Similar as	above (we	et, ver	y stiii)			16
9													
10													
11						<b> </b>	<u>                                     </u>			. <b></b>	· <b>-</b>		.
12													
12													
13	6	13.5	15.0	SS/18	2-2-16		Gray amf	SAND co	ma CT	LT, trace fine GR	AVEL (wat made	lium	18
14		13.3	13.0	20/10	2-2-10		compact)	אראבט, 80.	1110 31	LI, HACE HIE GR	A VEL (WEI, IIIE)	ululli	10
1 1 7							(Compact)						
15	†												
16													
17						ļ	<u> </u>				<b>-</b>		.
18	_	10.5	10.1	00/5	26.5004"		D . C	1	,1	1 DOGW E	. (01 1 ) (		50
10	7	18.5	19.1	SS/6	26-50@1"		Dark Grey	nighly we	eather	ed ROCK Fragme	ents (Shale) (wet)	)	50+
19							Snlit Snoon	n and Aug	or Do	fusal @ 19.5. Set	un to core		
20	1					<u> </u>	Continued			jusui w 19.5. Sel	ир ю соге.		┥

20 Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

CVE
Associates, Inc.

6035 Corporate Drive East Syracuse, NY 13057

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-594

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST DOMING		Project No.	28	062		
	LO	G OF	BOR1	ING SA	SAMPLES VISUAL CLASSIFICATION OF MATERIAL								
Depth Scale (Feet)	Sample No.	Sample (F		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 359 20% / trace - 0 to 109		SPT "N" or RQD %		
20	110.	110111	10	ACC. (III.)	1 et 0 fliches	(rt.)	Continued from Page 1	ntue - 10 to 2	2070 / Hace - 0 to 10%	U	KQD 70		
21 22	R-1	19.5	24.5	C/60	NQ-Core		19.5' - 22.0': Dark Grey Si medium bedded, medium interbedded Shale layers ( laminated to thinly bedded	hard. 22.0' - 24.5' 1/8" - 2" thick), sl	: DOLOSTONE lightly weathered	with , thinly	48%		
23							(1/4" thick) @ 19.8'. <i>Brokand</i> 26.5' - 26.7'.	ken and fractured	zones @ 25.7' - 2				
24							Recovery: 60"/60" = 100" 27 Pieces, 0" Chips and Fi 1:00 min/ft, no water loss	ragments	= 48%				
25	1						Coring conducted in 4th g	gear, 1500 rpm, 70			72%		
26	R-2	24.5	29.5	C/60	NQ-Core		Dark Grey DOLOSTONE with interbedded SHALE layers (<1/8" 3.0" thick), slightly weathered, thinly laminated to medium bedded medium hard to hard.  Recovery: 60"/60" = 100%						
27							Recovery: 60"/60" = 100%						
28							RQD: 43"/60" = 72% 7 Pieces, 5" Chips and Fragments 1:00 min/ft, no water loss						
29							Coring conducted in 4th gear, 1500 rpm, 700 psi down pressure.						
30							v ·						
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
42													
43													
44													
45	I			l		I	Ī				1		

/ tttaoriiii	ont to o	TVIL IXC	portra	uilibei.	20002D-04-0724	_				<u> </u>	est boiling Logs	. ago	100 01 20 1
				6035 C	orporate Drive	rive SUBSURFACE EXPLORATION Boring No. B							
		IV		East Sy	racuse, NY 13057						Page No.	1	of 2
	<b>A</b> sso	ociates	s, Inc.	Phone:	315-701-0522		IESI	BORI	NG	LUG	Project No.	28	3062
Project	Name:	Micror	Campi	us, Clay,	New York						Date Started	05/	02/24
Client:		Rambo									Date Finished	05/	03/24
Location	n:	See Ex	ploratio	on Locati	ion Plan						Surface Elev.	39	90.4'
		ME	THO	DS OF	INVESTIGATIO	N			GI	ROUNDWATER	OBSERVAT	IONS	
Driller:		Beau F	letcher		Casing:	3 ¼" ID	H.S.A.	Data		T:	Dandle (E4.)	Continu	- A4 (E4 )
Driller:		Ryan C	Casatelli	i	Casing Hammer:			Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto	or:				Other:	NQ-Cor	re	05/02/24		While Drilling	0.0	1	8.5
Drill Ri	g:	CME 5	55		Soil Sampler:		Split Barrel			ore Casing Removed	None Noted	2	8.6
Type:		ATV			Hammer Wt:	140 lbs.		05/03/24		er Casing Removed	2.7	(	out
Rod Size		AWJ			Hammer Fall:	30 in.		05/03/24		er Casing Removed	caved @ 13.0		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SSIFICATION (	)F MATERIA	L	1
Depth		Sample		Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample	(F		Sample	Sampler	Change		medium			0% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10	%	RQD %
0	1A	0.0	0.5	SS/15	WH-2-3-4	ļ				erial (moist)	LAND (	- <del>-</del>	5
1	1B	0.5	2.0				_	vn SIL1,	race	CLAY, trace fine S	SAND (moist, m	edium	
1						stiff) Brown SILT, trace fine SAND, trace CLAY (wet, stiff)							
2	2	2.0	4.0	SS/17	6-6-7-7	Brown SILT, trace fine SAND, trace CLAY (wet, stiff)							
2	2	2.0	4.0	55/17	0-0-7-7	Brown SILT, trace fine SAND, trace CLAY (wet, stiff)							
3						Brown SILT trace fine SAND trace CLAY (wet_stiff)							
						Brown SILT, trace fine SAND, trace CLAY (wet, stiff)							
4	3	4.0	6.0	SS/16	5-6-6-8	Brown SILT, trace fine SAND, trace CLAY (wet, stiff)							12
		1.0	0.0	<i>DD</i> / 10		Brown SILT, trace fine SAND, trace CLAY (wet, stiff)							12
5						Brown Sill, trace line SAND, trace CLAY (wet, still)							
6	4	6.0	8.0	SS/16	6-6-8-8		Similar as	above (we	et, sti	ff)			14
7													
8	5	8.0	10.0	SS/20	5-7-8-7		Brown/Gre	ey, similaı	as al	bove (wet, very stif	f)		15
9													
10													
10													
11													
11													
12													
12													
13													
	6	13.5	15.0	SS/12	8-6-7		Grey SILT	, trace CI	AY	(wet, stiff)			13
14								, <b>32</b>	'	· · · · · · · · · · · · · · · · · · ·			
15													
16													
17													
						<b> </b>	<u>                                     </u>						
18						1	Augers harder beginning @ 18.0' Grey highly weathered ROCK Fragments (Shale) (wet)						
	7	18.5	18.6	SS/1	50@1"			•		_			50+
19	_					Split Spoon and Auger Refusal @ 18.6. Set up to core.						<b>.</b>	
	R-1	18.6	23.6	C/59	NQ-Core					n interbedded SHAl	LE layers (<1/8"	- 3.0"	93%
20		1			i e	1	Continued	on Dogo	,				

20 Continued on Page 2 SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \*Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057

#### SUBSURFACE EXPLORATION **TEST BORING LOG**

Boring No. B-595 Page No. 2 of 2 Project No. 28062

	Ass	ociates	s, Inc.	Phone: 3	315-701-0522		TEST DOKING		Project No.	280	062	
	LO	G OF	BOR	ING SA	MPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL			
Depth Scale (Feet)	Sample No.		Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %	
20 21 22 23 24 25	R-2	23.6	28.6	C/58	NQ-Core		Continued from Page 1 thick), slightly weathered, medium hard to hard.  SILT seam (<1/8" thick) @ Recovery: 59"/60" = 98% 21 Pieces, 0" Chips and Fil:00 min/ft, no water loss Coring conducted in 4th g Grey DOLOSTONE with thick), slightly weathered, medium hard to hard.  Broken and fractured zone	23.0'.  RQD: 56"/60" = ragments  ear, 1700 rpm, 70 interbedded SHAI thinly laminated t	= 93% 00 psi down pressu LE layers (<1/8" - 10 medium bedded 11 and 27.0' - 27.2'.	ure. 5.0"	82%	
<ul><li>26</li><li>27</li><li>28</li></ul>							Recovery: 58"/60" = 97%   RQD: 49"/60" = 82% 12 Pieces, 4" Chips and Fragments 1:00 min/ft, no water loss Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure.  Bottom of Boring @ 28.6'					
29												
30												
31 32												
33												
34												
35 36												
37												
38												
39												
41												
42												
43												
44												

			F		orporate Drive	SU	J <b>BSURF</b>	ACE EX	(PL	ORATION	Boring No.		596
	Acc	neister	luo		racuse, NY 13057			BORI			Page No.		of 2
		ociates			315-701-0522				. , •		Project No.		3062
Project	Name:			us, Clay,	New York						Date Started		19/24
Client:		Rambo									Date Finished		19/24
Location	n:			on Locati			1		- · -	OT 11	Surface Elev.		91.7'
					INVESTIGATIO				GR	ROUNDWATER	OBSERVAT	IONS	
Driller:		Beau F			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		Ryan C		i	Casing Hammer:						_		
Inspecto		Chris (			Other:	• • • • •		04/19/24		While Drilling	11.3		3.5
Drill Ri	g:	CME 5	55		Soil Sampler:		Split Barrel	04/19/24		ore Casing Removed	14.4		2.2
Type:		ATV			Hammer Wt:	140 lbs.		04/19/24		er Casing Removed	4.8		out
Rod Siz		AWJ	DAD	DIG G	Hammer Fall:	30 in.	X7X	04/19/24		er Casing Removed	caved @ 8.6		out
	LO	G OF	BOK	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	OF MATERIA	L	
Depth		_	Depth	Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample		t.)	Sample	Sampler	Change		medium			% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine	1.		0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.5	SS/15	1-1-4-3	ļ		~		erial (moist)	ODCANIC		5
,	1B	0.5	2.0					•		Γ, little CLAY, trac	e OKGANIC		
1							MATERIA	L (moist,	med	ıum stiff)			
2	2	2.0	4.0	SS/19	3-6-5-6	Similar as above (moist, stiff)							11
3													
4	3	4.0	6.0	SS/14	4-4-4-2	Grey/Brown CLAY, some SILT, trace cmf SAND (moist, medium stiff)							8
-		7.0	0.0	DD/14	<del></del>	The state of the s							O
5	1					stiff)							
			6 -			stiff)							
6	4	6.0	8.0	SS/13	3-5-5-4		Brown SIL	Τ, trace C	CLAY	(moist, stiff)			10
7													
8	5	8.0	10.0	SS/12	4-7-6-7		Similar as	above (we	et, sti	ff)			13
9													
7													
10													
11													
11													
12													
13													
	6	13.5	15.0	SS/11	3-4-7		Brown SIL	T, trace C	CLAY	, trace mf GRAVE	EL, trace cmf SA	ND	11
14							(wet, stiff)						
15	}												
15													
16													
1.5													
17													
18													
	7	18.5	20.0	SS/10	5-15-17		Dark Grev	cmf GR A	VEI	, some cmf SAND,	little SILT (wet	t.	32
19	<b>'</b>		_0.0				compact)	Jun Old	. ,	., 20110 0111 0111 10	,	-,	
								_					
20	1	•		1	i e	1	Continued	on Dogo	,				

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

6035 Corporate Drive East Syracuse, NY 13057

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-596

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BURING	LUG	Project No.	280	062
					AMPLES		VISUAL CLAS	SIFICATION O			
Depth Scale (Feet)	Sample No.	Sample	e Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20				, ,			Continued from Page 1				
21											
22	8	22.2	22.2	SS/0	50@0"		ROCK Fragments in tip of Bottom of Boring @ 22.2	f spoon. Auger Re	efusal @ 22.2'		50+
23											
24	•										
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41 42											
43											
44											
45											

Test Boring Logs - Page 112 of 201

						_				<u>.</u>		90	· · · = · · · · · ·
				6035 Co	orporate Drive	ST	IRSHRE	ACE FY	PI 4	ORATION	Boring No.	В	598
		IV			racuse, NY 13057						Page No.	1 0	of 2
	Assu	ociates	s, Inc.	Phone: 3	315-701-0522		IESI	Γ BORII	NG	LUG	Project No.	28	3062
Project 1	Name:			us, Clay,	New York						Date Started		01/24
Client:		Rambo	oll								Date Finished	05/0	01/24
Location	ı:			on Locati							Surface Elev.		33.5'
					INVESTIGATIO				GR	ROUNDWATER	OBSERVAT	IONS	
Driller:		H. Lyo		- <b>-</b>	Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casino	g At (Ft.)
Driller:		K. Cra			Casing Hammer:						· · · · · · · · · · · · · · · · · · ·		, (= <del>••</del> )
Inspecto		C. O'H			Other:	2" 05 0	inlit D= 1	05/01/24		While Drilling	1	<u> </u>	
Drill Rig	g.	CME 4	tJ		Soil Sampler: Hammer Wt:	2" OD S 140 lbs.	Split Barrel	05/01/24 05/01/24		ore Casing Removed er Casing Removed	<b>'</b>	1	auf
Type: Rod Size	e:	ATV AWJ			Hammer Wt: Hammer Fall:	140 lbs. 30 in.		05/01/24		er Casing Removed er Casing Removed	caved @ 8.0		out
Lou SIZ			BUDI		AMPLES	JU III.	VI			SSIFICATION O			
_	LU(	ı				1			_AA	TION U	LIVITIUMA		G=-
Depth Scale	Sample		e Depth et.)	Type /	Blows on Sampler	Depth of		- coarse medium	ļ	and 25 : 50	9% / some - 20 to 35%	%	SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		medium - fine	ļ		9% / some - 20 to 359 20% / trace - 0 to 10%		or RQD %
0	1A	0.0	0.6	SS/14	WH-WH-3-2	()			Mate	terial (moist)			3
	1B	0.6	2.0	[		[				CLAY, trace mf SA	ND (moist, soft	<del>)</del>	
1	1	1	<b>[</b>	[			1						
			<b>[</b>	[_			_	<b>F</b>	•	7 .	,		
2	2	2.0	4.0	SS/15	1-2-1-2		Brown SIL	77, little C	LAY	, trace cmf SAND	(wet, soft)		3
	1	1	<b>[</b>	[			1						
3	1		<b>(</b>	[			[						
4	3	4.0	6.0	SS/14	9-11-11-7		Brown an	T trace	<u>ሃ</u> ለን	Y (moist, very stiff)			22
4	3	4.0	U.U	SS/14	<i>7</i> -11-11- <i>/</i>		הייסwu SIF	., uace C	LAY	i (moist, very stiff)			22
5	1		<b>[</b>	1			1						
			<b>[</b>	1			1						
6	4	6.0	8.0	SS/17	5-5-6-5		Brown/Gre	y/Orange.	, Sim	nilar as above (mois	t, stiff)		11
		Ī į	<b> </b>	[			1	J					
7			<b>[</b>	[			1						
_	_	0.0	10 -	00%	2.4.7.		C ~		A = -	(mot elect			_
8	5	8.0	10.0	SS/12	3-4-5-4		Grey SILT	, trace CL	AY (	(wei, stiff)			9
9	1	1	<b>[</b>	[			1						
7			<b>[</b>	[			1						
10	1		<b>[</b>										
			<b>[</b>	[			1						
11			<b> </b>	[			1						
			<b>[</b>	[			1						
12			<b> </b>	[			1						
1.0	_	10-	1	00%	277		C:	ob -		ff)			1.0
13	6	13.0	15.0	SS/14	2-7-5-5		Similar as	adove (we	ε, stif	11)			12
14			<b>[</b>	[			1						
14			<b>[</b>	[			1						
15			<b>[</b>				1						
-			<b>[</b>	[			1						
16			<b>[</b>				1						
			<b>[</b>	1					. = = -				
17			<b> </b>	[				- <b>-</b> -		- <b></b>			
4.5	_	10	20	gg	4.2.5 :			V	TF =	1124 2	A	D.	
18	7	18.0	20.0	SS/17	1-2-2-4				ılT,	, little mf GRAVEL	, trace cmf SAN	ロ (wet,	4
10			<b>[</b>	1			medium sti	111)					
19			<b> </b>	1			1						
20	ł	] (	<b>!</b>				Continued	on Page 2					

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Test Boring Logs - Page 113 of 201 Attachment to CME Report Number: 28062B-04-0724 Boring No. **B-598** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 2 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 VISUAL CLASSIFICATION OF MATERIAL LOG OF BORING SAMPLES Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change From To Per 6 Inches f - fine little - 10 to 20% / trace - 0 to 10%RQD % (Feet) No. (Ft.) Rec. (in.) Continued from Page 1 20 8A 20.0 SS/14 8-15-50@2" Similar as above (wet, hard) 50+ 20.6 Black highly weathered ROCK Fragments (Shale) 21 8B 20.6 21.7 9 21.1 21.1 SS/0 50@0" Split Spoon and Auger Refusal @ 21.1' Bottom of Boring @ 21.1' 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

37

38

39

40

41

42

43

44

Attachm	ent to C	ME Re	port N	umber:	28062B-04-0724						Test Boring Logs	- Page 1	14 of 20
				6035 Co	orporate Drive	SI	IBSURF	ACE EX	PLO	RATION	Boring No.	B-	600
		IV		East Sy	racuse, NY 13057						Page No.	1	of 1
	Asso	ciates	s, Inc.	Phone:	315-701-0522		ILS	ΓBORI	NG L	JUG	Project No.	28	062
Project	Name:	Micror	Camp	us, Clay,	New York						Date Started	04/2	24/24
Client:		Rambo	oll								Date Finished	04/2	24/24
Location	n:	See Ex	ploratio	on Locati	on Plan						Surface Elev.	38	3.4'
		ME	THO	DS OF	INVESTIGATIO	ON			GRO	OUNDWATE	R OBSERVAT	IONS	
Driller:		H. Lyo	n		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Cocina	At (Ft.)
Driller:		K. Cra	ndall		Casing Hammer:						Depth (Ft.)	Casing	At (Ft.)
Inspecto		C. O'H			Other:			04/24/24		Vhile Drilling	7.8		3.0
Drill Ri	g:	CME 4	15		Soil Sampler:		Split Barrel	04/24/24		e Casing Removed		1	7.4
Type:		ATV			Hammer Wt:	140 lbs.		04/24/24		Casing Removed	4.7	C	out
Rod Siz		AWJ			Hammer Fall:	30 in.		04/24/24		Casing Removed	caved @ 7.6		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASS	SIFICATION (	OF MATERIA	.L	
Depth		Sample		Type /	Blows on	Depth of	c	- coarse					SPT "N"
Scale	Sample	(F		Sample	Sampler	Change		medium			0% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		f - fine			20% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.6	SS/14	1-1-4-4	ļ	Topsoil an				-int my 11 (12)		5
1	1B	0.6	2.0				Brown/Gro	ey mottled	SIL1,	trace CLAY (m	oist, medium stif	<b>(</b> )	
1													
2	2	2.0	4.0	SS/10	2-2-4-3		Cimilan oa	aharra (ma	aist m	adium stiff)			6
2	2	2.0	4.0	33/10	2-2-4-3	Similar as above (moist, medium stiff)							U
3						Similar as above (moist, medium stiff)							
3													
4	3	4.0	6.0	SS/13	3-5-5-3		Brown/Re	d SII T lii	ttle cm	f SAND trace fi	ne GRAVEL, tra	ce	10
-	3	7.0	0.0	55/13	3 3 3 3		CLAY (me		ttic Cili	i britte, trace ii	ne GRAVEL, tra		10
5							CEITI (III	0130, 30111)					
C													
6	4A	6.0	6.9	SS/15	4-15-23-23		Similar as	above (we	et, hard	1)			38
	4B	6.9	8.0			h					e SILT (moist, co	mpact)	
7							Augers lik			,	, ,	1 /	
							Augers ha	rder begin	ning (	@ 7.8'			
8	5	8.0	10.0	SS/8	4-5-13-19		Brown/Gre	ey cmf GF	RAVEL	, some cmf SAN	ND, little SILT (w	et,	18
							medium co	ompact)					
9													
10													
11													
10													
12													
12		12.0	15.0	00/11	1 2 4 11		C	CAND	1 C C	DAMEL 1941. C	II T (	`	
13	6	13.0	15.0	SS/11	1-2-4-11		Grey cmf	SAND and	ı mt G	KAVEL, little Sl	LT (moist, loose)	)	6
14													
14													
15													
13						}	Augers ha	rder begir	mina G	n 15 5'			
16							rugers na	idei vegin	ining (	≈ 1J.J			
10													
17	7	17.4	17.5	SS/1	50@1"		Black RO	CK Fragm	ents (S	Shale) (wet)			50+
1,	,	-/	27.5	~~ 1	5001			_		usal @ 17.4'			

Bottom of Boring @ 17.4'

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

19

				6035 Co	orporate Drive	SI	JBSIJRF	ACE EX	 (PL	ORATION	Boring No.	B	-601
		V	Ę	-	racuse, NY 13057			Γ BORI			Page No.		of 1
		ociates			315-701-0522		1691	DOKI.	110	LUG	Project No.		8062
Project	Name:			us, Clay,	New York						Date Started		01/24
Client:		Rambo									Date Finished		01/24
Locatio	n:			on Locati		<u> </u>		ı	~=		Surface Elev.		83.1'
				DS OF	INVESTIGATIO				GR	ROUNDWATER	OBSERVAT	TONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Driller: Inspect	<b></b> .	K. Cra C. O'H			Casing Hammer: Other:			05/01/24		While Drilling	0.6	1	3.0
Drill Ri		CME 4			Soil Sampler:	2" OD S	Split Barrel	05/01/24		ore Casing Removed	7.1		5.0
Type:	ь.	ATV			Hammer Wt:	140 lbs.	-	05/01/24		er Casing Removed	4.6		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/01/24		er Casing Removed	caved @ 7.3		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C		SSIFICATION C	F MATERIA	L	
Depth		Sample	e Depth		Blows on		C	- coarse					SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		little - 10 to 2	0% / trace - 0 to 10°	%	RQD %
0	1A	0.0	0.7	SS/13	1-WH-WH-4	l				erial (moist)			0
	1B	0.7	2.0							, trace fine SAND,	trace ORGANI	C	
1							MATERIA	AL (moist,	very	soft)			
	_	2.0		aa.4.=	2056								1
2	2	2.0	4.0	SS/17	3-8-7-6		Brown SIL	T, trace C	LAY	Y (moist, very stiff)			15
3													
3													
4	3	4.0	6.0	SS/13	5-7-5-7	Brown/Grey, Similar as above (moist, stiff)							
		4.0	0.0	55/13	3 7 3 7	Brown/Grey, Similar as above (moist, stiff)							
5	1												
6	4	6.0	8.0	SS/18	7-6-5-8		Brown SIL	T, little C	LAY	(moist, stiff)			11
7													
	_	0.0	100	aa /1 2			G GYY F						
8	5	8.0	10.0	SS/12	5-8-8-5		Grey SILT	, trace CL	AY (	(moist, very stiff)			16
9													
9													
10	ł												
11													
						<u> </u>							.]
12						[ <b></b>					<b> </b>		
13	6	13.0	15.0	SS/7	WH-2-6-3			and cmf	SAN	D, trace mf GRAV	EL, trace CLAY	(wet,	8
1,,							stiff)						
14													
15							Augers ha	rd haaine	ina G	n 15 2'			
13	7	15.9	15.9	SS/0	50@0"		Augers nat Auger Refi			y 1J.Z			50+
16	′	13.7	13.7	33/0	30@0		Bottom of			)'			30+
								201111g @	10.7				
17													
18													
19													
20	1												
711													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

			F	6035 Co	orporate Drive	SI	JBSURFA	ACE EX	KPL	ORATION	Boring No.		602
		ı, yı	Ę.	•	racuse, NY 13057			BORI			Page No.		of 2
		ociates			315-701-0522		11201	DORL	110	LOG	Project No.		3062
Project	Name:		_	us, Clay,	New York						Date Started		01/24
Client:		Rambo	oll								Date Finished	05/	01/24
Location	n:			on Locati							Surface Elev.		34.9'
		ME	THO	DS OF	INVESTIGATIO	N			Gl	ROUNDWATER	R OBSERVAT	IONS	
Driller:		Beau F			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casino	At (Ft.)
Driller:		Ryan C	Casatell	i	Casing Hammer:						_	,	
Inspecto					Other:	NQ-Cor		05/01/24		While Drilling	4.9		8.5
Drill Ri	g:	CME 5	55		Soil Sampler:		plit Barrel	05/01/24		ore Casing Removed	None Noted	3	1.8
Type:		ATV			Hammer Wt:	140 lbs.		05/01/24		ter Casing Removed	3.2 *	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/01/24		ter Casing Removed	caved @ 17.0		out
	LO	G OF	BOR	ING SA	AMPLES		VIS	SUAL C	LAS	SSIFICATION C	)F MATERIA	L	
Depth			Depth	Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample	(F		Sample	Sampler	Change		medium			0% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10°	%	RQD %
0	1A	0.0	1.0	SS/17	1-1-8-9		Topsoil and	d Organic	Mat	terial (moist)			9
						1.0	<u></u>				<del> </del>		
1	1B	1.0	2.0				Brown SIL	T, trace c	mf S	SAND, trace fine GI	RAVEL (moist,	stiff)	
2	2	2.0	4.0	SS/18	10-12-13-16	Brown/Grey SILT, trace fine SAND, trace CLAY (wet, very stiff)							
_	_			25/10	10 12 10 10								
3						Brown SILT, trace CLAY (wet, very stiff)							
						Brown SILT, trace CLAY (wet, very stiff)							
4	3	4.0	6.0	SS/19	8-9-6-7	Brown SILT, trace CLAY (wet, very stiff)							
						Brown SILT, trace CLAY (wet, very stiff)							
5						Brown SILT, trace CLAY (wet, very stiff)							
6	4	6.0	8.0	SS/19	7-8-6-6		Brown SIL	T. little fi	ine S	AND, trace CLAY	(wet, stiff)		14
								,		,	,		
7													
	_									-			
8	5	8.0	10.0	SS/14	3-4-4-4		Grey SILT	, trace fin	e SA	AND, trace CLAY (v	wet, stiff)		8
9													
10													
11													
12													
12													
13	6	13.5	15.0	SS/15	2-4-4		Grey SILT	, trace CI	ΔAY	(wet, stiff)			8
14	_		- 70					, <b></b>		,,,			
15													
13													
16													
] ,_													
17						·							
18													
	7	18.5	20.0	SS/15	14-13-10		Grey highl	y weather	ed R	OCK Fragments (S	hale), little SILT	, little	23
19							cmf SAND			<u> </u>	-		

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-602

 Page No.
 2 of 2

 Project No.
 28062

	ASS	ociates	s, inc.	Phone: 3	315-701-0522	v							
	LO	G OF	BOR	ING SA	AMPLES	VISUAL CLASSIFICATION OF MATERIAL							
Depth Scale (Feet)	Sample No.	_	Depth (t.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 10% / trace - 0 to 10%	SPT "N" or RQD %			
20 21						(Ft.)	Continued from Page 1  Split Spoon and Auger Re	fusal @ 21.8'. Set	up to core.				
22 23 24 25 26	R-1	21.8	26.8	C/60	NQ-Core		Grey DOLOSTONE with thick), moderately weather medium hard to hard.  Weathered, broken and from 24.3'-24.6' and 26.4'-26.8  SILT seam with weathered Weathered zones @ 22.0'-Recovery: 60"/60" = 100''  22 Pieces, 16" Chips and 3	red, thinly laminat actured zones @ 2 '. I ROCK Fragment 22.2', 23.2', and 2 %   RQD: 13"/60"	ed to thinly bedded, 2.2'-23.0', 23.5'-24.0', as @ 25.8'-26.0'. 6.5'-26.6'.	22%			
							1:00 min/ft, no water loss		10 mai danna macanna				
27 28	R-2	26.8	31.8	C/57	NQ-Core		Coring conducted in 4th g Grey DOLOSTONE with thick), slightly to moderate	interbedded SHAI ely weathered, thir	LE layers (<1/8" - 2.0"	28%			
29							bedded, medium hard to l Broken and fractured zone 28.4'-28.5', 28.8'-29.0', an	es @ 27.0'-27.1', 2	27.5'-27.6', 27.8'-28.3',				
30							SILT seam with weathered Recovery: 57"/60" = 95%	_					
31							11 Pieces, 15" Chips and 11:15 min/ft, no water loss						
32							Coring conducted in 4th g Bottom of Boring @ 31.8		00 psi down pressure.				
33							Doubling C 3110						
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45	1	1											

Attachin	ont to o		portre	arribor.	20002D-04-0724						est boiling Logs	. i ago			
				6035 C	orporate Drive										
		IV			racuse, NY 13057						Page No.	1	of 2		
	Asso	ociates	s, Inc.	Phone:	315-701-0522		IESI	r BORI	NG.	LUG	Project No.	28	3062		
Project	Name:	Micror	Camp	us, Clay,	New York	•					Date Started	04/	19/24		
Client:		Rambo	oll	-							Date Finished	04/	19/24		
Location	ı:	See Ex	ploration	on Locati	ion Plan						Surface Elev.	39	91.4'		
		ME	THO	DS OF	INVESTIGATIO	N			GF	ROUNDWATER	OBSERVAT	TONS			
Driller:		Beau F	letcher		Casing:	3 ¼" ID	H.S.A.	Data		T:	Depth (Ft.)	Carina	- A4 (E4 )		
Driller:		Ryan C	Casatell	i	Casing Hammer:			Date		Time	Deptn (Ft.)	Casing	g At (Ft.)		
Inspecto	r:	Chris C	O'Hara		Other:	NQ-Cor	re	04/19/24		While Drilling	None Noted	1	5.0		
Drill Ri	g:	CME 5	55		Soil Sampler:	2" OD S	Split Barrel	04/19/24		ore Casing Removed		2	5.0		
Type:		ATV			Hammer Wt:	140 lbs.		04/19/24		er Casing Removed	4.0 *	(	out		
Rod Size		AWJ			Hammer Fall:	30 in.		04/19/24	_	er Casing Removed	caved @ 20.6		out		
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION (	OF MATERIA	L			
Depth		Sample	Depth	Type /	Blows on	Depth of	c -	- coarse					SPT "N"		
Scale	Sample	(F		Sample	Sampler	Change		medium			0% / some - 20 to 35		or		
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10	%	RQD %		
0	1A	0.0	0.5	SS/12	1-1-2-4	ļ				erial (moist)			3		
	1B	0.5	2.0			1		Τ, trace (	LAY	, trace ORGANIC	MATERIAL (n	noist,			
1						1	soft)								
	2	2.0	4.0	00/15	4656	1	Brown SILT, trace CLAY (moist, stiff)								
2	2	2.0	4.0	SS/15	4-6-5-6		Brown SILT, trace CLAY (moist, stiff)								
2															
3															
4	3	4.0	6.0	SS/24	3-4-3-6		Brown SILT little CLAY trace fine SAND (moist medium stiff)								
4	3	4.0	0.0	33/24	3-4-3-0		Brown SILT, little CLAY, trace fine SAND (moist, medium stiff)								
5							Brown SILT, little CLAY, trace fine SAND (moist, medium stiff)								
3															
6	4	6.0	8.0	SS/14	4-5-6-8		Brown SII	T trace (	LAY	Y (moist, stiff)			11		
	•	0.0	0.0	55/11	1500		Brown Siz	71, 11400	<i></i>	(moist, stiii)			11		
7															
8	5	8.0	10.0	SS/13	5-6-6-7		Similar as	above (we	et, sti	ff)			12		
								`	,	,					
9															
10						1									
11						1									
						1									
12						1									
13						1				99					
	6	13.5	15.0	SS/11	4-4-4	1	Similar as	above (wo	et, sti	ff)			8		
14						1									
15						1									
1.0						1									
16															
17						1									
17						1									
18						<b>}</b> -	<u> </u>								
10	7A	18.5	19.6	SS/16	1-2-5	1	Grey CLA	V littla m	of GP	AVEL, little SILT	trace cmf SAN	D	7		
19	/ <b>/1</b>	10.5	19.0	20/10	1-2-3	1	(wet, medi		ıı UK	arvee, mue sie i	, and chin SAIN	J	'		
1)	7B	19.6	20.0			1	, ,		Y tr	ace cmf SAND (we	et, medium stiff)				
20	, 5	17.0	20.0			1	Continued			acc chii britto (Wi	, m.a.um sum)				

20 Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-604

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522						TEST BURING	LUG	Project No.	280	)62
	LO	G OF	BOR	ING SA	MPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL		
Depth Scale (Feet)	Sample No.	_	e Depth (t.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20 21							Continued from Page 1				
22 23											
24	8	23.5	24.3	SS/9	5-50@3"		Grey/Black cmf GRAVEI SAND (wet, very compac		tle SILT, trace cm	f	50+
25 26	R-1	25.0	30.0	C/60	NQ-Core		Split Spoon and Auger Regrey DOLOSTONE with thick), slightly weathered,	interbedded SHA	•		98%
27							hard to hard. Recovery: 60"/60" = 100 RQD: 59"/60" = 98%	00% I Fragments			
28 29							17 Pieces, 0" Chips and F 1.0 - 1.25 min/ft, no water	ater loss			
30	R-2	30.0	35.0	C/60	NQ-Core		Grey DOLOSTONE with		•		63%
31							thick), slightly weathered, hard to hard. <i>Broken and</i> <i>Horizontal fractures with</i>	fractured zone wi	th SILT @ 25.2' - 2	25.3′.	
32 33							34.5' and 34.7'. Recovery: 60"/60" = 100 RQD: 38"/60" = 63%	%			
34							23 Pieces, 1" Chips and F 1.0 - 1.5 min/ft, no water to	-			
35	1						Bottom of Boring @ 35.0	1			
36											
37											
38 39											
40											
41 42											
43											
44											
45		Ī		1 1		1	ĺ				

Attachm	ent to C	INE KE	роп и	umber: A	28062B-04-0724					lest Boring Logs	- Page 1	20 of 201
				6035 Co	orporate Drive	C1	TRCLIDE	ACE EX	KPLORATION	Boring No.	B-	605
		IV			racuse, NY 13057	50				Page No.	1	of 2
	Asso	ociates	, Inc.	Phone:	315-701-0522		TEST	' BORI	NG LOG	Project No.		062
Project :					New York					Date Started		03/24
Client:	Name.	Rambo		us, Ciay,	New Tork					Date Started  Date Finished		03/24
				Ŧ	D1							
Location	1:			on Locati					CD CLINIDAL ATEL	Surface Elev.		0.2'
				DS OF	INVESTIGATIO				GROUNDWATE	R OBSERVAT	TONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date	Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		K. Cra			Casing Hammer:					•		
Inspecto		C. O'H	ara		Other:			05/03/24	U	2.8	8	3.0
Drill Ri	g:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/03/24	, and the second		2	0.2
Type:		ATV			Hammer Wt:	140 lbs.		05/03/24	After Casing Removed	7.3	C	out
Rod Size	e:	AWJ			Hammer Fall:	30 in.		05/03/24	After Casing Removed	caved @ 4.0	C	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIFICATION (	OF MATERIA	L	
Donath		Sample	Depth		D1		_					CDT "NI"
Depth Scale	Sample		t.)	Type /	Blows on Sampler	Depth of		coarse medium	and 25 to 50	0% / some - 20 to 35	0/-	SPT "N"
(Feet)	No.	From	To	Sample Rec. (in.)	Per 6 Inches	Change (Ft.)		- fine		20% / some - 20 to 33 20% / trace - 0 to 10		or RQD %
0	1A	0.0	0.5	SS/14	WH-WH-1-2	(1 (.)			Material (moist)	2070 / 11400 0 10 10	, .	1
	1B	0.0	2.0	00/14	**11- **11-1-Z	<b>}</b> -			CLAY, trace fine SAND	(moist soft)		1
1	110	0.5	2.0				DIOMII SIL	i, nace C	LAI, HACE THE SAINL	(moist, soit)		
1												
2	2	2.0	4.0	00/10	2 4 2 2		D /O	CII T	T. OT ANY ( )	1' .'		7
2	2	2.0	4.0	SS/18	2-4-3-3		Brown/Ora	inge SILT	T, trace CLAY (moist, m	nedium stiff)		7
3												
4	3	4.0	6.0	SS/18	5-7-7-8		Brown SIL	T, trace C	CLAY (wet, stiff)			14
5												
6	4	6.0	8.0	SS/16	7-8-8-8		Similar as	above (we	et, very stiff)			16
									,,			
7												
,												
8	5	8.0	10.0	SS/17	6-8-7-10		Danassan /Can	v. Cimila	m oo ob orro (rrot rromr oti	££)		15
0	3	8.0	10.0	33/1/	0-8-7-10		PLOWINGIE	ey, Sililia	r as above (wet, very sti	111)		13
9												
10												
11												
12												
13	6A	13.0	13.6	SS/11	5-7-8-7		Similar as	above (m	oist, very stiff)			15
	6B	13.6	15.0	~~,11		<b> </b> -			one cmf GRAVEL, trace	e SILT (wet_med	lium	
14	OD.	15.0	15.0				compact)		me emi Ola v LL, uaci	c Silli (wet, iiici		
14							compact)					
1.5												
15												
1.								,, ,				
16							Augers gro	ivelly beg	inning @ 16.3'			
17												
18	7	18.0	19.2	SS/12	11-28-50@2"		Grey cmf S	SAND, so	me cmf GRAVEL, little	e SILT (wet, very	/	50+
							compact)			•		
19												
		ī	1		ī	1						i l

20 | Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 121 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-605

 Page No.
 2 of 2

 Project No.
 28062

	Ass	ociate	s, Inc.	Phone:	315-701-0522		TEST BORING L	JUG	Project No.	280	)62
					AMPLES	1	VISUAL CLASS	SIFICATION C			
Б.,		т —	e Depth			1					CDT "NT"
Depth Scale	Sample		t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		20% / trace - 0 to 10%		RQD %
20							Continued from Page 1				
	8	20.2	20.2	SS/2	50@2"		Black SHALE Fragments				
21							Split Spoon and Auger Ref	usal @ 20.2'			
							Bottom of Boring @ 20.2'				
22											
23											
23											
24											
25											
2.5											
26											
27											
] -											
28											
29											
30	-										
30											
31											
32											
22											
33											
34											
35	Ī										
36											
27											
37											
38											
39											
	<u> </u>										
40											
41											
71						1					
42											
43						1					
44											
45											

Allaciiii	ent to C	IVIL IXC	portiv	uniber.	20002D-04-0724						est boning Logs	- i aye	122 01 20 1
				6035 C	orporate Drive	CI	IRSHDE	CE EZ	ZPI	ORATION	Boring No.	B-	606
		IV		East Sv	racuse, NY 13057						Page No.		of 2
	Asso	ciates	s, Inc.	Phone:	315-701-0522		TEST	BORI	NG	LUG	Project No.		3062
Project					New York						Date Started	05/	02/24
Client:		Rambo									Date Finished		02/24
Location	1:	See Ex	ploratio	on Locati	ion Plan						Surface Elev.		93.2'
			_		INVESTIGATIO	ON			GF	ROUNDWATER			
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Deti					A A (TE4.)
Driller:		K. Cra	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspecto	r:	C. O'H	ara		Other:			05/02/24		While Drilling	10.8	1	3.0
Drill Ri	g:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/02/24		ore Casing Removed	7.2	2	1.5
Type:		ATV			Hammer Wt:	140 lbs.		05/02/24		er Casing Removed	3.8	(	out
Rod Size		AWJ			Hammer Fall:	30 in.		05/02/24		er Casing Removed	caved @ 5.1		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SSIFICATION (	OF MATERIA	L	
Depth			Depth	Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample		t.)	Sample	Sampler	Change		medium		and - 35 to 50	0% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.4	SS/12	1-WH-3-4	ļ				erial (moist)			3
	1B	0.4	2.0				Brown/Gre	ey mottled	I SIL	T, little CLAY (mo	ist, soft)		
1													
	2	1 2 2	4.0	00/4.4	2 2 2 2		D /C			TD ( CY ANY)	. 1		
2	2	2.0	4.0	SS/14	3-3-3-2		Brown/Gre	ey mottled	ı SIL'	T, trace CLAY (we	t, medium stiff)		6
3													
4	2	4.0	60	00/12	2240		D OII	T 4 (	T . T	V (	TC)		
4	3	4.0	6.0	SS/13	3-3-4-8		Rrown SIL	ı, trace (	LAY	Y (wet, medium stif	1)		7
5													
5													
6	4	6.0	8.0	SS/20	8-9-9-11		Similar as	ahove (w	at vo	ery stiff)			18
U	7	0.0	0.0	55/20	0-9-9-11		Similar as	uoove (Wt	oi, ve	1 y 51111)			10
7													
,													
8	5	8.0	10.0	SS/24	10-12-16-16		Similar as	above (we	et. ve	rv stiff)			28
		5.5	10.0	~~,	10 12 10 10				, , , .	-, -, -,			
9													
10													
11							Augers eas	ier begini	ning	@ 11.0'			
							Augers gra	-	_				
12								, 0		~			
13	6	13.0	15.0	SS/14	1-3-4-4		Similar as	above (we	et, me	edium stiff)			7
								•					
14													
15													
16						<b> </b>	<u>                                     </u>						
17													
	_	4.0 -	200		44 - 45			~~	_	0.0.4.3.77	<b></b>		
18	7	18.0	20.0	SS/11	11-7-12-16			GRAVEL	and o	cmf SAND, trace S	ILT (wet, mediu	ım	19
10							compact)						
19													
								_					

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 123 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-606

 Page No.
 2 of 2

 Project No.
 28062

	<b>Ass</b>	ociate	s, Inc.	Phone: 3	315-701-0522		TEST BURING	LUG	Project No.	28	062
					AMPLES		VISUAL CLAS	SIFICATION (			
Depth Scale	Sample	Sample (F	e Depth t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%		RQD %
20							Augers harder beginning	@ 20 5'			
21	8	21.5	21.5	SS/0	50@0"		Split Spoon and Auger Re				
22	8	21.3	21.3	33/0	30@0		Bottom of Boring @ 21.5	jusui & 21.5			
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45	1										

				6035 Co	orporate Drive	ST	JBSHRF	ACE EX	(PI	ORATION	Boring No.	B-	607
		IV		East Sy	racuse, NY 13057			S BORI			Page No.	1	of 2
	Asso	ociates	s, Inc.	Phone:	315-701-0522		IESI	BUKI	NG	LUG	Project No.	28	3062
<b>Project</b>	Name:	Micror	Camp	us, Clay,	New York	•					Date Started	04/	18/24
Client:		Rambo	11								Date Finished	04/	18/24
Location	1:	See Ex	ploratio	on Locati	on Plan						Surface Elev.	39	93.9'
		ME	THO	DS OF	INVESTIGATIO	N			GF	ROUNDWATER	OBSERVAT	IONS	
Driller:		Gary R	ichards	1	Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Cacina	g At (Ft.)
Driller:		Chris C	)'Hara		Casing Hammer:						_		
Inspecto					Other:			04/18/24		While Drilling	None Noted		5.0
Drill Ri	g:	CME 5	55		Soil Sampler:		Split Barrel	04/18/24		ore Casing Removed	None Noted	2	2.0
Type:		ATV			Hammer Wt:	140 lbs.		04/18/24		er Casing Removed	None Noted		out
Rod Size		AWJ	D O D	DIG G	Hammer Fall:	30 in.	¥7¥	04/18/24		er Casing Removed	caved @ 5.0		out
	LO			ING SA	MPLES		VI	SUAL C	LAS	SIFICATION C	)F MATERIA	.L	ı
Depth		Sample		Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample	(F		Sample	Sampler	Change		medium			% / some - 20 to 359		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine	3.6.4		0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.5	SS/16	1-1-2-3	<b> </b>				erial (moist)	MATERIAL (m.		3
,	1B	0.5	2.0					ι, trace (	LA Y	, trace ORGANIC	MAIEKIAL (M	ioist,	
1							soft)						
2	2	2.0	4.0	SS/20	4-4-4-4	Brown SILT, little CLAY (moist, stiff)							
	2	2.0	7.0	55/20	→ →- <b>-</b>	Brown Sill 1, intile CLA 1 (moist, still)							
3													
3													
4	3	4.0	6.0	SS/21	4-5-7-6		Brown SIL	T. trace C	CLAY	(moist, stiff)			12
								,		(,			
5													
6	4	6.0	8.0	SS/11	6-5-12-11		Brown SIL	T, trace C	CLAY	(moist, very stiff)			17
7													
8	5	8.0	10.0	SS/23	9-5-5-5		Similar as	above (m	oist, s	stiff)			10
_													
9													
10													
10													
11													
11													
12													
12													
13													
13	6	13.5	15.0	SS/17	3-3-4		Similar as	above (we	et, me	edium stiff)			7
14	U	10.0	15.0	55/17	334		Ziiiiiai as	(W	٠٠, ١١١١	Jarain Still)			, ,
1													
15													
16													
17													
18													
	7A	18.5	18.7	SS/13	7-7-13	ļ				Y (wet, very stiff)			20
1.0	7B	18.7	20.0			1	IGrev/Black	cmf SAI	VID at	nd cmf CD AVEL	trace SILT (wet)		1
19	7 13						Grey, Braci	Cili SA	מא	ilu Cilli OKA VEL, i	irace SILT (wei)		

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

6035 Corporate Drive
East Syracuse, NY 13057

### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-607

 Page No.
 2 of 2

 Project No.
 28062

	<b>A</b> sso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BORING I	70G	Project No.	280	62
					MPLES		VISUAL CLASS	SIFICATION C			
Depth Scale (Feet)	Sample No.	Sample		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	% / some - 20 to 35% 0% / trace - 0 to 10%		SPT "N" or RQD %
20	NO.	Piolii	10	Rec. (III.)	rei o iliches	(Fi.)	Continued from Page 1	ittle - 10 to 2	0% / trace - 0 to 10%		KQD %
21											
22	8	22.0	22.0	SS/0	50@0"		Black ROCK Fragments (	Shale) in tip of Spl	it Spoon		50+
23							Bottom of Boring @ 22.0'				
24											
25											
26											
27											
28											
29											
30	1										
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44	_										

Test Boring Logs - Page 126 of 20

Depth   Dept					6035 Co	orporate Drive	CI	IRSTIRE	ACE EX	(PI	ORATION	Boring No.	B-	608
Project Name			<b>IV</b> I		East Sy								1	of 2
Circum   Continue		Ass	ociates	s, Inc.	Phone:	315-701-0522	$\perp$	1E51	DUKI	NG.	LUG	Project No.	28	3062
Location   See Exploration Location   Plan   See Exploration   S	Project	Name:	Micror	ı Camp	us, Clay,	New York						Date Started	05/	03/24
METHODS OF INVESTIGATION   GROUNDWATER OBSERVATIONS	Client:		Rambo	oll								Date Finished	05/	03/24
Defiller   H. I. Iyon   Casing Hammer:   Casing Hammer:	Locatio	n:	See Ex	ploration	on Locati	on Plan						Surface Elev.	38	37.7'
Defile   C. Calsing Hammer   Casing Hammer			ME	THO	DS OF	INVESTIGATIO	N			GF	ROUNDWATER	OBSERVAT	IONS	
Dispection   C. Cribran   Other   Ot	Driller:		-			Casing:	3 ¼" ID	H.S.A.	Data		Time	Denth (Ft.)	Casino	. At (Ft )
Driff Rig: CME 45   Soil Sampler: 2						_						_		
Type   No.   Top   South   T	_										•			
Note		g:		15		_		-			ŭ		2	2.4
Depth   Sample   Peth   Property   Peth   Prop											-			
Depth Scale   Sample (Pt)   (Pt)   Sample (Pt)   (Pt)   Sample (Pt)   (Pt)   Sample (Pt)	Rod Siz			DOD.	DIG G		30 in.	X7T						out
Scale   Sample   GF-   Sample   GF		LO	1		ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	OF MATERIA	L	1
Sample   Part   Sample   Sample   Change   Cha	Depth				Type /		Depth of	c -	- coarse					SPT "N"
1		_			Sample	_	Change	m -						
1B	, ,						(Ft.)			3.6.4		0% / trace - 0 to 109	%	
1	Ü				SS/12	WR-1-1-3	·					(ist ==		2
2 2 2.0 4.0 SS/14 4-3-4-5 Brown/Grey mottled SILT, trace CLAY (moist, medium stiff) 7  3 4 3 4.0 6.0 SS/17 3-7-7-8 Similar as above (moist, stiff) 14  5 4 6.0 8.0 SS/24 6-6-8-11 Brown SILT, trace CLAY (moist, stiff) 14  7 8 5 8.0 10.0 SS/19 11-9-6-7 Similar as above (moist, very stiff) 15  9 10 11 12 12 13 6 13.0 15.0 SS/15 1-3-3-4 Grey, Similar as above (wet, medium stiff) 6  14 15 16 17 18 7 18.0 20.0 SS/11 2-2-8-8 Grey cmf SAND and mf GRAVEL, little SILT (wet, medium 10 compact) 10	1	118	0.5	2.0				Brown SIL	11, trace i	ine S.	AND, trace CLA i	(moist, soit)		
3	1						Brown/Grey mottled							
3	2	2	2.0	40	SS/14	4-3-4-5		Brown/Gre	ev mottled	SIL	T trace CLAY (mo	ist medium stif	f)	7
Similar as above (moist, stiff)   14	2		2.0	4.0	55/14	7 3 7 3	Brown/Grey mottled SILT, trace CLAY					ist, mearam stir	1)	_ ′
Similar as above (moist, stiff)   14	3													
5       6       4       6.0       8.0       SS/24       6-6-8-11       Brown SILT, trace CLAY (moist, stiff)       14         7       8       5       8.0       10.0       SS/19       11-9-6-7       Similar as above (moist, very stiff)       15         9       10       11       12       13.0       15.0       SS/15       1-3-3-4       Grey, Similar as above (wet, medium stiff)       6         14       15       16       17       18.0       20.0       SS/11       2-2-8-8       Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)       10	3													
5       6       4       6.0       8.0       SS/24       6-6-8-11       Brown SILT, trace CLAY (moist, stiff)       14         7       8       5       8.0       10.0       SS/19       11-9-6-7       Similar as above (moist, very stiff)       15         9       10       11       12       13.0       15.0       SS/15       1-3-3-4       Grey, Similar as above (wet, medium stiff)       6         14       15       16       17       18.0       20.0       SS/11       2-2-8-8       Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)       10	4	3	4.0	6.0	SS/17	3-7-7-8	Similar as above (moist, stiff)							14
6									`	,				
7       8       5       8.0       10.0       SS/19       11-9-6-7       Similar as above (moist, very stiff)       15         9       10       11       12       13       6       13.0       15.0       SS/15       1-3-3-4       Grey, Similar as above (wet, medium stiff)       6         14       15         16       17       18.0       20.0       SS/11       2-2-8-8       Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)       10	5	1					Similar as above (moist, stiff)							
7       8       5       8.0       10.0       SS/19       11-9-6-7       Similar as above (moist, very stiff)       15         9       10       11       12       13       6       13.0       15.0       SS/15       1-3-3-4       Grey, Similar as above (wet, medium stiff)       6         14       15         16       17       18.0       20.0       SS/11       2-2-8-8       Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)       10														
8 5 8.0 10.0 SS/19 11-9-6-7 Similar as above (moist, very stiff) 15 9 10 11 12 13 6 13.0 15.0 SS/15 1-3-3-4 Grey, Similar as above (wet, medium stiff) 6 14 15 16 17 18 7 18.0 20.0 SS/11 2-2-8-8 Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact) 10	6	4	6.0	8.0	SS/24	6-6-8-11		Brown SIL	T, trace C	CLAY	Y (moist, stiff)			14
8 5 8.0 10.0 SS/19 11-9-6-7 Similar as above (moist, very stiff) 15 9 10 11 12 13 6 13.0 15.0 SS/15 1-3-3-4 Grey, Similar as above (wet, medium stiff) 6 14 15 16 17 18 7 18.0 20.0 SS/11 2-2-8-8 Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact) 10														
9   10   11   12   13   6   13.0   15.0   SS/15   1-3-3-4   Grey, Similar as above (wet, medium stiff)   6   17   18   7   18.0   20.0   SS/11   2-2-8-8   Grey cmf SAND and mf GRAVEL, little SILT (wet, medium 10 compact)   19   10   10   10   10   10   10   10	7													
9   10   11   12   13   6   13.0   15.0   SS/15   1-3-3-4   Grey, Similar as above (wet, medium stiff)   6   17   18   7   18.0   20.0   SS/11   2-2-8-8   Grey cmf SAND and mf GRAVEL, little SILT (wet, medium 10 compact)   19   10   10   10   10   10   10   10		_			~~			l						
10 11 12 13 6 13.0 15.0 SS/15 1-3-3-4 Grey, Similar as above (wet, medium stiff) 6 14 15 16 17 18 7 18.0 20.0 SS/11 2-2-8-8 Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact) 10	8	5	8.0	10.0	SS/19	11-9-6-7		Similar as	above (mo	oist, v	very stiff)			15
10 11 12 13 6 13.0 15.0 SS/15 1-3-3-4 Grey, Similar as above (wet, medium stiff) 6 14 15 16 17 18 7 18.0 20.0 SS/11 2-2-8-8 Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact) 10	0													
11	9													
11	10													
12	10													
12	11													
13	11													
13	12													
14														
14	13	6	13.0	15.0	SS/15	1-3-3-4		Grey, Simi	lar as abo	ve (w	vet, medium stiff)			6
15								]			,			
16	14													
16														
17	15													
17														
18         7         18.0         20.0         SS/11         2-2-8-8         Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)         10	16						ļ <b>-</b> -							
18         7         18.0         20.0         SS/11         2-2-8-8         Grey cmf SAND and mf GRAVEL, little SILT (wet, medium compact)         10														
19 compact)	17													
19 compact)	10	_	10.0	20.0	00/44	2222				1 0	CD ATTENDED	<b>m</b> (		4.0
19	18	7	18.0	20.0	SS/11	2-2-8-8						10		
	10							compact)						
	19													
20 Continued on Page 2	20	1						Continued	on Page 2	)				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 127 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-608

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BORING I	JUG	Project No.	280	062
					AMPLES	1	VISUAL CLASS	SIFICATION C			
D. 4			e Depth								CDT "NT"
Depth Scale	Sample		t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		20% / trace - 0 to 10%		RQD %
20							Continued from Page 1				
							Augers gravelly beginning	@ 20.2'			
21								<b>.</b>			
1 22	8	22.4	22.4	SS/0	50@0"		Augers possibly on top of		21.9'		50.
22	0	22.4	22.4	33/0	30@0		Split Spoon and Auger Rep Bottom of Boring @ 22.4'				50+
23							Bottom of Boring & 22.4				
24											
25											
26											
26											
27											
28											
20											
29											
30											
30											
31											
32											
33											
33											
34											
35											
2.5											
36											
37											
38											
39											
40	1										
40											
41											
42											
42											
43											
44											
45	1										

Attachm	ent to C	ME Re	port N	umber: :	28062B-04-0724	_				7	est Boring Logs	- Page	128 of 201
				6035 Co	orporate Drive	SI	IRSIIRE	ACE EX	ZPI A	RATION	Boring No.	B-	609
				East Sy	racuse, NY 13057						Page No.	1	of 1
	Asso	ociates	s, Inc.	Phone:	315-701-0522		TEST	BORI	NG L	OG	Project No.	28	3062
Project					New York						Date Started	05/	01/24
Client:		Rambo		,,							Date Finished		01/24
Locatio	n:	See Ex	nloratio	on Locati	ion Plan						Surface Elev.		91.7'
Locatio					INVESTIGATIO	N			GRO	OUNDWATER			,
Driller:		H. Lyo		00 01	Casing:	3 ¼" ID	HSA						
Driller:		K. Cra			Casing Hammer:	374 115	11.5.71.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto		C. O'H			Other:			05/01/24	W	hile Drilling	7.8	1	0.0
Drill Ri		CME 4			Soil Sampler:	2" OD S	Split Barrel	05/01/24		Casing Removed	9.5		7.6
Type:	ъ.	ATV			Hammer Wt:	140 lbs.	-	05/01/24		Casing Removed	6.4		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/01/24		Casing Removed	caved @ 11.4		out
1104 512			RORI	NG S	AMPLES	1	VI			IFICATION (			-
	LU	I		110 52							or white it		
Depth	G. 1		e Depth et.)	Type /	Blows on	Depth of		coarse		. 1 25 . 5	00/ / 20: 27	0/	SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Pec (in )	Sampler Per 6 Inches	Change (Ft.)		medium - fine			0% / some - 20 to 35 20% / trace - 0 to 109		or RQD %
0	1A	0.0	0.5	Rec. (in.) SS/15	1-1-2-5	(Fl.)	Topsoil an		Matari		1070 / Hace - O to 105	/0	3
	1B	0.0	2.0	55/13	1-1-2-3	}				trace fine SAND	trace ORGANI		3
1	110	0.5	2.0				MATERIA	,	,	irace fine 57 ir vD	, unce orozavi		
1							THE LEGISTRE	(1110131,	, 5011)				
2	2	2.0	4.0	SS/13	7-6-7-6	1	Brown SII	T. trace C	CLAY	trace fine SAND	(moist, stiff)		13
		2.0	1.0	DD/13	7 0 7 0		DIOWII DIL	i, irace c	Liii,	irace fine Stave	(moist, stiii)		13
3													
3													
4	3	4.0	6.0	SS/11	4-4-5-5		Brown SII	T trace (	TAY	moist, stiff)			9
		7.0	0.0	55/11	1 4 4 3 3		Diown Sit	i, irace c	JLIII (	moist, stiii)			
5	ľ												
3													
6	4	6.0	8.0	SS/13	4-2-2-7		Brown SII	T trace c	mf SAI	ND, trace fine G	RAVEL (wet m	edium	4
O		0.0	0.0	55/13	7221		stiff)	i, trace c	7111 57 ti	vD, trace fine of	id IV LL (wet, in	caram	_
7							Still)						
,						<b> </b>							
8	5	8.0	10.0	SS/14	2-2-1-1		Brown cm	SAND S	some m	f GRAVEL, little	e SILT_trace CL	AY	3
J		3.0	10.0	55/17		1	(wet, very		. 0.1110 111	, 11111	, udoc CL		
9							, wei, very	10050)					
10	6	10.0	12.0	SS/14	15-28-38-42		Brown cm	GRAVE	L and c	emf SAND, trace	SILT (moist ve	erv	66
10		10.0	12.0	55/17	15 20 30 42	1	compact)	CIUITE	_ and C	5. 11 12, 11 110	~ III (IIIOI31, VC	- J	
11						1	, simpact,						
**						1							
12						1							
						1							
13													
13						1							
14	7	14.0	15.2	SS/11	12-15-50@2"	1	Brown cm	SAND.	some m	f GRAVEL, little	e SILT (moist. v	erv	50+
- '					10 0002	1	compact)	,		,,,		J	201
15						1	, , , , , , , , , , , , , , , , , , ,						
						1	Augers har	der begin	ınine (a	15.7'			
16							200000000	<u> 508111</u>	8				
						1							
17													
	8	17.6	18.5	SS/4	20-50@3"	1	Black ROO	CK Fragm	ents (S	hale)			50+
18		- / .0	- 5.5	~~.		1				/			
						1	Bottom of	Boring @	18.5'				
19						1							
1	Ī	1		Ī	I		1						1

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

		6035 Corporate Drive SUBSURFACE EXPLORATION Boring No. B-610									610		
		V	Ę	East Sy	racuse, NY 13057			S BORI			Page No.		of 1
					315-701-0522		113		.10	LUU	Project No.		3062
Project	Name:			us, Clay,	New York						Date Started		01/24
Client:		Rambo									Date Finished		01/24
Locatio	n:			on Locati		. N.T			<u> Cr</u>		Surface Elev.		32.7'
D-'''				DS OF	INVESTIGATIO		TLC 4		GR	ROUNDWATER	OBSERVAT	IUNS	
Driller:		H. Lyo K. Cra			Casing Hamman	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller: Inspect		K. Cra C. O'H			Casing Hammer: Other:			05/01/24		While Drilling	8.8	1	3.0
Drill Ri		C. On			Soil Sampler:	2" OD 9	Split Barrel	05/01/24		ore Casing Removed	10.0		8.5
Type:	<b>-</b> '	ATV			Hammer Wt:	140 lbs.	_	05/01/24		er Casing Removed	4.3		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/01/24		er Casing Removed	caved @ 6.7		out
			BOR	ING SA	AMPLES		VI			SIFICATION C		L	
Depth		ı	e Depth		Blows on			- coarse					SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine		little - 10 to 2	0% / trace - 0 to 109		RQD %
0	1A	0.0	0.4	SS/16	1-WH-4-5	ļ				erial (moist)			4
	1B	0.4	2.0				Brown SII	$T$ , trace $\overline{C}$	CLAY	, trace fine SAND	(moist, medium	stiff)	
1													
2	2	2.0	4.0	00/10	4-6-7-7	Brown SILT, trace CLAY, trace mf SAN				/ trace of CAND	moist stiff		12
2	2	2.0	4.0	SS/12	4-0-7-7	Brown SILT, trace CLAY, trace mf SANI				, trace mi SAND (	moist, still)		13
3													
3						Provin SILT trace cmf GDAVEL trace cmf GDAVEL							
4	3	4.0	5.9	SS/13	3-4-3-50@5"						GRAVEL, trace	e CLAY	7
						Brown SILT, trace cmf GRAVEL, trace cmf GRAVEL (wet, medium stiff)					_,,		
5													
6	4	6.0	8.0	SS/11	4-8-8-8		Brown SII	T, little fi	ne G	RAVEL, trace cmf	SAND (wet, ve	ry stiff)	16
_													
7													
8	5	8.0	10.0	SS/14	8-6-6-7		Brown CII	T come o	mf C	AND, trace fine Gl	RAVEL (wat at	iff)	12
O		0.0	10.0	JOJ/14	0-0-0-/		וופ וואסים	ı, suille (	лш 3	mo, nace file G	KAYEL (WEI, SI	111)	12
9							Augers like	e Cobble I	pegin	ning @ 9.0'			
								222000	-0				
10	Ī												
11													
						ļ	.						
12													
12	_	12.0	15.0	00/10	WD 5 C C		Cmc	OD A VIDT		a amf CAND 1'41	CII T ( 1	L.,,,,,	1.1
13	6	13.0	15.0	SS/12	WR-5-6-6		Grey cmf (compact)	JKAVEL,	som	e cmf SAND, little	SIL1 (wet, med	num	11
14							compact)						
17													
15													
16													
17						Augers like Cobble beginning @ 17.2'							
	_					Pleak highly weathered POCK Fromments (Shale) little SUT							
18	7	18.0	18.2	SS/4	41-50@2"	Black highly weathered ROCK Fragments (Shale), little SILT				50+			
10	o	10.5	10 5		50.00"	(moist) Split Speep and August Patienal @ 18.5'				50:			
19	8	18.5	18.5		50@0"	Split Spoon and Auger Refusal @ 18.5' Bottom of Boring @ 18.5'					50+		
20							DOUGHI OI	Bornig @	10.3	,			
20	I	1	1	Ī	Ī		1						1

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

Test Boring Logs - Page 130 of 201

				6035 Co	orporate Drive	ST	JBSIJRF.	ACE EX	<b>KPLORAT</b>	ION	Boring No.	B-	611
		IV			racuse, NY 13057				NG LOG	-011	Page No.		of 1
		ociates		I momen	315-701-0522		11001	L DOKI	140 DOQ		Project No.		3062
Project	Name:		_	us, Clay,	New York						Date Started		30/24
Client:		Rambo									Date Finished		30/24
Locatio	n:			on Locati		N.T		ı	CDOLIND	XX/A/DED	Surface Elev.		30.6'
Driller:			letcher		INVESTIGATIO	3 ¼" ID	псч		GROUND	WAIER	OBSERVAT	IONS	
Driller:			Casatell		Casing Hammer:	3 % ID	п.з.А.	Date	Tim	e	Depth (Ft.)	Casing	At (Ft.)
Inspecto		Ryan	Jasaten		Other:			04/30/24	While Di	illing	6.7	8	3.0
Drill Ri		CME 5	55		Soil Sampler:	2" OD S	Split Barrel	04/30/24		_	6.7		8.8
Type:	J	ATV			Hammer Wt:	140 lbs.	-	04/30/24			3.5	(	out
Rod Siz	æ:	AWJ			Hammer Fall:	30 in.		04/30/24	After Casing	Removed	caved @ 6.8	C	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIFICA	ATION (	F MATERIA	L	
Depth		Sample	e Depth	Type /	Blows on	Depth of	c ·	- coarse					SPT "N"
Scale	Sample		t.)	Sample	Sampler	Change		medium			% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 109	%	RQD %
0	1A	0.0	1.0	SS/13	WH-1-3-4	<b> </b>	Topsoil an	d Organic	Material (mo	ist, mediu	m stiff)		4
1	1B	1.0	2.0				Brown/Gre	SV SII T 1	ittle CLAV tr	aca OPG	ANIC MATERIA	AI (wat	
1	1 1 1 1	1.0	2.0				medium st	•	ittie CLAT, ti	ace OKO	ANIC MATERIA	AL (WEI,	
2	2	2.0	4.0	SS/16	6-5-5-4								10
_	_			22,10				<i>y</i> 111000100		22111 (1110	,150, 50111)		10
3													
4	3	4.0	6.0	SS/22	3-4-5-5	Brown/Grey SILT, little cmf SAND, trace CLAY (wet, stiff)							9
						Brown/Grey SILT, little cmf SAND, trace CLAY (wet, stiff)							
5													
6	1	6.0	8.0	SS/24	1 1 5 5		Danaria CII	T two as (	TIAV (wat at	:cc)			0
6	4	6.0	8.0	55/24	4-4-5-5		Brown SIL	1, trace C	CLAY (wet, st	1IT <i>)</i>			9
7													
,													
8	5	8.0	10.0	SS/18	3-5-6-7		Brown SIL	T, trace C	CLAY (wet, st	iff)			11
9													
	=												
10													
11													
11													
12													
12						ļ							
13													
	6	13.5	15.0	SS/6	8-16-8		Grey highl	y weather	ed ROCK Fra	gments (S	hale) and SILT,	trace	24
14							cmf SAND	(wet)					
15													
1.0													
16													
17													
1 /													
18													
	7	18.5	18.8	SS/3	50@3"						50+		
19						Split Spoon and Auger Refusal @ 18.8'							
	]						Bottom of	Boring @	18.8'				
20													

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Test Boring Logs - Page 131 of 201 Attachment to CME Report Number: 28062B-04-0724 Boring No. **B-612** 6035 Corporate Drive SUBSURFACE EXPLORATION Page No. East Syracuse, NY 13057 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 04/18/24 Project Name: Micron Campus, Clay, New York **Client:** Ramboll **Date Finished** 04/19/24 Location: See Exploration Location Plan **Surface Elev.** 391.6' METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 ¼" ID H.S.A. Date Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** While Drilling 13.0 13.5 Inspector: Other: NQ-Core 04/18/24 Drill Rig: **CME 550X** Soil Sampler: 2" OD Split Barrel 04/19/24 Before Casing Removed 13.5 \* 13.6 ATV Hammer Wt: 140 lbs

Type:		ATV			Hammer Wt:	140 lbs.		19/24		er Casing Removed	6.3 *	0	out
Rod Size		AWJ			Hammer Fall:	30 in. 04/19/24 After Casing Removed caved @ 15.5 or VISUAL CLASSIFICATION OF MATERIAL				out			
	LO	G OF	BOR	ING SA	AMPLES		VISUA	AL CI	LAS	SIFICATION C	OF MATERIA	L	
Depth Scale	Sample	(F		Type / Sample	Blows on Sampler	Depth of Change	c - coar m - medi	ium			% / some - 20 to 35		SPT "N" or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		6.0		0% / trace - 0 to 109		RQD %
0	1	0.0	2.0	SS/11	1-2-2-3		Brown SILT, ti (moist, medium			AND, trace ORGA	NIC MATERIA	L	4
2 3	2	2.0	4.0	SS/16	3-3-4-5		Brown/Grey m	ottled	SILT	T, trace CLAY (we	t, medium stiff)		7
4	3	4.0	6.0	SS/19	3-3-4-4		Brown SILT, to	race fi	ne SA	AND (wet, mediun	n stiff)		7
5 6	4	6.0	8.0	SS/17	3-3-3-3		Similar as abov	ve (we	t, me	dium stiff)			6
7 8 9	5	8.0	10.0	SS/15	1-2-3-3		Brown SILT, s	some c	mf G	RAVEL, little cmf	SAND (wet, me	edium	5
10 11 12 13 14 15 16 17	6	13.5	15.0	SS/10	13-21-27		Brown/Grey cr compact)	mf SAI	 ND, s	some cmf GRAVE	L, little SILT (n	 noist,	48
18 19 20	7A 7B	18.5 19.0			40-50@4"		Similar as abov Grey cmf GRA compact) Continued on I	VEL a	and c	ery compact) mf SAND, trace S	ILT (moist, very	7	50+

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

Test Boring Logs - Page 132 of 201

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-612

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  epth Sample Depth Type / Blows on				315-701-0522		TEST BUKING	LOG	Project No.	28062	2
	LO	G OF	BOR	ING SA	MPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL		
Depth Scale (Feet)	Sample No.	Sample (F		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		PT "N" or QD %
20 21 22 23							Continued from Page 1				
24	8	23.5	23.6	SS/1	50@1"		Grey ROCK Fragments (I Set up to Core				50+
25 26	R-1	23.6	28.6	C/54	NQ-Core		Grey DOLOSTONE with thick), moderately weathe laminated to thinly bedded <i>Broken and fractured zone</i>	red, medium hard l. e @ 24.1' - 27.4'.	to hard, thinly	1"	12%
27 28							Recovery: 54"/60" = 90% 5 Pieces, 31" Chips and F 55 sec/ft, no water loss Coring conducted in 5th	ragments		sure.	
29	R-2	28.6	33.6	C/60	NQ-Core		Grey DOLOSTONE with thick), slightly to moderat <i>Weathered fracture zones</i> 31.3', 31.4', 31.9', 32.3'	ely weathered, me (1/4" - 2" thick) @	dium hard to hard. 30.4' - 30.5', 31.		55%
31							Recovery: 60"/60" = 1009 28 Pieces, 1" Chips and F 50 sec/ft, no water loss	% RQD: 33"/60" = ragments	= 55%		
32							Coring conducted in 5th g  Bottom of Boring @ 33.6		00 psi down pressu	ire.	
34											
36											
37											
38											
39											
40											
42											
43											
44											

Attachm	ent to C	ME Re	port N	umber: 2	28062B-04-0724	T					Test Boring Logs	- Page 1	133 of 201	
		CME Report Number: 28062B-04-0724  Test Boring Logs - Page 133 of Boring No. B-613  SUBSURFACE EXPLORATION East Syracuse, NY 13057 Phone: 315-701-0522  SUBSURFACE EXPLORATION TEST BORING LOG  Project No. 28062  Project No. 28062								613				
		V		East Syr	racuse, NY 13057						Page No.	1	of 2	
	Ass	ociates	s, Inc.	Phone: 3	315-701-0522		1E51	BOKI	NG	LOG	Project No.	28	3062	
Project					New York						Date Started	04/	19/24	
Client:		Rambo		,, ,							Date Finished		19/24	
Locatio	n:			on Locati	on Plan						Surface Elev.		0.0'	
20cailo					INVESTIGATIO	N			GF	ROUNDWATE			0.0	
Driller:		Al Lin			Casing:	3 ¼" ID	H.S.A.	_						
Driller:		John V			Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)	
Inspect					Other:			04/19/24		While Drilling	12.5	1	8.5	
Drill Ri		CME 5	550X		Soil Sampler:	2" OD S	Split Barrel	04/19/24		ore Casing Removed	6.5	2	1.6	
Туре:	<b>6</b> .	ATV			Hammer Wt:	140 lbs.	-	04/19/24		ter Casing Removed	4.5		out	
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		04/19/24		ter Casing Removed			out	
1104 512			RORI	NG SA	AMPLES		VI			SSIFICATION			, 40	
		T .							/11/1 K		OI WINTERNA	. <u></u>	l	
Depth		_	e Depth t.)	Type /	Blows on	Depth of		- coarse		1 25 . 5	00/ / 00 / 05/	.,	SPT "N"	
Scale (Feet)	Sample	From		Sample	Sampler Per 6 Inches	Change		medium			0% / some - 20 to 359		or POD %	
(Feet)	No.	0.0	To 2.0	Rec. (in.) SS/17		(Ft.)		- fine	CTT		20% / trace - 0 to 109	0	RQD %	
0	1	0.0	∠.0	33/1/	WH-1-3-5			•	mottled SILT, trace CLAY, trace ORGANIC (moist, medium stiff)					
1							MAIEKIA	AL (IIIOISI,	, mea	num sum)				
1														
2	2	20	4.0	00/15	2252		D#011/C		CTT	T two as CLAW (	oist stiff		0	
2	2	2.0	4.0	SS/15	3-3-5-3	Brown/Grey mottled SILT, trace CLAY (moist,							8	
3														
											5			
4	3	4.0	6.0	SS/17	2-2-3-4		Brown/Gre	ey SILT, t	y SILT, trace CLAY (wet, medium stiff)					
5														
6	4	6.0	8.0	SS/19	3-3-3-5		Brown SIL	T, trace C	CLAY	Y (wet, medium sti	ff)		6	
7														
8	5	8.0	10.0	SS/16	3-5-7-8		Similar as	above (we	et, sti	iff)			12	
9														
10	]													
11														
12														
13														
	6	13.5	15.0	SS/11	3-3-2		Similar as	above (we	et me	edium stiff)			5	
14		13.3	15.0	55/11	332		Similar as	(WC	-c, 1110	carain sani				
1 1 7														
15	ł													
13														
16														
16	7	165	16.0	00/2	FO@ 4"	Gray mf GRAVEL little SILT little cmf SAND (wat very compact)					50.			
1.7	7	16.5	16.8	SS/3	50@4"	Grey mf GRAVEL, little SILT, little cmf SAND (wet, very compact)					50+			
17						Augers like Boulder from 16.5' to 18.0'								
10														
18		10.5	10.7	00.7	2.5.5	Drawn/Crov. Cl. AV. some SH.T. trops amf SAND (rust stiff)						1.2		
10	8A	18.5	19.5	SS/7	3-6-6	Brown/Grey CLAY, some SILT, trace cmf SAND (wet, stiff)						12		
19		1				Brown/Grey CLAY, some SILT, trace cmf SAND (wet, stiff)								

8B 19.5 20.0 Grey mf GRAVEL, trace cmf SAND, trace SILT (wet, medium compact) Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 134 of 201

ttachinent to Givie Report No	JITIDET. 20002D-04-0724	
CVE Associates, Inc.	6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522	SUBSURFACE EXPLORATION TEST BORING LOG
LOG OF BORI	NG SAMPLES	VISUAL CLASSIFICATIO

Boring No.	B-613
Page No.	2 of 2
Project No.	28062

	Ass	ociate	s, Inc.	Phone:	315-701-0522		IESI BURING I	LUG	Project No.	28	062
	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES  Sample Depth Type / Blows on Sample Sample Sampler						VISUAL CLAS	SIFICATION O	OF MATERIAL		
Depth Scale	Sample	Sample	e Depth t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	nttle - 10 to 2	20% / trace - 0 to 10%		RQD %
21	9	21.0	21.4	SS/3	50@3"		Grey ROCK Fragments (I Auger Refusal @ 21.6'			- — -	50+
22							Bottom of Boring @ 21.6	•			
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45										ļ	

Test Boring Logs - Page 135 of 201

				6035 Co	orporate Drive	SI	IRSURE	ACE EX	(PI 4	ORATION	Boring No.	B-	614
		<b>IV</b>		East Sy	racuse, NY 13057	13057 22  TEST BORING LOG  Page No. 1 of 1 Project No. 28062							
					315-701-0522		1E3	DUKI	NG.	LUG	-		
Project	Name:			us, Clay,	New York								
Client:		Rambo									Date Finished		02/24
Locatio	n:			on Locati		· N.T		1	C.F.		Surface Elev.		36.2'
D-31				DS OF	INVESTIGATIO		TI C A		Gk	ROUNDWATER	OBSERVAT	IUNS	
Driller: Driller:		H. Lyo K. Cra			Casing:	3 ¼" ID	н.ѕ.А.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller: Inspecto		K. Cra C. O'H			Casing Hammer: Other:			05/02/24		While Drilling	1.5	Ş	3.0
Drill Ri		CME 4			Soil Sampler:	2" OD S	Split Barrel	05/02/24		ore Casing Removed	3.0		9.7
Type:	<b>6</b> ,	ATV			Hammer Wt:	140 lbs.	-	05/02/24		er Casing Removed	2.5		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/02/24		er Casing Removed	caved @ 6.0		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C		SIFICATION C	F MATERIA	L	
Depth		Sample	e Depth	T	Blows on	D d f	· ·	- coarse					SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.5	SS/14	WR-1-1-3	ļ				erial (moist)			2
	1B	0.5	2.0			Brown SILT, trace CLAY, trace fine SAND				(moist, soft)			
1													
2	2	2.0	4.0	SS/15	3-4-4-4	Brown SILT trace CLAY (moist_stiff)						8	
		2.0	4.0	33/13	J- <del>4</del> -4-4		Brown SILT, trace CLAY (moist, stiff)						0
3													
4	3	4.0	6.0	SS/16	1-1-WH-4		Brown/Grey CLAY and SILT, trace cmf SANI				ND (moist, very	soft)	1
							Brown/Grey CLAY and SILT, trace cmf SAN					,	
5													
					_			_					
6	4	6.0	8.0	SS/13	7-8-8-8		Brown/Gre	ey SILT, ti	race (	CLAY (wet, very st	tiff)		16
7													
7													
8	5	8.0	10.0	SS/12	8-10-11-12		Similar as	ahove (we	et ve	rv stiff)			21
U		3.0	10.0	00/12	0 10-11-12		Similar as	above (we	, vC	i y 30111 <i>)</i>			
9													
10													
11													
10													
12													
12	6	13.0	15.0	SS/14	1 1 5 6		Grove Cimi	lor oc ob-	vo (	vot stiff)			9
13	0	13.0	15.0	SS/14	1-4-5-6		Grey, Simi	nar as abo	ve (W	vet, Suii)			9
14													
1 17													
15	1												
16						L	<u> </u>						
17							Augers gro	ivelly begi	innin	g @ 17.0'			
10		10.0	10.5	00.7	5 6 0 50 0 1 11		D. J. C	/D1. 1.1.	1.1	and a locar		\ 1	1,,
18	7	18.0	19.6	SS/7	5-6-8-50@1"			_		weathered ROCK F	ragments (Shale	) and	14
19						SILT, little cmf SAND (wet)							
1)	8	19.7	19.8	SS/1	50@1"		Black SHALE Fragments in tip of spoon Auger Refusal @ 19.8'				50+		
20	<b> </b>	-/.,		~~,1	2001	Black SHALE Fragments in tip of spoon. Auger Refusal @ 19.8' Bottom of Boring @ 19.8'						201	

20 Bottom of Boring @ 19.8'
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

										i	D 27	-	(15
			F		orporate Drive	NY 13057 01-0522    SOBSCREACE EXILEMENT   Page No.   1 of 2							
	1 V		l les	•	racuse, NY 13057	]				_			
		ociates		I moner :	315-701-0522	<u> </u>				_			
Project 1	Name:			us, Clay,	New York						Date Started		18/24
Client:		Rambo									Date Finished		18/24
Location	n:			on Locati							Surface Elev.		91.8'
		ME	THO		INVESTIGATION				GR	OUNDWATER	R OBSERVAT	IONS	
Driller:			letcher		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Contra	A # (TE# )
Driller:		Ryan C		i	Casing Hammer:		ŀ			1 IIIIe	<u> </u>		g At (Ft.)
Inspecto		Chris C			Other:		ŀ	04/18/24		While Drilling	None Noted	1	5.0
Drill Rig	g:	CME 5	55		Soil Sampler:	2" OD S	Split Barrel	04/18/24		re Casing Removed	8.8	2	6.4
Type:		ATV			Hammer Wt:	140 lbs.	ŀ	04/18/24	Afte	er Casing Removed	None Noted	(	out
Rod Size		AWJ	_	_	Hammer Fall:	30 in.	\	04/18/24		er Casing Removed	caved @ 6.3	(	out
			BOR		AMPLES		VIS			SIFICATION C			
Dec		ı	e Depth			_							SPT "N"
Depth Scale	Sample	_	t.)	Type /	Blows on Sampler	Depth of		- coarse medium		and 25 +- 50	0% / some - 20 to 359	%	SPT "N" or
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		medium - fine			0% / some - 20 to 35° 20% / trace - 0 to 10°		or RQD %
0	1A	0.0	0.5	SS/13	WH-1-2-3	(2 11.)	Topsoil and Organic Material (moist, medi						3
	1B	0.5	2.0	ر ۱ اس	, <i>1 2 3</i>	t	Brown/Grey mottled SILT, little CLAY, tr						
1	٠	3.5				MATERIAL (moist, soft)							
1			ļ			1	MATERIAL (moist, soft)						
2	2	2.0	4.0	SS/18	4-4-4	1	Brown/C-	y mottled	ד ווצ	Γ, trace CLAY (we	t. stiff)		8
		۵.0	F.U	10/ ادار	, <del>, ,-,-,</del>	1		, mouted	السب	, and CLAI (We	.,)		0
3	Į,		ļ	[		1	I						
3	Į,		ļ	[		1							
	3	4.0	6.0	SS/17	3-3-5-7	1	Brown ar	T tree= 0	7 A 37	(moist stiff)			8
4	)	4.0	0.0	აა/1/	J-J-J-/	1	ואסיים wn SIL	., uace C	∠∟AY	(moist, stiff)			0
-	ţ .		ļ			1							
5			ļ			1							
_	4	6.0	8.0	SS/16	4-6-7-8	1	Similar	ahove (=	nict .	tiff)			13
6	4	0.0	0.0	აა/16	4-0-7-8	1	Similar as	aoove (mo	118t, S	<i>)</i>			13
7			ļ			1							
7	Į,		ļ	[		1	I						
8	_	8.0	10.0	SS/24	6-7-6-7	1	Similar as	ahove (	4 c4.0	<del>`f</del> )			13
8	5	0.0	10.0	აა/24	U-/-O-/	1	ышыr as .	aoove (We	ı, stif	,			13
0			1	<b>(</b>		1							
9			ļ			1							
10	<b>†</b> .		ļ			1							
10	Į,		ļ	[		1	I						
11			1	<b>(</b>		1							
11			ļ			1							
10			ļ			1							
12			ļ			1							
4.0			ļ			1							
13	_ '	10	1~ .	00.11	2.5	1	C	a		207-2			1.0
,	6	13.5	15.0	SS/14	3-6-7	1	Grey/Brow	n, Sımilaı	as at	bove (wet, stiff)			13
14			ļ			1							
1 ~	ļ ,		ļ			1							
15			ļ			1							
			ļ										
16			ļ										1
			ļ										
17			ļ			1							
1			ļ			1							
18			_			1	<u> </u>						
1	7	18.5	20.0	SS/13	2-3-6	1	Grey, Similar as above (wet, stiff)					9	
19	Ī		Į			1	,						
	ļ .		ļ										
20			1	l l			Continued	on Page 2	)				

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

6035 Corporate Drive
East Syracuse, NY 13057

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-615

 Page No.
 2 of 2

 Project No.
 28062

	<b>Ass</b>	ociate	s, Inc.	Phone: 3	315-701-0522		IESI BURING I	LUG	Project No.	280	062
	LOG OF BORING SAMPLES  Sample Depth Type / Sample Sampler  Sample Sample Sample Sampler					†	VISUAL CLASS	SIFICATION (			
Depth Scale (Feet)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					SPT "N" or RQD %					
20					2.2. 0.2.2.2.2	(= 1.)	Continued from Page 1				
21											
22						ļ					
23											
24	8	23.5	25.0	SS/12	6-8-13		Grey cmf GRAVEL and c compact)	mf SAND, trace S	SILT (wet, medium		21
25	1										
26							Auger Refusal @ 26.4'				
27							Bottom of Boring @ 26.4'				
28											
29											
30											
31											
32											
33											
34											
35	1										
36											
37											
38											
39											
40											
41											
42											
43											
44											
45	Ī	Ī	Ī			1	ĺ				

None Noted

7.0 \*

15.0

24.2

Test Boring Logs - Page 138 of 201 Attachment to CME Report Number: 28062B-04-0724 Boring No. **B-616** 6035 Corporate Drive SUBSURFACE EXPLORATION Page No. East Syracuse, NY 13057 1 of 2 **TEST BORING LOG** Associates, Inc. 28062 Phone: 315-701-0522 Project No. 04/18/24 Project Name: Micron Campus, Clay, New York **Date Started Client:** Ramboll **Date Finished** 04/18/24 Location: See Exploration Location Plan **Surface Elev.** 392.5' METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Casing: Beau Fletcher 3 ¼" ID H.S.A. Date Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli **Casing Hammer:** 

2" OD Split Barrel

04/18/24

While Drilling

04/18/24 Before Casing Removed

Drill Ki	g.	CIVIE 3	,,,		Son Sampier:		-				7.0 **	24.2	
Type:		ATV			Hammer Wt:	Wt:         140 lbs.         04/18/24         After Casing Removed         5.0 *         out           Fall:         30 in.         04/18/24         After Casing Removed         caved @ 9.7         out					out		
Rod Siz	e:	AWJ			Hammer Fall:	E						out	
	LO	G OF	BOR	ING SA	AMPLES	VISUAL CLASSIFICATION OF MATERIAL							
Depth		Sample	Depth	m ,	Blows on								
Scale	Sample	(F		Type / Sample	Sampler	Depth of Change		medium	an	d - 35 to 509	% / some - 20 to 35%	SPT "N" or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 10%		
0	1A	0.0	0.5	SS/13	1-1-3-4	(= 1.)			Material (moi		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4	
	1B	0.5	2.0	55/13	1101	<b> </b>					e cmf SAND, tra		
1	110	0.5	2.0					•	IAL (moist, m				
1							OROAIVIC		IAL (moist, m	carain sur	1)		
2	2	2.0	4.0	SS/12	4-5-5-5		Brown/Gr	ov mottlad	SILT, trace C	IAV (mo	ict ctiff)	10	
	2	2.0	4.0	33/12	4-3-3-3		DIOWII/OIG	ey monieu	SIL1, Hace C.	LAT (IIIO	181, 81111)	10	
3													
	_		- 0	~~			Brown SILT, trace CLAY, trace fine SAND (moist, stiff)						
4	3	4.0	6.0	SS/17	4-4-6-8		Brown SIL	T, trace C	LAY, trace fir	ie SAND	(moist, stiff)	10	
5													
6	4	6.0	8.0	SS/15	6-8-7-10		Brown SIL	T, trace C	LAY (wet, ver	ry stiff)		15	
7						L							
						[							
8	5	8.0	10.0	SS/20	6-8-5-5		Brown SIL	T, little cı	nf GRAVEL,	trace CLA	Y, trace cmf SA	ND 13	
							(wet, stiff)						
9													
10	•												
11													
11													
12													
12													
13													
13	6	13.5	15.0	SS/12	3-4-8		Brown/C-	w CHT 4	ace CLAY (w	ot stiff)		12	
1 4	O	13.3	13.0	33/12	3-4-8		DIOMINOIG	zy SIL1, ll	act CLAI (W	ci, Silli)		1.2	
14												1	
1.5	ł											1	
15												1	
												1	
16												1	
						ļ	-						
17												1	
												1	
18												1	
	7	18.5	20.0	SS/7	WH-1-2		Grey cmf S	SAND, litt	le mf GRAVE	L, trace S	ILT (wet, very le	oose) 3	
19							-				·	1	
												1	
20							Continued	on Page 2				1	
						<u> </u>		5					

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

Inspector:

Drill Rig:

Chris O'Hara

**CME 55** 

Other:

Soil Sampler:

Test Boring Logs - Page 139 of 201

6035 Corporate Drive East Syracuse, NY 13057 SSOCIATES, INC. Phone: 315-701-0522

### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-616

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociate	s, Inc.	Phone: 3	315-701-0522		TEST BORING I	LOG	Project No. 28	3062	
					MPLES		VISUAL CLAS	SIFICATION O	=		
Depth		T .	e Depth		Blows on		c - coarse			SPT "N"	
Scale	Sample		t.)	Type / Sample	Sampler	Depth of Change	m - medium	and - 35 to 50	% / some - 20 to 35%	or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		0% / trace - 0 to 10%	RQD %	
20							Continued from Page 1				
21	8	20.0	22.0	SS/11	7-8-21-22		Grey cmf SAND and mf C compact)	GRAVEL, trace SII	LT (wet, medium	29	
22											
23				GG (0	40.70.00					50+	
24	9 R-1	23.5 24.2	24.2 29.2	SS/8 C/60	19-50@2" NQ-Core		Grey cmf SAND and mf GRAVEL, little SILT (wet, very compact) Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0"				
24	IX-1	24.2	29.2	C/00	NQ-Core		thick), slightly weathered,		•	97%	
25							hard to hard. SILT seam (Recovery: 60"/60" = 100%	(1/8" thick) @ 24.4			
26							RQD: 58"/60" = 97%				
						21 Pieces, 0" Chips and Fragments					
27						0.5 - 1.50 min/ft, no water loss					
28							Coring conducted in 4th gear, 1500 rpm, 600 psi down pressure.				
29	R-2	29.2	34.2	C/60	NQ-Core		Grey DOLOSTONE with	interbedded SHAI	LE layers (<1/8" - 2.0"	97%	
							Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0" thick), slightly weathered, thinly laminated to thinly bedded, medium				
30							hard to hard. Weathered z		hick) @ 31.3' and 31.8'.		
31							Recovery: 60"/60" = 100% RQD: 58"/60" = 97%	6			
31							22 Pieces, 1" Chips and Fi	raoments			
32							1.5 - 1.75 min/ft, no water				
							Coring conducted in 4th g		0 psi down pressure.		
33											
34							Bottom of Boring @ 34.2'				
35											
36											
37											
38											
39											
40	]										
41											
42											
43											
44											
45	1										

Test Boring Logs - Page 140 of 20

				6035 Co	orporate Drive	SI	IRSURF	ACE EX	PI (	ORATION	Boring No.	B-	617
		V		East Syr	racuse, NY 13057			r BORII			Page No.		of 2
		ociates		I momen	315-701-0522		11691		101		Project No.		3062
Project	Name:			us, Clay,	New York						Date Started		17/24
Client:		Rambo									Date Finished		17/24
Locatio	n:		•	on Locati		N.T		1	CP		Surface Elev.		93.0'
Driller:					INVESTIGATIO		II C A		GR	ROUNDWATER	UBSEKVAT	IUNS	
Driller: Driller:		Chris C	lichards	S	Casing: Casing Hammer:	3 ¼" ID	п.3.А.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspect		CIIIIS	Jiiaia		Other:			04/17/24		While Drilling	None Noted	1	5.0
Drill Ri		CME 5	55		Soil Sampler:	2" OD S	Split Barrel	04/17/24		ore Casing Removed	12.6		4.3
Type:	0	ATV			Hammer Wt:	140 lbs.		04/17/24		er Casing Removed	4.3		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		04/17/24		er Casing Removed	caved @ 7.7	(	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C		SIFICATION C	F MATERIA	L	
Depth		Sample	Depth	T /	Blows on	Dom#1 6	c.	- coarse					SPT "N"
Scale	Sample	(F	t.)	Type / Sample	Sampler	Depth of Change		medium	% / some - 20 to 35	%	or		
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches						0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.5	SS/14	WH-1-3-4	Topsoil and Organic Material (moist)  Brown/Grey mottled SILT, little CLAY, trace					ODCANG		4
,	1B	0.5	2.0			MATERIAL (moist, medium stiff)					ce ORGANIC		
1						MATERIAL (moist, medium stiff)							
2	2	2.0	4.0	SS/15	4-5-7-8	Brown/Grey SILT, little CLAY (wet, stiff)							12
	-	2.0	1.0	55,13	1570		2.5 , 11/ 510	.,, II			12		
3													
4	3	4.0	6.0	SS/13	5-5-6-6	Brown SILT, trace CLAY (wet, stiff)						11	
5													
			0.0	99/19			Б СИ	T	Y . X . X .	7. (			1.4
6	4	6.0	8.0	SS/12	7-7-7		Brown SIL	T, trace C	LAY	(wet, stiff)			14
7													
'													
8	5	8.0	10.0	SS/11	4-5-7-8		Brown SIL	T. trace C	LAY	, trace cmf SAND	(wet, stiff)		12
								,		,	(,,		
9													
10													
1.													
11													
12													
12													
13													
14	6	14.0	16.0	SS/12	WH-1-WH-2		Brown/Gre	ey SILT, li	ittle C	CLAY, trace cmf S.	AND (wet, very	soft)	1
15													
1 -	_	1	10.0	00/10	1 2 2 2		g: '1	1 /		11			
16	7	16.0	18.0	SS/10	1-2-2-2		Similar as	above (we	et, me	edium stiff)			4
17													
17													
18	8	18.0	20.0	SS/15	2-3-3-2	Grey SILT, trace CLAY (wet, medium stiff)						6	
10		10.0	20.0	55,13	2332	Grey Sill, trace Clay (wet, medium still)							
19													
20							Continued	on Page 2					

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

CVE Associates, Inc. 6035 Corporate Drive East Syracuse, NY 13057

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-617

 Page No.
 2 of 2

 Project No.
 28062

Associates, Inc. Phone: 315-701-0522							TEST BORING LOG  Project No. 2800				
LOG OF BORING SAMPLES						VISUAL CLASSIFICATION OF MATERIAL					
D. d			e Depth								CDT "NT"
Depth Scale	Sample		t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		20% / trace - 0 to 10%		RQD %
20							Continued from Page 1				
	9	20.0	22.0	SS/18	WH-1-2-4		Grey CLAY, little SILT, t	race cmf SAND (v	wet, very soft)		1
21						ļ					
22	10	22.0	23.0	SS/13	5-10-16-50@5"		Dark Grey/Black ROCK F	Fragments (Shale)	and CLAV (wet)		26
22	10	22.0	23.7	35/13	3-10-10-30@3		Dark Grey/Black ROCK I	raginents (Shale)	and CLAT (wet)		20
23											
							Augered harder beginning				
24	11 24.3 24.3		24.3	3 SS/0	50@0"		No Recovery - Auger Refusal @ 24.3'				50+
25	-						Bottom of Boring @ 24.3'				
23											
26											
27											
28											
20											
29											
30											
31											
31											
32											
33											
34											
35	1										
36											
37											
]											
38											
20											
39											
40	†										
41											
42											
43											
15											
44											
	1										
45	1			I			1				

Attachm	ent to C	ME Re	port N	umber:	28062B-04-0724	_					Т	est Boring Logs	- Page	142 of 201
				6035 C	orporate Drive	SI	J <b>BSURF</b> A	ACE EX	XPI.	ORAT	ION	Boring No.	B-	618
		IV	Ę	East Sy	racuse, NY 13057			BORII			1011	Page No.	1	of 2
	Asso	ociates			315-701-0522		11691	DOKI	NG	LUG		Project No.	28	3062
Project	Name:	Micror	n Camp	us, Clay,	New York							Date Started		19/24
Client:		Rambo	oll									Date Finished	04/	19/24
Location	n:			on Locati				ŀ				Surface Elev.		92.7'
					INVESTIGATIO				GF	ROUND	WATER	OBSERVAT	IONS	
Driller:		Beau F			Casing:	3 ¼" ID	H.S.A.	Date		Tim	e	Depth (Ft.)	Casing	g At (Ft.)
Driller:		Ryan C		1	Casing Hammer:			0.4/10/0.4		11 11 D	****	• ' '		
Inspecto		Chris C			Other:	2" OD 6	-1:4 D1	04/19/24	D-f-	While D		15.0		8.5
Drill Rig	g:	CME 5	) )		Soil Sampler: Hammer Wt:	2 OD S	Split Barrel	04/19/24 04/19/24			Removed Removed	14.3 6.0		24.3 out
Rod Siz	۵۰	AWJ			Hammer Fall:	30 in.		04/19/24			Removed	caved @ 6.1		out
Kou Siz			ROR1	NC S	AMPLES	30 III.	VI					OF MATERIA		Jui
	LO	I			I				LITT	JOH TO	111011	or MATERIA	. <b>L</b> J	
Depth Scale	Sample	Sample (F	e Depth ft.)	Type /	Blows on	Depth of		coarse medium		_	nd 25 to 50	0% / some - 20 to 359	0/4	SPT "N"
(Feet)	No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		- fine				1% / some - 20 to 359 20% / trace - 0 to 109		or RQD %
0	1A	0.0	0.4	SS/14	WH-2-2-3	(*)	Topsoil an		Mat			,	-	4
	1B	0.4	2.0			l						ce ORGANIC		
1							MATERIA	•						
						Day (Carana) 1 CH T and CHAY (								
2	2	2.0	4.0	SS/15	1-2-2-2	Brown/Grey mottled SILT and CLAY						t, medium stiff)		4
3														
4	3	4.0	6.0	SS/13	3-4-5-6	Similar as above (moist, stiff)								9
5														
6	4	6.0	8.0	SS/14	4-7-6-7		Brown SIL	T trace (	T A Y	V (moist	ctiff)			13
0	4	0.0	0.0	33/14	4-7-0-7		DIOWII SIL	ar, mace C	LAI	i (ilioist,	Suii)			13
7														
,														
8	5	8.0	10.0	SS/7	6-10-10-8		Similar as	above (mo	oist, v	very stiff	)			20
								`	,		,			
9														
10														
11														
1.0														
12														
12														
13	6	13.5	15.0	SS/14	3-2-2		Grey/Brow	т SII Т 13	ittla (	CI AV (	vet madiu	m stiff)		4
14	U	15.5	15.0	DD/14	J-2-2		JICY/DIOW	попл.	ille (	CLAI (V	vet, meuru	suii <i>)</i>		
17														
15	7A	15.0	16.0	SS/15	2-2-1-1	Grey SILT, some CLAY (wet,					t)			3
						Grey SiL1, some CLA1 (wet					,			
16	7B	16.0	17.0			Grey CLAY, little SILT, little fine GRAVEL,					L, trace cmf SAN	ND		
						(wet, soft)								
17	8	17.0	18.5		4-5-4	Grey SILT, some CL				Γ, some CLAY, trace fine GRAVEL, trace cmf SAND				9
						ļ	(wet, stiff)							
18														
1.0	9	18.5	20.0	SS/11	3-5-4		Grey cmf S	cmf SAND, some cmf GRAVEL, some SILT (wet, loose)					se)	9
19														

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-618

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522 LOG OF BORING SAMPLES						TEST BORING I	JUG	Project No.	28062
						<del>                                     </del>	VISUAL CLASS	SIFICATION (		
Depth Scale (Feet)	Sample	Sample	Depth To	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%	SPT "N" or RQD %
20							Continued from Page 1			
21										
22										
23	10	23.5	23.9	SS/5	50@5"		Grey/Black highly weather	ed ROCK Fragm	ents (Dolostone), little	e 50+
24							SILT (wet) Split Spoon and Auger Ref	Tusal @ 24.3'		
25							Bottom of Boring @ 24.3'			
26										
28										
29										
30	-									
31										
32										
33										
34										
35 36										
37										
38										
39										
40	_									
41										
42										
43										
44										
/1 ~			•				•			

Attachin	ent to c	IVIL IXC	port N	ullibel.	28062B-04-0724						est Boring Logs	- raye	144 01 20 1
				6035 C	orporate Drive	SUBSURFACE EXPLORATION					Boring No.	B-	619
		IV	Ę	East Sy	racuse, NY 13057			F BORI			Page No.	1	of 2
					315-701-0522		ILSI	DOKI	NG	LUG	Project No.	28	3062
Project	Name:			us, Clay,	New York						Date Started		17/24
Client:		Rambo									Date Finished		17/24
Location	n:		_	on Locati				T			Surface Elev.		92.3'
					INVESTIGATIO				G	ROUNDWATER	OBSERVAT	IONS	
Driller:		-	tichards	S	Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Driller:		Chris (	O'Hara		Casing Hammer:						•	15.0	
Inspecto					Other:	<b>4</b> 11 0 D (		04/17/24	D (	While Drilling	None Noted		
Drill Ri	g:	CME 5	)5		Soil Sampler:		Split Barrel	04/17/24		Fore Casing Removed	3.0		4.0
Type: Rod Size		ATV AWJ			Hammer Wt: Hammer Fall:	140 lbs. 30 in.		04/17/24 04/17/24		ter Casing Removed ter Casing Removed	4.7 caved @ 12.1		out
Kou Siz			D/D	INIC C	AMPLES	30 III.	<b>171</b>			SSIFICATION (			out
	LU	1		ING SE	AMIPLES		V 1	SUAL C	LA	SSIFICATION (	JE MIA LEKIA	L	
Depth		_	Depth	Type /	Blows on	Depth of		- coarse					SPT "N"
Scale	Sample		řt.)	Sample	Sampler	Change		medium - fine			0% / some - 20 to 35		or DOD 0/
(Feet)	No.	From 0.0	To 0.3	Rec. (in.) SS/13	Per 6 Inches WH-1-3-4	(Ft.)			Mo	terial (moist)	20% / trace - 0 to 10°	%	RQD %
	1B	0.0	2.0	33/13	W11-1-3-4	ļ				T, some CLAY, tra	ce ORGANIC		4
1	110	0.5	2.0				MATERIA	•			ic ORGAINIC		
1							WIATLKIA	iL (moist,					
2	2	2.0	4.0	SS/11	5-4-3-5	Brown/Grey mottled SILT, little CLAY (moist, me						f)	7
	_	2.0	1.0	55/11	3 1 3 3							.,	,
3													
4	3	4.0	6.0	SS/12	3-4-5-7	Brown SILT, trace CLAY (wet, stiff)							9
						Brown SILT, trace CLAY (wet, stiff)							
5													
6	4	6.0	8.0	SS/15	5-7-7-7		Brown SIL	ILT, trace CLAY, trace fine SAND (wet, stiff)					14
7													
8	5	8.0	10.0	SS/14	5-6-7-8		Brown SIL	T, trace C	CLA	Y (wet, stiff)			13
9													
10													
11													
10													
12													
12													
13													
14	6	14.0	16.0	SS/12	3-3-3-5		Grov Cimi	lar ac aba	wo (-	wet, medium stiff)			6
14	U	14.0	10.0	33/12	3-3-3-3		Oley, Silli	iai as abo	ve (1	wet, medium sum)			0
15													
13													
16													
10													
17													
''													
18													
19	7	19.0	21.0	SS/10	1-3-5-7		Similar as	above (mo	oist,	stiff)			8
								`	•				
20	Ī				ĺ	1	Continued	on Door C	,				1

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

	6035 Corporate Drive
	East Syracuse, NY 13057
es. Inc.	Phone: 315 701 0522

#### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-619

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522 LOG OF BORING SAMPLES						TEST BORING LOG  Project No. 28062					
							VISUAL CLASS	SIFICATION O				
Depth Scale (Feet)	Sample No.	Sample	e Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine  Continued from Page 1		% / some - 20 to 35% 0% / trace - 0 to 10%	SPT "N" or RQD %		
21							Continued from Page 1					
22 23							Augered harder beginning		CGAND.			
24	8A 8B	24.0 24.2	24.2 25.1	SS/9	3-22-50@1"	ļ <u> </u>	Grey CLAY, little SILT, tr (wet, hard) Black/Grey ROCK Fragmo Split Spoon and Auger Ref	ents (Dolostone) (v				
26							Bottom of Boring @ 25.3'					
27 28												
29												
31												
32												
34	-											
36												
37												
39	-											
41 42												
43												
44	-											

Attachini	ent to o	IVIL IVE	portiv	ullibel.	28062B-04-0724						est Boring Logs	- i age	140 01 20 1	
				6035 Co	orporate Drive	SUBSURFACE EXPLORATION					Boring No.	B-	620	
		IV	Ę	East Sy	racuse, NY 13057			BORI			Page No.	1	of 2	
					315-701-0522		1691	DOKI	NG	LUG	Project No.	28	3062	
Project 1	Name:		_	us, Clay,	New York						Date Started		18/24	
Client:		Rambo									Date Finished		18/24	
Location	1:			on Locati							Surface Elev.		91.3'	
					INVESTIGATIO				G	ROUNDWATER	OBSERVAT	IONS		
Driller:			letcher		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)	
Driller:		Ryan C		1	Casing Hammer:			04/10/24		177 D 111	•			
Inspecto		Chris C			Other:	2" OD 6	S-1'4 D1	04/18/24		While Drilling	None Noted		5.0	
Drill Rig	<b>g:</b>	CME 5	))		Soil Sampler: Hammer Wt:	2 OD S	Split Barrel	04/18/24		fore Casing Removed fter Casing Removed	14.0 8.0		4.5	
Rod Size	a•	AWJ			Hammer Fall:	30 in.		04/18/24		ter Casing Removed	caved @ 21.0		out	
Kou Size			R∩D1	INC S	AMPLES	JO III.	VI			SSIFICATION (			Jut	
	LO	ı			I		V 1	SUAL C	LA		JI MIATEKIA	L		
Depth	a .	Sample	e Depth ft.)	Type /	Blows on	Depth of		- coarse			20. 25		SPT "N"	
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		medium - fine			0% / some - 20 to 35 20% / trace - 0 to 10°		or RQD %	
0	1A	0.0	0.5	SS/14	1-1-4-4	(11.)	1		Ma	terial (moist)	2070 / trace - 0 to 10	70	5	
U	1B	0.5	2.0	55/14	1144	·				Y, trace cmf SAND	. trace GRAVEI	(moist.		
1	12	0.5	2.0				medium st			i, auce emi sin (b	, auce Grait El	z (moist,		
								,						
2	2	2.0	4.0	SS/11	3-4-4-7	Brown/Grey mottled SILT, trace CLAY (wet, stiff)							8	
3														
4	3	4.0	6.0	SS/15	5-8-7-9	Brown SILT, trace CLAY (wet, very stiff)								
						Brown Sill, trace Clai (wet, very still)								
5														
6	4	6.0	8.0	SS/10	6-7-8-7		Similar as	above (we	et, ve	ery stiff)			15	
7														
	_	0.0	100	9940			a			.100				
8	5	8.0	10.0	SS/18	5-7-8-9		Similar as	above (m	oist,	very stiff)			15	
0														
9														
10														
10														
11														
11														
12														
13														
15	6	13.5	15.0	SS/14	2-3-3		Grev, Simi	lar as abo	ve (1	moist, medium stiff	)		6	
14	~						, , , , , , , , , , , , , , , , , , ,		- (	,				
15														
16														
17														
18	_					Grey SILT, some CLAY (wet, stiff)								
10	7	18.5	20.0	SS/11	4-7-3		Grey SILT	, some CI	LAY	(wet, stiff)			10	
19														
20							Continued	D (						

20 Continued on Page 2 SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-620

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BORING I	WG	Project No.	28062
						+	VISUAL CLASS	SIFICATION (		
Depth Scale (Feet)	Sample No.	Sample	Depth To	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)		and - 35 to 50	0% / some - 20 to 35% 10% / trace - 0 to 10%	SPT "N" or RQD %
20	110.	Tioni	10	Kec. (III.)	1 et 0 menes	(11.)	Continued from Page 1	Ittle - 10 to 2	20% / trace - 0 to 10%	KQD 70
21							Augers gravelly beginning	@ 21.4'		
22						ļ				
23										
24	8	23.5	24.4	SS/9	5-50@5"		Dark Grey/Black ROCK F SAND (wet) Auger Refusal @ 24.5'	ragments (Shale)	and CLAY, little cmf	50+
25							Bottom of Boring @ 24.5'			
26										
27										
28										
29										
30										
31										
32										
33										
34										
35	<u>.</u>									
36										
37										
38										
39										
40										
41										
42										
43										
44										
45			I				1			

Attachm	ent to C	ME Re	eport N	lumber: :	28062B-04-0724		Test Boring Logs - Page				- Page 1	48 of 201
				6035 C	orporate Drive	ST	IRSURE	ACE EX	KPLORATION	Boring No.	В-	623
		IV			racuse, NY 13057					Page No.	1 (	of 2
	Asso	ociate	s, Inc.	Phone:	315-701-0522		1E51	DUKI.	NG LOG	Project No.	28	062
Project	Name:	Micror	ı Camp	us, Clay,	New York					Date Started	04/1	16/24
Client:		Rambo	oll							Date Finished	04/1	16/24
Location	n:	See Ex	ploration	on Locati	on Plan					Surface Elev.	39	2.1'
		ME	THO	DS OF	INVESTIGATIO	)N			GROUNDWATE	R OBSERVAT	IONS	
Driller:			cichards		Casing:	3 ¼" ID	H.S.A.	ъ.	TEN.	B (1 (E())	<i>a</i> .	A ( (T) )
Driller:		Chris (			Casing Hammer:			Date	Time	Depth (Ft.)	Casing	At (Ft.)
Inspecto	or:	Mark S	Schuma	cher, P.C	Other:			04/16/24	While Drilling	None Noted	19	9.0
Drill Ri	g:	CME 5	55		Soil Sampler:	2" OD S	Split Barrel	04/16/24	Before Casing Remove	d 8.1	2:	5.7
Type:		ATV			Hammer Wt:	140 lbs.		04/16/24	After Casing Removed	1 4.8	0	ut
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		04/16/24	After Casing Removed	l caved @ 7.7	O	ut
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIFICATION	<b>OF MATERIA</b>	L	
Donth		Sample	e Depth		Blows on			coarse				SPT "N"
Depth Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium	and - 35 to	50% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine		20% / trace - 0 to 10		RQD %
0	1A	0.0	0.3	SS/18	1-1-3-4		Topsoil an	d Organic	: Material (moist)			4
	1B	0.3	2.0			1			SILT, trace CLAY, t	ace ORGANIC		
1								•	medium stiff)			
2	2	2.0	4.0	SS/18	3-5-5-5		Brown/Gre	y mottled	I SILT, trace CLAY (r	noist, stiff)		10
3												
4	3	4.0	6.0	SS/24	3-6-6-7		Brown/Gre	y SILT, t	race CLAY, trace cmf	SAND (moist, sti	ff)	12
5												
6	4	6.0	8.0	SS/24	7-8-8-9		Brown SIL	T, trace C	CLAY (moist, very stif	f)		16
7						ļ	<u> </u>					
8	5	8.0	10.0	SS/20	5-7-7		Brown SIL	T, trace f	ine GRAVEL, trace co	mf SAND (moist,	stiff)	14
9												
- 10												
10												
1.1												
11												
10												
12												
12												
13												
1.4	6	14.0	16.0	SS/18	2247		Crov. CII T	tress OT	AV (wat madines all	T)		7
14	6	14.0	10.0	33/18	2-3-4-7		Grey SIL1	, trace CL	LAY (wet, medium stif	1)		/
15												
13												
16												
10												
17												
1 /												
18												
10												
19	7A	19.0	20.5	SS/22	1-2-2-1		Grev CLA	Y, trace S	ILT, trace fine GRAV	EL, trace cmf SA	ND	4
		-/.0					(wet, medi		-, Sid I	_,	_	

(wet, medium stiff)

Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

#### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-623

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BORING I	LOG	Project No.	280	62
							VISUAL CLAS	SIFICATION (			
Depth		1	e Depth		Blows on	D	c - coarse	-3-1			SPT "N"
Scale	Sample	(F	t.)	Type / Sample	Sampler	Depth of Change	m - medium		0% / some - 20 to 35%		or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine  Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%		RQD %
20 21	7B 8	20.5 21.0	21.0 23.0	SS/17	2-4-9-6		Continued from Page 1 Grey SILT, some cmf SAI Grey cmf SAND and cmf compact)			(wet)	13
22							t ompatt)				
23											
24	9A	24.0		SS/13	4-23-50@1"		Augers gravelly beginning Grey cmf SAND, little SII compact)	LT, trace fine GRA	-		50+
25	9B	24.6	25.1				Dark Grey weathered ROC	CK Fragments (Sh	ale)		
26							Auger Refusal @ 25.7' Bottom of Boring @ 25.7'				
27											
28											
29											
30											
31											
33											
34											
35	1										
36											
37											
38											
39	_										
40											
42											
43											
44											
45											

Test Boring Logs - Page 150 of 201 Attachment to CME Report Number: 28062B-04-0724 Boring No. **B-624** 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 04/16/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 04/17/24 Surface Elev. 389.8' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS Driller:** Al Linstruth Casing: 3 1/4" ID H.S.A. **Date** Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** While Drilling Inspector: Mark Schumacher, P.G Other: NQ-Core 04/16/24 None Noted 10.0 **Drill Rig:** 2" OD Split Barrel 04/17/24 Before Casing Removed 4.3\* 24.1 CME 55 Soil Sampler: ATV 04/17/24 After Casing Removed Type: Hammer Wt: 140 lbs. out Rod Size: AWJ **Hammer Fall:** 30 in. 04/17/24 After Casing Removed caved @ 16.7 out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sample Sampler m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % (Feet) From Per 6 Inches little - 10 to 20% / trace - 0 to 10%No. Rec. (in.) (Ft.) f - fine 1A 0.0 0.5 SS/18 Topsoil and Organic Material (wet) 1-1-1-3 2.0 Brown/Grey mottled SILT, trace CLAY (moist, soft) 1B 0.5 1 2 2 2.0 SS/16 Brown/Grey mottled SILT, little CLAY (moist, stiff) 12 4.0 4-6-6-8 3 4 3 4.0 6.0 SS/24 Brown SILT, trace CLAY (moist, stiff) 12 4-6-6-6 5 6.0 4 8.0 SS/19 Brown SILT, trace CLAY (moist, stiff) 12 6 5-6-6-6

Brown SILT, trace CLAY (moist, stiff)

Grey SILT, trace CLAY, trace fine SAND (wet, medium stiff)

Grey SILT and CLAY, trace fine SAND (wet, very soft)

Continued on Page 2

13

6

1

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

**Remarks:** \*Water added to borehole during coring process.

SS/9

7

8

9

10

11

12

13

14

15

16

17

18

19

5

6

7

14.0

19.0

21.0

8.0

10.0

SS/13

SS/20

16.0

4-6-7-10

4-3-3-3

WH-1-WH-1

Test Boring Logs - Page 151 of 201

6035 Corporate Drive East Syracuse, NY 13057 Associates, Inc. Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-624

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						Project No. 28062						
	LO	G OF	BOR	ING SA	AMPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL				
Depth Scale (Feet)	Sample No.	_	e Depth ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %		
20	110.	Tiom	10	rece. (iii.)	Ter o menes	(11.)	Continued from Page 1	nete 10 to 1	20/07 trace 0 to 10/0		RQD 70		
21	8A	21.0	22.5		WH-3-2-4		Grey CLAY, little SILT, t	race cmf SAND (v	wet, medium stiff)		5		
22 23	8B	22.5	23.0				Grey cmf SAND and SIL's Augers gravelly beginning						
24	9	24.0	24.1		50@1"	24.1'	Augers harder beginning Grey ROCK Fragments (S Split Spoon and Auger Re	Shale) and ROCK			50+		
25 26	R-1	24.1	29.1	C/59	NQ-Core		Grey DOLOSTONE with thick), slightly weathered, hard. CLAY seam (3/4" t	interbedded SHAl thinly laminated t	LE layers (<1/8" - 1	"	37%		
27							Broken and fractured zone @ 25.4' - 25.6'. Core blocked @ ~ 25.4'. Recovery: 59"/60" = 98%   RQD: 22"/60" = 37% 28 Pieces, 2" Chips and Fragments 2 - 2.25 min/ft, no water loss						
28							2 - 2.25 min/ft, no water loss Coring conducted in 4th gear, 1800-2000 rpm, 450 psi down pressure.						
30	R-2	29.1	34.1	C60	NQ-Core		pressure.  Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2" thick), slightly weathered, thinly laminated to medium bedded.  CLAY seam (1/4" thick) @ 29.1'.						
31							• • •						
32							13 Pieces, 0" Chips and Fi 2 - 2.75 min/ft, no water le	ragments oss					
34							Coring conducted in 4th g pressure. Bottom of Boring @ 34.1	_	om, 430 psi aown				
35													
36													
37													
38													
39													
40													
41													
43													
44													
45	†												

East Syracuse, NY 13057   Page No.   1 of 2					6035 Co	orporate Drive	SI	UBSURF	ACE EX	XPL(	ORATION	Boring No.		-625			
Project Name   Micros Compus. Chapt. No. 2002   Conception   Section   Conference   Conference				lu -	•							_					
Client   Continue		_			I moner :			1120	DOM	1101		· ·					
Depth   Part		Name:			us, Clay,	New York							04/	30/24			
METHODS OF INVESTIGATION   GROUNDWATER OBSERVATIONS   Drifter   Ryan Cascalti   Casing Hammer   Drifter   Drifter   Ryan Cascalti   Casing Hammer   Drifter    Client:																	
Description	Location	1:								~-				85.8'			
Depth   Casing Hammer:   No Core   Other:   No Co	D.:11							A I I C A		GR	OUNDWATER	COBSERVAT	TONS				
Defil Rig: CMI 55   Soil Sampler: Speed   CMI 55   Soil Sampler:   140 lbs   140 lbs	Driller: Driller:					O	3 ¼" ID	0 H.S.A.				Depth (Ft.)	Casing	g At (Ft.)			
Compact   Comp	_						-						1	3.5			
No.		g:		55		<del>-</del>		-					2	26.0			
LOG OF BORING SAMPLES   VISUAL CLASSIFICATION OF MATERIAL								•				1.7	-				
Depth of Scale   Scample   C(1)   Type   Compact	Rod Siz			D 0 D			30 in.							out			
Sample   (Fee)   No.   No.   Sample   (Fee)   No.   No.   Sample   No.   Sample   No.   No.   Sample   No.   No.		LO	1		ING SA	AMPLES	ļ	VI	SUAL C	CLAS	SIFICATION (	OF MATERIA	L				
Sample   U-1					Type /	Blows on	Depth of	c	- coarse					SPT "N"			
1					Sample	1	_										
Compact   Comp	, ,						(Ft.)	_		)DCA							
1	0	1	0.0	2.0	SS/16	WH-1-1-3				JRGA	NIC MATERIAL	, trace fine SAN	D	2			
Brown SILT, some cmf SAND, little mf GRAVEL (wet, very stiff)   16	1							(IIIOISI, SOI	ιι)								
3	1																
3	2	2	2.0	40	SS/23	8-9-7-7		Brown SII	T some	cmf S	AND little mf GR	AVEL (wet ver	v stiff)	16			
3   4.0   5.4   SS/14   5-32-50@5"   Brown cmf SAND, some mf GRAVEL, trace SILT (moist, very compact)   Auger Refusal @ 5.5' possibly due to boulder   Augered to 8.0'   SS/24   40-35-40-29   Brown cmf SAND, some cmf GRAVEL, trace SILT (moist, very compact)   Grey cmf SAND, some cmf GRAVEL, trace SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT	2	<u> </u>	2.0	7.0	00/23	0- <i>)</i> -1 <del>-</del> 1		ווא וואיים	_1, some (	C1111 D	in id, mule iii ON	artel (wel, vel	y 30111 <i>)</i>	10			
3   4.0   5.4   SS/14   5-32-50@5"   Brown cmf SAND, some mf GRAVEL, trace SILT (moist, very compact)   Auger Refusal @ 5.5' possibly due to boulder   Augered to 8.0'   SS/24   40-35-40-29   Brown cmf SAND, some cmf GRAVEL, trace SILT (moist, very compact)   Grey cmf SAND, some cmf GRAVEL, trace SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT (moist, very compact)   Grey cmf SAND, some mf GRAVEL, little SILT	3																
Compact   Comp							<b>∤</b>							·]			
Compact   Comp	4	3	4.0	5.4	SS/14	5-32-50@5"	Brown cmf SAND, some mf GRAVEL, trace SILT (moist, very										
Auger Refusal @ 5.5' possibly due to boulder   Augered to 8.0'																	
Augered to 8.0'    Augered to 8.0'   Augered to 8.0'   Brown cmf GRAVEL, trace SILT (moist, very compact)   To	5																
R-1   16.0   21.0   C/60   NQ-Core   Sand process   Recovery: 60"/60" = 100   100										•	•						
Secorate    6																	
Secorate																	
Compact   Comp	7																
Compact   Comp																	
10	8	4	8.0	10.0	SS/24	40-35-40-29			f SAND,	some (	emf GRAVEL, tra	ce SILT (moist,	very	75			
10	_							compact)									
11	9																
11	10																
12	10																
12	1.1																
13	11																
13	12																
SA	12																
SA	13																
14	13	5A	13.5	14.5	SS/12	34-39-50@2"		Grev cmf	SAND. so	me m	f GRAVEL. little	SILT (moist, ver	·V	50+			
SB	14	511	10.0	1	22,12	2.373362			, 50		, nuic	(1110100, 101					
15	•	5B	14.5	14.7			<b>∤</b>		ly weather	ed RC	OCK Fragments (S	hale) and ROCK	K Flour	· [			
Auger Refusal @ 16.0' - set up to core   Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 2.0"   17%   thick), slightly to moderately weathered, medium hard to hard.   Weathered horizontal fractures @ 16.7', 17.7', 17.8', 18.2', 18.3',   18.6', 18.7', 19.1', 19.2' and 19.4'.   Broken and fractured zone @ 19.5' - 20.3'.   Recovery: 60"/60" = 100%   RQD: 10"/60" = 17%   23 Pieces, 6" Chips and Fragments   Continued on Page 2   SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod	15								,			,					
R-1	-																
R-1	16							Auger Refusal @ 16.0' - set up to core									
thick), slightly to moderately weathered, medium hard to hard.  Weathered horizontal fractures @ 16.7', 17.7', 17.8', 18.2', 18.3',  18.6', 18.7', 19.1', 19.2' and 19.4'.  Broken and fractured zone @ 19.5' - 20.3'.  Recovery: 60"/60" = 100%   RQD: 10"/60" = 17%  23 Pieces, 6" Chips and Fragments  Continued on Page 2  SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod		R-1	16.0	21.0	C/60	NQ-Core											
Weathered horizontal fractures @ 16.7', 17.7', 17.8', 18.2', 18.3',   18.6', 18.7', 19.1', 19.2' and 19.4'.   Broken and fractured zone @ 19.5' - 20.3'.   Recovery: 60"/60" = 100%   RQD: 10"/60" = 17%   23 Pieces, 6" Chips and Fragments   Continued on Page 2   SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod	17					-											
Broken and fractured zone @ 19.5' - 20.3'.  Recovery: 60"/60" = 100%   RQD: 10"/60" = 17%  23 Pieces, 6" Chips and Fragments  Continued on Page 2  SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod																	
Recovery: 60"/60" = 100%   RQD: 10"/60" = 17% 23 Pieces, 6" Chips and Fragments Continued on Page 2  SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod	18							18.6', 18.7	7', 19.1', 1	9.2' ar	nd 19.4'.						
23 Pieces, 6" Chips and Fragments Continued on Page 2 SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod									v								
20 Continued on Page 2 SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod	19											" = 17%					
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod									-		ragments						
			<u></u>				<u> </u>										
*Water added to boring for coring.	-	-					Weight of	of Hammer	+ Rod, W	R - W	eight of Rod						
	Remar	ks:	*Wate	er adde	d to bor	ing for coring.											

6035 Corporate Drive
East Syracuse, NY 13057
Associates, Inc.
Phone: 315-701-0522

### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-625

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522  LOG OF BORING SAMPLES						TEST BORING I	LUG	Project No.	28062	$\neg$
							VISUAL CLAS	SIFICATION C	_		_
Depth			Depth	Type /	Blows on	Depth of	c - coarse			SPT "	'N"
Scale	Sample	(F	řt.)	Sample	Sampler	Change	m - medium		% / some - 20 to 35%	or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine	little - 10 to 2	0% / trace - 0 to 10%	RQD	%
20							Continued from Page 1 1:00 min/ft, no water loss				
21							Coring conducted in 4th g	ear, 1500 rpm, 70	0 psi down pressure		
	R-2	21.0	26.0	C/60	NQ-Core		Grey DOLOSTONE with	interbedded SHAI	LE layers (<1/8" - 1.0	0" 429	%
22							thick), slightly to moderate	ely weathered, thin	ly laminated to thinl	У	
23							bedded, hard.  Horizontal fractures with	weathering @ 21	3' 21 5' 22 3' 24 9'		
23							25.3', 25.5', 25.6' and 25.8		,, 21.3 , 22.3 , 21. <i>)</i> ,	'	
24							Recovery: 60"/60" = 100°		= 42%		
25	-						28 Pieces, 2" Chips and Fi	ragments			
23							1:00 min/ft, no water loss Coring conducted in 4th g	ear. 1500 rpm. 70	0 psi down pressure		
26							Bottom of Boring @ 26.0'		o par do mi pressure.		
27											
28											
29											
30	1										
31											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
15	1										

Attachm	ent to C	ME Re	eport N	umber: 2	28062B-04-0724					T	est Boring Logs	- Page 1	54 of 201
				6035 Co	orporate Drive	SI	IRSURF	ACE EX	ZPI.(	ORATION	Boring No.	В-	626
		IV			racuse, NY 13057			S BORI			Page No.	1 (	of 2
	Asso	ociate	s, Inc.	Phone: 3	315-701-0522		IESI	DUKI	NGI	LUG	Project No.	28	062
Project	Name:	Micron	ı Camp	us, Clay,	New York						Date Started	04/1	19/24
Client:		Rambo	oll								Date Finished	04/1	19/24
Locatio	n:			on Locati							Surface Elev.		5.4'
		ME	THO	DS OF	INVESTIGATIO	N			GR	ROUNDWATER	OBSERVAT	IONS	
Driller:		Al Lin	struth		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		John V	Vinks		Casing Hammer:						1 , ,		
Inspecto					Other:			04/19/24		While Drilling	15.0		8.5
Drill Ri	g:	CME 5	55		Soil Sampler:		Split Barrel	04/19/24		ore Casing Removed	14.7		0.8
Type:		ATV			Hammer Wt:	140 lbs.		04/19/24		er Casing Removed	None Noted		ut
Rod Siz		AWJ	DOD		Hammer Fall:	30 in.	¥7¥	04/19/24		er Casing Removed	caved @		ut
	LO			ING SA	MPLES		VI	SUAL C	LAS	SIFICATION O	F MATERIA	<u>.L</u>	ı
Depth		_	Depth	Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample		řt.)	Sample	Sampler	Change		medium			% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine	CILI		0% / trace - 0 to 109	%	RQD %
0	1	0.0	2.0	SS/16	4-1-1-3		MATERIA	•		Γ, trace CLAY, trac	e ORGANIC		2
1							MATERIA	ıL (moist,	som)				
1													
2	2	2.0	4.0	SS/18	3-4-4-4		Similar as	above (we	et. stif	ff)			8
_	_			55,10					, 5011	/			
3													
4	3	4.0	6.0	SS/19	3-4-3-3		Brown SIL	T, trace C	CLAY	(wet, medium stiff	f)		7
5													
6	4	6.0	8.0	SS/17	3-4-3-4		Brown SIL	T, little C	LAY	(wet, medium stiff			7
7													
_	_							_			_		
8	5	8.0	10.0	SS/18	2-3-3-3		Brown SIL	T, trace C	CLAY	(wet, medium stiff	f)		6
9													
10													
10													
11													
11													
12													
1	l					I							

(wet, stiff)

See Remark 1 Continued on Page 2

Brown SILT, trace CLAY (wet)

SAND, trace fine GRAVEL (wet)

Grey SILT, some cmf GRAVEL, little cmf SAND, trace CLAY

Dark Grey/Black ROCK Fragments (Shale), some SILT, little cmf

12

11

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

3-6-6

6-5-6

Remarks: 1. No recovery with a 2" spoon; therefore a 3" spoon was utilized.

13

14

15

16

17

18

19

6A

6B

7

13.5 | 14.0 | SS/18

14.0 15.0

18.5 | 20.0

SS/0

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 155 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-626

 Page No.
 2 of 2

 Project No.
 28062

	<b>Ass</b>	ociate	s, Inc.	Phone: 3	315-701-0522		TEST BURING	LUG	Project No.	280	062
					AMPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL		
D4h		1	e Depth								CDT "NI"
Depth Scale	Sample		t.)	Type /	Blows on Sampler	Depth of	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%		SPT "N" or
(Feet)	No.	From	То	Sample Rec. (in.)	Per 6 Inches	Change (Ft.)	f - fine		20% / some - 20 to 33% 20% / trace - 0 to 10%		RQD %
20						(= 1.)	Continued from Page 1				
	8	20.7	20.8		50@1"		Grey ROCK Fragments (S	Shale) (wet)			50+
21					5001		Split Spoon and Auger Re	fusal @ 20.8'			
							Bottom of Boring @ 20.8	,,,,,,,,,			
22											
23											
24											
25											
26											
27											
20											
28											
29											
23											
30											
50											
31											
32											
33											
34											
35											
33											
36											
30											
37											
0,											
38											
39											
40											
41											
42											
42											
43											
43											
44											
• •											
45											

, tttaoiiiii	ont to C	IVIL IXC	portiv	arribor. 2	20002D-04-0724	1				<u> </u>	est boiling Logs	i age i	00 01 201
				6035 Co	orporate Drive	SI	JBSURF	ACE EX	PI.	ORATION	Boring No.	В-	627
		IV	Ę	-	racuse, NY 13057			BORI			Page No.	1	of 2
	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		1691	DOKI	NG	LUG	Project No.	28	062
Project	Name:	Micror	ı Camp	us, Clay,	New York						Date Started	04/3	30/24
Client:		Rambo	oll								Date Finished	04/3	30/24
Location	n:	See Ex	ploration	on Locati	on Plan						Surface Elev.		3.0'
		ME	THO	DS OF	INVESTIGATIO	N			GI	ROUNDWATER	OBSERVAT	IONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Cocina	At (Ft.)
Driller:		K. Cra	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspecto		C. O'H	ara		Other:			04/30/24		While Drilling	2.5	8	3.0
Drill Ri	g:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	04/30/24		ore Casing Removed	7.8	2	1.0
Type:		ATV			Hammer Wt:	140 lbs.		04/30/24		ter Casing Removed	3.5	C	out
Rod Size		AWJ			Hammer Fall:	30 in.		04/30/24		ter Casing Removed	caved @ 5.5		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SSIFICATION (	)F MATERIA	L	
Depth		Sample	e Depth	Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample	(F	řt.)	Sample	Sampler	Change		medium		and - 35 to 50	0% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.5	SS/12	WH-1-1-3	l				terial (moist)			2
	1B	0.5	2.0				Brown SIL	T, trace C	CLAY	Y, trace fine SAND	(moist, soft)		
1													
2	2	2.0	4.0	SS/14	4-5-6-4		Brown/Gre	y mottled	SIL	T, trace CLAY (we	t, stiff)		11
3													
4	3	4.0	6.0	SS/17	1-2-4-4		Brown SIL	T, trace C	CLAY	Y (wet, medium stif	f)		6
5													
6	4	6.0	8.0	SS/24	3-4-4		Similar as	above (we	et, sti	iff)			8
7													
8	5	8.0	10.0	SS/23	4-4-4-5		Similar as	above (we	et, sti	iff)			8
9													
10													
11								** *					
						<u> </u>	Augered gr	ravelly be	ginni	ing @ 11.8'			
12													
		1.0.0		00.55	2000			TD 4 **==	11	OH # 12-1	AND		
13	6	13.0	15.0	SS/10	2-9-8-8			jRAVEL,	little	e SILT, little cmf S	AND (wet, medi	ıum	17
							compact)						
14													
1.5													
15													
1.0													
16													
17													
17													
10	7	18.0	20.0	SS/10	12-5-6-6		Cross and	יייע א מבי	on d	omf CAND 1:41- 0	II T (wat 1	<b></b>	11
18	/	18.0	20.0	33/10	12-3-0-0			JKAVEL	ana	cmf SAND, little S	ılı (wet, meatu	111	11
19							compact)						
19													
ļ													

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

6035 Corporate Drive
East Syracuse, NY 13057

#### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-627

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ciate	s, Inc.	Phone:	315-701-0522		TEST BORING I	.OG	Project No.	28062
					AMPLES	1	VISUAL CLASS	SIFICATION O		
Depth			e Depth		Blows on	Б			·	SPT "N"
Scale	Sample		t.)	Type / Sample	Sampler	Depth of Change	m - medium	and - 35 to 50	% / some - 20 to 35%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		0% / trace - 0 to 10%	RQD %
20							Continued from Page 1			
21	0	21.0	21.1	00/1	50@1"		Augers harder beginning			50.
21	8	21.0	21.1	SS/1	50@1"		Black ROCK Fragments (S Split Spoon and Auger Ref			50+
22							Bottom of Boring @ 21.1'	usui @ 21.1 .		
23										
2.4										
24										
25	-									
26										
27										
28										
20										
29										
	<u> </u>									
30										
31										
32										
22										
33										
34										
35										
26										
36										
37										
38										
20										
39										
40	1									
41										
40										
42										
43										
44										
15	1									
45	1	l	l	I		I				

				6035 Co	orporate Drive	ST	IBSURF	ACE EX	XPI.C	<b>PRATION</b>	Boring No.	B-	-628
		Y	Ę	East Syı	racuse, NY 13057			Γ BORI			Page No.		of 1
	Asso	ociates	s, Inc.	Phone: 3	315-701-0522				11Q L		Project No.	28	3062
Project	Name:	Micror	n Camp	us, Clay,	New York						Date Started	04/	30/24
Client:		Rambo	oll								Date Finished	04/	30/24
Location	n:			on Locati							Surface Elev.		31.4'
		ME	THO	DS OF	INVESTIGATIO	)N			GR	OUNDWATER	OBSERVAT	IONS	
Driller: Driller:		H. Lyo K. Cra			Casing: Casing Hammer:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto	or:	C. O'H			Other:			04/30/24	7	While Drilling	None Noted	(	5.0
Drill Ri		CME 4			Soil Sampler:	2" OD S	Split Barrel			e Casing Removed	None Noted		1.0
Туре:	-	ATV			Hammer Wt:	140 lbs.	•	04/30/24		Casing Removed	None Noted		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		04/30/24		Casing Removed	caved @ 6.9	(	out
		G OF	BOR	ING SA	AMPLES		VI			SIFICATION O	F MATERIA	L	
D 4		I	e Depth										CDT !IN!!
Depth Scale	Sample		t.)	Type / Sample	Blows on Sampler	Depth of		- coarse medium		and - 35 to 50	0% / some - 20 to 35	%	SPT "N" or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	Change (Ft.)		- fine			20% / some - 20 to 33 20% / trace - 0 to 109		RQD %
0	1A	0.0	0.6	SS/16	4-WH-2-1	\ <u>/</u>			Mate	rial (moist)			2
-	1B	0.6	2.0		<b>-</b> -					trace fine SAND	(moist, soft)		
1								,	-,				
2	2	2.0	4.0	SS/15	1-4-3-4		Brown SIL	T, trace C	CLAY	(wet, medium stif	f)		7
											•		
3													
4	3	4.0	6.0	SS/11	7-7-6-5		Similar as	above (we	et, stiff	<del>-</del> )			13
								•					
5													
6	4	6.0	8.0	SS/14	4-5-4-4		Similar as	above (we	et, stiff	<del>(</del> )			9
7													
8	5	8.0	8.6	SS/7	5-50@1"					ND, trace CLAY	(wet, hard)		50+
							Augers like	e Cobble l	beginn	ing @ 8.5'			
9													
	l r												
10													
	_			~~:-	<b></b>		a 1: 5	• .	_				
11	6	11.0	11.0	SS/0	50@0"					fusal @ 11.0'			50+
10							Bottom of	Boring @	11.0'				
12													
10													
13													
1.4													
14													
15													
13													
16													
10													
17													
1 /													
18													
10													
19													
1)													
20	1												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

Attachm	ent to C	ME Re	port N	umber: :	28062B-04-0724					Т	est Boring Logs	- Page 1	159 of 201
				6035 Co	orporate Drive	SI	IBSURF	ACE ES	XPI.	ORATION	Boring No.	B-	629
		IV		East Sy	racuse, NY 13057						Page No.	1	of 2
	Ass	ociates	s, Inc.	Phone:	315-701-0522		1E51	BORI	NGI	LOG	Project No.	28	3062
Project					New York	<u> </u>					Date Started	05/	01/24
Client:		Rambo									Date Finished		01/24
Locatio	n:			on Locati	ion Plan						Surface Elev.		33.3'
Location					INVESTIGATIO	N			GR	OUNDWATER			,5.5
Driller:		H. Lyo		20 01	Casing:	3 ¼" ID	H.S.A.						
Driller:		K. Cra			Casing Hammer:			Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto		C. O'H			Other:			05/01/24		While Drilling	3.4	8	3.0
Drill Ri		CME 4			Soil Sampler:	2" OD S	Split Barrel	05/01/24		re Casing Removed	9.0		3.7
Туре:	<b>6</b> .	ATV			Hammer Wt:	140 lbs.	-	05/01/24		r Casing Removed	8.0		out
Rod Siz	æ:	AWJ			Hammer Fall:	30 in.		05/01/24		r Casing Removed	caved @ 15.9		out
			BOR	ING S	AMPLES		VI			SIFICATION (			
	1	Sample			I								GDT IIN III
Depth Scale	Sample	Sample (F		Type /	Blows on	Depth of	1	coarse medium		and 25 to 50	0% / some - 20 to 35	04	SPT "N"
(Feet)	No.	From	То	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		- fine			20% / some - 20 to 35 20% / trace - 0 to 109		or RQD %
0	1A	0.0	0.5	SS/15	1-WH-2-4	(1 (.)			: Mate	erial (moist)	, Lace 0 to 10,		2
	1B	0.5	2.0		',,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>				, trace fine SAND	. trace ORGANI		
1							MATERIA				,		
								(	, <del></del> /				
2	2	2.0	4.0	SS/13	4-4-4		Brown SIL	T, trace (	CLAY	(moist, stiff)			8
								,		, , ,			
3													
4	3	4.0	6.0	SS/17	6-10-8-7		Similar as	above (we	et, ver	y stiff)			18
								`	,	•			
5	1												
6	4	6.0	8.0	SS/16	5-6-6-7		Brown SIL	T, trace C	CLAY	, trace fine GRAV	EL, trace cmf S	AND	12
							(wet, stiff)						
7													
8	5	8.0	10.0	SS/18	5-7-8-7		Brown/Gre	y SILT, t	race C	CLAY (moist, very	stiff)		15
9													
	1												
10													
11													
12													
	_	1.2.	1	00.5	XXX 2.2.2			~=					
13	6	13.0	15.0	SS/14	WH-2-3-2		Grey SILT	, little CL	AY (v	wet, medium stiff)			5
1.													
14													
1.7	4												
15													
1.0													
16													
17						}							
17													
10	7	18.0	20.0	SS/15	1 1 1 2		Cross CT A	V 1:441 = 0	пт.	ross amf CAND	roog fine CD AV	EI (*	2
18	′	18.0	∠0.0	33/13	1-1-1-2		soft)	i, iittie S	ılı, t	race cmf SAND, t	race line GKAV.	EL (wet	, 2
19							SOIL)						
19													

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-629

 Page No.
 2 of 2

 Project No.
 28062

	Ass	ociate	s, Inc.	Phone:	315-701-0522		TEST BORING I	LUG	Project No.	280	062
					AMPLES		VISUAL CLASS	SIFICATION (			
Donth			e Depth								SPT "N"
Depth Scale	Sample		t.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%		or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		20% / trace - 0 to 10%		RQD %
20							Continued from Page 1				
21	8A	20.0		SS/8	3-9-7-10		Similar as above (moist, v		T to a CC 13Th		16
21	8B	20.3	22.0				Grey CLAY, some cmf Gl	RAVEL, little SIL	T, trace cmf SAND		
22							(wet, very stiff)				
						<u> </u>					
23							Augers like Rock starting	@ 23.1'			
	9	23.7	23.9	SS/1	50@2"		Black SHALE Fragments				50+
24							Split Spoon and Auger Rej	tusal @ 23.9'			
25	1						Bottom of Boring @ 23.9'				
26											
27											
28											
29											
20											
30											
31											
32											
33											
33											
34											
35											
36											
] 30											
37											
38											
39											
40											
41											
42											
72											
43											
44											
45											

				6035 Co	orporate Drive	SI	IRSURF	ACE EX	ZPI.	ORATION	Boring No.	B-	630
		IV	Ę		racuse, NY 13057			BORI			Page No.	1	of 2
		ociates		i none.	315-701-0522		1691	DUKI	NG.	LUG	Project No.	28	3062
Project	Name:		_	us, Clay,	New York						Date Started		29/24
Client:		Rambo	oll								Date Finished	04/	29/24
Locatio	n:		_	on Locati							Surface Elev.		31.7'
					INVESTIGATIO				GR	ROUNDWATER	OBSERVAT	IONS	
Driller:		Gary R		3	Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		John W	√1nks		Casing Hammer:	NO C		04/20/24		Mi.1 D.II.	_		
Inspecto Drill Ri		CME 5	5		Other: Soil Sampler:	NQ-Cor	re Split Barrel	04/29/24		While Drilling ore Casing Removed	4.1 2.2		4.0 2.0
Type:	g.	ATV	) )		Hammer Wt:	140 lbs.	-	04/29/24		er Casing Removed	2.2		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		04/29/24		er Casing Removed	caved @ 14.0		out
Itou SIZ			BOR	ING SA	AMPLES	J	VI			SIFICATION C			, at
		ī		110 52		+					or white the		
Depth Scale	Sample	_	e Depth ft.)	Type /	Blows on	Depth of		coarse medium		and 25 to 50	% / some - 20 to 35	04	SPT "N"
(Feet)	No.	From	То	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		- fine			% / some - 20 to 35 0% / trace - 0 to 109		or RQD %
0	1	0.0	2.0	SS/5	WH-WH-2-4				mf SA	AND, trace woody			
							(moist, sof						
1													
2	2	2.0	4.0	SS/15	7-6-6-6		Brown/Gre	y SILT, t	race (	CLAY, trace fine S	AND (wet, stiff)	)	12
3													
		4.0	- 0	G G / 4 <b>5</b>			a			an.			10
4	3	4.0	6.0	SS/17	6-5-7-6		Similar as	above (we	et, stil	ff)			12
	1												
5													
6	4	6.0	8.0	SS/17	5-6-7-11		Similar as	ahove (we	et stif	ff)			13
	_	0.0	0.0	55/17	3 0 7 11		Sillina as	ubove (we	, sti	11)			13
7													
8	5	8.0	10.0	SS/14	6-8-8-7		Brown SIL	T, trace f	ine S	AND (wet, very sti	ff)		16
9													
10													
1.1													
11													
12													
12													
13													
1.5													
14	6	14.0	15.5	SS/14	WH-1-4		Brown SII	T, little fi	ne S	AND, trace CLAY	(wet, very soft)		1
								,		,	, , ,		
15						1							
	7	15.5	17.5	SS/15	WH-WH-2-2		Brown CL	AY, some	SIL	Γ, trace cmf SAND	, trace mf GRA	VEL	2
16							(wet, soft)						
						ļ							
17									_				
	8	17.5	19.5	SS/15	16-6-9-15					me SILT, little CL	AY, little cmf SA	AND	15
18							(wet, medi	um compa	act)				
10													
19													
20							Continued	on Page 1	)				
20	<u> </u>			Ī			Lonunded	on rage 2	_				1

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

Test Boring Logs - Page 162 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

Boring No. B-630

Page No. 2 of 2

Project No. 28062

	Asso	ociate	s, Inc.	Phone: 3	315-701-0522		TEST BURING I	LUG	Project No.	2806	52
					AMPLES						
Depth Scale (Feet)	Sample No.		e Depth Ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
<ul><li>20</li><li>21</li><li>22</li><li>23</li></ul>	9 R-1	22.0 22.0		SS/0 C/57	50@0" NQ-Core		Spoon Refusal @ 22.0' - s. Grey DOLOSTONE with slightly weathered, thinly hard to hard.	interbedded SHA laminated to medi	um bedded, mediu	nick),	50+ 72%
24 25 26 27 28 29 30	R-2	27.0	32.0	C/57	NQ-Core		Weathered broken and fra Recovery: 57"/60" = 95% RQD: 43"/60" = 72% 11 Pieces, 1" Chips and Fra 1:20 min/ft, no water loss Coring conducted in 4th g Grey DOLOSTONE with slightly weathered, thinly is SILT seam (1/8" thick) @ Recovery: 57"/60" = 95% RQD: 57"/60" = 95% 10 Pieces, 0" Chips and Fra 57 sec/ft, no water loss Coring conducted in 4th g	ragments  ear, 1700 rpm, 70 interbedded SHA laminated to medi 29.3'.  ragments	00 psi down pressu LE (<1/8" - 1/4" th um bedded, hard.	nick),	95%
<ul><li>31</li><li>32</li><li>33</li></ul>							Bottom of Boring @ 32.0		o psi uowii pressu		
34											
36 37											
38 39											
40											
42 43											
44											

Attachm	ent to C	ME Re	eport N	umber:	28062B-04-0724					Т	est Boring Logs	- Page 1	63 of 201
				6035 C	orporate Drive	ÇI	IRSLIDE	ACE EX	ypi (	ORATION	Boring No.	B-	631
		IV		East Sy	racuse, NY 13057	50					Page No.	1	of 2
	Ass	ociates	s, Inc.	Phone:	315-701-0522		1E51	r BORI	NGI	LOG	Project No.	28	062
Project	Name:	Micror	ı Camp	us, Clay,	New York						Date Started	04/	30/24
Client:		Rambo	oll								Date Finished	04/.	30/24
Locatio	n:	See Ex	ploration	on Locati	on Plan						Surface Elev.	38	34.5'
		ME	THO	DS OF	INVESTIGATIO	N			GR	OUNDWATER	OBSERVAT	IONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		K. Cra			Casing Hammer:						_		
Inspecto		C. O'H			Other:	2" OD (	N-1:4 D1	04/30/24		While Drilling	5.7		3.0
Drill Ri	g:	CME 4	<del>1</del> 3		Soil Sampler: Hammer Wt:	2 OD 8	Split Barrel	04/30/24		re Casing Removed	6.0 8.8		5.7
Type: Rod Siz	•	AWJ			Hammer Fall:	30 in.		04/30/24		er Casing Removed	o.o caved @ 12.5		out
Kou Siz			BUD.	INC S	AMPLES	30 III.	T/T			SIFICATION C			out
	LU			ING SE	AIVIT LES		V 1	SUAL C	LAS	SIFICATION	T MATERIA	.L <i>i</i>	1
Depth		_	e Depth	Type /	Blows on	Depth of		- coarse					SPT "N"
Scale (Fact)	Sample		řt.)	Sample	Sampler	Change		medium - fine			% / some - 20 to 359		or DOD 0/
(Feet)	No.	From 0.0	To 0.6	Rec. (in.)	Per 6 Inches 1-1-1-3	(Ft.)			Moto	erial (moist)	0% / trace - 0 to 109	6	RQD %
	1B	0.6	2.0	33/17	1-1-1-3	·				, trace mf SAND (	moist soft)		2
1	115	0.0	2.0				DIOWILDIL	i, trace c	LAI	, trace iii sand (	moist, soit)		
1													
2	2	2.0	4.0	SS/14	3-4-4-5		Brown/Gre	ev SILT 1	ittle C	CLAY (moist, stiff)			8
-	1 -	2.0	1.0	55/11	3113		Diown or	oy oibi, i		Erri (moist, stiii)			
3													
4	3	4.0	6.0	SS/16	6-3-2-4		Similar as	above (w	et. me	dium stiff)			5
									,				
5	1												
6	4	6.0	8.0	SS/17	5-6-7-8		Brown SIL	T, trace (	CLAY	(moist, stiff)			13
7													
8	5	8.0	10.0	SS/20	6-7-7-8		Similar as	above (wo	et, stif	f)			14
9													
	]												
10													
11													
1.0													
12													
12	6	13.0	15.0	SS/13	2 4 4 2		Drouge CII	T tross	ine C	AND trace CII T (	wat stiff)		o
13	6	15.0	15.0	33/13	3-4-4-2		DIOMU 2II	1, trace f	me SA	AND, trace SILT (	wei, siiii)		8
14													
14													
15	1												
16													
17													
18	7	18.0	20.0	SS/16	WH-1-2-1		Grey CLA	Y, little S	ILT, t	race fine GRAVE	L, trace cmf SAN	ND (wet,	3
	I	I		1		1	coft)						1

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

soft)

Remarks:

19

6035 Corporate Drive
East Syracuse, NY 13057

### SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-631

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociate	s, Inc.	Phone: 3	315-701-0522		TEST BORING I	LUG	Project No. 2	8062	
					MPLES	VISUAL CLASSIFICATION OF MATERIAL					
Depth			Depth	Type /	Blows on	Depth of	c - coarse			SPT "N"	
Scale	Sample		řt.)	Sample	Sampler	Change	m - medium		0% / some - 20 to 35%	or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1	little - 10 to 2	20% / trace - 0 to 10%	RQD %	
21	8	20.0	22.0	S/24	WH-1-5-8	ļ	Brown/Red CLAY, little S (wet, medium stiff)		AVEL, trace cmf SAND	6	
22							Augers gravelly beginning	g @ 21.1°			
23 24	9	23.0	25.0	SS/5	5-7-10-12		Grey cmf GRAVEL, some compact)	e cmf SAND, trace	e SILT (wet, medium	17	
25	•										
26	10	25.7	25.7	SS/0	50@0"		Black SHALE Fragments : Refusal @ 25.7'		olit Spoon and Auger	50+	
27							Bottom of Boring @ 25.7'				
28											
29											
30											
31											
33											
34											
35											
36											
37											
38											
40											
41											
42											
43											
44											
45	ĺ	1		[		1				1	

Test Boring Logs - Page 165 of 201

Boring No. B-632

				6035 Co	orporate Drive	SI	JBSURF	ACE EX	XPLO	RATION	Boring No.		632
		IV		East Syr	racuse, NY 13057			BORI			Page No.		of 2
	Asso				315-701-0522		11791		11 <b>U</b> L		Project No.		3062
Project	Name:	Micror	ı Camp	us, Clay,	New York						Date Started	04/	30/24
Client:		Rambo	oll								Date Finished	04/	30/24
Locatio	n:		_	on Locati							Surface Elev.		33.8'
		ME	THO	DS OF	INVESTIGATIO	N			GRO	DUNDWATER	OBSERVAT	IONS	
Driller: Driller:			letcher Casatell		Casing: Casing Hammer:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspect	or:	•			Other:	NQ-Co	re	04/30/24	V	Vhile Drilling	7.7	1	3.5
Drill Ri	g:	CME 5	55		Soil Sampler:	2" OD S	Split Barrel	04/30/24	Before	e Casing Removed	None Noted	3	2.0
Type:		ATV			Hammer Wt:	140 lbs.		04/30/24	After	Casing Removed	5.3	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		04/30/24		Casing Removed	caved @ 17.6		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASS	IFICATION C	F MATERIA	L	
Depth		Sample	e Depth	T. /	Blows on	D 1 6	c -	coarse					SPT "N"
Scale	Sample		t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	0% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10°		RQD %
0	1A	0.0	0.5	SS/16	1-1-1-4		Topsoil an						2
1	1B	0.5	2.0				Brown/Gre (moist, stif	-	ittle CI	LAY, trace ROO	$\Gamma$ S, trace fine SA	AND	
2	2	2.0	4.0	SS/22	4-5-7-6		Brown/Gre	ey mottled	l SILT,	trace CLAY (mo	oist, stiff)		12
3													
4	3	4.0	6.0	SS/5	4-5-6-4		Brown SIL (wet, stiff)	T, little C	CLAY,	trace mf GRAVE	EL, trace cmf SA	ND	11
5													
6 7	4	6.0	8.0	SS/14	6-7-8-7		Brown SIL stiff)	T, some o	emf GR	RAVEL, trace cm	f SAND (wet, ve	ery	15
8	5	8.0	10.0	SS/19	3-3-5-5		Brown SIL	T, trace C	CLAY,	trace fine SAND	(wet, stiff)		8
9													
10													
11													
12													
13	6	13.5	15.0	SS/17	3-2-2		Brown/Gre	ev SILT, 1	ittle CI	AY, trace fine S	AND (wet, med	ium	4
14							stiff)	, -		,	, ,, ,,		
15													
16													
17													
18	7	10.5	20.0	00/12	(57		Constant of the	LANID -	a cu m	CD AV	TEL (made and 3)		12
19	7	18.5	20.0	SS/12	6-5-7		Grey cmf S compact)	SAND and	a SILT	, some mf GRAV	EL (wet, mediu	m	12
20	1						Continued	on Page 2	2				

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

Associates, Inc.

6035 Corporate Drive East Syracuse, NY 13057

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-632

 Page No.
 2 of 2

 Project No.
 28062

Associates, Inc. Phone: 315-701-0522							200	Project No.	28	062		
	LO	G OF	BOR	ING SA	AMPLES	VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample (F From		Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %	
20	140.	Tiom	10	Rec. (III.)	Tel 0 menes	(11.)	Continued from Page 1	indic - 10 to	20% / Hace - 0 to 10%	0	KQD /0	
22	R-1	22.0	27.0	C/60	NQ-Core		Auger Refusal @ 22.0' - S Grey DOLOSTONE with	interbedded SHA	•		95%	
<ul><li>23</li><li>24</li></ul>							thick), slightly weathered, to hard. Weathered and broken zon	ne (1/2" thick) @		m hard		
25	-						Recovery: 60"/60" = 100" RQD: 57"/60" = 95% 11 Pieces, 0" Chips and Fr					
<ul><li>26</li><li>27</li></ul>	R-1	27.0	32.0	C/56	NQ-Core		1:15 min/ft, no water loss Coring conducted in 4th g Grey DOLOSTONE with	interbedded SHA	LE layers (~1/4"		87%	
28							slightly weathered, lamina Weathered fractures @ 27 Recovery: 56"/60" = 93%	7.4' and 27.6'.	ded, hard.			
30							RQD: 52"/60" = 87% 8 Pieces, 3" Chips and Fra 1:00 min/ft, no water loss	gments				
31							Coring conducted in 4th g	ear, 1700 rpm, 70	00 psi down press	sure.		
32							Bottom of Boring @ 32.0					
33 34												
35												
36 37												
38												
39												
40												
42												
43												
44	]											

Test Boring Logs - Page 167 of 201

/ tttaciiiii	one to o	IVIL I C	portiv	arribor.	20002D-04-0724						est boning Logs	i ago i	07 01 201	
				6035 C	orporate Drive	SI	JBSIJRF	ACE EX	ζPI.	ORATION	Boring No.	В-	633	
		ĮVI			racuse, NY 13057			BORI			Page No.	1 (	of 2	
	Asso	ciates	s, Inc.	Phone:	315-701-0522		1121	DUKL	NG	LUG	Project No.	28	062	
Project 1	Name:	Micror	Camp	us, Clay,	New York						Date Started		30/24	
Client:		Rambo	oll								Date Finished	04/3	30/24	
Location	ı:			on Locati							Surface Elev.		0.9'	
		ME	THO	DS OF	INVESTIGATIO				GI	ROUNDWATER	R OBSERVAT	IONS		
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Cacina	At (Ft.)	
Driller:		K. Cra			Casing Hammer:						• • •			
Inspecto		C. O'H			Other:			04/30/24		While Drilling	4.9		3.0	
Drill Rig	_	CME 4	15		Soil Sampler:		Split Barrel			ore Casing Removed		2	1.5	
Type:		ATV			Hammer Wt:	140 lbs.		04/30/24		er Casing Removed	3.7	C	out	
Rod Size		AWJ			Hammer Fall:	30 in.		04/30/24		er Casing Removed	caved @ 9.0		out	
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SSIFICATION (	OF MATERIA	L		
Depth		Sample	Depth	Type /	Blows on	Depth of	c -	- coarse					SPT "N"	
Scale	Sample	(F	řt.)	Sample	Sampler	Change	m -	medium		and - 35 to 50	0% / some - 20 to 35	%	or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10°	%	RQD %	
0	1A	0.0	0.5	SS/14	WH-1-2-5	<b> </b>				erial (moist)			3	
	1B	0.6	2.0				Brown SIL	T, trace C	CLAY	Y, trace fine SAND	(moist, soft)			
1														
	2	2.0	4.0	00/15			D 277	TD /	TT					
2	2	2.0	4.0	SS/16	5-4-5-5	Brown SILT, trace CLAY (moist, stiff)							9	
3						Similar as above (wet. stiff)								
	2	4.0	60	00/15	4500	Similar as above (wet, stiff)								
4	3	4.0	6.0	SS/15	4-5-6-6		Similar as above (wet, stiff)							
- 5						Similar as above (wet, stiff)								
5														
6	4	6.0	8.0	SS/21	4-5-6-5		Similar as	ahova (w	at eti	ff)			11	
U	4	0.0	0.0	33/21	4-2-0-3		Similal as	above (Wi	ı, sil	11)			11	
7														
'														
8	5	8.0	10.0	SS/20	4-4-5-5		Similar as	ahove (w	et eti	ff)			9	
0	5	0.0	10.0	55/20	T T-J-J		Similar as	uoove (Wi	, su	11)				
9														
10														
11														
							Augers gra	ivelly beg	innin	ng @ 11.5'				
12						t	1 3 2 3 3			<u> </u>				
13	6	13.0	15.0	SS/9	5-3-14-13		Red/Brown	n SILT, lit	ttle m	nf GRAVEL, little	CLAY, trace cm	f SAND	17	
							(wet, very			,	,			
14							(wet, very suir)							
15														
16														
						<b> </b>								
17							<b>-</b>	<b></b>		·	<b></b>	<b></b>		
18	7	18.0	20.0	SS/16	7-11-10-30		1 -	GRAVEL	, som	ne cmf SAND, some	e SILT (wet, me	dium	21	
							compact)							
19														
20								_						
20				-				D	•					

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod
Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 168 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

SUBSURFACE EXPLORATION
TEST BORING LOG

 Boring No.
 B-633

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociate	s, Inc.	Phone:	315-701-0522		TEST BURING I	LUG	Project No.	28	062
					AMPLES		VISUAL CLASS	SIFICATION (			
Depth Scale (Feet)	Sample No.	Sample	Depth Ft.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20	110.	1.011		-100. (III.)	101 0 moneo	(2 1.)	Continued from Page 1	10102	23,2 / 11400 0 10 10 /0		1.22 /0
21											
22	8	21.5	21.7	SS/1	50@2"		Grey SHALE Fragments  Split Spoon and Auger Re	fusal @ 21.7'			50+
23							Bottom of Boring @ 21.7				
24											
25											
26 27											
28											
29											
30											
31											
32											
33											
34											
36											
37											
38											
39											
40											
41											
42											
43											
45											,

Attachm	nent to C	ME Re	port N	umber:	28062B-04-0724						Test Boring Logs	- Page	169 of 201
					orporate Drive	CT	IDCIIDE	ACEES	ZDI O	RATION	Boring No.		664
					racuse, NY 13057	50					Page No.		of 2
	Ass	ociates	s, Inc.	Phone:	315-701-0522		TEST	r BORI	NG L	.OG	Project No.		3062
Project					New York						Date Started	04/	24/24
Client:		Rambo									Date Finished	04/	24/24
Location	n:	See Ex	ploratio	on Locati	ion Plan						Surface Elev.		39.8'
					INVESTIGATIO	N			GRO	OUNDWATE	R OBSERVAT		
Driller:		Beau F			Casing:	3 ¼" ID	H.S.A.						
Driller:		Ryan C	Casatell	i	Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspecto	or:	•			Other:	NQ-Cor	e	04/24/24	V	While Drilling	13.2	1	8.5
Drill Ri	g:	CME 5	55		Soil Sampler:	2" OD S	plit Barrel	04/24/24	Before	e Casing Removed	l None Noted	3	0.1
Type:		ATV			Hammer Wt:	140 lbs.		04/24/24	After	Casing Removed	6.0 *	(	out
Rod Siz	æ:	AWJ			Hammer Fall:	30 in.		04/24/24	After	Casing Removed	caved @ 17.0	(	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASS	SIFICATION	OF MATERIA	L	
Depth		Sample	Depth		Blows on		C	- coarse					SPT "N"
Scale	Sample	-	t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 5	50% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 109		RQD %
0	1A	0.0	0.5	SS/18	WH-1-1-2	<u></u>	Topsoil an	d Organic	Mater	rial (moist)			2
	1B	0.5	2.0			ļ	Brown SII	T, trace C	CLAY,	trace fine SANI	O, trace ORGANI	C	
1							MATERIA	AL (moist,	soft)				
2	2	2.0	4.0	SS/22	6-5-4-4		Brown/Gre	ey mottled	I SILT,	, trace CLAY (m	oist, stiff)		9
3													
4	3	4.0	6.0	SS/16	2-3-3-4		Brown CL	AY, some	SILT	(moist, medium	stiff)		6
	1												
5													
	١.							~~~ ~ .					
6	4	6.0	8.0	SS/18	4-4-4-3		Brown/Gre	ey SILT, l	ittle Cl	LAY (wet, stiff)			8
_													
7													
0	_	0.0	10.0	00/20	2222		D 011	T	T 4 3 7	, <u>1</u> ; ,	. cc		4
8	5	8.0	10.0	SS/20	2-2-2-2		Brown SIL	T, trace (	CLAY	(wet, medium st	111)		4
9													
10	-												
10													
11													
11													
12													
12													
13													
13	6	13.5	15.0	SS/18	3-3-4		Brown SII	T. trace C	LAY	(wet, medium st	iff)		7
14		13.3	13.0	55/10	J J- <del>T</del>		DIO WII DIL	11, Hace C	1111	wet, medium st	,		_ ′
1 1 7													
15	1												
16													
17													
						ļ							
18													
	7	18.5	20.0	SS/18	2-4-8		Grey SILT	and cmf	GRAV	EL, little CLAY	, trace cmf SANI	O (wet,	12
10	I	1	1	I	ĺ	1							

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

stiff)

**Remarks:** \* Water added to boring for coring.

19

CVE Associates, Inc.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315, 701, 0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-664

 Page No.
 2 of 2

 Project No.
 28062

	Ass	ociate	s, Inc.	Phone: 3	315-701-0522		TEST BURING	ւսց	Project No.	28	062
	_				AMPLES		VISUAL CLAS	SIFICATION (	-	Ĺ	
Depth Scale (Feet)	Sample No.	Sample	e Depth	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20							Continued from Page 1				
21											
22											
23	8	23.5	25.0	SS/15	23-13-50		Dark Grey SILT, some cn	nf GRAVEL, little	highly weathered	ROCK	63
24							Fragments (Shale), trace c				
25							Auger Refusal @ 25.1'. S				
26	R-1	25.1	30.1	C/59	NQ-Core		Grey DOLOSTONE with thick), slightly weathered, Weathered horizontal frac	thinly laminated	•		80%
27							Recovery: 59"/60" = 98% RQD: 48"/60" = 80%	8% I Fragments			
28							14 Pieces, 0" Chips and Fi 1:00 min/ft, no water loss				
29								_			
30	R-2	30.1	35.1	C/59	NQ-Core		Grey DOLOSTONE with thick), slightly weathered,	thinly laminated	to thickly bedded,		93%
31							Weathered and broken zoo Recovery: 59"/60" = 98%		30.3'.		
32							RQD: 56"/60" = 93% 9 Pieces, 0" Chips and Fra	agments			
33							1:00 min/ft, no water loss Coring conducted in 4th g	year 1500 rpm 70	00 nsi down nressi	ure	
34							Coring conducted in 4in g	eur, 1300 rpm, 70	oo psi down pressi	arc.	
35							Bottom of Boring @ 35.1				
36											
37											
38											
39											
40											
42											
43											
44											
45	-										

		N/		6035 Cd	orporate Drive	SI	JBSURF	ACE EX	(PL	ORATION	Boring No.	В-	666
		V		-	racuse, NY 13057			Γ BORI			Page No.		of 1
		ociates		T mone.	315-701-0522		11601	DOM	.10	LUG	Project No.		062
Project	Name:			us, Clay,	New York						Date Started		06/24
Client:		Rambo									Date Finished		06/24
Location	n:			on Locati				1	~=		Surface Elev.		9.1'
				DS OF	INVESTIGATIO				Gk	ROUNDWATER	OBSERVAT	TONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller: Inspect		K. Cra C. O'H			Casing Hammer: Other:			05/06/24		W/L:1- D::11:	4.0		5.0
Drill Ri		C. OH			Soil Sampler:	2" OD 9	Split Barrel	05/06/24		While Drilling ore Casing Removed	2.8		0.2
Type:	g.	ATV	+3		Hammer Wt:	140 lbs.	-	05/06/24		er Casing Removed	2.5		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/06/24		er Casing Removed	caved @ 5.2		out
1100 512			ROR		AMPLES	J	VI			SSIFICATION C			
		T		110 51	I				1110		, iviiii Eitii		
Depth Scale	Sample		e Depth t.)	Type /	Blows on Sampler	Depth of		- coarse medium		and 25 to 50	% / some - 20 to 35	04	SPT "N" or
(Feet)	No.	From	То	Sample Rec. (in.)	Per 6 Inches	Change (Ft.)		- fine			0% / some - 20 to 33 0% / trace - 0 to 10 <sup>9</sup>		RQD %
0	1A	0.0	0.3	SS/10	1-WH-2-3	(- 1.)			Mate	erial (moist)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2
	1B	0.3	2.0							, trace fine SAND	(moist, soft)		
1								,		•			
2	2	2.0	4.0	SS/11	3-3-3-2		Brown SIL	T, trace C	CLAY	, trace mf GRAVE	EL, trace cmf SA	ND	6
						Brown SILT, trace CLAY, trace mf GRAVEL, trace cmf SAND (moist, medium stiff)							
3													
						Augers like Cobble beginning @ 3.5'							
4	3	4.0	6.0	SS/7	7-7-21-24	Brown/Grey SILT and cmf GRAVEL, trace cmf SAND, trace CLAY							
						· · ·							
5						ļ							
		- 0		9914	22 40 20 20		D (G			- 1 GY - T			20
6	4	6.0	8.0	SS/4	22-18-20-30			ey cmf GR	RAVE	EL and SILT, trace	cmf SAND (mo	ist,	38
							compact)	, , .		G ( 0)			
7						ļ — -	Augers har	raer begin	ining	@ 0.8			
8	5	8.0	9.8	SS/15	18-20-30-50@4"		Droum CII	T little o	mf C	RAVEL, trace cmf	CAND (moist 1	aard)	50
0	3	0.0	7.0	33/13	16-20-30-30@4		DIOWII SIL	i, mule c	IIII O	KAVEL, trace cili	SAND (IIIOISI, I	iaiu)	30
9							Augers like	e Rock he	oinnii	na @ 9 2'			
						h	ingers in	TOOK DE	2000	8 @ 7.2			
10	6	10.1	10.2	SS/0	50@1"		Black SHA	ALE Fragr	nents	in tip of spoon			50+
										efusal @ 10.2'			
11							Bottom of						
								<i>5</i> -					
12													
13													
14													
	1												
15													
1 -													
16													
17													
17													
18													
10													
19													
20	1												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

/ tttaoriiii	ont to o		portre	arribor.	20002D-04-0724						est boiling Logs	. i ago	72 0. 20		
				6035 Co	orporate Drive	CI	IRSTIDE	ACE EX	ypi 4	ORATION	Boring No.	B-	667		
		IV		East Sy	racuse, NY 13057						Page No.	1	of 1		
	Asso	ciate	s, Inc.	•	315-701-0522	1	TEST	r BORI	NG.	LOG	Project No.		3062		
Project	Name:	Micror	ı Camp		New York	1					Date Started	05/	06/24		
Client:		Rambo	_								Date Finished		06/24		
Location	1:	See Ex	ploration	on Locati	ion Plan						Surface Elev.	39	9.4'		
					INVESTIGATIO	N			GF	ROUNDWATER					
Driller:		H. Lyc	n		Casing:	3 ¼" ID	H.S.A.	D 4		m·	D (1 (E())	<i>a</i> .	A 4 (TE4.)		
Driller:		K. Cra	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)		
Inspecto	r:	C. O'H	ara		Other:			05/06/24		While Drilling	8.0	2	2.0		
Drill Ri	g:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/06/24	Befo	ore Casing Removed	10.2	1	0.8		
Type:		ATV			Hammer Wt:	140 lbs.		05/06/24	Afte	er Casing Removed	6.5	(	out		
Rod Size		AWJ			Hammer Fall:	30 in.		05/06/24	_	er Casing Removed	caved @ 6.0		out		
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION (	OF MATERIA	L			
Depth		Sample	e Depth	Type /	Blows on	Depth of	c -	- coarse					SPT "N"		
Scale	Sample		t.)	Sample	Sampler	Change		medium		and - 35 to 50	)% / some - 20 to 35	%	or		
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10	%	RQD %		
0	1A	0.0	0.4	SS/13	WR-WH-1-2	<b> </b>			erial (moist)			1			
	1B	0.4	2.0			1		•	ce fine SAND, tr	race					
1						1	ROOTS (n	noist, soft	)						
	2	2.0	4.0	00/14	2224	Brown SILT, trace CLAY (moist, medium stiff)									
2	2	2.0	4.0	SS/14	2-2-3-4	Brown SILT, trace CLAY (moist, medium stiff)									
2						Brown Sill 1, trace CLAT (moist, medium sun)									
3															
1	2	4.0	60	00/15	7006	Brown SILT, trace CLAY, trace cmf SAND, trace fine GRAVEL									
4	3	4.0	6.0	SS/15	7-8-8-6	1	(moist, ver		LA Y	, trace cmi SAND	, trace line GRA	VEL	16		
5							(moist, ver	y Sum)							
3						1									
6	4	6.0	8.0	SS/17	20-14-16-20	1	Brown/Gre	v SILT o	some	cmf GRAVEL, tra	ce.cmf.SAND_tr	race	30		
	-⊤	0.0	0.0	55/1/	20 17-10-20		CLAY (mo	•		cim Civit v LL, tra	co chii barub, ti	iacc	30		
7						1	`			ning @ 6.3'					
'						<b> </b>		2000101							
8	5	8.0	10.0	SS/18	19-36-41-50	1	Brown/Gre	y mf GR.	AVEI	L and SILT, little c	mf SAND (mois	st, verv	77		
	-					1	compact)	,	· —-	,	(	, - 5			
9						1									
10						1	Augers har	rd @ 10.1	<i>'</i> .						
						1	~						69		
11	6	10.8	11.8	SS/13	19-39-30-38		Grey cmf (	GRAVEL	, little	e cmf SAND, little	SILT (moist, ve	ry			
						1	compact)								
12						1									
13						1	Bottom of	Boring @	12.8	<u> </u>					
						1									
14						1									
						1									
15						1									
1.						1									
16															
17						1									
17						1									
18															
18						1									
19						1									
1,9						1									
20						1									

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

Attachm	ent to C	ME Re	port N	umber: 2	28062B-04-0724	_				T	est Boring Logs	- Page	173 of 201
				6035 Co	orporate Drive	SI	J <b>BSURF</b> A	ACE EX	KPL/OI	RATION	Boring No.	В-	668
		IV		East Sy	racuse, NY 13057			Γ BORI			Page No.	1	of 2
	Ass	ociates	s, Inc.	Phone: 3	315-701-0522		1E21	DUKI	NG L	JG	Project No.	28	3062
Project	Name:	Micror	Camp	us, Clay,	New York						Date Started	05/	07/24
Client:		Rambo	oll								Date Finished	05/	07/24
Location	n:	See Ex	ploratio	on Locati	on Plan						Surface Elev.	39	9.5'
		ME	THO	DS OF	INVESTIGATIO	N			GRO	UNDWATER	OBSERVAT	IONS	
Driller:		H. Lyo	n		Casing:	3 ¼" ID	H.S.A.	Dete		m•	David (E4)	G	A4 (E4.)
Driller:		K. Cra	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto	r:	C. O'H	ara		Other:			05/07/24	W	hile Drilling	3.8	8	3.0
Drill Ri	g:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/07/24	Before	Casing Removed	6.5	2	0.5
Type:		ATV			Hammer Wt:	140 lbs.		05/07/24	After (	Casing Removed	None Noted	(	out
Rod Size	e:	AWJ			Hammer Fall:	30 in.		05/07/24	After (	Casing Removed	caved @ 5.1	(	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSI	FICATION C	F MATERIA	L	
Depth		Sample	Denth		Blows on			- coarse					SPT "N"
Scale	Sample	(F		Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 109		RQD %
0	1A	0.0	0.4	SS/12	WH-1-3-5		Topsoil an		Materia				4
	1B	0.4	2.0			h				noist, medium s	 tiff)		
1													
2	2	2.0	4.0	SS/13	3-4-6-5		Brown SIL	T, little C	CLAY (r	noist, stiff)			10
3													
4	3	4.0	6.0	SS/18	3-5-5-8		Brown SIL	T, trace C	CLAY (1	noist, stiff)			10
5													
6	4	6.0	8.0	SS/17	9-14-16-20		Similar as	above (me	oist, har	d)			30
7							L						
8	5	8.0	9.8	SS/16	17-14-11-50@4"		Brown SIL	T, little n	nf GRA	VEL, trace cmf S	SAND (moist, ve	ery	25
							stiff)						
9							Augered li	ke Cobble	e beginn	ing @ 8.8′			
10													
11							1.						
							Augers gra	ivelly beg	inning (	@ 11.5'			
12													
								_					
13	6	13.0	15.0	SS/10	10-12-7-12			, some mi	f GRAV	EL, little cmf SA	AND, trace CLA	Y (wet,	19
							very stiff)						
14													
15													
1.5													
16													
17													
10	_	10.0	10.0	aa /o	20.500.4"		G 077.77	, .	CODAT	TT 1141 66	AND (		
18	7	18.0	18.8	SS/9	38-50@4"		Grey SILT	, some mi	t GRAV	EL, little cmf SA	AND (wet, hard)	1	50+
10						ļ							
19													
			i	1		1	1						1

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 174 of 201

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

LOG OF BORING SAMPLES

SUBSURFACE EXPLORATION
TEST BORING LOG
VISUAL CLASSIFICATIO

 Boring No.
 B-668

 Page No.
 2 of 2

 Project No.
 28062

	Ass	ociate	s, Inc.	Phone:	315-701-0522		TEST BURING	ւսց	Project No.	28	062
					AMPLES		VISUAL CLAS	SIFICATION (			
Depth		Sample	e Depth	Type /	Blows on	Depth of	c - coarse				SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)	m - medium f - fine		0% / some - 20 to 35% 20% / trace - 0 to 10%		or RQD %
20	110.	110111	10	rec. (III.)		(11.)	Continued from Page 1		2070 / 11400 - 0 10 1070		KQD 70
21	8	20.5	20.5	SS/0	50@0"		Black SHALE Fragments	in tip of spoon			50+
21							Split Spoon and Auger Re Bottom of Boring @ 20.5	fusal @ 20.5'			
22							Double of Doining C 2010				
23											
24											
25	1										
26											
20											
27											
28											
29											
30	1										
31											
32											
33											
34											
35	1										
36											
37											
38											
39											
40	1										
41											
42											
43											
44											
45	1										

Allaciiii	ent to c	IVIL IXC	portiv	umber.	20002D-04-0724	_					est boning Logs	- r aye	175 01 20
				6035 C	orporate Drive	CI	J <b>BSURF</b> A	CE EX	XDI UD	ATION	Boring No.	B-	669
				East Sy	racuse, NY 13057						Page No.	1	of 2
	Asso	ociates	s, Inc.	Phone:	315-701-0522		TEST	BORI	NG LO	G	Project No.	28	3062
Project					New York						Date Started	05/	07/24
Client:		Rambo		···, · ·· <b>,</b> ,							Date Finished		07/24
Location	n:			on Locati	on Plan						Surface Elev.		99.9'
2004010			_		INVESTIGATIO	)N			GROI	JNDWATER	OBSERVAT		
Driller:			letcher		Casing:	3 ¼" ID	H.S.A.						
Driller:		Ryan C			Casing Hammer:			Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto	r:	,			Other:	NQ-Cor	re	05/07/24	Wh	ile Drilling	None Noted	2	3.2
Drill Ri	g:	CME 5	55		Soil Sampler:	2" OD S	Split Barrel	05/07/24		Casing Removed	None Noted	2	3.2
Type:		ATV			Hammer Wt:	140 lbs.		05/07/24	After C	asing Removed	2.0 *	(	out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/07/24	After C	asing Removed	caved @ 9.6	(	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	CLASSII	FICATION C	F MATERIA	L	
Depth		Sample	Depth		Blows on		C	coarse					SPT "N"
Scale	Sample	(F		Type / Sample	Sampler	Depth of Change	1	medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		little - 10 to 2	0% / trace - 0 to 109	%	RQD %
0	1A	0.0	1.0	SS/16	1-WH-3-4		Topsoil an	d Organic	e Materia	l (moist)			3
						l	<u> </u>						
1	1B	1.0	2.0				Brown SIL	T, trace C	CLAY (m	oist, stiff)			
2	2	2.0	4.0	SS/20	4-4-5-4		Brown SIL	T, trace C	CLAY (w	et, stiff)			9
3													
	2	4.0	6.0	GG/22			D CH	TT	OI ANA				10
4	3	4.0	6.0	SS/22	5-5-5-5		Brown SIL	T, trace C	CLAY (w	et, stiff)			10
5													
6	4	6.0	8.0	SS/15	4-4-5-7		Brown/Gre	w SII T 1	little cmf	GRAVEL trac	e cmf SAND (m	noist	9
0		0.0	0.0	55/15	4-4-3-7		stiff)	y SIL1, 1	intile ellii	OKA v LL, trac	c chii SAND (iii	10151,	
7							Still)						
,													
8	5	8.0	10.0	SS/19	7-9-12-20		Brown/Gre	ev SILT. 1	little cmf	GRAVEL, trac	e cmf SAND (m	noist.	21
		0.0	10.0	55,19	, , 12 20		very stiff)	,, 2121,1		31ti 1 / 22, ti ti		.0150,	
9													
10													
11													
12													
13				_	_		Auger Refi	ısal @ 13	3.2'. Set u	p to core.			↓
	R-1	13.2	18.2	C/59	NQ-Core						LE layers (<1/8"		80%
14										nly laminated to	o thinly bedded,		
1.7							medium ha				1411 1112	,	
15										' thick) @ 13.9'	, 14.1' and 14.8		
16							Recovery:						
16							RQD: 48"/			manta			
17							29 Pieces,	-	_	ments			
17							1:00 min/fi			r 1700 mm 70	0 psi down pres	curo	
18	R-2	18.2	23.2	C/59	NQ-Core		-		-	-	edded SHALE la		80%
10	N-2	10.2	23.2	C/39	NQ-Core			•			y laminated to the	•	00%
19							bedded, me				y iaiiiiiateu to ti	шшу	
1											lded DOLOSTO	NF.	
	}					1	20.1 23.2	OII	oj DIIAL	with hitchook	DOLODIO	. 12	1

20 Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \* Water added to boring for coring.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-669

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BURING	ւսց	Project No.	280	062
<u></u>					AMPLES		VISUAL CLAS	SIFICATION (	_		
Depth Scale (Feet)	Sample No.	Sample	Depth ft.)	Type / . Sample . Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD %
20	110.	110111	10	ree (iii)	T or o menes	(11.)	Continued from Page 1				1102 /0
21							layers (<1/8" - 1.0" thick), medium hard to hard.	, thinly laminated	to thinly bedded,		
21							Broken and fractured zone	e 18.9' - 19.1'.			
22							Weathered zone (1/4" - 1.0				
23							Recovery: 59"/60" = 98% 21 Pieces, 2" Chips and Fr		= 80%		
24							1:00 min/ft, no water loss				
24							Coring conducted in 4th g Bottom of Boring @ 23.2		10 psi down pressur	e.	
25							,				
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45		I	I			I					

				6035 Co	orporate Drive	SI	JBSURF	ACE EX		ORATION	Boring No.	B-	-670
		V	Ę		racuse, NY 13057			Γ BORII			Page No.		of 1
	_	ociates			315-701-0522					200	Project No.		3062
Project	Name:			us, Clay,	New York						Date Started		07/24
Client:		Rambo									Date Finished		07/24
Location	<u>n:</u>		•	on Locati		NT .			(IF		Surface Elev.		00.0'
D-211					INVESTIGATIO		псч	ļ	GK	ROUNDWATER	OBSEKVAT	TONS	
Driller: Driller:		H. Lyo K. Cra			Casing: Casing Hammer:	3 ¼" ID	п.з.А.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto		C. O'H			Other:		1	05/07/24	$\vdash \vdash$	While Drilling	3.7	<del>                                     </del>	6.0
Drill Rig		CME 4			Soil Sampler:	2" OD S	Split Barrel	05/07/24		ore Casing Removed	8.5		3.3
Type:	J	ATV			Hammer Wt:	140 lbs.	_	05/07/24		er Casing Removed	4.8		out
Rod Size	e:	AWJ			Hammer Fall:	30 in.	ĺ	05/07/24		er Casing Removed	caved @ 5.3		out
			BOR	ING SA	AMPLES		VI			SIFICATION C		L	
Depth		I	e Depth		Blows on	Dd.		- coarse		Ī			SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium	ļ		0% / some - 20 to 35		or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		little - 10 to 2	20% / trace - 0 to 109		RQD %
0	1A	0.0	0.4	SS/14	WH-WH-3-4	ļ				erial (moist)			3
_ (	1B	0.4	2.0				Brown/Gre	ey mottled	I SIL7	Γ, trace CLAY (we	et, soft)		
1		[ [				Ī							
2	2	2.0	4.0	SS/12	3-4-4-3		Similar as	ahovo (m-	niet ~	tiff)			8
4	~	2.0	<b>→</b> .∪	JD/12	J-4-4-3		Similar as	4007E (M	013t, S	, <i>)</i>			
3		[ [				Ī							
		1	1										
4	3	4.0	6.0	SS/13	WH-2-5-6		Brown SIL	tiff)		7			
	[	[ [				Ī							
5		1				Ī							
_	,		0.5	00	10 11 15 55	Ī	D -	T	AF . =	7 4 OH	/ • • • · · ·		
6	4	6.0	8.0	SS/18	10-14-17-20	Ī	Brown SIL	I, trace C	LAY	Y, trace fine SAND	(moist, hard)		31
7			1										
′		1				·	· -						
8	5	8.0	10.0	SS/17	9-8-7-15		Brown mf	GRAVFI	, som	ne cmf SAND, som	e SILT (wet me	edium	15
		3.0					compact)	, L/L	, 5511.	, som	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
9		[ [				Ī	r						
L '		1	1				Augers like	? Cobble b	beginn	ning @ 9.5'			
10		1				Ī							
			1										
11		[ [				Ī							
12			1										
12		1				Ī	Augers hai	der baci	min-	@ 12 5'			
13	6	13.0	13.3	SS/0	50@3"		Augers har Auger Refi	_	_	₩ 14.J			50+
13		15.0	13.3	50/U	2003		Bottom of			<u> </u>			201
14		[ [				Ī							
L '		1	1										
15	]	1				Ī							
1			1										
16		1				Ī							
		[ [				Ī							
17		1	1										
18			1										
10						Ī							
19			1										
						Ī							
20	1												

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod Remarks:

Test Boring Logs - Page 178 of 201

Attachment to CME Report Number: 28062B-04-0724											est Boring Logs	- Page 1	78 of 201
				6035 Co	orporate Drive	SUBSURFACE EXPLORATION					Boring No.	B-	671
		IV			racuse, NY 13057	80					Page No.		of 1
	Ass	ciate	s, Inc.		315-701-0522		TEST	BORI	NG	LOG	Project No.		062
Project					New York						Date Started		06/24
Client:	ı tame.	Rambo		us, Ciay,	TIOW TOIK						Date Started  Date Finished		06/24
				T	DI								
Location	11:			on Locati		NT .			<u> </u>		Surface Elev.		0.3'
					INVESTIGATIO				GI	ROUNDWATER	OBSERVAT	TONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		K. Cra			Casing Hammer:							_	
Inspecto		C. O'H			Other:			05/06/24		While Drilling	None Noted		5.0
Drill Ri	g:	CME 4	15		Soil Sampler:	2" OD S	plit Barrel			ore Casing Removed	None Noted	1	0.2
Type:		ATV			Hammer Wt:	140 lbs.		05/06/24		ter Casing Removed	2.8	C	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/06/24	Aft	ter Casing Removed	caved @ 4.5	C	out
	LO	G OF	BOR	ING SA	AMPLES		SUAL C	LAS	SSIFICATION C	F MATERIA	L		
Depth		Sample	e Depth		Blows on	Death of C - COarse					SPT "N"		
Scale	Sample		t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 10		RQD %
0	1A	0.0	0.5	SS/13	1-WH-4-6				Mat	terial (moist)			4
	1B	0.5	2.0			<b>├</b>				CLAY (moist, med	ium stiff)		
1		5.5	0					., ~, (		-2.11 (moist, mou			
1													
2	2	2.0	4.0	SS/16	2-3-3-2		Brown/Gre	v mottled	тр	T, trace CLAY (we	t madium stiff)		6
2	2	2.0	4.0	33/10	2-3-3-2		DIOWII/OIC	y mounce	ı bil	II, HACC CLAI (WC	t, ilicululli stili)		U
2													
3													
			- 0	~~					~				
4	3	4.0	6.0	SS/18	1-6-11-14		Brown SIL	T, trace (	CLA	Y (moist, very stiff)			17
	r												
5						<b>.</b>	<u> </u>						
6	4	6.0	8.0	SS/	12-10-11-14		Brown SIL	T, little n	nf GI	RAVEL, trace cmf S	SAND (wet, ver	y stiff)	21
7													
8	5	8.0	10.0	SS/15	10-11-16-32		Brown/Gre	ev SILT. 1	ittle	mf GRAVEL, trace	cmf SAND (mo	oist.	27
							very stiff)	, ~,-		,	(	,	
9							, 51 5 5 6 111)						
10	6	10.2	10.2	SS/0	50@0"		Split Space	and Assa	nov D	Pofusal @ 10 2'			
10	0	10.2	10.2	33/0	30@0	<u> </u>	Bottom of	Rorina @	10 C	efusal @ 10.2'.			<del>                                     </del>
11							DOUTOIN OF	DOITING @	10.2	<b>L</b>			
11													
12													
13													
14													
15													
16													
17													
"													
18													
10													
10													
19													
20	ļ												
20	Ī						I						1

Test Boring Logs - Page 179 of 201

Attachment to CME Report Number: 28062B-04-0724									est Boring Logs	- Page	179 01 201		
				6035 Co	orporate Drive	CI	IDCLIDE	A CE EX	ZDI A	ORATION	Boring No.	B-	672
		IV			racuse, NY 13057	50					Page No.		of 1
	Asso	ociates	s. Inc.	Dhone:	315-701-0522		TEST	Γ BORI	NG :	LOG	Project No.		3062
Project 1					New York						Date Started		06/24
	Name:	Rambo		us, Ciay,	New TOIK								
Client:											Date Finished		06/24
Location	n:			on Locati				ı	~=		Surface Elev.		00.4'
					INVESTIGATIO				Gh	ROUNDWATER	OBSERVAT	TONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing At (Ft	
Driller:		K. Cra			Casing Hammer:						_		
Inspecto		C. O'H			Other:			05/06/24		While Drilling	2.8		5.0
Drill Rig	g:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/06/24	Befo	ore Casing Removed	6.2	Ç	9.3
Type:		ATV			Hammer Wt:	140 lbs.		05/06/24	Afte	er Casing Removed	3.0	(	out
Rod Size	e:	AWJ			Hammer Fall:	30 in.		05/06/24	Afte	er Casing Removed	caved @ 4.1	(	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION (	F MATERIA	L	
- ·			e Depth										GDT IIN III
Depth Scale	Sample		t.)	Type /	Blows on	Depth of		- coarse medium		and 25 to 50	0% / some - 20 to 35	0/	SPT "N"
(Feet)	No.	From	То	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		- fine			20% / some - 20 to 33 20% / trace - 0 to 10		or RQD %
0	1	0.0	2.0	SS/6	1-WH-1-WH	(Fl.)			roop l	ORGANIC MATE			1
U	1	0.0	2.0	33/0	1- W П-1- W П			•	race	ORGANIC MATE	KIAL, trace iii i	SAND	1
1							(moist, ver	y son)					
1													
_		2.0	4.0	00/44	2 7 4 2								0
2	2	2.0	4.0	SS/14	2-5-4-3		Brown SIL	T, trace f	ine S	AND, trace CLAY	(wet, stiff)		9
3													
4	3	4.0	6.0	SS/15	WR-1-1-2		Brown/Gre	ey SILT, t	race	cmf SAND, trace fi	ine GRAVEL, tr	ace	2
							CLAY (we	et, soft)					
5													
6	4	6.0	8.0	SS/17	2-15-11-10		Brown/Gre	ev SILT. s	some	mf GRAVEL, little	e cmf SAND (we	et. verv	26
		0.0	0.0	55,17	2 10 11 10		stiff)	, 5121,	,01110	0101, 22, 1101	, em 211, 25 (	, , , , ,	
7							Journ's						
,													
8	5	8.0	9.4	SS/12	14-17-50@5"		Brown/Gr	w CII T 1	ittla r	mf GRAVEL, trace	omf SAND (mo	sict	50+
O	3	8.0	7.4	33/12	14-17-30@3			sy SIL1, I	ittie i	ili OKAVEL, trace	CIII SAND (IIIC	лы,	30+
0		0.4	0.4	00/0	50.00"		hard)		: G	0.01 C-1:4 C	J. A D . C	-10	
9	6	9.4	9.4	SS/0	50@0"	-				9.2'. Split Spoon	ana Auger Rejus	sai @	
							9.4'. Botte	om of Boi	ring (	@ 9.4'			
10													
11													
12													
13													
14													
15													
13													
16													
10													
1.7													
17													
1.0													
18													
19													
20													

Allaciiii	ieni io c	INIT IVE	port iv	uniber. 2	28062B-04-0724						est Boring Logs	- raye	100 01 20 1
				6035 Co	orporate Drive	SUBSURFACE EXPLORATION					Boring No.	B-	673
					racuse, NY 13057	50					Page No.	1	of 1
	Ass	ciate	s, Inc.	-	315-701-0522		TEST	BORI	NG	LOG	Project No.		3062
Project	Name	Micror	Camp		New York						Date Started		06/24
Client:	rame.	Rambo		us, Clay,	11CW TOTK						Date Finished		06/24
Location				an I agati	on Dlan						Surface Elev.		00/24
Location	u;		_	on Locati	INVESTIGATIO	) NI			C	ROUNDWATER			10.7
D.:11				DS OF			II C A		T G	ROUNDWAIER	ODSERVAI	IONS	
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		K. Cra			Casing Hammer:			05/06/04		111 1 D 111	NT NI 1		2.0
Inspecto		C. O'H			Other:	<b>A</b> II OD (	1 11 15 1	05/06/24		While Drilling	None Noted		3.0
Drill Ri	g:	CME 4	15		Soil Sampler:		Split Barrel			fore Casing Removed	None Noted		9.2
Type:		ATV			Hammer Wt:	140 lbs.		05/06/24		fter Casing Removed	None Noted		out
Rod Size		AWJ			Hammer Fall:	30 in.		05/06/24		fter Casing Removed	caved @ 8.8		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LA	SSIFICATION C	OF MATERIA	L	
Depth		Sample	e Depth	Type /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample	(F	t.)	Sample	Sampler	Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		little - 10 to 2	0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.3	SS/13	1-WH-1-3		Topsoil an	d Organic	: Ma	terial (moist)			1
	1B	0.3	2.0				Brown SIL	T, little c	mf S	SAND (wet, very sof	(t)		
1								,		, , ,	,		
_													
2	2	2.0	4.0	SS/15	3-8-5-5		Brown SII	T trace (	~T.A	Y, trace fine SAND	(moist stiff)		13
		2.0	4.0	55/15	3033		Brown Sil	i, trace c		1, trace fine brand	(moist, stirr)		13
3													
3													
4	_	4.0	6.0	00/14	2555		D CII	т		CAND A CLAY	· · · · · · · · · · · · · · · · · · ·	X/IDI	10
4	3	4.0	6.0	SS/14	2-5-5-5			1, some	cmf	SAND, trace CLAY	, trace fine GRA	VEL	10
_	1						(wet, stiff)						
5													
						ļ	Augers gro						
6	4	6.0	8.0	SS/11	2-5-10-10		Brown SIL	T, little n	nf G	RAVEL, trace cmf S	SAND (wet, ver	y stiff)	15
7							Augers like	Cobble l	begi	nning @ 7.4'			
8	5	8.0	9.2	SS/10	11-25-50@2"		Brown/Gre	y SILT, 1	ittle	cmf SAND, trace fir	ne GRAVEL (m	oist,	50+
							hard)	•					
9	6	9.2	9.2	SS/0	50@0"			ı and Aug	er R	Refusal @ 9.2'			50+
							Bottom of						
10	Ì												
10													
11													
11													
12													
12													
12													
13													
,													
14													
	ļ												
15													
16													
17													
18													
19													
<b>—</b>	ł					ı	1						

				6035 Co	orporate Drive	SI	UBSURF	ACE EX	KPLOR.	ATION	Boring No.		674
	Acc		l lne	East Syr	racuse, NY 13057				NG LO		Page No.		of 1
					315-701-0522		1201				Project No.		3062
	Name:			us, Clay,	New York						Date Started		06/24
Client:		Rambo									Date Finished		06/24
Locatio	n:		•	on Locati		ONI		ı	CDOI	NIDWATED	Surface Elev.		)1.4'
Driller:		H. Lyc			INVESTIGATIO	3 ¼" ID	исл		GROU	NDWAIER	OBSERVAT	IONS	
Driller:		K. Cra			Casing Hammer:	3/4 1D	11.5.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspect		C. O'H			Other:			05/06/24	Whil	le Drilling	None Noted		5.0
Drill Ri		CME 4			Soil Sampler:	2" OD \$	Split Barrel			asing Removed			7.7
Туре:		ATV			Hammer Wt:	140 lbs.	-	05/06/24		sing Removed	None Noted	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/06/24		sing Removed	caved @ 6.4		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIF	ICATION (	F MATERIA	L	
Depth		_	e Depth	Type /	Blows on	Depth of		- coarse					SPT "N"
Scale (Feet)	Sample No.	From	To	Sample Rec. (in.)	Sampler Per 6 Inches	Change		medium - fine			0% / some - 20 to 35 20% / trace - 0 to 109		or RQD %
0	1A	0.0	0.5	SS/12	1-4-6-8	(Ft.)	Topsoil an		Material		20% / trace - 0 to 10	70	10
U	1B	0.5	2.0	55/12	1-4-0-0						e SILT (moist, r	nedium	10
1	115	0.5	2.0				compact)	GRUTTE	iii, muie ei	m 57 m (D, mai	e oill'i (moist, i	ilearain	
2	2	2.0	4.0	SS/14	9-9-10-10		Brown/Gre	ev.cmf GF	PAVEL an	nd SII T little	cmf SAND (moi	ist	19
2		2.0	4.0	55/14	7 7 10 10		medium co	-	arvel an	id SiL1, ittie	cini bi ti vib (inoi	131,	1)
3								, iii puet,					
							-						
4	3	4.0	6.0	SS/6	11-10-16-18		Brown SIL	T, little c	mf GRAV	EL, trace cmf	SAND (moist, v	very	26
							stiff)						
5													
6	4	6.0	7.3	SS/16	14-15-50@4"		Similar as	above (me	oist, hard)				50+
7							Augers like						
0	5	7.7	7.7	SS/0	50@0"		Split Spoor			l @ 7.7'			50+
8							Bottom of	Boring @	7.7				
9													
9													
10	İ												
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

Test Boring Logs - Page 182 of 201 Attachment to CME Report Number: 28062B-04-0724 Boring No. B-675 6035 Corporate Drive SUBSURFACE EXPLORATION Page No. East Syracuse, NY 13057 1 of 2 **TEST BORING LOG** Associates, Inc. Project No. 28062 Phone: 315-701-0522 **Date Started** 05/06/24 Project Name: Micron Campus, Clay, New York **Client:** Ramboll **Date Finished** 05/06/24 Location: See Exploration Location Plan **Surface Elev.** 403.9' METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Al Linstruth Casing: 3 ¼" ID H.S.A. Date Time Depth (Ft.) Casing At (Ft.) Driller: John Winks **Casing Hammer:** NQ-Core While Drilling Inspector: Other: 05/06/24 4.2 4.0 2" OD Split Barrel Drill Rig: **CME 55** Soil Sampler: 05/06/24 Before Casing Removed 4.5 \* 10.5

T III KI	<b>5</b> •	CIVIL	, ,		Son Sampler.	1 5							
Type:		ATV			Hammer Wt:	140 lbs.		05/06/24				01	ut
Rod Siz		AWJ			Hammer Fall:	30 in.		05/06/24		sing Removed	caved @	οι	ut
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIF	TICATION C	F MATERIA	L	
Depth Scale	Sample	Sample (F	t.)	Type / Sample	Blows on Sampler	Depth of Change	m -	- coarse medium			% / some - 20 to 35		SPT "N" or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		f - fine	CCANE		0% / trace - 0 to 10		RQD %
0	1	0.0	2.0	SS/16	2-2-2		(moist, loo		mt SANL	), trace fine GF	RAVEL, trace R	OOTS	4
2	2	2.0	4.0	SS/19	2-2-2-2		Brown SII stiff)	LT, little cr	mf SAND	), trace fine GF	RAVEL (wet, me	edium	4
4	3	4.0	6.0	SS/17	1-1-1-1		Brown SILT, little mf GRAVEL, little cmf SAND (wet, very loose)					2	
5 6	4	6.0	8.0	SS/15	3-4-7-7		Brown SILT, some cmf SAND, some mf GRAVEL (wet, stiff)				11		
7 8	5	8.0	10.0	SS/16	6-3-6-11		Similar as above (wet, stiff)				9		
9													
10 11 12	R-1	10.5	15.5	C/54	NQ-Core			OSTONE thily weath	with intenered, thir	rbedded SHAI	LE layers (<1/8" o thinly bedded,		90%
13							Weathered Recovery: 12 Pieces, 1:25 min/f	tzones (< 54"/60" = 0" Chips a t, no water	1/8" thick = 90%   R and Fragr r loss				
15	R-2	15.5	20.5	C/60	NQ-Core		Grey DOL	OSTONE	with inte	rbedded SHAI	LE layers (<1/8"	' - 3.0"	97%
16 17							thick), slightly weathered, thinly laminated to thinly bedded, medium hard to hard.  Weathered zones (~1/2" thick) @ 19.4'.  Recovery: 60"/60" = 100%   RQD: 58"/60" = 97%						
18							19 Pieces, 0" Chips and Fragments 1:10 min/ft, no water loss						
19						Coring conducted in 4th gear, 1700 rpm, 550 psi down pressure.  Continued on Page 2							

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

\*Water added to boring for coring. Remarks:

Attachment to CME Report Number: 28062B-04-0724

Test Boring Logs - Page 183 of 201

VE ciates, Inc.	6035 Corporate Drive East Syracuse, NY 13057 Phone: 315-701-0522	SUBSURFACE EXPLORATION TEST BORING LOG
OE DODI	NO GAMPI EG	

Boring No.	B-675
Page No.	2 of 2
Project No.	28062

	Associates, Inc. Phone: 315-701-0522					Project No. 28062						
	LOG OF BORING SAMPLES					VISUAL CLASSIFICATION OF MATERIAL						
Depth Scale (Feet)	Sample No.	Sample	Depth (t.)	Type / . Sample . Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)		and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%	SPT "N" or RQD %		
20						(,	Continued from Page 1					
							Bottom of Boring @ 20.5'					
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45	1											

/ tttaoriiri	ionic to C		portre	diffibol. 2	20002D-04-0724					<u>'</u>	est builing Logs	, age	10 1 01 20 1
				6035 Co	orporate Drive	SUBSURFACE EXPLORATION					Boring No.	B-	676
		<b>IV</b>		East Sy	racuse, NY 13057			Γ BORI			Page No.	1	of 1
	Ass	ociate	s, Inc.	Phone: 3	315-701-0522		IESI	BUKI	NG	LUG	Project No.	28	062
Project	Name:	Micro	n Camp	us, Clay,	New York						Date Started	05/0	06/24
Client:		Rambo	oll								Date Finished	05/0	06/24
Location	n:			on Locati							Surface Elev.		)4.3'
		ME	THO	DS OF	INVESTIGATIO	N			GI	ROUNDWATER	OBSERVAT	IONS	
Driller:		Al Lin			Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	At (Ft.)
Driller:		John V	Vinks		Casing Hammer:								
Inspecto		~ ~			Other:	• • • • •		05/06/24		While Drilling	6.0		1.0
Drill Ri	g:	CME 5	55		Soil Sampler:		Split Barrel	05/06/24		ore Casing Removed	None Noted		1.0
Type: Rod Siz		ATV AWJ			Hammer Wt: Hammer Fall:	140 lbs. 30 in.		05/06/24 05/06/24		er Casing Removed	None Noted caved @		out
Kou Siz			DOD	INIC S	AMPLES	30 III.	1/1			er Casing Removed SSIFICATION (			out
		1		ING SE		+	V 1	SUAL C	LAS		JE MIATEKIA	L	
Depth			e Depth Ft.)	Type /	Blows on	Depth of		- coarse		1 25 . 50	20. 25	0.4	SPT "N"
Scale (Feet)	Sample No.	From	То	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		medium - fine			9% / some - 20 to 35 20% / trace - 0 to 109		or RQD %
0	1	0.0	2.0	SS/15	1-2-2-4	(11.)			mf S	AND, little mf GR			4
Ů	1	0.0	2.0	55/13	1221		MATERIA				IVEE, unce on	G/ II (IC	
1							.,	(1110151)	11100	,			
2	2	2.0	4.0	SS/16	4-4-3-4		Brown SII	T, some o	emf S	SAND, trace fine G	RAVEL, trace		7
							ORGANIC	MATER	IAL	(moist, medium sti	ff)		
3													
4	3	4.0	6.0	SS/18	2-2-3-2			T and cm	f GR	AVEL, some cmf S	SAND (wet, med	lium	5
							stiff)						
5													
			0.0	00/15	2 12 10 10		р си	<b></b>		SDANIEL 15.4		T 4 T 7	22
6	4	6.0	8.0	SS/15	2-12-10-10				emt C	GRAVEL, little cmf	SAND, trace C	LAY	22
7							(wet, very	Stiff)					
7													
8	5	8.0	10.0	SS/16	5-10-13-7		Brown SII	T and mf	GR A	AVEL, little CLAY	little cmf SAN	D (wet	23
		0.0	10.0	55/10	3-10-13-7		very stiff)	and iii	OI	AVEE, IIIIC CEAT	, muc chii sarv	D (wci,	23
9							very still)						
10	İ												
11							Auger Refi						
							Bottom of	Boring @	11.3	3'			
12													
13													
1.													
14													
15	ł												
13													
16													
10													
17													
18													
19													
	]												

Project Name:
Client:
Location:

6035 Corporate Drive East Syracuse, NY 13057	SUBSURFACE EXPLORATION	Boring No.	B-677
	TEST BORING LOG	Page No.	1 of 1
pciates, Inc. Phone: 315-701-0522	TEST BOKING EOG	Project No.	28062
Micron Campus, Clay, New York		Date Started	05/06/24
Ramboll		Date Finished	05/06/24
See Exploration Location Plan		Surface Elev.	403.8'

	1								
	METHODS	S OF INVESTIGATIO	N	GROUNDWATER OBSERVATIONS					
Driller:	Al Linstruth	Casing:	3 ¼" ID H.S.A.	Date	Time	Depth (Ft.)	Casing At (Ft.)		
Driller:	John Winks	Casing Hammer:		Date	Time	Depth (Ft.)	Casing At (Ft.)		
Inspector:		Other:		05/06/24	While Drilling	4.2	8.0		
Drill Rig:	CME 55	Soil Sampler:	2" OD Split Barrel	05/06/24	Before Casing Removed	4.7	10.5		
Type:	ATV	Hammer Wt:	140 lbs.	05/06/24	After Casing Removed	5.4	out		
Rod Size:	AWJ	Hammer Fall:	30 in.	05/06/24	After Casing Removed	caved @ 6.0	out		
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	-~ ~ ~							

- J P - ~ :											
Rod Siz		AWJ			Hammer Fall:	30 in.	ĕ				
	LO	G OF	BOR	ING SA	AMPLES		VISUAL CLAS	SIFICATION (	OF MATERIAL		
Depth		Sample	e Depth		Blows on		c - coarse			SPT "N"	
Scale	Sample		t.)	Type / Sample	Sampler	Depth of Change	m - medium	and - 35 to 50	0% / some - 20 to 35%	or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine		20% / trace - 0 to 10%	RQD %	
0	1	0.0	2.0	SS/15	1-2-1-6		Brown SILT, little cmf SA			3	
							(moist, soft)				
1											
						ļ					
2	2	2.0	4.0	SS/14	4-2-2-4		Brown cmf SAND and cn	nf GRAVEL, some	SILT, trace CLAY	4	
							(moist, loose)				
3						L	L				
						[					
4	3	4.0	6.0	SS/17	4-2-4-7		Brown SILT, some mf GF	RAVEL, little cmf	SAND, trace CLAY	6	
							(moist, medium stiff)				
5											
6	4	6.0	8.0	SS/15	6-7-14-17		Brown SILT, little cmf SA	AND, trace CLAY	(moist, very stiff)	21	
_											
7						ļ				- — -	
0	- 1	0.0	0.0	00/16	14 17 07 54		D CGAND	CODATEL 1	1 CH T /		
8	5A	8.0	9.0	SS/16	14-17-27-54		Brown cmf SAND, some	cmf GRAVEL, litt	tle SIL1 (wet, comp	pact) 44	
9	5B	9.0	10.0			·	Grey/Black weathered RC	CV Erromants (C	hala) (wat)	- — -	
9	эв	9.0	10.0				Grey/Black weathered RC	CK Fragments (S	naie) (wet)		
10	·										
10							Auger Refusal @ 10.5'				
11							Bottom of Boring @ 10.5	1			
11							Dottom of Boring @ 10.5				
12											
1											
13											
14											
15											
16											
17											
18											
19											

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

Attachm	ent to C	ME Re	port N	umber: 2	28062B-04-0724				7	est Boring Logs	- Page 1	86 of 201
				6035 Co	orporate Drive	CI	IRSHDE	CE EX	<b>XPLORATION</b>	Boring No.	B-	678
		IV		East Syı	racuse, NY 13057					Page No.	1	of 2
	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST	ROKI	NG LOG	Project No.	28	062
Project					New York					Date Started	05/0	)7/24
Client:	- 100	Rambo		,,,						Date Finished		07/24
Location	n•			on Locati	on Plan					Surface Elev.		8.4'
Location					INVESTIGATIO	N			GROUNDWATER			0.4
Driller:		H. Lyo			Casing:	3 ¼" ID	нсл		GROUNDWATER	OBSERVITI	10115	
Driller:		K. Cra			Casing Hammer:	3 /4 ID	11.5.A.	Date	Time	Depth (Ft.)	Casing	At (Ft.)
Inspecto		C. O'H			Other:			05/07/24	While Drilling	None Noted	C	3.0
_		C. On				2" OD (	Split Barrel	05/07/24		20.4		4.4
Drill Ri	g:		+3		Soil Sampler:		•		Before Casing Removed			
Type:		ATV			Hammer Wt:	140 lbs.		05/07/24	After Casing Removed	None Noted		out
Rod Siz		AWJ	<b>DOD</b>		Hammer Fall:	30 in.		05/07/24	- C	caved @ 3.8		ut
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIFICATION (	)F MATERIA	L	
Depth		Sample	e Depth	Type /	Blows on	Depth of	c -	coarse				SPT "N"
Scale	Sample	(F	t.)	Sample	Sampler	Change		medium	and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		20% / trace - 0 to 109		RQD %
0	1A	0.0	0.4	SS/14	1-1-2-2		Topsoil an	d Organic	: Material (moist)			3
	1B	0.4	2.0						trace CLAY, trace woo	dy ORGANIC		
1							MATERIA			•		
						1		- (-110101	, <del></del> /			
2	2	2.0	4.0	SS/13	4-6-6-4		Brown SII	T trace (	CLAY (moist, stiff)			12
		2.0	1.0	55/13	1001		Brown Sie	71, trace C	ELTT (moist, stiff)			12
3												
3												
4	2	4.0	6.0	00/14	2 2 4 2		D CII	T. 1'41. C	N A X / '			7
4	3	4.0	6.0	SS/14	3-3-4-2		Brown SIL	I, little C	CLAY (moist, medium s	tiff)		7
5												
6	4	6.0	8.0	SS/17	2-4-5-8		Brown SIL	T, trace C	CLAY (wet, stiff)			9
7												
8	5	8.0	10.0	SS/16	8-10-10-8		Brown/Gre	y, Simila	r as above (moist, very s	stiff)		20
9												
10												
11												
12												
12												
12	6	13.0	15.0	SS/14	1215		Brown /C	CII T 4	roco CI AV (west mod!	um stiff)		7
13	6	13.0	15.0	33/14	1-3-4-5		DIOWII/Gre	y SILI, t	race CLAY (wet, mediu	ını sun1)		/
1 , .												
14												
15												
16												
17							Augers eas	ier begini	ning @ 17.0'			
						<b> </b>	<u> </u>		. <b></b>			
18	7	18.0	20.0	SS/14	WH-2-13-35	[ <b></b>	Grey SILT	, some cn	of SAND, trace mf GRA	VEL (moist, vei	ry stiff)	15
19												
	Ī	ı	I	Ī		1	I					1

6035 Corporate Drive
East Syracuse, NY 13057
Associates, Inc.
Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-678

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociate	s, Inc.	Phone: 3	15-701-0522		TEST BORING I	JUG	Project No.	28062	$\neg$
					MPLES		VISUAL CLASS	SIFICATION C		-	$\dashv$
Depth Scale (Feet)	Sample No.	Sample	e Depth it.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	% / some - 20 to 35% 0% / trace - 0 to 10%	SPT or RQD	r
20							Continued from Page 1				
21							Augers hard @ 21.4'				
22						L					
23	8	23.0	23.4	SS/5	50@5"		Grey cmf SAND and fine	GRAVEL, little S	ILT (moist, very	50	+
24							compact) Auger Refusal @ 24.4'	,	`		
25	9	24.4	24.7	SS/4	50@4"		Grey cmf SAND and SILT	, little fine GRAV	EL (moist, very	50	+
							compact) Bottom of Boring @ 24.7'				
26											
27											
28											
29											
30	1										
31											
32											
33											
34											
35	1										
36											
37											
38											
39											
40	1										
41											
42											
43											
44											
45											

Test Boring Logs - Page 188 of 201

				6035 Co	orporate Drive	ÇI	IRSURF	ACF FY	pi (	ORATION	Boring No.	B-	679
		V			racuse, NY 13057						Page No.	1	of 2
	Ass	ociates	s, Inc.	Phone:	315-701-0522	1	IES	Γ BORI	NG I	LUG	Project No.	28	3062
Project	Name:	Micror	1 Camp	us, Clay,	New York	•					Date Started	05/	08/24
Client:		Rambo	oll								Date Finished	05/	08/24
Locatio	n:	See Ex	ploration	on Locati	on Plan						Surface Elev.	39	95.9'
		ME	THO	DS OF	INVESTIGATIO	N			GR	OUNDWATER	R OBSERVAT	IONS	
Driller:		H. Lyc	n		Casing:	3 ¼" ID	H.S.A.	Date		Time	Donth (Et.)	Cogine	- A 4 (E4 )
Driller:		K. Cra	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspecto		C. O'H	lara		Other:			05/08/24		While Drilling	None Noted	1	3.0
Drill Ri	g:	CME 4	15		Soil Sampler:		Split Barrel	05/08/24		re Casing Removed	None Noted	2	2.2
Type:		ATV			Hammer Wt:	140 lbs.		05/08/24		r Casing Removed	None Noted	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/08/24		r Casing Removed	caved @ 11.7		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION (	)F MATERIA	L	1
Depth			e Depth	Type /	Blows on	Depth of	c	- coarse					SPT "N"
Scale	Sample		ł.)	Sample	Sampler	Change	m -	medium			0% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		f - fine			20% / trace - 0 to 109	%	RQD %
0	1	0.0	2.0	SS/8	WH-1-WH-2		Topsoil an	d Organic	Mate	rial (moist)			1
1						<b>}</b> -	- <b> </b>						
2	2	2.0	4.0	SS/14	4-5-4-7		Drown/Cre	ov mottlad	спт	tropo CLAV (mo	viat atiff		9
2	2	2.0	4.0	33/14	4-3-4-7		BIOWII/GIO	ey mouled	SILI	, trace CLAY (mo	)ISI, SIIII)		9
3													
3													
4	3	4.0	6.0	SS/15	6-10-9-9		Similar as	ahove (mo	nist v	ery stiff)			19
-		1.0	0.0	55/13	0 10 7 7		Sililiai as	above (III	J15t, V	ery stiir)			17
5	t												
J													
6	4	6.0	8.0	SS/17	8-8-7-7		Brown SII	T, trace C	CLAY	(moist, very stiff)			15
								,		, , ,			
7						1							
8	5	8.0	10.0	SS/18	4-8-8-10		Brown SII	LT, trace n	nf GR	AVEL, trace cmf	SAND, trace CL	ΔY	16
							(wet, very	stiff)					
9													
10													
11							١.	** *		0.11.6			
10						1	Augers gro	avelly begi	inning	g @ 11.6'			
12						1	A 1	nd bo	C	12.71			
12	_	12.0	15.0	00/10	12 12 22 16	1	Augers ha				AVEL (maint 1	rd)	34
13	6	13.0	15.0	SS/10	12-12-22-16	1	Grey SIL1	, some cm	ıı <b>S</b> Al	ND, trace fine GR.	AVEL (MOIST, N	ıru)	34
14						1							
14						1							
15	1												
13						1							
16													
						1							
17						ļ	Augers ver	ry hard be	ginnir	ng @ 17.0'			
						1	32.0,0,	,		0			
18	7	18.0	18.3	SS/3	50@3"		Grey cmf	GRAVEL,	, little	SILT, little cmf S	AND (moist, ver	ry	50+
						1	compact)	,			, , , , ,	-	
19													
						1							
20				I			Continued	on Page 2	2				1

20 Continued on Page 2
SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

6035 Corporate Drive
East Syracuse, NY 13057
Phone: 315-701-0522

## SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-679

 Page No.
 2 of 2

 Project No.
 28062

	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST BUKING	LUG	Project No.	28062	2
					MPLES		VISUAL CLAS	SIFICATION C			
Depth Scale (Feet)	Sample No.	Sample	Depth (t.)	Type / Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	c - coarse m - medium f - fine	and - 35 to 50	0% / some - 20 to 35% 20% / trace - 0 to 10%		PT "N" or QD %
20					2 02 0 2233333	(= 11)	Continued from Page 1				<u></u>
21						 	Augers very hard beginnin	ng @ 22.2'			
22	9	22.2	22.5	SS/4	50@4"		Dark Grey weathered ROO little SILT (moist, very co	mpact)	ale), little cmf SAN	ID,	50+
23 24							Bottom of Boring @ 22.5				
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37 38											
39											
40											
41											
42											
43											
44											
15	4										

Test Boring Logs - Page 190 of 201

					orporate Drive	SI	JBSURF	ACE EX	(PL	ORATION	Boring No.		680
			Ę		racuse, NY 13057			BORI			Page No.	1	of 1
	Asso	ociates	s, Inc.	Phone: 3	315-701-0522		TEST	DOKI	NG.	LOG	Project No.	28	3062
Project	Name:	Micror	ı Camp	us, Clay,	New York						Date Started	05/	07/24
Client:		Rambo	oll								Date Finished	05/	07/24
Locatio	n:			on Locati							Surface Elev.		9.5'
		ME	THO	DS OF	INVESTIGATIO	N			GF	ROUNDWATER	OBSERVAT	IONS	
Driller:		H. Lyo	n		Casing:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Cocino	At (Ft.)
Driller:		K. Cra	ndall		Casing Hammer:						• ' '		
Inspect	or:	C. O'H	ara		Other:			05/07/24		While Drilling	None Noted	1	3.0
Drill Ri	ig:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/07/24	Befo	ore Casing Removed	11.6	1	7.4
Type:		ATV			Hammer Wt:	140 lbs.		05/07/24		er Casing Removed	4.1	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/07/24		er Casing Removed	caved @ 11.0		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	)F MATERIA	L	
Depth		Sample	e Depth	Trung /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample		t.)	Type / Sample	Sampler	Change		medium		and - 35 to 50	0% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.5	SS/16	1-WH-1-4	L				erial (moist)			1
	1B	0.5	2.0				Brown SIL	T, trace C	CLAY	, trace fine SAND	(moist, soft)		
1													
2	2	2.0	4.0	SS/18	4-4-5-4		Brown SIL	T, trace C	CLAY	(moist, stiff)			9
3													
4	3	4.0	6.0	SS/14	5-6-6-6		Brown/Gre	y SILT, t	race (	CLAY, trace fine S	AND (moist, sti	ff)	12
	_												
5													
				~~									
6	4	6.0	8.0	SS/16	9-10-11-12		Similar as	above (m	oist, v	very stiff)			21
7													
0	_	0.0	10.0	SS/19	0 10 10 11		D CII	Т	71 A X	7 (:			20
8	5	8.0	10.0	33/19	8-10-10-11		Brown SIL	1, trace C	LA I	(moist, very stiff)			20
9													
9													
10	1												
10													
11													
**													
12													
1							Augers gra	vellv hee	innin	g @ 12.7'			
13	6	13.0	15.0	SS/11	4-4-6-14	h				f GRAVEL, little (	CLAY, trace cm	f SAND	10
		10.0	10.0	~~/11			(moist, stif			,,,			
14								,					
15	1												
16													
							Augers like	Rock be	ginnii	ng @ 16.7'			
17	7	17.4	17.4	SS/0	50@0"		~	7	-	efusal @ 17.4'			50+
							Bottom of						
18								-					
19													
1 1													

/ tttaoriiii	0111110		portre	arribor.	200020-04-0724					<u> </u>	est borning Logs	, ago	101 01 201	
				6035 Co	orporate Drive	CI CI	IRSTIRE	ACE EX	ZPI 4	ORATION	Boring No.	В-	681	
		IV		East Sy	racuse, NY 13057	30					Page No.	1	of 1	
	Asso	ciates	s, Inc.	Phone:	315-701-0522		TEST	r BORI	NG.	LOG	Project No.	28	3062	
Project 1	Name:	Micror	Camp	us, Clay,	New York						Date Started	05/	08/24	
Client:		Rambo	_	,,							Date Finished		08/24	
Location	1:			on Locati	on Plan						Surface Elev.		95.6'	
					INVESTIGATIO	N			GF	ROUNDWATER				
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	_						
Driller:		K. Cra			Casing Hammer:			Date		Time	Depth (Ft.)	Casing	g At (Ft.)	
Inspecto	r:	C. O'H			Other:			05/08/24		While Drilling	1.7			
Drill Rig	2:	CME 4	15		Soil Sampler:	2" OD S	Split Barrel	05/08/24		ore Casing Removed	None Noted	1	3.0	
Type:		ATV			Hammer Wt:	140 lbs.	-	05/08/24		er Casing Removed	None Noted		out	
Rod Size	e:	AWJ			Hammer Fall:	30 in.		05/08/24	Afte	er Casing Removed	caved @ 6.7		out	
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	F MATERIA	L		
Donth			e Depth		Blows on			200***					SPT "N"	
Depth Scale	Sample		t.)	Type / Sample	Sampler	Depth of Change		- coarse medium		and - 35 to 50	0% / some - 20 to 35	%	or or	
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10°		RQD %	
0	1A	0.0	0.3	SS/12	WH-1-1-2	1	Topsoil an	d Organic	Mate	erial (moist)			2	
	1B	0.3	2.0			1				ck cinders, fine gra	vel, cmf sand, si	lt (wet)		
1										_				
						[								
2	2	2.0	4.0	SS/18	9-8-7-7	1	Brown SIL	T, trace C	CLAY	, trace fine SAND	(moist, stiff)		15	
						1								
3						1								
4	3	4.0	6.0	SS/17	2-6-8-12		Similar as			14				
5						1								
_				~~		ļ						-, -,		
6	4	6.0	8.0	SS/15	11-7-6-7			T, little c	mf S	AND, trace mf GR	AVEL, trace CL	ΑY	13	
							(wet, stiff)							
7														
0	~	0.0	0.4	00/14	11 20 50 55"		D CH	TD.	ca		DAMEL / '.	1 1	50.	
8	5	8.0	9.4	SS/14	11-28-50@5"					SAND, trace fine G	RAVEL (moist,	hard)	50+	
0						1	Augers like	e Cobble l	pegin	ning @ 8.5'				
9						1								
10														
10						1								
11						1								
11							Augers ha	rdar baaii	mino	@ 117'				
12						1	Augers nai	uer vegir	ining	w 11./				
12						1								
13	6	13.0	13.9	SS/10	83-50@5"	1	Grev SII T	trace fin	e S A I	ND, trace CLAY (1	moist hard)		50+	
13	U	13.0	13.7	33/10	03-30@3		Olcy SIL1	, uace IIII	USA	ind, nace CLAT (I	moist, natu)		30±	
14						1	Bottom of	Boring @	13 0	)'				
1 1						1	Bottom of Boring @ 13.9'							
15						1								
-5														
16						1								
						1								
17														
						1								
18						1								
19						1								
						1								
20														

	METHODS	OF INVESTIGATION	ON		GROUNDWATER	OBSERVAT	TIONS
Driller:	H. Lyon	Casing:	3 ¼" ID H.S.A.	Date	Time	Depth (Ft.)	Casing At (Ft.)
Driller:	K. Crandall	Casing Hammer:		Date	Time	<i>Deptii</i> (Ft.)	Casing At (Ft.)
Inspector:	C. O'Hara	Other:		05/08/24	While Drilling	None Noted	4.0
Drill Rig:	CME 45	Soil Sampler:	2" OD Split Barrel	05/08/24	Before Casing Removed	None Noted	6.5
Type:	ATV	Hammer Wt:	140 lbs.	05/08/24	After Casing Removed	None Noted	out
Rod Size:	AWJ	Hammer Fall:	30 in.	05/08/24	After Casing Removed	caved @ 4.0	out
	LOG OF BORING	G SAMPLES	VI	ISUAL C	<b>LASSIFICATION</b> O	F MATERIA	L
	0 1 5 1						

Type:		ATV Hammer Wt:				140 lbs.		05/08/24		ter Casing Removed	None Noted	0	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/08/24		ter Casing Removed	caved @ 4.0		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SSIFICATION C	F MATERIA	L	
Depth		Sample	Depth	T /	Blows on	Depth of	c -	coarse					SPT "N"
Scale	Sample		t.)	Type / Sample	Sampler	Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 109		RQD %
0	1A	0.0	0.8	SS/15	1-WH-1-2		Topsoil an	d Organic	Mat	terial (moist)			1
	1B	0.8	2.0							Y, trace fine SAND	(moist, soft)		
1								,		,	(		
-													
2	2	2.0	4.0	SS/17	6-4-5-4		Brown SII	T little ci	mf S	SAND, trace fine GR	AVEL trace C	LAY	9
_		2.0	1.0	55/17	0 1 3 1		(moist, stif		5	n in v.D., truce fine Gr	arvee, mace e	2711	
3							(moist, stii	1)					
3						·							
4	3	4.0	60	00/16	17 10 22 24		Danarum ama	ECAND a		CILT little amf CI	AVEL (moist	a a mama a a t`	41
4	3	4.0	6.0	SS/16	17-18-23-24		Brown cm	SAND, S	some	e SILT, little cmf GF	KAVEL (moist,	compact,	41
5						ļ	<u> -                                    </u>						
6	4	6.0	6.4	SS/5	50@5"					SAND, trace fine GR	RAVEL (moist, l	nard)	50+
							0			eginning @ 6.4'			
7	5	6.5	6.6		50@1"					SAND (moist, hard)			50+
							Bottom of	Boring @	6.6'	'			
8													
9													
10	1												
11													
12													
12													
13													
13													
14													
14													
15	}												
15													
1.0													
16													
17													
18													
19													

Test Boring Logs - Page 193 of 201 Attachment to CME Report Number: 28062B-04-0724 Boring No. B-683 6035 Corporate Drive SUBSURFACE EXPLORATION East Syracuse, NY 13057 Page No. 1 of 2 **TEST BORING LOG** Associates, Inc. Phone: 315-701-0522 Project No. 28062 **Date Started** 05/07/24 Project Name: Micron Campus, Clay, New York Client: Ramboll **Date Finished** 05/08/24 Surface Elev. 394.8' Location: See Exploration Location Plan METHODS OF INVESTIGATION **GROUNDWATER OBSERVATIONS** Driller: Beau Fletcher 3 ¼" ID H.S.A. Casing: **Date** Time Depth (Ft.) Casing At (Ft.) Driller: Ryan Casatelli **Casing Hammer:** Inspector: Other: 05/08/24 While Drilling 3.3 13.5 **Drill Rig:** Soil Sampler: 2" OD Split Barrel 05/08/24 Before Casing Removed 27.4 28.5 CME 55 ATV 05/08/24 After Casing Removed 6.0 Type: Hammer Wt: 140 lbs. out caved @ 8.3 Rod Size: AWJ **Hammer Fall:** 30 in. 05/08/24 After Casing Removed out LOG OF BORING SAMPLES VISUAL CLASSIFICATION OF MATERIAL Sample Depth SPT "N" Depth Blows on c - coarse Type / Depth of (Ft.) Scale Sampler Sample m - medium and - 35 to 50% / some - 20 to 35% Sample Change То RQD % (Feet) From Per 6 Inches little - 10 to 20% / trace - 0 to 10%No. Rec. (in.) (Ft.) f - fine 1A 0.5 SS/17 1-7-4-12 Topsoil and Organic Material (moist) 0.0 11 Grey/Brown cmf GRAVEL and cmf SAND, trace SILT (moist, 2.0 1B 0.5 medium compact) 1 2 2 2.0 SS/16 5-6-11-13 Brown/Dark Grey SILT, trace fine SAND (moist, very stiff) 17 4.0 3 4 3 4.0 6.0 SS/219 8-10-11-12 Brown/Grey SILT, trace fine SAND, trace CLAY (moist, very stiff) 21 5 Brown SILT, little cmf SAND, trace mf GRAVEL (wet, stiff) 4 6.0 8.0 SS/24 7-5-7-7 12 6 7 8 5 8.0 9.7 SS/15 3-9-11-50@2" Grey SILT, some cmf SAND, little cmf GRAVEL (wet, very stiff) 20 9 10 11 12

(moist, hard)

(moist, hard)

Continued on Page 2

Grey SILT, trace mf GRAVEL, trace cmf SAND, trace CLAY

Grey SILT, some cmf SAND, little CLAY, trace fine GRAVEL

50 +

50 +

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

19-50@5"

17-45-50@4"

**Remarks:** \* Water added to boring for coring.

19.8

13

14

15

16

17

18

19

13.5

18.5

6

7

14.4

SS/7

SS/13

CME Associates, Inc.

6035 Corporate Drive East Syracuse, NY 13057 Phone: 315, 701, 0522

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-683

 Page No.
 2 of 2

 Project No.
 28062

Continued from Page 1   Continued from Page 1		LUG	KING L	IESI BUKING				Associates, Inc. Phone: 315-701-0522					
Depth   Sample   Sample   (Point   No.   AT	SIFIC	CLASS	VISUAL CLAS										
21	and		n	c - coarse m - medium f - fine	ge	Change	oler	Blows or Sampler	Type / Sample	Depth t.)	Sample (F	Sample	ile et)
26   27   28   29   28.5   29.3   SS/8   30-50@4"   Grey SILT, little CLAY, trace fine SAND (moist, hard)  30   31   32   33   34   35   36   37   38   39   40   41   10   10   10   10   10   10	race	AVEL, t					5"	50@5"	SS/5	23.9	23.5	8	1 2 3 4
Bottom of Boring @ 30.0'  Bottom of Boring @ 30.0'  Bottom of Boring @ 30.0'  Bottom of Boring @ 30.0'  Bottom of Boring @ 30.0'  Bottom of Boring @ 30.0'  Bottom of Boring @ 30.0'	ne S	trace fir	CLAY, tr	Grey SILT, little CLAY,			<b>@</b> 4"	30-50@4	SS/8	29.3	28.5	9	5 7 8
33       34       35       36       37       38       39       40       41		'	g @ 30.0'	Bottom of Boring @ 30.0	]								)
35       36       37       38       39       40       41													3
38       39       40       41													5
40 41													
43 44 45													4

/ tttaoriiii	0 10 0	1112 110	port	uilibei. 2	20002D-04-0724	_					est borning Logs	i ago	100 01 20 1
				6035 Co	orporate Drive	CI	IRSTIDE	ACE EX	ypt 4	ORATION	Boring No.	B-	684
		IV		East Syı	racuse, NY 13057						Page No.	1	of 1
	Asso	ociates	s, Inc.	•	315-701-0522		TEST	r BORI	NG .	LUG	Project No.		3062
Project 1	Name:	Micron	ı Campı	us, Clay,	New York	1					Date Started	05/	08/24
Client:		Rambo	_								Date Finished		08/24
Location	1:	See Ex	ploratio	on Locati	on Plan						Surface Elev.	39	94.0'
					INVESTIGATIO	N			GR	ROUNDWATER			
Driller:		H. Lyo	n		Casing:	3 ¼" ID	H.S.A.	Dot:		Tima	Donth (E4.)	Cocin	. A + /TE+ \
Driller:		K. Crai	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspecto		C. O'H			Other:			05/08/24		While Drilling	4.5		3.0
Drill Rig	_	CME 4	15		Soil Sampler:		Split Barrel			ore Casing Removed	3.2	1	3.0
Type:		ATV			Hammer Wt:	140 lbs.		05/08/24		er Casing Removed	3.7		out
Rod Size		AWJ			Hammer Fall:	30 in.		05/08/24	_	er Casing Removed	caved @ 6.7		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	OF MATERIA	L	_
Depth		Sample		Type /	Blows on	Depth of	c -	- coarse					SPT "N"
Scale	Sample	(F		Sample	Sampler	Change	m -	medium			0% / some - 20 to 35		or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			20% / trace - 0 to 10°	%	RQD %
0	1A	0.0	0.5	SS/13	1-WH-1-2	<b> </b>				erial (moist)	A CAMPANA A S	, -,	1
	1B	0.5	2.0			1		1, trace (	JLAÝ	, trace ORGANIC	MATERIAL (n	noist,	
1			ļ ,			1	very soft)						
2	2	2.0	4.0	SS/14	2-6-5-6		Prouse CII	T tross	7T A X	Y, trace fine SAND	(moist stiff)		11
2	۷	2.0	4.0	33/14	2-0-3-0	1	DIOMII 211	a, nace C	JLA I	, uace file SAND	(moist, still)		11
3			ļ ,			1							
3			<b>!</b>			1							
4	3	4.0	6.0	SS/15	2-2-8-10	<b>}</b> -	Brown SII	T. little o	mf G	RAVEL, trace cmf	SAND (wet sti	ff)	10
-		0	5.0	20/13	2 2 O-10		Z.OWII BIL	,	U	, LL, HACC CIIII	wet, su	/	10
5			<b>!</b>			1							
							Augers har	rder begir	ากเกร	@ 5.5'			
6	4	6.0	8.0	SS/12	8-17-21-29					RAVEL, trace cmf S	SAND (moist, h	ard)	38
			ļ ,					*		•		,	
7			<b>!</b>			1							
			<b>!</b>			1							
8	5	8.0	9.4	SS/10	19-28-50@5"	1	Grey SILT	, little fin	e GR	AVEL, trace cmf S	AND (moist, ha	rd)	50+
			<b>!</b>										
9			<b>!</b>			1							
10			<b>!</b>			1							
			<b>[</b>										
11		ļ	<b>!</b>										
		ļ	<b>!</b>										
12			<b>[</b>										
10		12.0	14.5	00.44	07.04.50.0		G	1 11/24	Cr.	WEL . ~ ~		D	[
13	6	13.0	14.3	SS/11	27-34-50@4"				GRA	VEL, trace CLAY	, trace cmf SAN	ט	50+
1 4		ļ	<b>!</b>				(moist, har	a)					
14		ļ	<b> </b>				Dott- C	Pori- ^	140	<u>!</u>			<del>                                     </del>
15		ļ	<b>!</b>				Bottom of	DOTING @	14.3	,			
15		ļ	<b>!</b>										
16			<b>[</b>										
10			<b>[</b>										
17		ļ	<b>!</b>										
1 '		ļ	<b> </b>										
18			<b>[</b>										
		ļ	<b>!</b>										
19		ļ	<b>!</b>										
		ļ	<b> </b>										
20	i i	! I	<b>!</b> :			1							

				6035 Co	orporate Drive	CI	IRSIIDE	ACE EX	(PI	ORATION	Boring No.	B-	685
		V		East Sy	racuse, NY 13057						Page No.	1	of 1
	Ass	ociate	s, Inc.	Phone:	315-701-0522		IES	Γ BORI	NG.	LUG	Project No.	28	3062
Project	Name:	Micro	n Camp	us, Clay,	New York						Date Started	05/	09/24
Client:		Rambo	oll								Date Finished	05/	09/24
Locatio	n:			on Locati							Surface Elev.	39	7.0'
		ME	ТНО	DS OF	INVESTIGATIO	)N			GF	ROUNDWATER	OBSERVAT	IONS	
Driller:		H. Lyc	n		Casing:	3 ¼" ID	H.S.A.	Doto		Time	Donth (Et.)	Cocine	. A + (E+ )
Driller:		K. Cra	ndall		Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)
Inspect	or:	C. O'H	Iara		Other:			05/09/24		While Drilling	7.4	1	0.0
Drill Ri	g:	CME 4	45		Soil Sampler:	2" OD \$	Split Barrel	05/09/24		ore Casing Removed	5.8	1	7.7
Type:		ATV			Hammer Wt:	140 lbs.		05/09/24		er Casing Removed	4.8	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/09/24		er Casing Removed	caved @ 14.8		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SSIFICATION C	F MATERIA	L	
Depth		Sample	e Depth	T/	Blows on	Depth of	· c	- coarse					SPT "N"
Scale	Sample		-t.)	Type / Sample	Sampler	Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	To	Rec. (in.)	Per 6 Inches	(Ft.)	f	- fine		little - 10 to 2	0% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.6	SS/16	WH-1-2-2		Topsoil an	d Organic	Mate	erial (moist)			3
	1B	0.6	2.0							, trace cmf SAND,	trace ORGANI	C	
1							MATERIA	AL (moist,	soft)	)			
2	2	2.0	4.0	SS/15	5-6-6-6		Brown SII	T, trace C	CLAY	(moist, stiff)			12
3													
4	3	4.0	6.0	SS/16	6-9-11-12		Similar as	above (we	et, vei	ry stiff)			20
5													
_				~~									
6	4	6.0	8.0	SS/18	7-8-8-8		Similar as	above (m	oist, v	very stiff)			16
_													
7													
0	_	0.0	10.0	00/20	6007		D /C	(0)	<b>G</b> :	"1 1	4:00		1.0
8	5	8.0	10.0	SS/20	6-8-8-7		Brown/Gre	ey/Orange	, Sim	ilar as above (mois	t, very stiff)		16
9													
9													
10	1												
10													
11													
11													
12													
12													
13	6	13.0	15.0	SS/11	7-5-11-6		Grev. Simi	ilar as abo	ve (n	noist, very stiff)			16
		13.5	13.3	22/11	, , , , , , ,	<del> </del> -	<u>  5.05</u> , 5mm						
14							Augers like	e Cobble l	begin	ning @ 14.0'			
									0	· G · · · ·			
15	1												
16													
17							Augers ver	y hard be	ginni	ing @ 17.2'			
	7	17.7	17.8	SS/1	50@1"	1	Black SHA	ALE Fragi	nents	Auger Refusa	l @ 17.7'		
18							Bottom of						
								-					
19													
20	1	1	1										

Test Boring Logs - Page 197 of 201

					20002D-04-0724					•	est boning Logs	. age			
				6035 Co	orporate Drive	DUDOUNTACE EXILONATION									
		IV		East Syı	racuse, NY 13057						Page No.	1	of 1		
	Asso	ciates	s, Inc.	Phone: 3	315-701-0522		IESI	r BORI	NG	LUG	Project No.	28	3062		
Project 1	Name:	Micror	Camp	us, Clay,	New York	•					Date Started	05/0	09/24		
Client:		Rambo									Date Finished	05/0	09/24		
Location	1:	See Ex	ploratio	on Locati	on Plan						Surface Elev.	39	7.5'		
					INVESTIGATIO	N			GF	ROUNDWATER					
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.	_							
Driller:		K. Cra			Casing Hammer:			Date		Time	Depth (Ft.)	Casing	At (Ft.)		
Inspecto	r:	C. O'H			Other:			05/09/24		While Drilling	5.8	1	0.0		
Drill Rig		CME 4	15		Soil Sampler:	2" OD S	Split Barrel			ore Casing Removed	6.5	1	7.0		
Type:	_	ATV			Hammer Wt:	140 lbs.	-	05/09/24		er Casing Removed	5.0		out		
Rod Size	e:	AWJ			Hammer Fall:	30 in.		05/09/24		er Casing Removed	caved @ 15.0	C	out		
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C		SIFICATION O	F MATERIA	L			
ъ л		Sample											CDT IIN III		
Depth Scale	Sample	Sample (F		Type /	Blows on	Depth of		- coarse medium		and 25 to 50	0% / some - 20 to 35	0/	SPT "N"		
(Feet)	No.	From	То	Sample Rec. (in.)	Sampler Per 6 Inches	Change (Ft.)		- fine			20% / some - 20 to 33 20% / trace - 0 to 10		or RQD %		
0	1A	0.0	0.8	SS/18	WR-WH-1-4	(11.)			Mat	erial (moist)	20707 Hace 0 to 10	70	1		
Ů	1B	0.8	2.0	55/10	***************************************	·				Y, trace fine SAND	trace ORGANI	[C	•		
1							MATERIA				, and one in				
1								(1110151,	5510)	,					
2	2	2.0	4.0	SS/16	5-6-6-7		Brown SII	T trace (	TAY	Y (moist, stiff)			12		
_	-	2.0	1.0	55/10	3 0 0 7		Brown SIE	, irace (		(moist, stiii)			12		
3															
3															
4	3	4.0	6.0	SS/15	4-7-7-8	Brown SILT, trace CLAY (wet, stiff)									
7	3	4.0	0.0	33/13	4-7-7-0	Brown SILT, trace CLAY (wet, stiff)									
5															
3															
6	4	6.0	8.0	SS/11	4-8-11-5		Similar as	obovo (w	at wa	my stiff)			19		
U	4	0.0	8.0	33/11	4-0-11-3		Silliliai as	above (we	ci, ve	ry suir)			19		
7															
/															
8	5	8.0	10.0	SS/20	5-6-8-13		Similar as	obovo (m	oiet e	atiff)			14		
0	3	8.0	10.0	33/20	3-0-6-13		Silliliai as	above (III	oist, s	suii)			14		
9															
9															
10															
10															
1 1															
11															
10															
12															
10		10.0	150	00/12	F < 0.43				,						
13	6	13.0	15.0	SS/13	5-6-8-13		Grey, Simi	iar as abo	ve (n	noist, stiff)			14		
14															
15															
16							<b>1</b> .								
								e Cobble l	begin	ning @ 16.7'. Aug	ers harder begii	nning @			
17						ļ <b>-</b> -	<i>16.9′</i> .								
	7	16.9	17.0	SS/1	50@1"		Black SHA				l @ 17.0'		50+		
18							Bottom of	Boring @	17.0	)'					
19															
20			ı			1	I								

Test Boring Logs - Page 198 of 201

				6035 Co	orporate Drive	ŞI	URSURF	ACE EX	<b>XPLORATIO</b>	V	Boring No.	B-	687
		<b>IV</b>	Ę	East Syr	racuse, NY 13057				NG LOG	• •	Page No.		of 1
	Ass	ociates	s, Inc.	Phone: 3	315-701-0522	Ш		L DUKI	NG LUG		Project No.	28	3062
Project	Name:	Micron	n Camp	us, Clay,	New York						Date Started	05/0	09/24
Client:		Rambo	oll								Date Finished	05/0	09/24
Locatio	n:		•	on Locati							Surface Elev.		98.1'
					INVESTIGATIO				GROUNDWA	ATE	OBSERVAT	IONS	
Driller: Driller:		H. Lyc K. Cra			Casing: Casing Hammer:	3 ¼" ID	H.S.A.	Date	Time		Depth (Ft.)	Casing	At (Ft.)
Inspect	or:	C. O'H	[ara		Other:			05/09/24	While Drillin	g	None Noted	1	3.0
Drill Ri	g:	CME 4	45		Soil Sampler:	2" OD 5	Split Barrel	05/09/24			11.8	1	7.9
Type:		ATV			Hammer Wt:	140 lbs.		05/09/24	ŭ		4.2	(	out
Rod Siz		AWJ			Hammer Fall:	30 in.		05/09/24	V		caved @ 6.7		out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LASSIFICATI	ON (	OF MATERIA	L	
Depth		Sample	e Depth	Type /	Blows on	Depth of	. c .	- coarse					SPT "N"
Scale	Sample	(F	t.)	Sample	Sampler	Change		medium	and - 1	35 to 50	0% / some - 20 to 35°	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine		- 10 to 2	20% / trace - 0 to 109	%	RQD %
0	1A	0.0	0.7	SS/14	1-1-2-5	ļ <u> </u>			Material (moist)				3
	1B	0.7	2.0				Brown SIL	T, trace C	CLAY, trace fine S	SAND	(moist, soft)		
1													
_				a a			]						
2	2	2.0	4.0	SS/18	6-5-7-9		Similar as	above (m	oist, stiff)				12
3													
	_	4.0	<i>c</i> 0	00/15	4.6.6.0		D CIT	<b>T</b>	TT 4 TT /				1.0
4	3	4.0	6.0	SS/15	4-6-6-8		Brown SIL	1, trace (	CLAY (moist, stiff	()			12
-	ļ												
5													
6	4	6.0	8.0	SS/20	7-9-10-11		Similar ac	ahova (m	oist, very stiff)				19
U	4	0.0	0.0	33/20	7-2-10-11		Similar as	above (III	oist, very still)				19
7													
,													
8	5	8.0	10.0	SS/17	8-8-7-8		Similar as	above (m	oist, very stiff)				15
Ü		0.0	10.0	55/17	0070		Similar as	above (III	oist, very still)				13
9													
10	†												
11													
12													
13	6	13.0	15.0	SS/12	5-10-7-9		Brown/Gre	ey, Simila	r as above (moist,	very s	stiff)		17
14													
15						ļ	<u> </u>		— — —				
							Augers ha	rder begir	ıning @ 15.5'				
16													
							<u>.</u>	a					
17	_	1	1	90.00	<b>~</b> 0.00:	ļ			beginning @ 17.1				
4.0	7	17.9	17.9	SS/0	50@0"		Black SHA			uger I	Refusal @ 17.9'		50+
18							Bottom of	Boring @	17.9'				
10													
19													
20													
20	l	I	Ī	1		I	1						

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks:

				6035 C	orporate Drive	SI	JBSIJRF/	ACE EX	PI 4	ORATION	Boring No.	B-	688
		V	Ę		racuse, NY 13057			S BORI			Page No.		of 2
		ociates		i none.	315-701-0522		1691	DOVI	10	LUU	Project No.		3062
Project	Name:			us, Clay,	New York						Date Started		07/24
Client:		Rambo									Date Finished		07/24
Locatio	n:			on Locati		<b>N</b> T	1		- CT		Surface Elev.		94.8'
D '11					INVESTIGATIO		II C A		GR	ROUNDWATER	OBSERVAT	IONS	
Driller: Driller:		Ryan (	Tetcher		Casing: Casing Hammer:	3 ¼" ID	H.S.A.	Date		Time	Depth (Ft.)	Casing	g At (Ft.)
Inspect		Kyan	Jasaten	ı	Other:	NQ-Cor	·e	05/07/24		While Drilling	5.5	1	3.5
Drill Ri		CME 5	55		Soil Sampler:	-	Split Barrel	05/07/24		ore Casing Removed	None Noted		6.0
Type:	<b>8</b> -	ATV			Hammer Wt:	140 lbs.	-	05/07/24		er Casing Removed	3.0 *		out
Rod Siz	e:	AWJ			Hammer Fall:	30 in.		05/07/24		er Casing Removed	caved @ 8.0	(	out
	LO	G OF	BOR	ING SA	AMPLES		VI	SUAL C	LAS	SIFICATION C	F MATERIA	L	
Depth		Sample	e Depth	T/	Blows on	Double of	c -	- coarse					SPT "N"
Scale	Sample	_	t.)	Type / Sample	Sampler	Depth of Change		medium		and - 35 to 50	% / some - 20 to 35	%	or
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)		- fine			0% / trace - 0 to 109	%	RQD %
0	1A	0.0	1.0	SS/19	WH-1-2-5		Topsoil and	d Organic	Mate	erial (moist)			3
1	1B	1.0	2.0			·	Brown SIL	T, trace C	CLAY	(moist, soft)			
2	2	2.0	4.0	SS/20	5-6-8-10		Brown/Gre	ey SILT, t	race (	CLAY (moist, stiff)	)		14
3													
4	3	4.0	6.0	SS/17	6-7-7-8	Brown, Similar as above (wet, stiff)						14	
5													
6	4	6.0	8.0	SS/19	7-8-9-13		Similar as above (moist, very stiff)						17
7													
8	5	8.0	10.0	SS/12	8-6-4-4		Grey SILT	, little mf	GRA	VEL, trace cmf SA	AND (wet, stiff)		10
9													
10													
11						<u> </u>							
12								<b></b>	- <del>-</del>		<b></b>	<b></b>	
13	6	13.5	15.0	SS/6	11-50-9		Grey/Black	cmf GR	AVEI	L, little SILT, little	cmf SAND (we	t, very	59
14							compact)						
15													
16	R-1	16.0	21.0	C/58	NQ-Core					Set up to core. interbedded SHAI	E lavers (1/8" -	1.0"	60%
17		- 5.0		3,00	- 14 5000			htly weath	nered,	, thinly laminated to	•		30,0
18							Broken and	d fracture	d zon	e @ 17.6' - 17.8'.			
19							Recovery:	58"/60" =	97%	/4" thick) @ 18.6' a   RQD: 36"/60" =			
20							21 Pieces,	-		ragments			

20 Continued on Page 2

SS - Split Spoon, U - Undisturbed Tube, C - Core, WH - Weight of Hammer + Rod, WR - Weight of Rod

Remarks: \*Water added to boring for coring.

CME Associates, Inc.

6035 Corporate Drive East Syracuse, NY 13057

# SUBSURFACE EXPLORATION TEST BORING LOG

 Boring No.
 B-688

 Page No.
 2 of 2

 Project No.
 28062

	Associates, Inc. Phone: 315-701-0522					Project No. 280								
	_				AMPLES	VISUAL CLASSIFICATION OF MATERIAL								
Depth Scale	Sample	Sample (F	e Depth ft.)	Type / Sample	Blows on Sampler	Depth of Change	c - coarse m - medium	and - 35 to 50	0% / some - 20 to 35%	)	SPT "N" or ROD %			
(Feet)	No.	From	То	Rec. (in.)	Per 6 Inches	(Ft.)	f - fine Continued from Page 1 1:00 min/ft, no water loss		20% / trace - 0 to 10%		RQD %			
21	R-2	21.0	26.0	C/56	NQ-Core		Coring conducted in 4th g Grey DOLOSTONE with	Coring conducted in 4th gear, 1700 rpm, 700 psi down pressure. Grey DOLOSTONE with interbedded SHALE layers (<1/8" - 6.0'						
22 23							medium hard to hard.  Weathered zone (<1/8" th	thick), slightly weathered, thinly laminated to medium bedded, medium hard to hard.  Weathered zone ( $<1/8$ " thick) @ 20.2'.						
24							Recovery: 56"/60" = 93% RQD: 47"/60" = 78% 22 Pieces, 0" Chips and Fi	Recovery: 56"/60" = 93% RQD: 47"/60" = 78%						
25							1:00 min/ft, no water loss Coring conducted in 4th g	gear, 1700 rpm, 70	00 psi down pressi	ure.				
26							Bottom of Boring @ 26.0 <sup>th</sup>	,						
27 28														
29														
30	1													
31														
32														
33														
34	-													
36														
37														
38														
39														
40	1													
41														
42														
43														
45	_													

Attachini	ent to o	IVIL IXC	port N	ullibel. 2	20002B-04-0724					est boning Logs	1 ago 201 01 20
				6035 Co	orporate Drive	ST	IRSHRE	CE EX	<b>XPLORATION</b>	Boring No.	B-689
		IV		East Syı	racuse, NY 13057					<b>Page No.</b> 1 of 1	
	Asso	ciates	s, Inc.	-	315-701-0522		TEST	ROKI	NG LOG	Project No.	28062
Project 1	Name:	Micror	Camp	us. Clav.	New York					Date Started	05/09/24
Client:		Rambo	_	,,						Date Finished	05/09/24
Location	1:			on Locati	on Plan					Surface Elev.	395.2'
			_		INVESTIGATIO						
Driller:		H. Lyo			Casing:	3 ¼" ID	H.S.A.				
Driller:		K. Cra			Casing Hammer:			Date	Time	Depth (Ft.)	Casing At (Ft.)
Inspecto	r:	C. O'H			Other:			05/09/24	While Drilling	1.5	13.0
Drill Rig		CME 4			Soil Sampler:	2" OD S	Split Barrel		Before Casing Removed	2.9	14.5
Type:		ATV			Hammer Wt:	140 lbs.	-	05/09/24		3.9	out
Rod Size		AWJ			Hammer Fall:	30 in.		05/09/24	U	caved @ 7.6	out
			BOR		AMPLES		VI		LASSIFICATION (		L
ъ .		Sample									
Depth Scale	Sample	Sample (F		Type /	Blows on Sampler	Depth of		coarse medium	and 35 to 50	0% / some - 20 to 35	SPT "N or
(Feet)	No.	From	То	Sample Rec. (in.)	Per 6 Inches	Change (Ft.)		- fine		20% / trace - 0 to 10	
0	1A	0.0	1.0	SS/18	WH-WH-1-2	(11.)			: Material (moist)	20,0, 11400 0 10 10	1
		0.0	1.0	55,10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		l opson un	a organie	(110150)		
1	1B	1.0	2.0				Brown SIL	T, trace C	CLAY, trace fine SAND	(moist, soft)	
2	2	2.0	4.0	SS/15	8-9-7-7		Brown SII	T trace	CLAY (moist, very stiff)		16
2	2	2.0	4.0	33/13	0-9-1-1		DIOWILDIL	i, trace C	LAT (moist, very stiff)		10
3											
3											
4	2	4.0	6.0	SS/17	7077		Daorem CII	T two as (	TIAV (moist your stiff)		15
4	3	4.0	0.0	33/1/	7-8-7-7		Brown SIL	1, trace C	CLAY (moist, very stiff)	)	15
5											
	4	<i>c</i> 0	8.0	00/10	5-8-8-10		D /C	G' '1.	1 (	4:00	16
6	4	6.0	8.0	SS/19	5-8-8-10		Brown/Gre	ey, Simila	r as above (moist, very s	suii)	16
7											
7						<b></b>	<u></u>				
0	~	0.0	10.0	00/17	0.7.0.4		D (C	CH T 1	'ul CODAVEL	CCAND /	1.6
8	5	8.0	10.0	SS/17	8-7-9-4			ey SILT, I	ittle mf GRAVEL, trace	e cmf SAND (mo	oist, 16
							very stiff)				
9											
10							L				
							0 0		inning @ 10.5'		
11							Augers like	Cobble l	beginning @ 11.2'		
12											
13	6	13.0	14.3	SS/5	2-6-50@4"		-	n SILT, s	some cmf SAND, trace f	fine GRAVEL (r	noist, 50+
						ļ	hard)				
14											
	7	14.5	14.5	SS/0	50@0"				ments in tip of spoon. A	uger Refusal @	14.5' 50+
15							Bottom of	Boring @	14.5'		
16											
17											
18											
19											
~ ~											



### GENERAL INFORMATION & KEY TO TEST BORING LOGS

The **Subsurface Exploration** – **Test Boring Logs** produced **by CME Associates, Inc.** (CME) present observations and mechanical data collected by the CME Drill Crew while at the site, supplemented, at times, by classification of the materials removed from the borings determined through visual identification by technicians in the laboratory. It is cautioned that the materials removed from the borings represent only a fraction of the total volume of the deposits at the site and may not necessarily be representative of the subsurface conditions between adjacent borings or between the sampled intervals. The data presented on the Exploration Logs together with the recovered samples will provide a basis for evaluating the character of the subsurface conditions relative to the proposed construction. The evaluation must consider all the recorded details and their significance relative to each other. Often, analyses of standard boring data indicate the need for additional testing and sampling procedures to more accurately evaluate the subsurface conditions. Any evaluations of the contents of CME's report and the recovered samples must be performed by Licensed Professionals having experience in Soil Mechanics, Geological Sciences and Geotechnical Engineering. The information presented in this Key defines some of the methods, procedures and terms used on the CME Exploration Logs to describe the conditions encountered. Refer to the Log on page 4 for key number.

Key No. Description

- 1. The figures in the **DEPTH SCALE** column define the vertical scale of the Boring Log.
- 2. The SAMPLE NO. is used for identification on the sample containers and in the Laboratory Test Report or Summary.
- 3. The SAMPLE DEPTH column gives the depth range from which a sample was recovered.
- **4.** The **TYPE / SAMPLE RECOVERY** column is used to signify the various types of samples. "SS is Split Spoon, "U" is Undisturbed Tube, and "C" is Rock Core. For soil and rock samples, the recovered length of the sample is recorded in inches.
- 5. BLOWS ON SAMPLER This column shows the results of the "Standard Penetration Test (SPT) ASTM D1586", recording the number of blows required to drive a 2-inch outside diameter (O.D.) split spoon sampler into the ground beneath the casing. The number of blows required for each six inches of penetration is recorded. The total number of blows required for the 6-inch to 18-inch interval is summarized in the SPT "N" column and represents the "Standard Penetration Number". The outside diameter of the sampler, the hammer weight and the length of drop are noted in the Methods of Investigation portion of the log. A "WH" or "WR" in this column indicates that the sample spoon advanced a 6-inch interval under the Weight of Hammer + Rod or Weight of Rod, respectively. If a rock core sample is taken, the core bit size designation is given here.
- 6. The **DEPTH OF CHANGE** column designates the depth (in feet) that the driller noted a compactness or stratum change. In soft materials or soil strata exhibiting a consistent relative density, it is difficult for the driller to determine the exact change from one stratum to the next. In addition, a grading or gradual change may exist. In such cases the depth noted is approximate or estimated only and may be represented by a dashed line. When continuous split spoon sampling is not employed, or an interval of several feet exists between samplings, the Depth of Change may not be indicated at all.
- 7. VISUAL CLASSIFICATION OF MATERIAL Soil materials sampled and recovered are described by the Driller or Geotechnical Representative on the original field log. Notes of the Drillers observations are also placed in this column. Recovered samples may also be visually classified by a Geologist, Engineer, or Soil Technician. Visual soil classifications are made using a modified Burmister System as practiced by CME and as generally described in this Key and abbreviated on the Test Boring Log. This modified Burmister System is a type of visual-manual textural classification estimated by the Driller, Geologist, Engineer, or Technician on the basis of weight-fraction of the recovered material and estimated plasticity, among other characteristics. See Table 1 "Classification of Materials". The description of the relative compactness or consistency is based upon the standard penetration number as defined in Table 2. The description of the recovered sample moisture condition is described as dry, moist, wet, or saturated. Water used to advance the boring may affect the moisture content of the recovered sample. Special terms may be used to describe recovered materials in greater detail, such terms are listed in ASTM D653. When sampling gravelly soils with a standard two-inch O.D. Split Spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter. The presence of boulders, cobbles, and large gravel is sometimes, but not necessarily, detected by observation of the casing advancement and sampler blows and/or through the "action" of the drill rig, sampler and/or casing as reported by the Driller.

The description of **Rock** is based upon the recovered rock core. Terms frequently used in the description are included in Tables 3, 4 and 5. The length of core run is defined as length of penetration between retrievals of the core barrel from the bore hole, expressed in inches. The core recovery expresses the length of core recovered from the core barrel per core run, in percent. The size core barrel used is noted in Column 5. An "N" size core, being larger in diameter than "A" size core, often produces better recovery, and is frequently utilized where accurate information regarding the geologic conditions and engineering properties is needed. An estimate of in-situ rock quality is provided by a modified core recovery ratio known as the "**Rock Quality Designation**" (**RQD**). This ratio is determined by considering only pieces of core that are at least 4 inches long and are hard and sound. Breaks obviously caused by drilling are ignored. The percentage ratio between the total length of such core recovered and the length of core drilled on a given run is the RQD. Table 4 indicates in-situ rock quality as related to the **RQD**.

Page 1 of 4 KEY 112619



- 8. The SPT "N" or RQD is given in this column as applicable to the specific sample taken. In Very Compact coarse-grained soils and in Hard fine-grained soils the N-value may be indicated as 50+ or 100+. This typically means that the blow count was achieved prior to driving the sampler the entire 6-inch interval or the sampler refused further penetration. For an "N" size rock core, the RQD is reported here, expressed in percent (%).
- 9. GROUNDWATER OBSERVATIONS and timing noted by the Drill Crew are shown in this section. It is important to realize that the reliability of the water level observations depend upon the soil type (e.g. water does not readily stabilize in a hole through fine grained soils), and that drill water used to advance the boring may have influenced the observations. Groundwater levels typically fluctuate seasonally so those noted on the log are only representative of that exhibited during the period of time noted on the log. One or more perched or trapped water levels may exist in the ground seasonally. All the available resources and data should be evaluated. If definite conclusions cannot be made, it is often prudent to examine the conditions more thoroughly through test pit excavations or through groundwater observation well installations.
- 10. METHODS of INVESTIGATION provides pertinent information regarding the identity of the Drill Crew members, inspector (if any), drill rig make and model, drill rig mount vehicle, casing and type of advancement, soil and rock sampling tools and appurtenances used in the installation of the Test Boring.

	TABLE 1 - CLASSIFICATION OF MATERIALS					
GROUP	COARSE GRAINED SOILS TEXTURAL SIZES					
BOULDERS	larger than 12" diameter					
COBBLES	12" diameter to 3" sieve					
GRAVEL	3" - coarse - 1" - medium - 1/2" - fine - #4 sieve					
SAND	#4 - coarse - #10 - medium - #40 - fine - #200 sieve					
GROUP	FINE GRAINED SOILS SIZE (PLASTICITY*)					
SILT	#200 sieve (0.074mm) to 0.005mm size (see below *)					
CLAY	0.005mm size to 0.001 mm size (see below *)					
GROUP	ORGANIC SOILS, PEAT, MUCK, MARL					
ORGANIC	Based on smell, visual-manual and laboratory testing					

ABBREVIATIONS	TERM	ESTIMATED PERCENT OF TOTAL SAMPLE BY WEIGHT
<b>f</b> - fine	and	35 to 50%
<b>m</b> - medium	some	20 to 35%
c - coarse	little	10 to 20%
	trace	0 to 10%

		D	DRY STRENGTH TEST				
TERM	PLASTICITY INDEX	INDICATION	FIELD TEST RESULT				
non-plastic	0 - 3	Very low	falls apart easily				
slightly plastic	4 - 15	Slight	easily crushed by fingers				
plastic	15 - 30	Medium	difficult to crush				
highly plastic	31 or more	High	impossible to crush with fingers				

Page 2 of 4 KEY 112619



	SOIL COMPACTNESS OR CONSISTENC	T		
Primary Soil Type	Descriptive Term of Compactness	Range of Standard Penetration Resistance (N)		
COARSE GRAINED SOILS	Very Loose	less than 4 blows per foot		
	Loose	4 to 10		
(More than half of Material	Medium Compact	10 to 30		
is larger than No. 200 sieve size)	Compact	30 to 50		
	Very Compact	Greater than 50		
FINE GRAINED SOILS	Descriptive Term of Consistency	Range of Standard Penetration Resistance (N)		
	Very Soft	less than 2 blows per foot		
(More than half of material is	Soft	2 to 4		
smaller than No. 200 sieve size)	Medium Stiff	4 to 8		
	Stiff	8 to 15		
	Very Stiff	15 to 30		
	Hard	Greater than 30		

\*The number of blows of 140-pound weight falling 30 inches to drive a 2-inch O.D., 1-3/8 inch I.D. sampler 12 inches is defined as the Standard Penetration Resistance, designated "N".

	TABLE 3 - ROCK (	CLASSIFICATION TERMS				
Rock Classification	n Terms	Field Test or Meaning of Term				
Hardness	Soft	Scratched by fingernail. Crumbles under firm blows with a geologic pick.				
		Shallow indentations (1 to 3 mm) can be made by firm blows of a geologic pick. Can be peeled with a pocketknife with difficulty.				
	Medium Hard	Scratched distinctly by penknife or steel nail. Can't be peeled or scraped with knife.				
		Scratched with difficulty by penknife or steel nail. Requires more than one blow with a geologic hammer to break it				
	-	Cannot be scratched by penknife or steel nail. Breaks only by repeated heavy blows with a geologic hammer.				
Bedding	Thinly Laminated Laminated	less than 1/8 <sup>th</sup> inch 1/8 <sup>th</sup> to 1 inch				
(Divisional planes	Thinly Bedded	1 inch to 4 inches				
and/or surfaces	Medium Bedded	4 inches to 12 inches				
separating it from layers	Thickly Bedded	12 inches to 48 inches				
above and below)	Massive	greater than 48 inches				

Relation of Ro	TABLE 4 Relation of Rock Quality Designation (RQD) and in-situ Rock Quality									
RQD %	Rock Quality Term Used									
90 to 100	Excellent									
75 to 90	Good									
50 to 75	Fair									
25 to 50	Poor									
0 to 25	Very Poor									

Page 3 of 4 KEY 112619



	TABLE 5 – BEDROCK WEATHERING CLASSIFICATION							
Classification	Diagnostic Features							
Fresh	No visible sign of decomposition or discoloration. Rings under hammer impact.							
Slightly Weathered	Slight discoloration inwards from open fractures, otherwise similar to Fresh.							
Moderately Weathered	Discoloration throughout. Strength somewhat less than fresh rock but cores cannot be broken by hand or scraped with knife. Texture observed.							
Highly Weathered	Most minerals somewhat decomposed. Specimens can be broken by hand with effort or shaved with knife. Core stones present in rock mass. Texture becoming indistinct but fabric preserved.							
Completely Weathered	Minerals decomposed to soil, but fabric and structure preserved (e.g. Saprolite). Specimens easily crumbled or penetrated.							
Residual Soil	Advanced state of decomposition resulting in plastic soils. Rock fabric and structure completely destroyed. Large volume change.							

					orporate Drive	SUBSURFACE EXPLORATION				Boring No.	- Carte Attacker	
	Asso	ciates	s, Inc.	4	acuse, NY 13057 815-701-0522		TEST	BORI	NG LOG	Page No. Report No.		of 1
Project 1	Name:									Date Started		
Client:										Date Finished		
Location	1:									Surface Elev.		
	METHODS OF INVESTIGATION GROUNDWATER								R OBSERVAT	IONS		
Driller: Driller:		10			Casing: Casing Hammer:	10		Date	Time	Depth (Ft.)	Casing	; At (Ft.)
Inspecto	r:	: Other:					3	While Drilling		9	9	
Drill Ri	g				Soil Sampler:				Before Casing Removed			
Type:					Hammer Wt:				After Casing Removed			
Rod Size	e:				Hammer Fall:				After Casing Removed			
	LO	GOF	BOR	ING SA	MPLES		VI	SUAL C	CLASSIFICATION (	OF MATERIA	L	
Depth Scale (Feet)	Sample No.		e Depth t.) To	Type/ Sample Rec. (in.)	Blows on Sampler Per 6 Inches	Depth of Change (Ft.)	m -	State of the state		0% / some - 20 to 35% 20% / trace - 0 to 10%		SPT "N" or RQD%
1	2	3	3	4	5	6			7			8

Page 4 of 4 KEY 112619



6035 Corporate Drive East Syracuse, New York 13057 (315) 701-0522 (315) 701-0526 (Fax)

www.cmeassociates.com

## **Transmittal**

August 08, 2024

Ramboll (Client) 94 New Karner Road Albany, New York Phone: 315.420.8439

Attn: Andy Philips, Sr. Project Manager

Andy.Philips@Ramboll.com

Re: Micron Campus

Clay, New York

CME Project No.: 28062-05

Gentlepeople:

Enclosed you will find....

Number of Copies Report Number Description

CEG Report No.:172E-02-0824 Geotechnical Engineering and 30% Civil Design Q&A Twelve Questions from CK Tang on 08/05/2024

The above report was emailed to Andy Philips at Andy. Philips@Ramboll.com on 08/08/2024.

Respectfully submitted,

**CME** Associates, Inc.

Jerry Seamans

Administrative Assistant

AA.js



August 08, 2024

Ramboll Americas Integrated Solutions 94 New Karner Road Albany, New York 12203

Email: <u>Andy.Philips@Ramboll.com</u>

Attn: Andy Philips, Senior Project Manager

Re: Geotechnical Engineering and 30% Civil Design Q&A

Twelve Questions from CK Tang on 08/05/2024

Micro Campus, Clay, New York CEG Report No.: 172E-02-0824

Page 1 of 4

### Gentlepeople:

At your request, CME Engineering Group, D.P.C. (CEG) is responding to the twelve questions posed by CK Tang of Micron on 08/05/2024, as given in the attached email. The Soils Investigation and Conceptual Foundation Recommendation Report, CEG Report No. 172E-01-0224, dated 02/06/2024, (CFR Report) is referenced.

Q1: What else would the geotechnical engineers propose to do and how do they anticipate that would help the project?

A1: CEG currently has a proposal (CME Change Order No. 3 R1, dated 06/27/2024) submitted to Ramboll for Phase 1A, which answers this question.

Q2: Can you show, graphically, the intent the 2.5\* height of fill requirement and where there are concerns in Figure 2 of the Feb 2024 report? What are the risks and how can they be mitigated? (SMP Risk)

A2: The setback recommendation is applicable to conventional shallow foundation systems for Level 400 structures located less than about 12.5 feet from the Level 400/Level 395 line and anywhere proposed structural fills grade down to native, pre-existing grade. The concern is retaining wall rotation and/or soil grade creep causing subsidence of on-grade improvements and building elements within this approximate influence area.

Alternatively, these concerns may be mitigated by stepping foundations down to below the influence area, and, in the case of on-grade improvements, other mitigating techniques may be applied.

Page 2 of 4



Q3: What are lateral load capacities of pile options to be used in evaluating deep foundations?

 Are there any concerns with the soils resisting lateral (wind/seismic) loads from the buildings if piles are not used?

A3: Pile lateral load capacity will vary significantly depending on, but not limited to, depth of structural fill, allowable deflection under service load, etc. In general, though, you can achieve higher lateral load capacity with drilled concrete piers, vs. driven steel and/or timber piles. Driven batter piles may be considered for higher lateral capacity. It is too early to answer the second part of the question.

Q4: Drilled pier foundations are specifically not recommended, could you elaborate on why they are not recommended? Drilled piers are a preferred option for the heaviest areas if they are feasible.

A4: Drilled Piers could be utilized in some areas, however, there are technical concerns, constructability concerns, and time concerns. Some of these issues/concerns include: the insitu bedrock quality varies from RQD 12% to RQD 100% in the upper 5 feet and the unconfined compressive strength varies from less than 4 ksi to 24 ksi, as well as the presence of inundated, collapsing non-plastic soils below structural fills, intervening layers of geotextiles, and variable downdrag loadings.

Q5: Could you add recommendations for driven concrete piles, push piles, and micropiles?

A5: In CEG's professional opinion, precast concrete piles are not a viable alternative due to highly variable pile length, and risk of pile damage when driving to reach the end-bearing stratum (bedrock/till). For the loads presented, the time of installation, and other factors; push piles and micropiles are not recommended.

Q6: What are the risks to underground utility installations, regardless of foundation types, and how are they recommended to be addressed?

A6: Underground utilities situated in, or below structural fill are subject to differential settlement risk. Large diameter storm sewers and underground utility tunnels may interfere with and/or create large linear abnormalities in areas where ground improvement techniques are elected. More risks may come to light once CEG is provided with underground utility plans and profiles.

Q7: Stormwater facilities will need to be specialty designed via sheet piling, weirs, liners, in lieu of native soils due to existing water table and proximity to existing swamp areas. What else can the Geotechnical Engineer recommend for these topics?

Page 3 of 4



A7: CEG has insufficient information to evaluate and/or render recommendations at this time. Input from Ramboll may be beneficial

Q8: What are geotechnical recommendations for building dewatering systems and anticipated design flowrates?

A8: CEG has insufficient information to evaluate and/or render recommendations at this time.

Q9: Can the geotechnical engineers provide a contour map or similar of what depths the expansive clays are found so that we can better understand their extents and depths?

A9: Please refer to the CFR Report, Section 4.5, 3<sup>rd</sup> Paragraph and note that expensive soils were also noted in the Test Pits (see CBR test results), within 6 feet of existing grade.

Q10: We do not believe the building column demands stated in the geotechnical recommendations are adequate for the FAB. Column reactions we have derived based on the reference project design and loading (both values are service level loads):

Typical truss support column: 2500 kipsTypical cleanroom column: 1200 kips

A10: Thank you for this new information.

Q11: At those values, we are finding that the pile recommendations provided are probably not adequate in strength to support the columns and so we would like to request options for a higher strength pile. Our first thought is a larger diameter drilled pier is needed.

 For drilled piers, we also need recommendations for minimum pile spacing and/or group effect modifications to aid in selecting a foundations option.

A11: CEG has insufficient information to evaluate and/or render recommendations at this time.

Q12: We are anticipating construction possibly into/below bedrock levels for some portions of the project. What are requirements for bedrock preparation for foundations and what methods of bedrock removal other than blasting can be recommended?

A12: CEG has insufficient information to evaluate and/or render recommendations at this time.

Page 4 of 4



Thank you for the opportunity to prepare this response report. Please contact our office with any questions that you may have.

Respectfully Submitted, CME ENGINEERING GROUP, D.P.C.

Anas N. Anasthas, PE

President

Reviewed By,

CME ENGINEERING GROUP, D.P.C.

Christopher R. Paolini, PE, MPS, EXW<sup>SM</sup> Vice President

Attachments:

Email from CK Tang of Micron through Andy Philips (3 of 3)

## Attachment to CEG Report No.: 172E-02-0824

### **Anas Anasthas**

From: Andy Philips <Andy.Philips@ramboll.com>

Sent: Monday, August 5, 2024 10:48 AM

To: Chris Paolini; Anas Anasthas; Marcus Rotundo

Cc: Zach Henderson; Derrick Cheney

**Subject:** FW: [EXT] Micron NY WP - Geotech and 30% Civil Design Q&A

Importance: High

Caution! This message was sent from outside CME.

Allow sender Block sender

Updated list of questions, see below:

Kind regards

#### **Andy Philips**

Sr. Project Manager Advanced Manufacturing

M +1 315 420 8439 andy.philips@ramboll.com

Ramboll 333 West Washington Street Syracuse, NY 13202 USA

https://ramboll.com

Classification: Confidential

From: Ck Tang 湯 珠淦 < cktang@micron.com> Sent: Monday, August 5, 2024 10:44 AM

To: Zach Henderson <Zachary.Henderson@ramboll.com>; Chris Paolini <cpaolini@cmeassociates.com>; Andy Philips

<Andy.Philips@ramboll.com>; Jeffrey Maidment < jmaidment@micron.com>; Mike Nguyen

<minhnguyen@micron.com>; Kar Hau Chai <kchai@micron.com>; Jane Hsu 徐 尉珍 <hsujane@micron.com>; Kayla Case

<kcase@micron.com>; Manuel Paner <mpaner@micron.com>

Subject: RE: [EXT] Micron NY WP - Geotech and 30% Civil Design Q&A

Importance: High

Micron Confidential

Hi Andy:

I summary the Geotech Q&A as below, please provide as possible as your teams recommendation (high level idea) during the meeting discussion.

What else would the geotechnical engineers propose to do and how do they anticipate that would help the project?

- Can you show, graphically, the intent the 2.5\* height of fill requirement and where there are concerns in Figure 2 of the Feb 2024 report? What are the risks and how can they be mitigated? (SMP Risk)
- What are lateral load capacities of pile options to be used in evaluating deep foundations?
  - Are there any concerns with the soils resisting lateral (wind/seismic) loads from the buildings if piles are not used?
- Drilled pier foundations are specifically not recommended, could you elaborate on why they are not recommended? Drilled piers are a preferred option for the heaviest areas if they are feasible.
- Could you add recommendations for driven concrete piles, push piles, and micropiles?
- What are the risks to underground utility installations, regardless of foundation types, and how are they recommended to be addressed?
- Stormwater facilities will need to be specialty designed via sheet piling, weirs, liners, in lieu of native soils due to existing water table and proximity to existing swamp areas. What else can the Geotechnical Engineer recommend for these topics?
- What are geotechnical recommendations for building dewatering systems and anticipated design flowrates?
- Can the geotechnical engineers provide a contour map or similar of what depths the expansive clays are found so that we can better understand their extents and depths?
- We do not believe the building column demands stated in the geotechnical recommendations are adequate for the FAB. Column reactions we have derived based on the reference project design and loading (both values are service level loads):
  - Typical truss support column: 2500 kips
  - Typical cleanroom column: 1200 kips
- At those values, we are finding that the pile recommendations provided are probably not adequate in strength to support the columns and so we would like to request options for a higher strength pile. Our first thought is a larger diameter drilled pier is needed.
  - For drilled piers, we also need recommendations for minimum pile spacing and/or group effect modifications to aid in selecting a foundations option.
- We are anticipating construction possibly into/below bedrock levels for some portions of the project. What are requirements for bedrock preparation for foundations and what methods of bedrock removal other than blasting can be recommended?

BR CK

#### Micron Confidential

----Original Appointment----

From: Zach Henderson \(\bar{Zachary.Henderson@ramboll.com}\)

Sent: Friday, August 2, 2024 9:18 AM

To: Zach Henderson; Chris Paolini; Andy Philips; Ck Tang 湯 珠淦; Jeffrey Maidment; Mike Nguyen; Kar Hau

Chai; Jane Hsu 徐 尉珍; Kayla Case

Subject: [EXT] Micron NY WP - Geotech and 30% Civil Design Q&A

When: Monday, August 5, 2024 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).

Where: Microsoft Teams Meeting

**CAUTION: EXTERNAL EMAIL.** Do not click links or open attachments unless you recognize the sender and were expecting this message.

Please forward as needed

#### Agenda:

- 1. Geotech Q&A
- 2. Civil 30% drawing request
- 3. TBD

## Microsoft Teams Need help?

#### Attachment to CEG Report No.: 172E-02-0824

## Join the meeting now

Meeting ID: 326 492 012 617

Passcode: cnPihH

#### Dial in by phone

+1 646-847-0325,,480207699# United States, New York City

Find a local number

Phone conference ID: 480 207 699#

#### Join on a video conferencing device

Tenant key: <a href="mailto:teams@meet.ramboll.com">teams@meet.ramboll.com</a>

Video ID: 127 327 902 9

More info

For organizers: Meeting options | Reset dial-in PIN

[NOTE: THIS EMAIL IS FROM AN EXTERNAL SENDER]



September 30, 2024

Ramboll Americas Integrated Solutions 333 West Washington Street Syracuse, New York 13202

Email: Andy.Philips@Ramboll.com

Attn: Andy Philips, P.E., Senior Project Manager

Re: Driller Pier vs. Driven Pile Geotechnical Memorandum

Micron Campus, Clay, New York CEG Report No.: 172E-03-0924

Page 1 of 8

#### Gentlepeople:

#### 1.0 INTRODUCTION

This memorandum is prepared by CME Engineering Group, D.P.C. (CEG), a subconsultant to CME Associates, Inc. (CME). This memorandum is issued pursuant to authorization of CME's continuing geotechnical services by Client (Ramboll), described in CME Proposal Number 28062A-06-0924, by Ramboll Purchase Order Number: 1950006347 and subsequent oral modification by Andy Philips on 09/27/2024.

This memorandum presents preliminary design parameters for drilled piers and driven steel H-piles for use within the FAB 1 construction area at the Micron Campus in Clay, New York. These recommendations are provided presuming that a satisfactory platform level design and installation will be completed prior to final selection and design of foundation type(s) for each structure planned for this FAB 1 construction. All other foundation options listed in the CFR¹ will be evaluated in concert with the platform level designs, construction, and in-situ performance.

The modified scope of services for this memorandum includes presenting the following recommendations:

- Service capacity and sizing.
- Standard Specification for Design and Construction.
- Summary of construction issues and methods to overcome them.

<sup>&</sup>lt;sup>1</sup> Soils Investigation and Conceptual Foundation Report, CEG Report Number: 172E-01-0124, dated 02/06/2024

Page 2 of 8



- Spreadsheet of Boring ID, coordinates, grade elevation, and presumptive bedrock contact elevation in Excel spreadsheet format and a contour map of presumptive bedrock contact elevation, overlain with the current Jacobs Site Master Plan in pdf format.
- Ancillary relevant information such as frost depth, load testing, and minimum spacing between foundation elements.
- Geotechnical design basis including provision for Down Drag (also called Negative Skin Friction).

The geotechnical design basis for the drilled pier foundations presented under this service scope is understood to be called out in the Jacobs SOW<sup>2</sup> Item 14 excerpt given below:

"The structures listed are anticipated to be supported by mat slabs supported by deep foundations bearing on bedrock, so the soils need only support the construction up to the point where the mat slab concrete has hardened."

Thus, estimates of down drag are incorporated into the foundation element capacity calculations, reducing the drilled pier and driven pile service capacities. There are other inherent risks associated with this design basis directive, such as long-term post-construction settlement of the near-surface and surface improvements, which need to be evaluated by Jacobs. Also, depending on other factors such as platform construction, installation timing, and ground improvement technologies implemented, the foundation sizes may be reduced or increased.

This report is made in reliance on the existing CME Geotechnical Data Reports (GDR) and CEG Geotechnical Engineering Reports (listed below) and the Jacobs SOW Design Basis and Design Criteria given in Items 14 and 15.

#### Geotechnical Data Reports:

Date Issued	<u>Title</u>	<u>Total Pages</u>	
06/19/2023	Ph. 1 GDR	154	
06/12/2023	Ph. 2 GDR	172	
12/08/2023	Combined Ph. 1 & Ph. 2 GDR	693	
07/16/2024	Ph. 3 GDR	381	
Geotechnical Engineering Reports:			
<u>Date Issued</u>	<u>Title</u>	<u>Total Pages</u>	
02/06/2024	Soils Investigation and	915	
	Conceptual Foundation (CFR) Re	port	
08/08/2024	Geotechnical Engineering and	8	
	30% Civil Design Q & A		
	06/19/2023 06/12/2023 12/08/2023 07/16/2024 <b>Reports:</b> Date Issued 02/06/2024	Date Issued Title 02/06/2024 Soils Investigation and Conceptual Foundation (CFR) Re 08/08/2024 Geotechnical Engineering and	

<sup>&</sup>lt;sup>2</sup> Geotechnical Investigation Scope of Services, dated 08/30/2024

Page 3 of 8



#### 2.0 SPECIFICATION FOR DESIGN AND CONSTRUCTION

Specifications, materials, and methods of construction are presented herein.

#### 2.1 Drilled Piers

**Reference Document:** Report on Design and Construction of Drilled Piers, ACI 336.3R-14. Drilled Piers designed and installed in full conformance with the specifications and this report are predicted to settle less than about one inch.

Construction Specification: Specification for the Construction of Drilled Piers, ACI 336.1-01.

**End Bearing Stratum:** Competent bedrock defined as rock exhibiting a nominal Rock Quality Designation (RQD) greater than or equal to 25% with minimum 95% recovery, as evidenced by a 60-inch core sample run taken with an N-size double-tube core barrel equipped with a diamond impregnated core bit.

**Portland Cement Concrete:** ACI 301–Specifications for Structural Concrete.

**Concrete Mixture**: 3000 psi compressive strength (at 28 days), Type I or I/II Portland Cement Concrete, with %-inch maximum size aggregate, 6±2 inches of slump at point of discharge, and high range water reducer and retarding admixture as appropriate.

Anticipated Concrete Placement Method: Tremie method using a pig (aka: rabbit or go-devil).

**Anticipated Shaft Excavation:** By Dry Method using temporary steel casing (due to loss of ground, unstable strata, flow of saturated silts and sands into hole, and/or uncontrollable groundwater, etc.) or permanent steel casing sealed into bedrock, where warranted.

**Permanent Steel Casing:** ASTM A36 or equivalent, with a wall thickness of 1/8 inch or 0.0075 times the diameter of shaft, whichever is larger. Length equals cut-off elevation minus bedrock contact elevation. Current estimate is that 10% of drilled piers will require permanent casing, sealed into bedrock.

**Excavation into Bedrock:** Excavation into bedrock shall be achieved by drilling, coring, chipping, and chopping. No blasting is allowed.

**Bedrock Socket:** A full-diameter bedrock socket is required for all drilled piers. See the notes in Table 2 of the attached *Preliminary H-Pile and Drilled Pier Capacity Tables* for length of socket.

**Drilled Pier Length:** Drilled Pier (DP) Length may be estimated using the following formula.

DP Length = Cutoff Elevation - Presumptive Bedrock Contact Elevation + Length of Rock Socket

Page 4 of 8



See attached *Presumptive Bedrock Contact Elevation Table*. The bedrock contact elevation has been confirmed only at the Test Boring locations by extraction of bedrock core samples.

**Steel Reinforcement:** Full-depth steel reinforcement to top of rock is undesirable and only required to accommodate full uplift capacity. It is recommended that the Structural Engineer of Record minimize the steel reinforcement to that necessary to satisfy the applicable structural code requirements.

**Preconstruction Load Testing:** A comprehensive preconstruction load testing program including not less than six (6) static load tests in accordance with ASTM D-8169 *Standard Test Methods for Deep Foundations Under Bi-Directional Static Axial Compressive Load* is required. The details of this prequalification load testing program will be determined by CEG. Evaluation of test results could result in redesign. Therefore, it is recommended that this load test program occur prior to Bid of the Drilled Pier Work Scope.

**Drilled Pier Service Capacity:** See Table 2 of the attached *Preliminary H-Pile and Drilled Pier Capacity Tables*.

**Drilled Piers in Groups:** There is no reduction in service capacity for drilled piers in groups when the clear distance (i.e., shortest plan dimension between perimeters of adjacent piers) is greater than or equal to 3 feet.

**Quality Assurance**: Full time inspection of shaft excavation, bedrock socket drilling, bottom cleanliness, and concrete and reinforcement cage placement is required. One inspector per drill rig will be required. The minimum level and scope of inspection and materials testing shall conform to the New York State Building Code section titled: *Special Inspections and Tests*, the New York State Department of Transportation (NYSDOT) publication *GEM-18 – Drilled Shaft Inspector's Guidelines*, Aug. 2015, and ACI 336.3R-14.

#### 2.2 Driven Steel H-Piles

Steel H-Piles shall be designed and installed consistent with this report and the applicable NYSDOT Standard Specifications for Construction and Materials. All the design and construction criteria given below shall apply. Steel H-Piles, designed and installed in full conformance with the specifications and this report, are predicted to settle less than about one inch.

**Pile Type:** Rolled HP sections of standard dimensions. Steel for piles shall be new and unused and shall conform to the requirements of ASTM A572, Grade 50.

**Pile Shoes (Driving Points):** A pile shoe shall be factory installed on all piles. Pile shoes shall be cast steel conforming to ASTM A27-65/35, such as H-Pile Point by Skyline Steel or

Page 5 of 8



equivalent. The driving point is to be specifically selected based on its robust performance for hard driving into weathered bedrock.

**Pile Service Capacity**: See Table 1 of the attached *Preliminary H-Pile and Drilled Pier Capacity Tables*.

**Pile Length:** All piles shall be driven to practical refusal in bedrock, so lengths will vary. Pile Pay Length may be estimated using the following formula:

Pile Pay Length = Cutoff Elevation - Presumptive Bedrock Contact Elevation + 2 feet

See attached Presumptive Bedrock Contact Elevation Table.

**Piles in Groups:** There is no reduction in service capacity for piles in groups, if piles are not closer than 3 feet center-to-center spacing.

**Driving Criteria:** Piles shall be driven to Practical Refusal in bedrock using an approved pile driving hammer. Practical Refusal is defined as the condition reached when a pile being driven by the approved hammer produces a pile penetration of less than 1/4 inch after 20 blows of the hammer.

**Installation Criteria:** The WEAP analysis shall be used by the contractor to estimate pile drivability of both driving stresses and net displacement per blow at ultimate load for the Contractor's proposed hammer. The WEAP analysis shall be submitted to CEG for review and comment, and the cost of said analysis shall be included in the Contractor's Base Bid.

Axial Load Testing: Axial capacity shall be confirmed via a dynamic load testing program paid for by the Contractor. The Dynamic Method of Load Testing (ASTM D4945 Standard Test Method for High-Strain Dynamic Testing of Piles) shall be performed at a minimum frequency of six (6) tests per structure or two (2) tests per one hundred (100) piles, whichever is greater. Five (5) piles tested within each structure shall be selected for a CAPWAP analysis. The Licensed Professional Engineer that performs the load testing for the contractor, shall be currently registered in New York State, and shall sign and seal the report of load testing in accordance with New York State Education Law.

**Quality Assurance:** Full-time inspection of all pile driving installation is required, with one inspector per drill rig. The minimum level and scope of inspection and materials testing shall conform to the New York State Building Code section titled: *Special Inspections and Tests*, and the NYSDOT publication *GEM-26 – Pile Driving Inspection Manual*, August 2015.

Page 6 of 8



#### 3.0 PRESUMPTIVE BEDROCK CONTACT INFORMATION

A *Presumptive Bedrock Contact Elevation Table* is attached. This table presents the CME Test Boring ID, location coordinates, elevation at grade, and presumptive bedrock contact elevation. The bedrock contact elevation has been confirmed only at the test boring locations by extraction of bedrock core samples. See the Geotechnical Data Reports (GDRs) for Test Boring Logs, classification of rock samples recovered, photographs of core samples, and "General Information and Key to the Test Boring Log" for the terms and definitions used in soil and rock classification. A map of presumptive bedrock contact elevation overlaid with the current Jacobs Site Master Plan, titled *Presumptive Bedrock Contact Elevation Contour Map* is attached.

#### 4.0 SUMMARY OF CONSTRUCTION ISSUES

A *Drilled Pier vs. Driven Steel H-Pile Comparison Table* is attached. This table presents several practical geotechnical design and construction, as well as cost and schedule related issues and risks. Based upon CEG's experience and considering the complexity and magnitude of this project, it is CEG's professional opinion that "simpler is better". Also, when it is within our purview and ability to minimize and manage known risks, it is prudent to do so.

In CEG's professional opinion, deep foundations consisting of driven H-Piles, a non-displacement pile, is recommended. Installation fugitive vibration (which is understood to adversely affect Micron's fabrication and production) may be controlled by implementing one or several relatively inexpensive and time efficient traditional methods and should be evaluated and accepted by the Project Vibration Consultant. An H-Pile deep foundation is a much less risky alternative to drilled piers, from a geotechnical design, installation, and performance standpoint. It is also understood that fugitive vibration from any of the various construction operations prior to the commissioning of FAB 1 for microchip fabrication would not or should not be an issue.

From a geotechnical engineering standpoint, there are several risks which are unquantifiable with respect to the satisfactory performance of drilled pier foundations. One of the primary concern is as-built drilled pier settlement risk.

The quality of the in-situ bedrock, as measured by Rock Quality Designation (RQD) in the upper 5 feet, varies in classification from "very poor" (RQD less than 25%) to "excellent" (RQD greater than 90%). Empirical data and universally recognized literature relate drilled pier foundation settlement to RQD. A single drilled pier foundation over bedrock that exhibits an RQD of less than 25% may settle more than the one-inch design tolerance. Approximately 11% of the core samples taken exhibit an RQD less than 25%. It is not possible to define the arial extents where the rock quality is very poor, because the Test Boring bedrock samplings are spaced out several hundred feet apart and the site area is about 1,400 acres.

Page 7 of 8



To help reduce the settlement risk, the pier is socketed into bedrock, which will add significant increased cost and much longer time of installation impacts, along with several adverse installation and quality assurance consequences. These are some but not all the reasons that CEG did not recommend drilled piers in the Concept Geotechnical Report (CFR) and still does not recommend drilled piers as the single foundation solution for the FAB 1 construction at the Micron Clay, New York Site.

In-situ bedrock quality is not an issue with H-Piles, because each pile is driven through very poor-quality rock to competent end bearing sufficient to mobilize the element's full ultimate capacity, and the quality is consistently assured at the end of driving every pile. Further, there is redundancy (i.e., multiple piles under one pile cap) built into the foundation system. CEG recommends the selection of driven H-Piles in-lieu of drilled piers for the FAB 1 construction. H-Piles will also be more compatible with the geotechnical and earthwork solutions (platform design) yet to be developed and as described in the CFR.

#### 5.0 ANCILLARY INFORMATION

**Frost Depth**: For heated space, a minimum of four feet (4') frost cover is recommended for all foundation elements (footings, pile caps, grade beams, mats, foundation slabs, etc.) exposed to freezing temperatures. The bottom of interior foundation elements in heated space may be set as high as practical. For unheated space, a minimum frost cover of four feet six inches (4'-6") is recommended for all foundation elements. Frost cover is measured from final adjacent exterior grade to bottom of foundation element.

Mass Fill Material: It is understood that locally sourced imported granular fill will be used as Controlled Engineered Fill for FAB 1 construction. Imported material shall be a well-graded natural sand and gravel, meeting the quality and gradation requirements of the NYSDOT Standard Specifications for Construction and Materials, Item No. 304.14 Subbase Course Type 4.

#### 6.0 CLOSING

CEG has endeavored to conduct the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the geotechnical engineering profession currently practicing in the same locality and under similar conditions as this project.

Please do not hesitate to contact the undersigned engineers if you have any questions regarding this report, its conclusions, its recommendations, or its application to planning, design, and/or actual field conditions revealed in the future. CEG looks forward to working with the Design & Construction Teams and future interaction necessary to the success of this project.

Page 8 of 8



Thank you for the opportunity to prepare this Geotechnical Memorandum. Please contact our office with any questions that you may have.

CME ENGINEERING GROUP, D.P.C.

Anas N. Anasthas, P.E.

President / Senior Geotechnical Engineer

Christopher R. Paolini, P.E.

Senior Vice President

Marcus A. Rotundo, P.E.

Senior Principal Engineer

#### Attachments:

Preliminary H-Pile and Drilled Pier Capacity Tables (1 of 1)

Drilled Pier vs. Steel H-Pile Comparison Table (1 of 1)

Presumptive Bedrock Contact Elevation Table (1 of 1)

Presumptive Bedrock Contact Elevation Contour Map (1 of 1)

Preliminary H-Pile and Drilled Pier Capacity Tables
Page 1 of 1

Table 1: Preliminary H-Pile Capacity					
Steel H-Pile	Axial Service Capacity (kips)	Uplift Service Capacity (kips)	Lateral Servi (Kips) -	ice Capacity - Note B	
Size	Note A	Note B	Strong Axis	Weak Axis	
HP12x53	100	15	7	5	
HP14x89	300	20	10	7	
HP14x102	400	20	10	7	
HP14x117	500	20	11	8	

#### **Notes**

- A. Axial capacity shall be confirmed via a dynamic load testing program. Dynamic load testing per ASTM D4945 shall be performed at a minimum frequency of 6 tests per structure or 2 tests per 100 piles, whichever is greater.
- B. Uplift and lateral capacities can be increased by design and installation of batter piles.
- C. Full time inspection of pile driving/installation and the Contractor's dynamic load testing is required. One inspector per drill rig is required.
- D. See report text for other requirements.

Table 2: Preliminary Drilled Pier Capacity				
Shaft				
Diameter	Axial Service Capacity	Uplift Service	Lateral Service Capacity	
(ft)	(kips)	Capacity (kips)	(kips)	
2.5	550 (See Note 1)	95	17	
3.0	950 (See Note 1)	115	23	
3.5	1,450 (See Note 2)	140	30	
4.0	2,000 (See Note 2)	160	37	
4.5	2,750 (See Note 2)	185	49	
5.0	3,500 (See Note 2)	210	52	
5.5	4,400 (See Note 2)	240	61	
6.0	5,400 (See Note 2)	265	70	

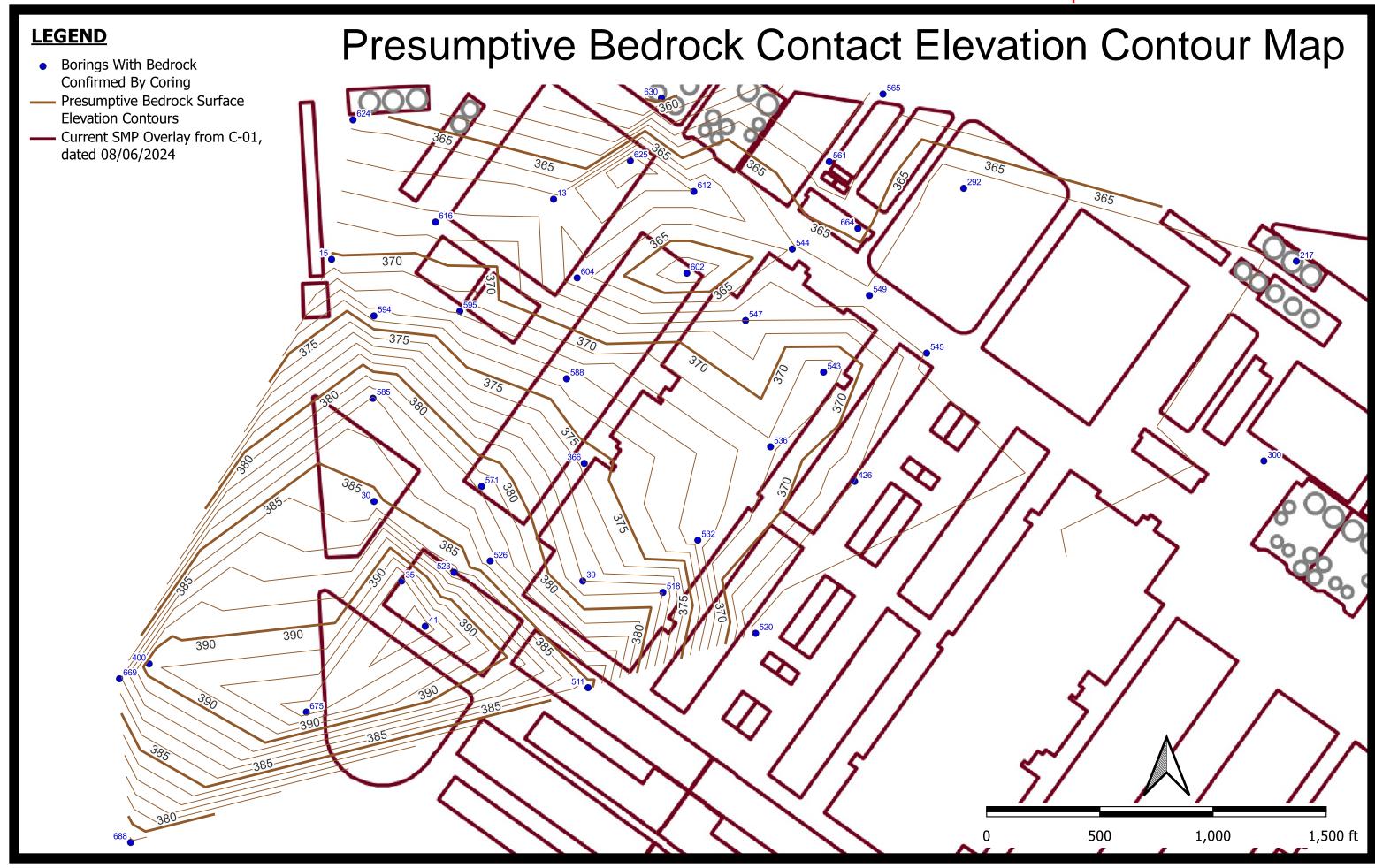
#### **Notes**

- 1. A full-diameter bedrock socket of 3-ft length is required.
- 2. A full-diameter bedrock socket is required. Socket length shall be equal to the shaft diameter (For example: 6-ft diameter drilled pier shall have a 6-ft diameter and 6-ft deep rock socket).
- 3. Full-time inspection of shaft excavation, bedrock socket drilling, bottom cleanliness, and concrete and reinforcement cage placement is required. One inspector per drill rig during drilling and concreting.
- 4. Axial service capacity shall be verified by a preconstruction static load testing program. A minimum of 6 static load tests per ASTM D8169 shall be performed for each FAB building. Evaluation of load test results could result in redesign.
- 5. Include an allowance for 10% of the total number of drilled piers to be installed with a permanent casing.
- 6. See report text for other requirements.

Micron Campus – FAB 1, Clay, New York Drilled Pier vs. Steel H-Pile Comparison Table Page 1 of 1

		Drilled Pier	Driven Steel H-Pile
1.	Diameter	Large (2.5 to 6-feet diameter)	Essentially non-displacement
2.	Volume of Spoil Removal	Large volumes of saturated mud spoils requiring continuous removal from work zone	No spoil
3.	Ease of Material Delivery and Storage	Large volumes of fresh concrete must be delivered continuously & without interruption during pier installation. Large area required to store prefab Rebar Cages	Steel piles can be pre-ordered, delivered and efficiently stacked & stored on or off-site, so they are readily available for installation.
4.	Bedrock Quality Issue	Unknown extents of very poor bedrock require rock sockets to help reduce settlement risk.	Every pile is driven to a quality assured capacity through very poor-quality rock.
5.	Effects from natural groundwater conditions & drainage improvements	Large diameter shaft will penetrate inuse buried geotextile, French, trench and blanket drainage, PVDs and other improvements, destroying said. Aquifers and Artesian groundwater conditions pose great risk of unexpected "changed site condition" claims by the construction team.	Piles can be driven through drainage improvements without issues to overcome and inflicting minor damage. Also, piles will not bind up with geotextile and destroy the integrity of the drain the way drilled shaft augers will.
6.	Dewatering	Temporary and permanent casing, dewatering and turbid discharge accommodation required. Potential artesian conditions and caving soils must be dealt with.	No casing, no dewatering required. Also, no sedimentation basins required to lower turbidity to environmental permit discharge limit.
7.	Installation and As- built Quality Issues	Underwater placement of concrete required (i.e. tremie method) and withdrawal of temporary casing results in neck-down or cave-in of soil difficulties and effective diameter and service capacity reduction; and requires Integrity Testing to assure quality.	Piles will be driven with a prequalified hammer and driving resistance carefully monitored to assure endbearing integrity for every pile. Simple and quick restrike procedure when questionable.  Also, no integrity testing required.
8.	Speed of Installation	Slow to very slow (about 1/3 to 1 per shift per crew) depending on subsurface conditions.	Fast (about 30 to 50 per shift per crew)
9.	End Bearing Quality Assurance	Impossible to visually inspect bedrock bearing surface to assure quality and intimate contact concrete-to-bedrock	Every pile is driven to practical refusal in bedrock and is easily monitored to assure end bearing.
10.	Load Testing	Static load testing is required before Bid, which is expensive, time consuming, and requires reaction piles and loading frame. Only a limited number of piers can be tested from a monetary, time and schedule standpoint.  Load test set up and testing will take 2 to 4 weeks/test and could result in redesign.	Dynamic load testing is expedient and inexpensive. Many piles (10 to 20 per shift per testing crew) can be tested quickly & contemporaneously while pile driving without production delay. No need for reaction piles, loading frame, tell-tails and electronic monitors.
11.	•	Significantly larger and more massive when group piers are required	Smaller pile caps
12.	Downdrag and reduced service capacity	Significantly greater due to larger diameter & rough surface correspond to greater concrete-to-soil bond and downdrag, greatly reducing effective service capacity.	Significantly smaller due to smaller diameter & smooth surface correspond to less pile-to-soil skin friction, less downdrag & more efficient capacity.

					Grade	Depth to	Bedrock Surface
Boring ID	Latitude	Longitude	Northing (ft)	Easting (ft)	Elevation (ft)	Bedrock (ft)	Elevation (ft)
B-13	43.195649	-76.162720	1164662.6	932366.8	391.1	23.8	367.3
B-15	43.194933	-76.166403	1164397.0	931386.1	394.0	23.8	370.2
B-30	43.191994	-76.165719	1163326.8	931573.7	392.3	7.0	385.3
B-35	43.191028	-76.165267	1162975.3	931696.1	397.4	4.0	393.4
B-39	43.191017	-76.162268	1162975.3	932496.0	397.0	19.0	378.0
B-41	43.190479	-76.164883	1162775.4	931799.5	398.8	4.3	394.5
B-217	43.194852	-76.150421	1164388.9	935648.1	387.8	21.9	365.9
B-217	43.192349	-76.130421	1163479.6	936225.2	389.3	24.0	365.3
B-292	43.195755	-76.155925	1164710.7	934178.5	385.5	18.5	367.0
B-292 B-300	43.192432	-76.150976	1163506.1	935504.5	393.6	28.0	365.6
	43.192444	-76.130976	1163495.2	932502.4	393.0	17.3	375.7
B-366						8.8	
B-400	43.190039	-76.169458	1162609.1	930580.2	399.6		390.8
B-426	43.192209	-76.157757	1163415.5	933696.8	390.5	22.5	368.0
B-511	43.189724	-76.162190	1162503.9	932519.2	400.6	15.0	385.6
B-518	43.190875	-76.160942	1162925.1	932849.7	393.4	14.4	379.0
B-520	43.190373	-76.159410	1162744.3	933259.3	395.7	29.1	366.6
B-523	43.191130	-76.164400	1163013.4	931927.2	393.5	7.2	386.3
B-526	43.191266	-76.163801	1163064.0	932086.7	396.9	13.5	383.4
B-532	43.191500	-76.160360	1163155.6	933004.0	396.5	24.0	372.5
B-536	43.192634	-76.159148	1163568.5	933325.1	387.2	16.0	371.2
B-543	43.193536	-76.158263	1163898.7	933559.3	392.1	20.2	371.9
B-544	43.195030	-76.158771	1164442.3	933421.2	381.6	15.5	366.1
B-545	43.193759	-76.156553	1163982.3	934014.8	392.6	25.7	366.9
B-547	43.194167	-76.159550	1164126.9	933214.9	389.0	21.0	368.0
B-549	43.194462	-76.157497	1164237.3	933761.9	391.3	25.1	366.2
B-561	43.196087	-76.158150	1164828.6	933584.7	383.5	20.4	363.1
B-565	43.196903	-76.157255	1165127.2	933822.0	381.2	18.0	363.2
B-571	43.192169	-76.163937	1163393.0	932048.7	391.3	9.5	381.8
B-585	43.193245	-76.165729	1163782.7	931569.0	394.1	11.0	383.1
B-588	43.193471	-76.162519	1163869.3	932424.4	384.4	11.0	373.4
B-594	43.194245	-76.165707	1164147.1	931572.9	392.9	19.5	373.4
B-595	43.194297	-76.164283	1164167.8	931952.6	390.4	18.6	371.8
B-602	43.194744	-76.160518	1164335.8	932955.8	384.9	21.8	363.1
B-604	43.194694	-76.162336	1164315.1	932470.9	391.4	25.0	366.4
B-612	43.195734	-76.160396	1164696.8	932986.3	391.6	23.6	368.0
B-616	43.195379	-76.164678	1164561.8	931845.2	392.5	24.2	368.3
B-624	43.196623	-76.166037	1165013.5	931480.7	389.8	24.1	365.7
B-625	43.196110	-76.161446	1164832.5	932705.8	385.8	16.0	369.8
B-630	43.196869	-76.160925	1165109.7	932843.2	381.7	22.0	359.7
B-632	43.197053	-76.159210	1165179.3	933300.1	383.8	22.0	361.8
B-664	43.195276	-76.157682	1164533.4	933711.1	389.8	25.1	364.7
B-669	43.189860	-76.169951	1162543.3	930449.2	399.9	13.2	386.7
B-675	43.189445	-76.166857	1162396.2	931275.0	403.9	10.5	393.4
B-688	43.187875	-76.169779	1161819.9	930498.5	394.8	16.0	378.8



# PRELIMINARY EARTHWORK CRITERIA MEMORANDUM (LANGAN)



# Memorandum

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 368 Ninth Avenue, 8<sup>th</sup> Floor New York, NY 10001 T: 212.479.5400 F: 212.479.5444

**To:** Jeffrey Maidment, Kayla Case, CK Tang, Terry Nasapara - Micron

From: Saul Shapiro, Arthur Alzamora, Anthony Cennamo - Langan

**CC:** Langan Micron Team

Jacobs Yankee Team

File

Date: 12 February 2025

Re: Preliminary Earthwork Criteria

Micron New York Manufacturing Facility

Clay, New York

Langan Project No.: 170883801

We have prepared this memorandum in response to the request for information pertaining to earthwork operations at the proposed Micron New York Campus located within the White Pine Commerce Park in Clay, New York. The list of requested items was identified in Item 21 of the Geotechnical RFP Bid Clarifications Log of 4 December 2024 (copy attached).

#### **DESCRIPTION AND CLASSIFICATION OF EXISTING SITE SOILS**

The existing site soils are generally comprised of topsoil underlain by low plasticity clayey silt soils with small concentrations of sand and gravel which are in turn underlain by heterogeneous glacial till soils comprised of sand, silt, clay, and gravel and finally dolostone or shale bedrock. We note that soils on the south side of the site, where drumlins are present, are reported to have higher concentrations of sand and gravel as would be expected based on the depositional environment. These areas also represent zones the depth of soil overburden is least, with the rock topography typically trending downward towards the northeast.

#### **USCS Classification**

The majority of the site soils generally classify as low plasticity silt (ML) or clayey silt (ML-CL) in accordance with the Unified Soil Classification System (USCS). Areas containing drumlins on the south side of the site tend to show higher concentrations of sand and gravel within the soil matrix, but these soils are still predominantly silt typically classify as ML.

#### **USDA Hydrologic Soil Group**

The United States Department of Agriculture (USDA) Hydrologic Soil Group (HSG) varies within the property from A to D, but over 93 percent of the property includes areas containing HSG = D. As such, for the purposes of site-wide design of stormwater management systems, we recommend assuming HSG = D. An overlay property limits on the USDA Soil Survey mapping is attached for reference.

Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York

Langan Project No.: 170883801 12 February 2025 - Page 2 of 10

For reference, the USDA definition for each soil group is as follows:

- <u>Hydrologic Soil Group A</u> Soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sand and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.
- <u>Hydrologic Soil Group B</u> Soils having moderate infiltration rates when thoroughly wetted, consisting chiefly of moderately deep or deep, moderately well or well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
- <u>Hydrologic Soil Group C</u> Soils having slow infiltration rates when thoroughly wetted, consisting chiefly of (1) soils with a layer that impedes the downward movement of water, or (2) soils with moderately fine or fine textures and slow infiltration rate. These soils have a slow rate of water transmission.
- <u>Hydrologic Soil Group D</u> Soils having very slow infiltration rates when thoroughly wetted, consisting chiefly of (1) clayey soils with high swelling capacity or potential, (2) soils with a high permanent water table, (3) soils with claypan or clay layer at or near the surface, and (4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission.

#### **CLEARING, GRUBBING, AND STRIPPING**

Prior to commencing fill operations, the site will need to be cleared and grubbed of trees, brush and other surficial cover, including all root matter. We anticipate that clearing operations will likely be completed in a single season to avoid protracted schedule impacts resulting from protected endangered species that may seasonally inhabit some areas of the property. Following clearing and grubbing, or coincident with such operations, the site will need to be stripped of surficial topsoil and organic matter, and very soft surficial soils. For the purposes of preliminary design, we recommend assuming removals to a minimum depth of 18-inches. Following such removals, we anticipate that much of the site will require placement of a layer of clean crushed stone aggregate to stabilize the subgrade and facilitate placement and compaction of new fill in the dry. The use of crushed stone materials is considered necessary because of the to the poor draining nature of the near-surface silt soils and the reported presence of high groundwater.

#### **REUSE OF EXISTING SITE SOILS**

#### Topsoil

Topsoil can be stripped and reclaimed for reuse where desired. Based on review of the available data compiled by CME Associates and our general experience, we would expect that screening or the addition of amendments may be required to improve the soil. This may include blending the reclaimed topsoil with sand meeting the gradation requirements of ASTM C33 to ensure particle size distributions consistent with those recommended in ASTM D5268.



Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York Langan Project No.: 170883801

12 February 2025 - Page 3 of 10

#### Site Soils - General

In general, the native site soils are not considered suitable for re-use as structural fill due the presence of high fines content (percent by weight passing a No. 200 sieve). The results of the subsurface investigation completed by CME Associates indicate that most of the soil within the site classifies as silt with varying concentrations of clay, sand, and gravel. The in-situ natural moisture contents of these soils tend to be well outside the reported optimum range necessary to achieve proper compaction and would require drying procedures such as discing to aid drying. Silt-rich soils are generally a poor construction material. Such soils are frost susceptible and are prone to degradation and softening when subjected to freeze-thaw cycles. Further, silts are prone to degradation and softening when subjected to construction traffic or vibratory loading while outside of their optimum moisture content. Use of such soils should be precluded within the limits of proposed structures, especially those to be founded on shallow foundations. Their use without significant amendment may lead to construction delays or the need to employ stabilization methods, particularly if they are not dried or become wetted following placement. While not suitable for structural purposes (without significant amendment), the existing site soils are likely suitable for reuse as detention pond embankments or in landscaped areas. The native clayey silts are likely also suitable for use as detention pond liners and are expected to comply with the requirements outlined in the NYSDEC Stormwater Management Design Manual for liner materials.

#### **IMPORTED SOILS**

All fill materials should be free of trash, debris, roots, vegetation, peat, or other deleterious materials and should be approved by the Geotechnical Engineer prior to placement. Imported fills shall be free of contaminants in excess of the permissible concentrations dictated by all applicable state and federal agencies having jurisdiction. Additionally, imported fills should meet the requirements identified below for the specific applications as identified herein.

#### **Subgrade Stabilization and Drainage Materials**

The following coarse aggregate materials shall be used as subgrade stabilization and drainage materials. All such materials shall be comprised of crushed bedrock crushed gravel, or natural gravel meeting the physical and gradation requirements outlined herein. Coarse aggregate materials shall be free of organics and other deleterious materials and shall be sound, durable, and non-reactive. Coarse aggregate shall be tested for soundness in accordance with NYSDOT Method No.: 703-07P,G and shall demonstrate Magnesium Sulfate Soundness losses less than or equal to 10 percent by weight after 10 cycles.



Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York

Langan Project No.: 170883801 12 February 2025 - Page 4 of 10

#### AASHTO Size No. 1

US Sieve Size	% Passing by Weight
4"	100
3 ½"	90 – 100
2 ½"	25 – 60
1 ½"	0 – 15
3/4 "	0 – 5

#### AASHTO Size No. 357

US Sieve Size	% Passing by Weight
2 ½"	100
2"	95 – 100
1"	35 – 70
1/2"	10 – 30
No. 4	0 – 5

#### AASHTO Size No. 57

US Sieve Size	% Passing by Weight
1 ½"	100
1"	95 – 100
1/2"	25 – 60
No. 4	0 – 10
No. 8	0 – 5

#### **Granular Fill**

Granular fill shall be used for general site filling operations, and for backfill beneath and behind structures (i.e., Structural Fill). Granular fill be comprised sand, gravel, crushed stone, or other approved recycled materials. Granular fill shall be sound, durable, and non-plastic and except as modified herein shall comply with the requirements of NYSDOT Standard Specification 733-04. Granular fill shall only be placed during the periods of freezing weather subject to the approval of the Geotechnical Engineer. Where not otherwise permitted due to inclimate conditions, granular fill shall be replaced with AASHTO No. 57 materials, except that the AASHTO No. 57 gradation shall be modified to permit up to 2 percent by weight passing the No. 200 sieve.

US Sieve Size	% Passing by Weight
4"	100
2"	90 – 100
1/4 "	30 – 65
No. 40	5 – 40
No. 200	0 – 15





Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York

> Langan Project No.: 170883801 12 February 2025 - Page 5 of 10

#### **Paving Subbase**

Paving subbase materials shall be comprised of sand, stone, gravel, or other approved recycled materials meeting the requirements for NYSDOT Standard Specification 733-04, Type 1.

US Sieve Size	% Passing by Weight
3"	100
2"	90 – 100
1/4 "	30 – 65
No. 40	5 – 40
No. 200	0 – 10

#### **Utility Bedding Sand**

Bedding for utilities shall be comprised of natural sand having the gradation presented herein and a pH value between 5 and 10.

US Sieve Size	% Passing by Weight
1/2"	100
1/4 "	90 – 100
No. 200	0 – 5

#### Thermal Sand

Thermal sand is recommended for use as backfill for utilities requiring improved heat dissipation. Such materials shall be comprised of clean quartz-rich sand, free of cinders, ash, organic matter, and other deleterious matter, meeting the gradation requirements presented herein. Thermal sand shall have a minimum pH of 5.5, a dry unit weight equal to 115 pcf, and a maximum thermal resistivity equal to 120 °C·cm/Watt at dry-out conditions at 95 percent of the maximum dry density determined in accordance with ASTM D1557.

US Sieve Size	% Passing by Weight
3/8"	100
No. 4	70 – 90
No. 8	60 – 75
No. 30	35 – 50
No. 50	15 – 30
No. 200	3 – 8

#### **Soil Detention Pond Lining**

Per the NYSDEC Stormwater Management Design Manual, detention ponds liners shall be comprised of clay and/or silt rich soils having at least 50 percent by weight passing a standard US No. 200 sieve and shall have a maximum permeability of 1x10-5 cm/s.



Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York

Langan Project No.: 170883801 12 February 2025 - Page 6 of 10

#### **SLOPES**

Based on a review of the available subsurface data, we believe that unreinforced earthen slopes up inclinations of up to 2H:1V are possible; however, we recommend that slopes not exceed a maximum inclination of 3H:1V. While steeper slopes are permissible from a stability standpoint, our experience is that increasing the slope inclination can lead to issues with establishment of vegetation and reduced access for maintenance such as mowing. Also, we note that the New York State Department of Environmental Conservation (NYSDEC) Stormwater Management Design Manual limits permissible slope inclination for detention ponds to 3H:1V. Slope heights exceeding 25 feet should be broken up with horizontal benches or by terracing with retaining walls. Drainage measures such as swales should be implemented at the tops of slopes to divert surface water runoff away from the slope face. Upon completion of final grading, slopes should be vegetated with a deep-rooted grasses or other appropriate plantings as soon as possible to avoid potential erosion and/or raveling. Grasses such as red or hard fescue are considered viable for general use, but alternative species are considered warranted for detention pond or drainage ditch areas where wet soils may be expected for extended periods. Use of stabilization measures such as mulch, jute mesh, erosion control blankets, or geosynthetics may be necessary to help establish vegetation, especially for slopes inclined at greater than 3H:1V.

#### **Fill Slopes**

Fill slopes should be constructed from the bottom up by creating a level key within firm stable subgrade materials. The key should be cut below any existing topsoil or loose/soft surficial soils to improve basal stability. The existing surface should be benched into competent materials to allow fill to be placed in horizontal lifts. Loose lift thickness should not exceed 12 inches and each lift should be compacted to at least 92 percent of the maximum dry density determined in accordance with ASTM D1557.

#### **Cut Slopes**

Cut slopes should be formed with uniform linear inclinations. The inclination of cut slopes may need to be reduced from the maximum value indicated above where excavations extend below the groundwater table or where seepage is observed through the slope face. Where such conditions occur, stabilization and/or permanent erosion controls measure of the slope face may also be required.

#### **RETAINING WALL DESIGN CRITERIA**

For the purposes of preliminary design, we recommend that retaining walls assume the following geotechnical parameters. Walls which are free to rotate should be designed assuming active earth pressure conditions whereas walls which are restrained should be design for at-rest conditions. We recommend that passive resistance be ignored above the frost line. The passive earth pressure coefficient provided herein assumes an applied factor of safety (FS) equal to 2.0 to reduce the translation necessary to mobilize resistance. All walls should be designed assuming a minimum factor of safety of 1.5 for sliding and overturning resistance and all walls shall bear at least 4 feet below adjacent grade.



Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York

> Langan Project No.: 170883801 12 February 2025 - Page 7 of 10

Soil Class	Description	Parameter	Estimated Range	Preliminary Recommended Value	Unit
	Moist Unit Weight	γd	120 to 130	120	lb/ft <sup>3</sup>
	Friction Angle	ф	34 to 40	36	degrees
	Cohesion	С	0	0	lb/ft²
Granular or	Active Earth Pressure	Ka	0.28 to 0.22	0.26	-
Aggregate Fill	Passive Earth Pressure Coefficient	Kp	3.5 to 4.6	190 (FS = 2)	-
	At-Rest Earth Pressure Coefficient	Ko	0.45 to 0.35	0.42	-
	Interface Friction Coefficient	μ	0.4 to 0.5	0.45	-
	Allowable Bearing Pressure	Qa	4 to 8	6 (1)	kip/ft²
	Moist Unit weight	γ <sub>d</sub>	100 to 125	115	lb/ft <sup>3</sup>
	Friction angle	ф	28 to 32	30	degrees
	Cohesion	С	0 to 200	0	lb/ft²
Native Site	Active Earth Pressure	K <sub>a</sub>	0.36 to 0.31	0.33	-
Soils	Passive Earth Pressure Coefficient	Kp	3.0	1.5 (FS = 2)	-
	At-Rest Earth Pressure Coefficient	Ko	0.55 to 0.47	0.50	-
	Interface friction coefficient	μ	0.3 to 0.4	0.3	-
	Allowable Bearing Pressure	Qa	2 to 4	3	kip/ft²

<sup>(1)</sup> The allowable bearing pressure indicated does not consider potential reductions necessary to account for underlying soft or compressible soils of lower strength. The allowable bearing pressure for final design shall be evaluated on a case-by-case basis based on local in-situ soil conditions and proposed wall geometry.

#### FILL PLACEMENT AND COMPACTION CRITERIA

Fill should be placed in uniform loose lifts not exceeding 12 inches in thickness in open areas and 6 inches in thickness in confined areas. Fill shall not be placed on frozen ground or on subgrades that contain topsoil, organics, snow, ice, rubbish or other deleterious materials. Fill placement in standing water shall only be performed where directed by the Geotechnical Engineer and material selection for such use shall be subject to the review and approval of the Geotechnical Engineer.

All subgrades should be proof-rolled prior to placement of fill and any moisture-sensitive soils that exhibit pumping and heaving during proof-rolling should be excavated to a depth of 12-inches and replaced with free draining crushed stone or gravel meeting the requirements for stabilization materials as described herein.

With the exception of landscaped areas, all fill placed should be compacted to at least 95% of its maximum dry density as determined by ASTM D1557. In landscaped areas, compaction may be reduced to 92% of the maximum dry density as determined by ASTM D1557. Compaction within 5 feet of retaining walls and foundation walls should be performed using hand operated equipment, unless otherwise approved by the Geotechnical Engineer. The water content at the



Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York Langan Project No.: 170883801

12 February 2025 - Page 8 of 10

time of compaction should be within 2 percent of the optimum value determined by ASTM D1557.

#### STORMWATER POND DESIGN CRITERIA

We understand that 17 permanent detention ponds are proposed for stormwater management within the site and that the ponds will not be relied upon for infiltration. The design of detention ponds should comply with the NYSDEC Stormwater Management Design Manual. Per Chapter 6 of the manual, ponds not serving as treatment for the stormwater are not required to maintain any separation from the seasonal high groundwater table. Based on a review of groundwater conditions reported by CME Associates, we believe that several of the ponds extend below the groundwater table. As the groundwater level is unlikely to decrease as a result of the proposed development, we do not recommend extending pond bottoms below estimated groundwater table. Ponds formed in cut zones should be constructed in accordance with the criteria for cut slopes outlined herein. Where ponds are formed by filling, the resulting embankments should be constructed in accordance with the criteria for fill slopes outlined herein. We expect that the native site soils can reused to form the embankments; however, as noted prior these soils may prove difficult if not within 2 percent of their optimum moisture content at the time of placement. The native soils are generally expected to suffice for pond liner material; however, a liner will likely be needed in areas where the ponds are constructed via new fill.

A summary of the local conditions at the proposed stormwater management practice (SMP) areas.

SMP	Parameter	Value	Notes
	Pond Bottom Elev.	374 to 378	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
	Est. GW Elev.	376 to 378	No data available in this area. Groundwater assumed to reside near-surface in this area of the site
'	Est. Top of Rock Elev.	N/A	No data available in this area. Rock expected to reside well below pond based on general trend of bedrock topography and is not expected to impact pond construction.
	Pond Bottom Elev.	391	Current pond bottom indicated on grading plan is expected to reside near the groundwater table.
2	Est. GW Elev.	390 to 392	No data available in this area. Groundwater assumed to reside near-surface in this area of the site.
	Est. Top of Rock Elev.	368 to 374	Rock is not expected to impact pond construction
	Pond Bottom Elev.	397 to 401	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
3/4	Est. GW Elev.	390 to 392	No data available in this area. Groundwater assumed to reside near-surface in this area of the site
	Est. Top of Rock Elev.	386 to 394	Estimated top of rock is near the bottom of the proposed pond.
5	Pond Bottom Elev.	397 to 401	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.



Preliminary Earthwork Criteria Micron New York Manufacturing Facility
Clay, New York
Langan Project No.: 170883801
12 February 2025 - Page 9 of 10

SMP	Parameter	Value	Notes
	Est. GW Elev.	401 to 412	Groundwater is believed to be perched atop rock in this area and varies from about el 401 at the NW to about el 412 at the SE corner of the pond.
	Est. Top of Rock Elev.	395 to 400	Estimated top of rock is near the bottom of the proposed pond.
	Pond Bottom Elev.	-	Varies
7-10	Est. GW Elev.	-	No subsurface data in this area.
	Est. Top of Rock Elev.	-	No subsurface data in this area.
	Pond Bottom Elev.	377.5 to 382	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
11	Est. GW Elev.	380 to 384	-
	Est. Top of Rock Elev.	-	Rock is not expected to impact pond construction in this area.
	Pond Bottom Elev.	379 to 382	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
12	Est. GW Elev.	385 to 388	-
	Est. Top of Rock Elev.	-	Rock is not expected to impact pond construction in this area.
	Pond Bottom Elev.	379 to 382	Current pond bottom indicated on grading plan is expected to reside below the groundwater table.
13	Est. GW Elev.	385 to 388	-
	Est. Top of Rock Elev.	-	Rock is not expected to impact pond construction in this area.
	Pond Bottom Elev.	380 to 384	-
14	Est. GW Elev.	385 to 388	No subsurface data in this area.
	Est. Top of Rock Elev.	-	No subsurface data in this area, but rock is not expected to impact pond construction in this area.
	Pond Bottom Elev.	389 to 392	
15	Est. GW Elev.	385 to 388	Groundwater is expected to be perched atop rock by about 1 to 2 feet in this area and would reside above the bottom of the pond.
	Est. Top of Rock Elev.	393 to 400	Estimated top of rock is above the bottom of the pond and would require rock excavation.
	Pond Bottom Elev.	-	Varies
16-17	Est. GW Elev.	-	No subsurface data in this area.
	Est. Top of Rock Elev.	-	No subsurface data in this area.



Preliminary Earthwork Criteria Micron New York Manufacturing Facility Clay, New York Langan Project No.: 170883801

12 February 2025 - Page 10 of 10

#### **REFERENCES**

American Association of State and Highway Transportation Officials, Guide Specifications for Highway Construction, 2020.

American Society for Testing and Materials, Annual Book of Standards.

New York State Department of Environmental Protection, Stormwater Management Design Manual, 2024.

New York State Department of Transportation, Standard Specifications, Volumes 1-4, 2025.

#### **ATTACHMENTS**

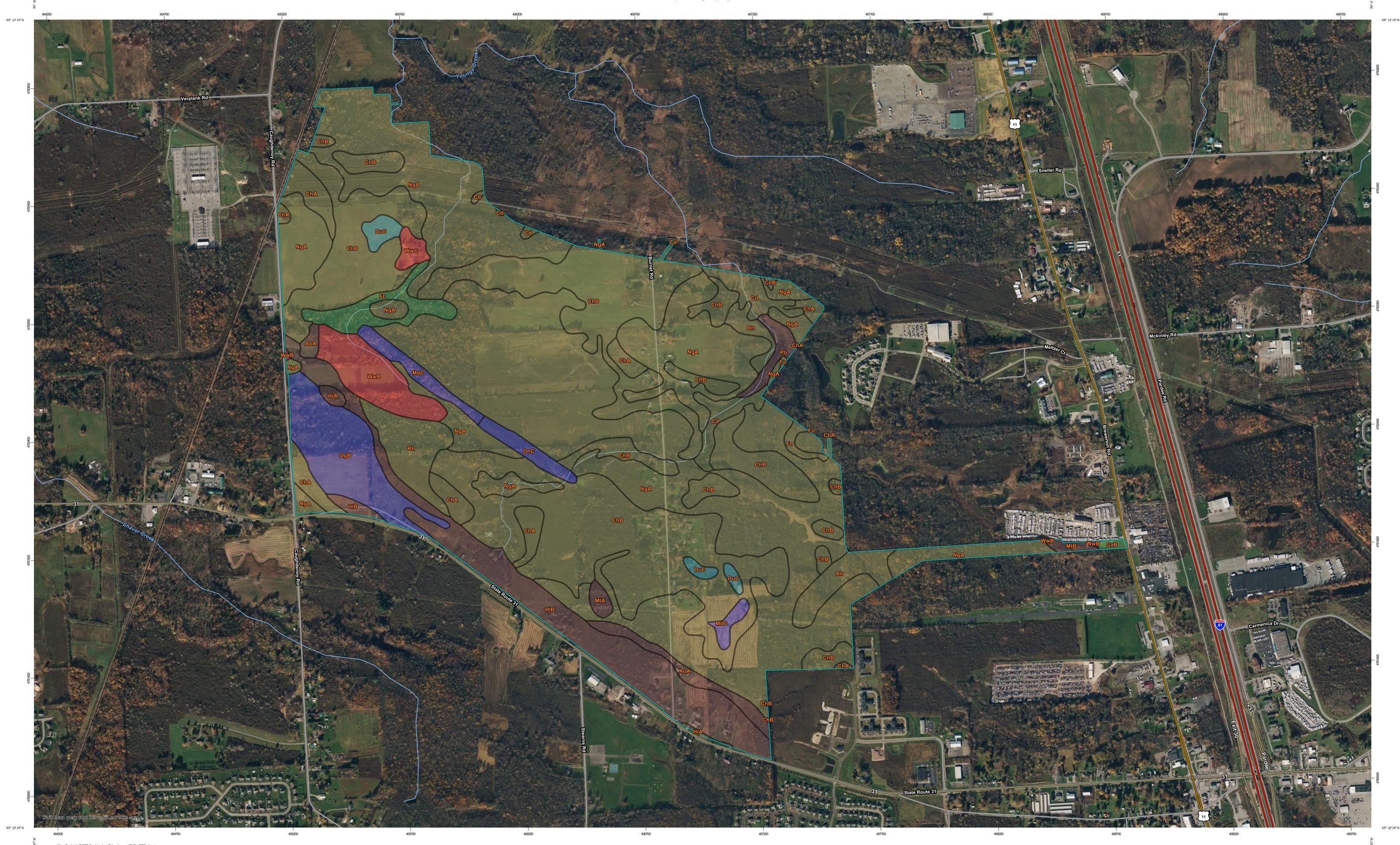
USDA Web Soil Survey Report

Bid Clarification Questions, Item 21.

\\langan.com\\data\\YC\\data\170883801\\Project Data\\_Discipline\\Geotechnical\\Reports\\Memoranda\\Civil\_Design\_Criteria\\2025-02-12\_Civil\_Criteria\_Memo.docx



# **ATTACHMENTS**



#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at Area of Interest (AOI) С 1:20.000. Area of Interest (AOI) C/D Soils Warning: Soil Map may not be valid at this scale. D Soil Rating Polygons Enlargement of maps beyond the scale of mapping can cause Not rated or not available Α misunderstanding of the detail of mapping and accuracy of soil **Water Features** line placement. The maps do not show the small areas of A/D Streams and Canals contrasting soils that could have been shown at a more detailed Transportation B/D Rails ---Please rely on the bar scale on each map sheet for map measurements. Interstate Highways C/D Source of Map: Natural Resources Conservation Service **US Routes** Web Soil Survey URL: D Major Roads Coordinate System: Web Mercator (EPSG:3857) Not rated or not available -Local Roads Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Soil Rating Lines Background distance and area. A projection that preserves area, such as the Aerial Photography Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Onondaga County, New York Survey Area Data: Version 19, Aug 29, 2024 Soil map units are labeled (as space allows) for map scales 1:50.000 or larger. Not rated or not available Date(s) aerial images were photographed: Aug 3, 2021—Nov 7. 2021 **Soil Rating Points** The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background A/D imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. B/D

# **Hydrologic Soil Group**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AoA	Appleton loam, 0 to 3 percent slopes	B/D	11.5	1.1%
Cd	Canandaigua mucky silt loam	C/D	16.9	1.7%
ChA	Collamer silt loam, 0 to 2 percent slopes	C/D	28.4	2.8%
ChB	Collamer silt loam, 2 to 6 percent slopes	C/D	291.6	28.6%
DuC	Dunkirk silt loam, rolling	С	7.4	0.7%
FL	Fluvaquents, frequently flooded	A/D	14.3	1.4%
Fo	Fonda mucky silty clay loam	C/D	2.8	0.3%
GaB	Galen very fine sandy loam, 2 to 6 percent slopes	A/D	1.1	0.1%
HIA	Hilton loam, 0 to 3 percent slopes	B/D	2.2	0.2%
HIB	Hilton loam, 3 to 8 percent slopes	B/D	71.8	7.0%
MdC	Madrid fine sandy loam, 8 to 15 percent slopes	В	11.5	1.1%
MtA	Minoa fine sandy loam, 0 to 2 percent slopes	B/D	2.6	0.3%
MtB	Minoa fine sandy loam, 2 to 6 percent slopes	B/D	1.9	0.2%
NgA	Niagara silt loam, 0 to 4 percent slopes	C/D	436.9	42.8%
OgB	Ontario loam, 3 to 8 percent slopes	В	40.2	3.9%
OnC	Ontario gravelly loam, 8 to 15 percent slopes	В	6.7	0.7%
Pb	Palms muck	B/D	5.8	0.6%
Rh	Rhinebeck silt loam	C/D	38.4	3.8%
WwB	Williamson silt loam, 2 to 6 percent slopes	D	23.9	2.3%
WwC	Williamson silt loam, rolling	D	3.9	0.4%
Totals for Area of Inte	rest		1,019.7	100.0%

#### **Description**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

### **Rating Options**

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

## Bid Clarification Questions – Item 21, dated 4 December 2024

Number	Reference	Question
21	Proposal for Geotech investigation	Micron would like to understand if the bidder will be able to provide the following information without waiting the full geotechnical evaluation. In particular, Micron would like to understand if this information could be provided within the 6-week Information Memo delivery and if not when is the earliest that the bidder expects to have this information available:  Description and classification of existing site soils Existing soils removal criteria (topsoil stripping, demucking, and over-excavation) Suitability of reuse of existing soils as Structural fill Import Structural fill requirements Maximum earthen cut and fill slopes Retaining wall design criteria. These will need to be installed as part of initial site filling. Fill compaction requirements Design criteria and/or considerations for stormwater ponds in a cut condition due to high ground water elevations. Likely an impermeable liner or clay layer will be required. Design criteria for constructed stormwater pond earthen embankments. Fill side of stormwater ponds typically require an impermeable liner or clay layer

# Appendix E-5 Micron Blasting Plan



# **NY EHS – Blasting**

#### **CONTROL INFORMATION**

Control Items	Details
Document Number	NYEHS - 002
Revision	0
Revision Date	16 May 2025
ECN Number	
Translated Documents	

1	Pur	pose	3
		ppe	
		ms and Definitions	
4		erences	
5		cument Control	
6	Rev	vision History	6
7	Sta	ndard	7
-	7.1	License, Certification, Permits, and Training	7
-	7.2	Standards of Conduct	
-	7.3	Blasting Safety Plan and Blast Design	9
-	7.4	Signs, Signals, and Traffic Control	9
-	7.5	Emergency Plan	10
-	7.6	Reporting and Recordkeeping	10

#### 1 **Purpose**

This document specifies the requirements for blasting operations as part of Micron operations within the state of New York, including construction.

#### 2 Scope

Items	Details
Site(s) Impacted	This document applies to the Fab 20 Micron-NY site in Clay, NY and associated construction activities
Target Audience	Construction Team, Site Leadership Team, Site EHS and All Micron Team members
Applicability	Micron-NY and all associated contractors

#### **Terms and Definitions** 3

Terms	Definitions
Authorized Blasting Assistant	An individual who has been authorized by the certified blaster-in-charge to work on a blasting operation after such blaster-in-charge has confirmed that the individual is either a certified blaster, or otherwise meets the following qualifications:  (1) is at least 18 years old; (2) has been properly trained in the performance of the tasks to be assigned; and (3) has been made aware of and understands the blasting hazards and risks.
Blast area	An area near any blasting operation in which concussion, flying material or debris, or gases resulting from a detonation of explosives can reasonably be expected to cause injury or property damage.
Blaster	An individual who performs any task on a blasting operation.
Blaster-in- Charge	The individual who has overall responsibility for the conduct and safety of a detonation of explosives within a blast area.
Blasting operation	The planning, preparation, detonation, and post detonation inspection of a blast. Where explosives are being used for purposes such as, but not limited to, rock and earth excavation, steel and concrete demolition, bonding metals, testing, ice breaking, industrial boiler cleaning, and seismic prospecting.
Blasting site	The specific place defined by the blaster-in-charge where explosives are used in blasting operations and where only the blaster-in-charge and authorized blasting assistants are permitted to work. A blast site is part of the blast area.
Certified blaster	An individual who holds a valid certificate of competence to act as a blaster in accordance with the NYSDOL
Explosives	See New York State Labor Law Article 16 Section 451

Terms	Definitions
Fly rock	Any material propelled from the blast area by the force of the blast.

#### 4 References

Internal References	Link
NY Construction EHS Program	Link to be added

External References	Link
12 NYCRR 61-4 Special Provisions for Blasters	Subpart 61-4 Special Provisions for Blasters
12 NYCRR 39 Possession, Handling, Storage, and Transportation of Explosives	Subpart 39 Possession, Handling, Storage, and Transportation of Explosives
NY Labor Law Article 16; 450 – 465: Explosives	Article 16 Explosives

#### 5 **Document Control**

Items	Details			
ECN Facility	Fab 20 MNY			
ECN Area	EHS SAFETY			
Approval	This document is approved by:			
	GLOBAL_EHS_SEAL_LT			
Notification	Notification of changes to this document is managed through Micron's Engineering Change Notification (ECN) process to the following:			
	Constructions Team  • MNY			
	Leadership Team  ■ MNY			
	EHS • MNY_EHS			
	Facilities  MNY_MANAGERS  MNY_CONSTRUCTION_MGRS  MNY_ALL EMPLOYEES			
Review	This document will be reviewed at least biennially (once per two years) by MNY EHS through the Periodic Document Review (PDR) process.			

# **6** Revision History

Rev	Revision Date	Description	Requestor	Conformance Date
0	16 May 16,	<b>ECN Number</b> : 101175924	DZELEZNOCK	
	2025	First published version		

#### 7 Standard

All blasting work must conform to the provisions of this standard.

All blasting work shall be managed and directed by a blaster-in-charge. All contractors and personnel that are part of the blasting operation shall be a certified blaster or authorized blasting assistant.

#### 7.1 License, Certification, Permits, and Training

All personnel associated with blasting operations shall be certified by the New York State Department of Labor (NYSDOL) in accordance with Subpart 61-4.3 and have a valid federal explosives user license from the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF). The certification of the blaster shall be in accordance with the appropriate certification class A through F, and aligned with the scope of blasting work being performed.

Certification Classes are listed below (see Subpart ;61-4.3 for more information):

- Class A Above/Below Ground
- Class B Aboveground
- Class C Belowground
- Class D Demolition
- Class E Seismic
- Class F Special Uses with total explosive material less than 50 pounds

All training and certification of blasters associated with a project must be verified and copies of the appropriate certification and training records will be documented at the project site and in the project files.

All blasting work shall be performed under the applicable operating permit issued by the local codes enforcement, along with appropriate notification procedures to the Town, local Fire Department and/or other necessary public entity.

#### 7.2 Standards of Conduct

While blasting all workers present will adhere to the following standards:

All blasts must be supervised by the Blaster-in Charge. Before any blasting can begin the blasting area must be cleared of all non-authorized personnel. To ensure that no worker who is not permitted to be in the blast site does not accidently or unknowingly enter the blast area blasting signs will be posted on all accesses to the blasting site. In addition, a blasting signal sign will be posted so the public is aware of blasting signals. Only authorized personnel may handle or work with the explosives.

Access to the blast site must be restricted prior to any loading of explosives. No smoking, open flames, or hot work permits are permitted within the blast area.

All blasting shall comply with the specific standards listed below:

- In charging holes for blasting, only non-sparking material shall be used for tamping and loading.
- Any fuse which varies more than 10 percent from an average speed when burned unconfined in the open at sea level in three-foot lengths shall not be used. Any fuse that burns faster than 90 seconds per three-foot length with more than an allowable variation of 10 percent, when burned unconfined in the open at sea level, shall not be used. Any 40 second/foot fuse length less than 36 inches shall not be used. This shall not apply to log-splitting wedges, the fuses for which may be not less than 12 inches in length. Fuses shall be cut and capped in safe, dry locations posted with "NO SMOKING" signs.
- The A.C. voltage used to detonate any blast shall not exceed 440 volts.
- All blasting operations and any handling of explosives shall be stopped immediately upon the approach of an electrical storm, and all persons shall immediately retire to a place of safety.
- All blasting operations conducted in areas that could be affected by radio frequency radiation hazards from either permanent or mobile sources shall be conducted in compliance with IME No. 20.
- Blasting caps shall be crimped to fuses only with implements designed for that specific purpose.
- Permanent electric blasting lines shall be properly supported, insulated and kept in good repair.
- If branch circuits are used when blasts are fired from power circuits, safety switches located at safe distances from the blast areas shall be provided in addition to the main blasting switch.
- Blasting switches shall be locked in the open position except when closed to fire and blast. Lead wires shall not be connected to the blasting switch until the shot is ready to be fired, except for permanent electric blasting lines.
- Electric circuits from blasting switches to the blast area shall not be grounded.
- All detonating-cord knots shall be tight and all connections shall be kept at right angles to the trunk lines.
- Blasts shall be monitored for ground vibration and airblast as required by article 8 of IME no. 3. When seismographs are used they shall
  be properly calibrated as recommended by the manufacturer and monitored by a qualified operator trained by the manufacturer of the
  device or individuals certified by the manufacturer.

 Wherever any person may be endangered from the material being blasted, such material shall be covered on all exposed sides with a strong woven matting of wire rope not less than one-half inch in diameter, or other equivalent covering which will be effective in preventing particles from being projected into the air by the blast.

#### 7.3 Blasting Safety Plan and Blast Design

The blasting contractor will create a blasting safety plan for each blast that includes the specific details of blasting signage, signals, traffic and personnel control, and emergency procedure. The blasting safety plan will be communicated to all personnel onsite and relevant details of the plan will be communicated to the nearby public as necessary for public safety.

At a minimum the safety plan must include specific details on:

- Details on how the blasting will comply with section 7.2 Standards of Conduct portion of this document
- Personal safety of all workers on the project team, including all required Personal Protective Equipment (PPE)
- Blasting safety procedures, including plan for misfires
- Drilling safety procedures
- Plan to prevent flyrock including details on stemming height, blasting mats, and delay sequence
- Detail on any hazardous materials, including necessary Safety Data Sheets (SDS)
- Hearing protection required and community noise and vibration exposure reduction efforts
- Airborne dust control plan
- Certifications and licenses of blasting company and associated personnel

Blast designs will be documented. The blast designs will be created in a manner to minimize ground vibration, air blast, flyrock, and overall risk. Included in the blast design will be an overall map of the blast, that indicates the location and depth of explosives as well as details that will be needed for recordkeeping, as indicated in section 7.6 of this document "Reporting and Recordkeeping."

No blasting materials may be stored onsite. All storage, handling, and transportation of blasting materials must be done in accordance with federal, state, and local requirements.

#### 7.4 Signs, Signals, and Traffic Control

To ensure that no personnel is accidently or unknowingly within the designated radius of the blast site, blasting signs will be posted on all access points to the blasting site and appropriately barricaded. The blast area will also be swept by the blast team to ensure no personnel is present. There will be signage to inform the nearby public of the time and duration of blasting, as well as the indicating blasting signals.

Five minutes prior to the blast, the Blaster-in-Charge will give a series of air horn signals. These signals will be repeated again one minute prior to the blast. The Blaster-in-Charge will initiate the blast once all is clear. After a successful blast the all clear signal is given and blast area can be reoccupied.

#### 7.5 Emergency Plan

In case of an emergency, Micron's onsite Emergency Response Team (ERT) will be notified. Micron's ERT will contact outside medical, or fire department support as needed.

Prior to any blasting, the contractor will confirm that appropriate Micron ERT support is available and on standby.

#### 7.6 Reporting and Recordkeeping

Within 24-hours of a blast the Blaster-in-Charge will complete a shot/blast report. This report shall be available for review by Micron and the NYSDOL and needs to be maintained for a minimum of 5 years after the blast. The report will include exactly where the blast was, including the ground material, distance to another structure not owned by Micron along with even the local time of the blast and the weather conditions at the time of the blast. The report will also include a detailed breakdown of exactly what was used before and during the explosion. This includes the exact number and type of detonators and explosives, the method for firing and circuit used, if any timing delays were used and the maximum number of explosives per delay period of eight milliseconds or greater. Lastly all reports will note any unusual or suspicious activity

If seismographs are used then the report will need to include additional information such as location of the seismograph and how far from the blast it was placed, the air blast readings, and the ground vibrations readings.

If the blast used drilled holes, then in the report the number, diameter, spacing and burden of the holes must be included as well as the height of stemming, drill logs and a description of the shop patterns including the number of holes with a delay of 8 seconds or more.

Page 10 of 10