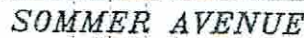




Job Number

Scan Code

Staten Island, NY



A Tech Engineering NYC, PLLC
4442 Arthur Kill Road, S.I., NY 10309
718-948-2785

A Tech Engineering NYC, P.L.L.C.
4442 Arthur Kill Rd. S.I.N.Y.,
10309 (718) 948-2785

Client: Anthony Fontana
Project: Block: 2223 Lot: 11
Address: Sommer Avenue, Staten Island, NY

BORING LOG
Boring No. B - 1 (Drywell/Building)
Page: 1 of 1

Drilling Start Date: 9/14/20
Drilling End Date:
Drilling Company: Drill Masters Inc.
Drilling Method: Hollow Stem Auger
Drilling Equipment: Acker Soil XLS
Driller:
Logged By: Anthony Santoro, P.E.

Boring Depth (ft): 37.0
Boring Diameter (in):
Sampling Method(s): Split Spoon
DTW During Drilling (ft): 31.0
DTW After Drilling (ft): N/A
Ground Surface Elev. (ft):
Location (Lat, Long):

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT					SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)	N Value RQD %			
0									(0') Asphalt	0.25' SC 4c (9-65)	0
5				SS		3	0.00	7	(0.25') Clayey SAND (SC); Fine, Moist Sand, Some Clay		5
10				SS		4	0.00	16	(10') Clayey SAND (SC); Clay, Some Silty Sand	(10.0') SC 4b (9-65)	10
15				SS		6	0.00	25			15
20				SS		10	0.00	35	(17') Clayey SAND (SC); Silty Sand and Clay, Trace of Gravel	(17.0') SC 4a (9-65)	20
25				SS		11	0.00	43			25
30				SS		14	0.00	28	(29') Clayey SAND (SC); Moist Silty Sand, Trace of Clay, Trace of Gravel	(29.0') SC 3b (7-65)	30
35				SS		17	0.00	23	(31') Groundwater Table at 31'	(32.0') SP 3b (7-65)	35
40				SS		11	0.00		(32') Poorly graded SAND (SP); Wet Sand, Trace of Gravel, Trace of Silt		40
45						10			(37') Boring terminated		45
50						13					50
55											55
60											60

NOTES: 1. Elevations refer to North American Vertical Datum (NAVD) of 1988. 2. Groundwater can appear/fluctuate due to rain, tides, season, and cresting groundwater on dates other than tested and/or signed herewith. 3. For site specific bearing capacity refer to SPT blow counts.

A Tech Engineering NYC, P.L.L.C. 4442 Arthur Kill Rd. S.I.N.Y., 10309 (718) 948-2785	Client: Anthony Fontana	BORING LOG
	Project: Block: 2223 Lot: 13	Boring No. B-2 (Drywell/Building)
	Address: Sommer Avenue, Staten Island, NY	Page: 1 of 1

Drilling Start Date: 9/14/20	Boring Depth (ft): 36.0
Drilling End Date:	Boring Diameter (in):
Drilling Company: Drill Masters Inc.	Sampling Method(s): Split Spoon
Drilling Method: Hollow Stem Auger	DTW During Drilling (ft): 29.0
Drilling Equipment: Acker Soil XLS	DTW After Drilling (ft): N/A
Driller:	Ground Surface Elev. (ft):
Logged By: Anthony Santoro, P.E.	Location (Lat, Long):

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT					SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)	N Value			
0									(0') Fill		0
5						3	0.00	6	(3') Poorly graded SAND (SP); Fine, Moist Sand	(3.0') SP 6 (11-65)	5
10						10	0.00	22	(9') Clayey SAND (SC); Clay, Some Silty Sand	(9.0') SC 4b (9-65)	10
15						12	0.00	29	(15') Clayey SAND (SC); Silty Sand and Clay, Trace of Gravel	(15.0') SC 4a (9-65)	15
20						16	0.00	39			20
25						21	0.00	49			25
30						26	0.00	26	(28') Clayey SAND (SC); Moist, Silty Sand, Trace of Clay, Trace of Gravel	(28.0') SC 3b (7-65)	30
35						12			(29') Groundwater Table at 29'	(31.0') SP 3b (7-65)	35
40						14			(31') Poorly graded SAND (SP); Wet Sand, Trace of Gravel, Trace of Silt		40
45						15	0.00	28	(36') Boring terminated		45
50						13					50
55											55
60											60



NOTES: 1. Elevations refer to North American Vertical Datum (NAVD) of 1988. 2. Groundwater can appear/fluctuate due to rain, tides, season, and cresting groundwater on dates other than tested and/or signed herewith. 3. For site specific bearing capacity refer to SPT blow counts.

A Tech Engineering NYC, P.L.L.C.
4442 Arthur Kill Rd. S.I.N.Y.,
10309 (718) 948-2785

Client: Anthony Fontana

Project: Block: 2223 Lot: 13

Address: Sommer Avenue, Staten Island, NY

BORING LOG

Boring No. B -3 (Building)

Page: 1 of 1

Drilling Start Date: 9/14/20

Drilling End Date:

Drilling Company: Drill Masters Inc.

Drilling Method: Hollow Stem Auger

Drilling Equipment: Acker Soil XLS

Driller:

Logged By: Anthony Santoro, P.E.

Boring Depth (ft): 25.0

Boring Diameter (in):

Sampling Method(s): Split Spoon

DTW During Drilling (ft): N/A

DTW After Drilling (ft): N/A

Ground Surface Elev. (ft):

Location (Lat, Long):

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)			
0								(0') Fill		0
5				SS		0.00	6	(4') Poorly graded SAND (SP); Moist, Fine Sand	(4.0') SP 6	5
					4					
					2			(7') Clayey SAND (SC); Clay, Some Silty Sand	(7.0') SC 4b	
10				SS		0.00	19			10
					8					
					11					
15				SS		0.00	22			15
					12					
					10			(16') Clayey SAND (SC); Silty Sand and Clay, Trace of Gravel	(16.0') SC 4a	
20				SS		0.00	38			20
					17					
					21					
25				SS		0.00	47			25
					24					
					23			(25') Boring terminated		
30										30
35										35
40										40



NOTES: 1. Elevations refer to North American Vertical Datum (NAVD) of 1988. 2. Groundwater can appear/fluctuate due to rain, tides, season, and cresting groundwater on dates other than tested and/or signed herewith. 3. For site specific bearing capacity refer to SPT blow counts.

A Tech Engineering NYC, P.L.L.C.
4442 Arthur Kill Rd. S.I.N.Y.,
10309 (718) 948-2785

Client: Anthony Fontana

Project: Block: 2223 Lot: 11

Address: Sommer Avenue, Staten Island, NY

BORING LOG

Boring No. B-4 (Building)

Page: 1 of 1

Drilling Start Date: 9/14/20

Drilling End Date:

Drilling Company: Drill Masters Inc.

Drilling Method: Hollow Stem Auger

Drilling Equipment: Acker Soil XLS

Driller:

Logged By: Anthony Santoro, P.E.

Boring Depth (ft): 25.0

Boring Diameter (in):

Sampling Method(s): Split Spoon

DTW During Drilling (ft): N/A

DTW After Drilling (ft): N/A

Ground Surface Elev. (ft):

Location (Lat, Long):

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT					SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)	N Value			
0									(0') Asphalt	0.25' SP 6	0
5				SS			0.00	7	(0.25') Poorly graded SAND (SP); Moist, Fine Sand		5
10				SS			0.00	24	(8') Clayey SAND (SC); Clay, Some Silty Sand	(8.0') SC 4b	10
15				SS			0.00	31	(15') Clayey SAND (SC); Silty Sand and Clay, Trace of Gravel	(15.0') SC 4a	15
20				SS			0.00	43			20
25				SS			0.00	48	(25') Boring terminated		25
30											30
35											35
40											40

NOTES: 1. Elevations refer to North American Vertical Datum (NAVD) of 1988. 2. Groundwater can appear/fluctuate due to rain, tides, season, and cresting groundwater on dates other than tested and/or signed herewith. 3. For site specific bearing capacity refer to SPT blow counts.

A Tech Engineering NYC, P.L.L.C. 4442 Arthur Kill Rd. S.I.N.Y., 10309 (718) 948-2785	Client: Anthony Fontana	Boring No. P-1 (Percolation Test) Page: 1 of 1
	Project: Block: 2223 Lot: 11	
	Address: Sommer Avenue, Staten Island, NY	

Drilling Start Date: 9/14/20	Boring Depth (ft): 37.0
Drilling End Date:	Boring Diameter (in):
Drilling Company: Drill Masters Inc.	Sampling Method(s):
Drilling Method: Hollow Stem Auger	DTW During Drilling (ft): 31.0
Drilling Equipment: Acker Soil XLS	DTW After Drilling (ft): N/A
Driller:	Ground Surface Elev. (ft):
Logged By: Anthony Santoro, P.E.	Location (Lat, Long):

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)			
0								The system was saturated with water through a 6" casing. Steady percolation rate achieved was 3.6 inches per minute at 37 ft. below grade.		0
5										5
10										10
15										15
20										20
25										25
30										30
35										35
40										40

NOTES: 1. Elevations refer to North American Vertical Datum (NAVD) of 1988. 2. Groundwater can appear/fluctuate due to rain, tides, season, and cresting groundwater on dates other than tested and/or signed herewith. 3. Percolation tests are per LL 103/89 & RS16, p. 113.



A Tech Engineering, NYC, P.L.L.C. 4442 Arthur Kill Rd. S.I.N.Y., 10309 (718) 948-2785	Client: Anthony Fontana	Boring No. P-2 (Percolation Test) Page: 1 of 1
	Project: Block: 2223 Lot: 13	
	Address: Sommer Avenue, Staten Island, NY	

Drilling Start Date: 9/14/20	Boring Depth (ft): 36.0
Drilling End Date:	Boring Diameter (in):
Drilling Company: Drill Masters Inc.	Sampling Method(s):
Drilling Method: Hollow Stem Auger	DTW During Drilling (ft): 29.0
Drilling Equipment: Acker Soil XLS	DTW After Drilling (ft): N/A
Driller:	Ground Surface Elev. (ft):
Logged By: Anthony Santoro, P.E.	Location (Lat, Long):

DEPTH (ft)	LITHOLOGY	WATER LEVEL	BORING COMPLETION	COLLECT					SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
				Sample Type	Time	Blow Counts	Recovery (ft)	N Value			
0									The system was saturated with water through a 6" casing. Steady percolation rate achieved was 3.0 inches per minute at 36 ft. below grade.		0
5											5
10											10
15											15
20											20
25											25
30									(29') Groundwater Table at 29'		30
35									(36') Percolation Test Conducted at 36'		35
40											40

NOTES: 1. Elevations refer to North American Vertical Datum (NAVD) of 1988. 2. Groundwater can appear/fluctuate due to rain, tides, season, and cresting groundwater on dates other than tested and/or signed herewith. 3. Percolation tests are per LL 103/89 & RS16, p. 113.

A Tech Engineering NYC, P.L.L.C.
4442 Arthur Kill Rd. S.I.N.Y.,
10309 (718) 448-2785

BORING AND WELL LOG LEGEND

LITHOLOGY	WATER LEVEL	WELL/BORING COMPLETION	Sample Type	DESCRIPTION
				ASPHALT CONCRETE BEDROCK IGNEOUS Rock METAMORPHIC Rock SEDIMENTARY Rock Well-graded GRAVEL (GW) Poorly graded GRAVEL (GP) Silty GRAVEL (GM) Clayey GRAVEL (GC) Well-graded GRAVEL with silt (GW-GM) Poorly graded GRAVEL with silt (GP-GM) Well-graded GRAVEL with clay (GW-GC) Poorly graded GRAVEL with clay (GP-GC) Well-graded SAND (SW) Poorly graded SAND (SP) Silty SAND (SM) Clayey SAND (SC) Well-graded SAND with silt (SW-SM) Poorly graded SAND with silt (SP-SM) Well-graded SAND with clay (SW-SC) Poorly graded SAND with clay (SP-SC) SILT (ML) Lean CLAY (CL) Organic SOIL (OL) Elastic SILT (MH) Fat CLAY (CH) Organic SOIL (OH) Organic SOIL (OL/OH) PEAT (PT) Volume Descriptors: Trace = <5% Few = 5-10% Little = 15-25% Some = 30-45% Mostly = >=50% Water Level During Drilling Water Level at End of Drilling/in Completed Well Cap Riser Screen End Plug Annular Seal (Bentonite-Cement Grout, Bentonite Slurry/Chips/Pellets/Powder, Other) Sanitary Seal (Bentonite Slurry/Chips/Pellets/Powder, Other) Filter Pack (Sand, Gravel, Other) Backfill Grab Encore Split Spoon Shelby Tube Core Barrel Direct Push Lab Sample and ID

NOTES:

SOIL GROUPS	UNIFIED SOIL CLASSIFICATION TYPICAL NAMES
GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
GP	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
GM	SILTY GRAVELS, GRAVEL-AND-SILT MIXTURES
GC	CLAYEY GRAVELS, GRAVEL-AND-CLAY MIXTURES
SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES
SM	SILTY SANDS, SAND-SILT MIXTURES
SC	CLAYEY SANDS, SAND-CLAY MIXTURES
ML	INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

ALLOWABLE BEARING PRESSURES

NYC BUILDING CODE BC1804 (Tab.1804.1)

CLASS OF MATERIALS	DESCRIPTION	MAX ALLOWABLE FOUNDATION PRESSURE TONS/SQ FT
1a	HARD SOUND ROCK - GNEISS, DIABASE, SCHIST	60
1b	MEDIUM HARD ROCK - MARBLE, SERPENTINE	40
1c	INTERMEDIATE ROCK - SHALE, SANDSTONE	20
1d	SOFT ROCK - WEATHERED ROCK	8
2a	SANDY GRAVEL (SOIL GROUPS GW,GP) - DENSE	10
2b	SANDY GRAVEL (SOIL GROUPS GW,GP) - MEDIUM	6
3a	GRANULAR SOILS (SOIL GROUPS GC,GM,SW,SP,SM AND SC) - DENSE	6
3b	GRANULAR SOILS (SOIL GROUPS GC,GM,SW,SP,SM AND SC) - MEDIUM	3
4a	CLAYS AND CLAY SOILS (SOIL GROUPS SC, CL & CH) - HARD	5
4b	CLAYS AND CLAY SOILS (SOIL GROUPS SC, CL & CH) - STIFF	3
4c	CLAYS AND CLAY SOILS (SOIL GROUPS SC, CL & CH) - MEDIUM	2
5a	SILTS AND SILTY SOILS (SOIL GROUPS ML & MH) - DENSE	3
5b	SILTS AND SILTY SOILS (SOIL GROUPS ML & MH) - MEDIUM	1.5
6	ORGANIC SILTS, ORGANIC CLAYS, PEATS, SOFT CLAYS, LOOSE GRANULAR SOILS AND VARVED SILTS	see 1804.2.1
7	CONTROLLED AND UNCONTROLLED FILLS	see 1804.2.2 or 1804.2.3