









Northing: 1118029.32  
 Easting: 922870.91  
 Mud Line: 352.90 Ft  
 Surface Water Depth: 4.6 Ft

Drilling Company: Atlantic Testing  
 Logging Company: Atlantic Testing  
 Geologist: SARA CHMURA/JIM SCHUETZ  
 Rig Type: BARGE MOUNTED CME 75

Total Depth: 84.0 Ft  
 Water Elev: 362.60 Ft  
 Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
66			4-4-4-5	8	0		SM	Wet, loose, brown, fine SAND, some silt, trace clay in top 3-inches.	2SS-140H	SAND/silt
			4-7-3-5	10	0		SM	Wet, loose, brown, fine SAND, some silt. (ML-SM)	2SS-140H	
70			4-4-4-5	8	0		SM	Wet, loose, brown, fine SAND, some silt.	2SS-140H	
			4-6-2-2	8	0		SM	Wet, loose to very loose, brown, fine SAND, some silt grading to little silt near end of spoon.	2SS-140H	
75			7-1-2-2	3	0		ML	Top 12-inches is wet, very loose, brown, fine SAND, some silt. Rest of spoon is wet, very soft, brown, SILT, some sand, trace clay, slight plasticity.	2SS-140H	SILT-fine sand
			2-1-WR-WR	0	0		ML	Wet, very soft, brown, SILT, some fine sand, trace clay, slight plasticity, bottom 4-inches is more plastic than rest of spoon.	2SS-140H	
			WR-WR-4-2	0	0		ML	Wet, soft, brown, SILT, some fine sand, small silt lenses.	2SS-140H	
80			4-2-18-25	20	0		ML	Wet, soft, brown SILT, some fine sand, trace black fine angular gravel. Bottom 2-inches is dry, green/black weathered rock, quartz fragments, micaceous fragments.	2SS-140H	
84.0			22-24-38-55	62	0		GM	Wet, hard, greenish grey, Silt and fine angular gravel, chunk of greenish grey rock in shoe of spoon.	2SS-140H	TILL

BORING LOCATION WILL BE SURVEYED LATER. 6IN CASING AT 40'  
 4IN CASING AT 46'. THE LOCATION IS 10.01 FEET FROM THE SURVEY MARKER  
 ON THE WOODEN PIECE OF CAUSEWAY. NULL FIELD READINGS INDICATE A READING  
 WAS NOT TAKEN.







# Honeywell

Northing: 1118083.92

Easting: 922870.91

Mud Line: 355.10 Ft

Surface Water Depth: 7.82 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SARA CHMURA/JIM SHUETZ

Rig Type: BARGE MOUNTED CME 75

Total Depth: 93.0 Ft

Water Elev: 362.60 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
60			10-3-2-1	5	0		ML	Wet, medium dense, brown, SILT and fine Sand, trace Clay. Rapid dilatancy.	2SS-140H	
			11-9-11-10	20	0		ML	Wet, very stiff, brown-gray, SILT and fine Sand, trace Clay. Interbedded portions (<5cm) portions of higher % Clay.	2SS-140H	
			9-5-6-6	11	0		ML	Wet, stiff, brown, SILT, and Sand. Rapid dilatancy. Ball drop test.	2SS-140H	
65			10-9-11-11	20	0		ML	Wet, stiff, brown-gray, SILT and fine Sand. Slow dilatancy.	2SS-140H	
			7-7-7-8	14	0		ML	Wet, stiff, brown, SILT and fine Sand. Slow dilatancy. Wash test.	2SS-140H	
70			10-11-13-8	24	0		ML	Wet, stiff, brown, Silt and fine Sand, trace Clay. Rapid dilatancy.	2SS-140H	SILT-fine sand
			6-0-6-3	6	0		ML	Wet, medium stiff, Silt and fine Sand, little Clay, Slow Dilatancy, low plasticity. Sample was taken on 4/14, but not logged.	2SS-140H	
			6-0-6-3	6	0		ML	Wet, medium stiff, brown, Silt and Sand, little clay. Slow dilatancy, Low plasticity.	2SS-140H	
75			4-3-5-6	8	0		ML	Wet, stiff, brown SILT and fine sand, some clay, slow dilatancy, low plasticity.	2SS-140H	
			5-3-10-20	13	0		SM	78 ft wet, stiff, brown, SILT and fine Sand, some Clay. Slow dilasticity, low plasticity 79 ft wet, stiff, brown, fine SAND, some Silt, trace gray Sand (till).	2SS-140H	
80			3-3-4-5	7			SW	Top 1 ft: Wet, medium stiff, brown, Silt and Clay. Lower 1/2: Wet, loose, mottled red-brown and gray, fine to coarse SAND, little fine Gravel, trace Silt.	2SS-140H	SILT-CLAY

# Honeywell

**Northing: 1118083.92**  
**Easting: 922870.91**  
**Mud Line: 355.10 Ft**  
**Surface Water Depth: 7.82 Ft**

**Drilling Company: Atlantic Testing**  
**Logging Company: Atlantic Testing**  
**Geologist: SARA CHMURA/JIM SHUETZ**  
**Rig Type: BARGE MOUNTED CME 75**

**Total Depth: 93.0 Ft**  
**Water Elev: 362.60 Ft**  
**Depth Units: Ft**

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
80										
		7-16-15-11	31	31	0		SW-SM	Wet, dense, mottled red-brown and gray, fine to coarse, Sand and fine Gravel, little Silt, trace Clay.	2SS-140H	
		11-13-13-25	26	26	0		SP	Wet, medium dense, mottled red-brown and gray, coarse to fine SAND and fine Gravel.	2SS-140H	
85		18-21-12-10	33	33	0		SW	Wet, dense, gray-brown, fine to coarse, Sand and fine Gravel, trace Silt.	2SS-140H	SAND-GRAVEL
		9-10-13-14	23	23	0		SP	Wet, medium dense, gray, coarse to fine Sand and fine to coarse Gravel. Coarse gravel lodged in tip of spoon.	2SS-140H	
90		14-16-36-100	52	52	0		GP	Upper 2/3: Wet, dense, brown and gray, fine to coarse Gravel, and coarse to fine Sand. Lower 1/3: Moist, hard, green, coarse Gravel, weather rock fragment/till.	2SS-140H	GRAVEL
		210-196-190-	386	386	0		ML	Moist, hard, mottled green, gray, red-brown, Silt and fine to coarse Gravel, trace Clay. Till. Sections of slightly plastic mixture of silt, clay and gravel. Other sections are predominantly green weathered shale.	2SS-140H	SILT-GRAVEL
93.0										

THERE IS NO SURVEYOR DURING SET-UP. LOCATED 9 FEET FROM CAUSEWAY.  
 THE DEPTH TO WATER FROM THE TOP OF CAUSEWAY (CONCRETE) WAS 8.7 FEET.  
 IF THE SURVEY IS TAKEN ON THE CAUSEWAY USE HEIGHT OF CAUSEWAY ABOVE  
 WATER AND DEPTH OF WATER TO MUDLINE FOR MUD ELE. NULL FIELD READINGS  
 INDICATE A READING WAS NOT TAKEN.







Site: Onondaga Lake (Syracuse NY)

Boring No: OL-STA-20027

Date: 04/25/2006 - 04/28/2006

Weather: Overcast, 10-15 mph winds, 50 deg F.

**Honeywell**

Northing: 1118140.03

Easting: 922819.91

Mud Line: 358.90 Ft

Surface Water Depth: 4.7 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SARA CHMURA/JIM SCHUETZ

Rig Type: BARGE MOUNTED CME 75

Total Depth: 97.0 Ft

Water Elev: 363.60 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
60										
		9-6-6-5	12	0			ML	Wet, stiff, brown, SILT, little Clay, trace fine Sand.	2SS-140H	SILT
		3-6-2-3	8	0			ML	Wet, stiff, brown, SILT, little Clay, trace fine Sand. Slow dilatancy.	2SS-140H	
65		6-5-6-7	11	0			ML	Wet, stiff, brown, SILT, some fine Sand, trace clay. Lenses of higher % Clay.	2SS-140H	SILT-fine sand
		5-4-5-3	9	0			ML	Wet, stiff, brown, fine Sand and Silt. Rapid dilatancy.	2SS-140H	
70		7-5-7-9	12	0			SM	Wet, medium dense, brown, fine Sand and Silt.	2SS-140H	
		9-7-3-5	10	0			SM	Wet, medium dense, fine Sand and Silt, trace Clay.	2SS-140H	fine SAND-SILT
		7-10-7-4	17	0			SM	Wet, medium dense, brown, fine Sand and Silt, trace Clay.	2SS-140H	
75		4-6-1-2	7	0			ML	Wet, medium stiff, brown, Silt and fine Sand, some Clay. Lenses (3-5 cm) of higher % fine Silt and Clay, with moderate plasticity.	2SS-140H	SILT-fine SAND
		2-1-2-2	3	0			ML	Wet, soft, brown, SILT, some Clay, trace fine Sand. Lenses (5-7 cm) of higher % Clay.	2SS-140H	SILT/clay
80		WR-WR-5-2	0	0			ML	Wet, medium stiff, SILT, little Clay, little fine Sand.	2SS-140H	SILT

# Honeywell

Northing: 1118140.03

Easting: 922819.91

Mud Line: 358.90 Ft

Surface Water Depth: 4.7 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SARA CHMURA/JIM SCHUETZ

Rig Type: BARGE MOUNTED CME 75

Total Depth: 97.0 Ft

Water Elev: 363.60 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
80										
		5-1-2-8		3	0		ML	Upper 20 inches: Wet, medium stiff, brown, SILT, little Clay, trace fine Sand. Lower: 4 inches: Wet, loose, red-brown, fine SAND, little Silt.	2SS-140H	SILT
		3-7-16-16		23	0		SM	Upper 10 in: Wet, loose, red-brown, fine SAND, little Silt. Lower 5 in: Wet, dense, mottled gray and red-brown, fine-coarse Sand and fine-to coarse Gravel.	2SS-140H	Fine SAND
85		13-14-13-23		27	0		SW	Wet, medium dense, mottled red-brown and gray, fine to coarse Sand and fine to coarse Gravel.	2SS-140H	
		23-15-12-14		23	0		GW	Wet, medium dense, gray, green-gray, brown, red-brown, fine-coarse Gravel and fine -coarse Sand.	2SS-140H	SAND-GRAVEL
90		9-16-24-30		40	0		SW	Wet, dense, gray, green gray, red-brown, fine-coarse Sand and fine to coarse Gravel, trace Silt. Looks similar to sand gravel till.	2SS-140H	
		16-18-10-11		28	0		GW	Wet, medium dense, mottled red-brown, green-gray, fine-coarse GRAVEL, some fine-coarse Sand, trace Silt. Small piece (2 cm) of red-brown, silt-clay-gravel till material.	2SS-140H	GRAVEL/sand
		18-15-12-12		27	0		GW	Upper 8 inches: Wet, medium dense, gray fine to coarse GRAVEL, little fine to coarse Sand, trace Silt. Lower 4 inches: Wet med dense, red-brown, coarse GRAVEL, trace Silt. Till, weathered shale and rounded chert. Distinct change (contact) between units.	2SS-140H	
95		0-171-1-NA		172	0		GM	Wet, hard, mottled, red, green, fine to coarse Gravel and Silt, little Clay, little fine to coarse Sand. Till. Note 172 blow count was all in the first 6 inches, then refusal.	2SS-140H	TILL
97.0										

PUSHED 6-INCH CASING 2 FEET INTO CLAY TO 44', PUSH 4 CASING TO 50'. THE BORING IS LOCATED 10.1 FEET FROM THE WOODEN BOARD ON THE CAUSEWAY. THE WIDTH OF THE BARGE FROM HOLE TO EDGE IS 8.7 FEET. THE EDGE OF THE BARGE IS BUTTED TO THE CAUSEWAY I-BEAM. NULL FIELD READINGS INDICATE A READING WAS NOT TAKEN.

BORING LOG

Site: Onondaga Lake (Syracuse NY)

Boring No: OL-STA-20028

Date: 05/01/2006 - 05/03/2006

Weather: Clear, sunny, 60 deg F, light breeze.



Northing: 1118224.5

Easting: 922742.57

Mud Line: 360.70 Ft

Surface Water Depth: 2.2 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SC/SD/JS

Rig Type: BARGE MOUNTED CME 75

Total Depth: 100.0 Ft

Water Elev: 362.50 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
0		OL-0123-55		0	2.3		ML	Top 5 in is wet, poorly sorted GRAVEL, some shells, trace black silt, trace f sand, rest of core is wet, soft, black, SILT, trace f sand, petroleum-like odor, trace fibers.	Vibracore	SILT
		OL-0123-56		0	4.7		ML	Black, soft, wet, SILT, trace fine sand, trace organic fibers, trace coal fragments, petroleum-like odor.	Vibracore	
5		OL-0123-57		0	30.4		ML	Wet, soft, black to dark gray, SILT, little fine sand, black slag throughout core, petroleum-like odor, bottom 2 inches is grayish green silt like grains, trace fine sand (SOLW).	Vibracore	
		OL-0123-58		0	7.5		SOLW	Wet, soft, greenish gray to gray, silt like grains, trace fine sand, mothball odor.	Vibracore	SOLVAY WASTE
10		OL-0123-68		0	10.1		SOLW	Wet, soft, greenish gray, silt like grains, trace fine sand, mothball odor.	Vibracore	
		OL-0123-69		0	10.3		SOLW	Wet, soft, greenish gray, silt like grains, trace fine sand, mothball odor, some fine sand lenses.	Vibracore	

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Northing: 1118224.5

Easting: 922742.57

Mud Line: 360.70 Ft

Surface Water Depth: 2.2 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SC/SD/JS

Rig Type: BARGE MOUNTED CME 75

Total Depth: 100.0 Ft

Water Elev: 362.50 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
90			21-12-21-24	33	0		GM	Wet, dense, gray, red-brown, green-gray, fine to coarse Gravel, and fine to coarse Sand, trace Silt, trace Clay. Appears to be a re-worked till or colluvium.	2SS-140H	
			20-12-15-13	27	0		GM	Wet, dense, gray, coarse to fine Gravel, little coarse to fine Sand, trace Silt, trace Clay.	2SS-140H	
95			20-12-15-13	27	0		GM	Wet, medium dense, green-gray, gray, fine to coarse, GRAVEL, trace Silt, trace Clay. Till fragments in sample.	2SS-140H	SAND-GRAVEL
			17-22-10-11	32	0		GW	Wet, dense, gray, red-brown and green-gray, coarse to fine GRAVEL, some fine to coarse Sand, trace Silt.	2SS-140H	
			67-200-	201	0		GM	Wet to moist, red and green, fine to coarse Gravel and Silt, little Clay over 4 inches of weathered shale.	2SS-140H	TILL

100.0

BARGE SET 1.8 FT OFF CAUSEWAY. BORING LOCATION 11.3 FEET OFF CAUSEWAY. LOCATION APPROVED BY BOB EDWARDS AND DAVE SCHEUING (FROM THE DEC). WATER TOO SHALLOW. BARGE DRAGGING BOTTOM. Null field readings indicate a reading was not taken.









Northing: 1118280.04

Easting: 922690.97

Mud Line: 360.40 Ft

Surface Water Depth: 2.4 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SARA CHMURA/SCOTT DILLMAN

Rig Type: BARGE MOUNTED CME 75

Total Depth: 100.1 Ft

Water Elev: 362.60 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
45										
50		WR-WR-2-3		0			CL	Wet, soft, olive gray-brown Clay, trace silt.	2SS-140H	CLAY
		3-5-5-3		10			CL	Wet, soft, olive gray-brown CLAY, trace silt. 52-53 ft. olive gray-brown SILT, trace clay.	2SS-140H	
		WR-WH-1-3		0			CL	Wet, soft, olive-gray-brown CLAY, little silt, lenses of SILT, little-some clay.	2SS-140H	
55		6-7-7-5		14			CL	55-56.2 ft. Wet, soft, olive-gray-brown CLAY, trace silt, and silt lenses. 56.2-57 ft. soft, wet, olive gray-brown SILT, trace clay.	2SS-140H	
		8-4-9-7		13			ML	Wet, medium stiff, olive-gray-brown SILT, little clay in lenses.	2SS-140H	SILT
60		9-4-6-6		10			ML	Wet, medium stiff, olive gray-brown SILT, little to trace clay.	2SS-140H	





Site: Onondaga Lake (Syracuse NY)

Boring No: OL-STA-20029

Date: 05/02/2006 - 05/05/2006

Weather: Clear, sunny, 60 deg F, light breeze.

# Honeywell

Northing: 1118280.04

Easting: 922690.97

Mud Line: 360.40 Ft

Surface Water Depth: 2.4 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SARA CHMURA/SCOTT DILLMAN

Rig Type: BARGE MOUNTED CME 75

Total Depth: 100.1 Ft

Water Elev: 362.60 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
90										
			13-12-16-16	28			--	No recovery. Probably pushing gravel ahead of split spoon.	2SS-140H	
			23-16-15-13	31			SW-SM	Wet, dense, reddish brown coarse SAND, some gravel, trace silt, trace clay.	2SS-140H	
95			15-18-22-12	40			SW-SM	Wet, dense, reddish brown, coarse SAND, some gravel, trace silt, trace clay.	2SS-140H	SAND/gravel
			13-10-13-14	23			SW-SM	Wet, dense, reddish-brown, coarse SAND, some gravel, trace silt, trace clay.	2SS-140H	
			20-17-100/1	0			SW-SM	99-99.8 ft Wet dense, reddish brown, coarse SAND, some gravel, trace silt and clay. 99.8-100.1 ft. TILL. Coarse sand some gravel, little clay trace silt grading into greenish gray shale. May be bedrock. Refusal.	2SS-140H	
100.1										TILL

SET UP 1.7 FEET OFF CAUSEWAY I-BEAM AT PILING. BORING 11.5 FT. OFF CAUSEWAY WALL. BORING DRILLED TO 100.1 FEET (TILL/BEDROCK). NULL FIELD READING INDICATE A READING WAS NOT TAKEN.



Northing: 1118362.57

Easting: 922612.19

Mud Line: 361.35 Ft

Surface Water Depth: 2.4 Ft

Drilling Company: Atlantic Testing

Logging Company: Atlantic Testing

Geologist: SARA M CHMURA/JIM SCHUETZ

Rig Type: BARGE MOUNTED CME 75

Total Depth: 102.2 Ft

Water Elev: 362.60 Ft

Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
0		OL-0122-42		0	14.9		ML	Wet, very soft, black to dark gray, SILT, little fine sand, trace organic fibers, bottom 9 inches is fine rounded gravel and silt, petroleum-like odor.	Vibracore	SILT
5		OL-0122-43		0	14.4		SM	Top 20 inches is moist, greenish gray, fine SAND, trace silt, some shells, sulfur odor, trace organic fibers. Rest of core is wet, soft, black, SILT, little fine sand, trace coal fragments. (ML)	Vibracore	SAND (Marl)
		OL-0122-44		0	48.2		SM	Wet, very soft, greenish gray, SAND and SILT, some shells, trace organic fibers, sulfur odor (MARL).	Vibracore	SAND-SILT (Marl)
10		OL-0122-45		0	15.1		ML	Wet, soft to medium stiff, SILT and SAND, some clay, some shells, trace organic fibers, sulfur odor (MARL).	Vibracore	
15		OL-0122-46		0	51		ML	Wet, soft, gray, SILT and CLAY, little fine sand, some shells, trace organics fibers, strong sulfur odor (MARL).	Vibracore	SILT-CLAY (Marl)
19		OL-0122-47		0	46.4		ML	Moist, soft, gray, SILT and CLAY, trace fine sand, little shells, sulfur odor, low plasticity (MARL).	Vibracore	









Site: Onondaga Lake (Syracuse NY)

Boring No: OL-STA-20030

Date: 04/25/2006 - 05/01/2006

Weather: Overcast, rain, 45 deg F.



Northing: 1118362.57  
 Easting: 922612.19  
 Mud Line: 361.35 Ft  
 Surface Water Depth: 2.4 Ft

Drilling Company: Atlantic Testing  
 Logging Company: Atlantic Testing  
 Geologist: SARA M CHMURA/JIM SCHUETZ  
 Rig Type: BARGE MOUNTED CME 75

Total Depth: 102.2 Ft  
 Water Elev: 362.60 Ft  
 Depth Units: Ft

Depth Ft	Recov	Sample ID	Blow Count	N Value	PID (ppm)	Mercury (mg/m3)	USCS Code	Soil Description	Sample Method	Stratum
95			17-14-14-12	28	0		GW-GM	Wet, fine, rounded GRAVEL, some fine sand, trace silt, rock in shoe, top 3-inches of gravel is in a stiff red silt matrix.	2SS-140H	GRAVEL with fine sand-silt
			21-19-20-20	39	0		GW-GM	Wet, rounded, fine GRAVEL, some fine sand, trace red silt. Shale fragments becoming larger and more abundant than previous spoon.	2SS-140H	
100			21-15-20-15	35	0		GW-GM	Wet, fine, round to subround GRAVEL, red/greenish-grey silt, some fine sand. Bottom 4-inches is all black/dark grey angular shale fragments with little brown silt.	2SS-140H	
102.2			11-35-100/2-	0			ML	Wet, hard, brick red SILT, trace clay (TILL).	2SS-140H	

SPUN 6-IN CASING TO 40-FT, PUSHED 4-IN CASING TO 46-FT THEN STARTED CONTINUOUS S/S SAMPLING. LOCATION WILL BE SURVEYED AT A LATER DATE. NULL FIELD READINGS INDICATE A READING WAS NOT TAKEN.