

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	357.0-357.5
Project No.:	2013-465-001	Sample No.:	ST-66
Lab ID:	2013-465-001-037		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	9

PRESSURES (psi)

Cell Pressure (psi)	273.6
Back Pressure (psi)	31.9
Eff. Conf. Pressure (psi)	241.7
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	295.41
Q	=	165.45

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.949	Diameter 1:	2.882
Length 2:	5.943	Diameter 2:	2.881
Length 3:	5.957	Diameter 3:	2.883
Avg. Length:	5.950	Avg. Diam.:	2.882

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	21.8
Final Change (ml)	26.2

Initial Dial Reading (mil)	64
Dial Reading After Saturation (mil)	75
Dial Reading After Consolidation (mil)	224

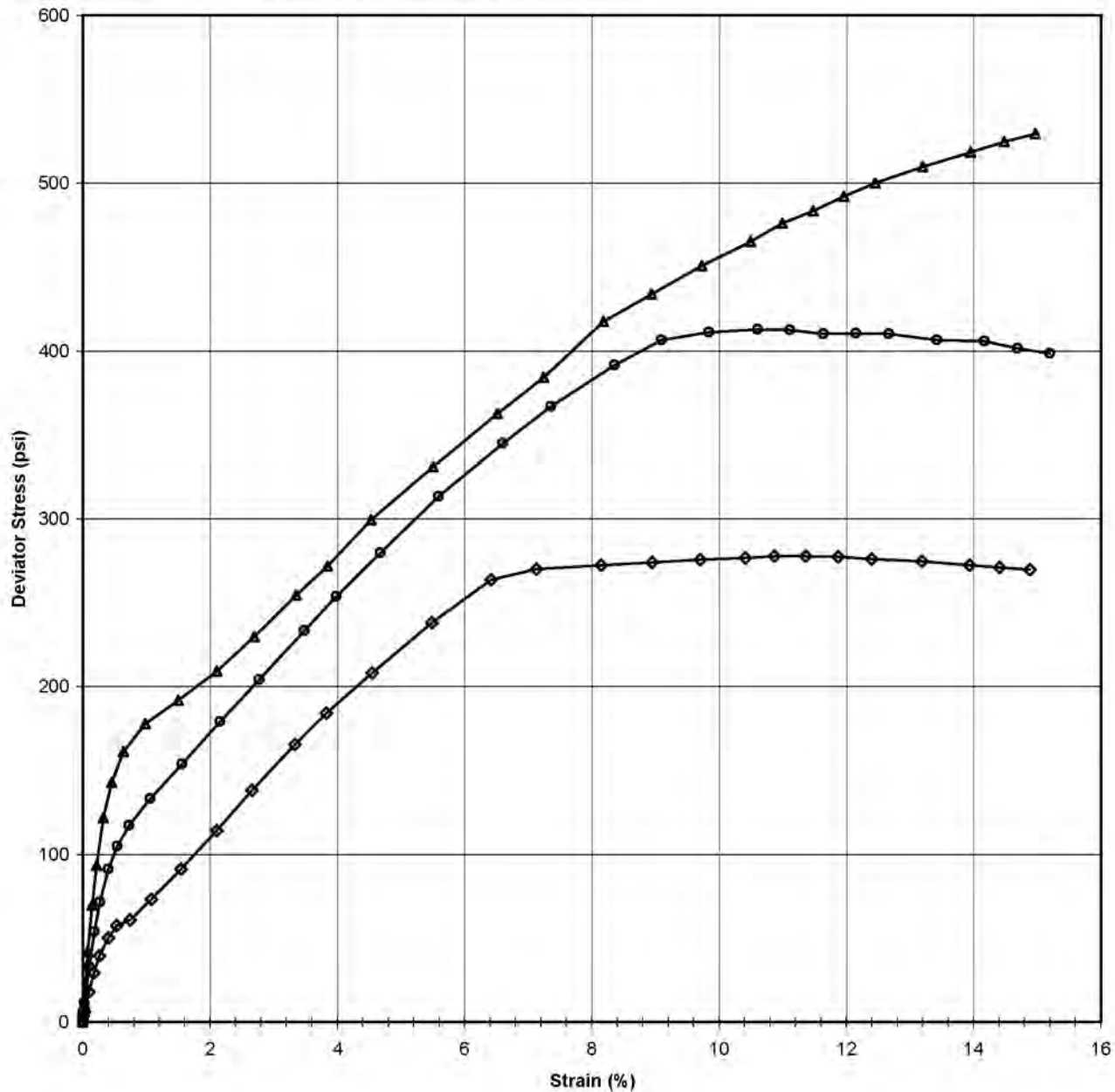
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
48.3	0.000	31.9
74.8	0.001	33.0
117.0	0.002	34.8
317.1	0.005	45.2
493.6	0.009	59.1
644.7	0.013	74.3
830.5	0.019	97.3
966.2	0.027	117.5
1085.6	0.037	138.2
1196.7	0.057	160.2
1292.4	0.087	173.5
1413.4	0.122	177.2
1557.7	0.156	175.0
1730.3	0.194	169.8
1853.6	0.223	164.1
2051.2	0.263	155.9
2286.1	0.319	143.6
2526.8	0.377	130.5
2695.2	0.420	121.2
2953.8	0.474	109.0
3093.1	0.518	100.0
3240.1	0.563	91.3
3370.1	0.608	83.7
3465.8	0.636	78.8
3538.7	0.664	74.1
3621.3	0.692	69.6
3699.5	0.721	65.0
3801.9	0.764	58.9
3899.3	0.808	54.0
3968.2	0.838	50.7
4026.7	0.867	47.8

Tested By:	JCM	Date:	10/21/13	Input Checked By:	KC	Date:	11/21/13
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DCN: CFS28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**
ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	355.9-358.6
Project No.:	2013-465-001	Sample No.:	ST-66
Lab ID:	2013-465-001-037		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



—◆— Test No. 7

—●— Test No. 8

—▲— Test No. 9

E50 Test No. 7 6234.777

E50 Test No. 8 11394.87

E50 Test No. 9 22811.78

Tested By: JCM

Date: 10/21/13

Approved By: DB

Date: 11/21/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	357.0-357.5
Project No.:	2013-465-001	Sample No.:	ST-66
Lab ID:	2013-465-001-037		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	241.7	Stage No.	1
		Test No	9

INITIAL DIMENSIONS

Initial Sample Length (in)	5.95
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.52
Initial Sample Volume (in ³)	38.81

VOLUME CHANGE

Volume After Consolidation (in ³)	37.00
Length After Consolidation (in)	5.79
Area After Consolidation (in ²)	6.390

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	4.15	1.09	244.76	240.6	1.017	0.26	242.69	2.08
0.03	10.74	2.88	249.56	238.8	1.045	0.27	244.19	5.37
0.08	42.03	13.31	270.42	228.4	1.184	0.32	249.41	21.01
0.15	69.58	27.17	284.12	214.5	1.324	0.39	249.32	34.79
0.22	93.13	42.43	292.40	199.3	1.467	0.46	245.84	46.56
0.33	122.01	65.43	298.28	176.3	1.692	0.54	237.28	61.00
0.46	142.98	85.57	299.11	156.1	1.916	0.60	227.62	71.49
0.64	161.29	106.31	296.67	135.4	2.191	0.66	216.03	80.64
0.99	177.94	128.31	291.33	113.4	2.569	0.72	202.36	88.97
1.50	191.76	141.57	291.89	100.1	2.915	0.74	196.01	95.88
2.11	209.12	145.34	305.47	96.4	3.170	0.70	200.91	104.56
2.69	229.83	143.13	328.40	98.6	3.332	0.62	213.49	114.92
3.36	254.37	137.87	358.20	103.8	3.450	0.54	231.01	127.18
3.84	271.64	132.23	381.10	109.5	3.481	0.49	245.29	135.82
4.53	299.21	123.95	416.96	117.7	3.541	0.41	267.35	149.61
5.50	330.91	111.75	460.86	130.0	3.546	0.34	295.41	165.45
6.51	362.59	98.65	505.64	143.1	3.535	0.27	324.35	181.30
7.25	384.18	89.26	536.62	152.4	3.520	0.23	344.53	192.09
8.18	417.46	77.12	582.03	164.6	3.537	0.18	373.31	208.73
8.94	433.87	68.09	607.48	173.6	3.499	0.16	390.54	216.94
9.73	450.89	59.41	633.18	182.3	3.473	0.13	407.74	225.44
10.50	465.26	51.84	655.11	189.9	3.451	0.11	422.49	232.63
10.99	476.01	46.90	670.82	194.8	3.444	0.10	432.81	238.01
11.48	483.50	42.23	682.98	199.5	3.424	0.09	441.22	241.75
11.96	492.26	37.67	696.29	204.0	3.413	0.08	450.16	246.13
12.45	500.23	33.08	708.86	208.6	3.398	0.07	458.74	250.12
13.20	509.84	27.05	724.49	214.7	3.375	0.05	469.57	254.92
13.96	518.51	22.12	738.09	219.6	3.361	0.04	478.84	259.26
14.48	524.60	18.75	747.55	222.9	3.353	0.04	485.25	262.30
14.97	529.34	15.86	755.18	225.8	3.344	0.03	490.51	264.67

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	357.0-357.5
Project No.	2013-465-001	Sample No.	ST-66
Lab ID #	2013-465-001-037	Test No.	9

Equipment	Equipment ID#	Calibration Due Date
Oven	G256	10/12/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G334	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G721	2/22/14
Timing Device	G489	5/13/14
Oven	G1387	8/16/14
Flow Pump	G1511-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-037 Specific Gravity (measured) 2.62

Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-6-1b	R-6-1b	R-6-1b
Depth (ft):	358.0-358.5	357.5-358.0	357.0-357.5
Sample No.:	ST-66	ST-66	ST-66
Test No.	T7	T8	T9
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	31.3	31.6	31.9
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	26.3	26.3	26.3
Total Unit Weight (pcf)	121.5	121.3	119.4
Dry Unit Weight (pcf)	96.1	96.0	94.5
Moisture Content (%) (FINAL)	26.9	25.9	26.5
Initial State Void Ratio, e	0.701	0.704	0.730
Void Ratio at Shear, e	0.663	0.596	0.650



Tested By: JCM Date: 10/21/13 Input Checked By: KC Date: 11/21/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T7	T8	T9
Tare Number	1122	1122	1122
Weight of Tare & Wet Sample (g)	163.46	163.46	163.46
Weight of Tare & Dry Sample (g)	146.93	146.93	146.93
Weight of Tare (g)	84.17	84.17	84.17
Moisture Content (%) (INITIAL)	26.34	26.34	26.34
Tare Number	1438	1444	46
Weight of Tare & Wet Sample (g)	1371.7	1338.89	793.61
Weight of Tare & Dry Sample (g)	1111.4	1093.48	670.36
Weight of Tare (g)	144.62	145.83	204.89
Moisture Content (%) (FINAL)	26.92	25.90	26.48

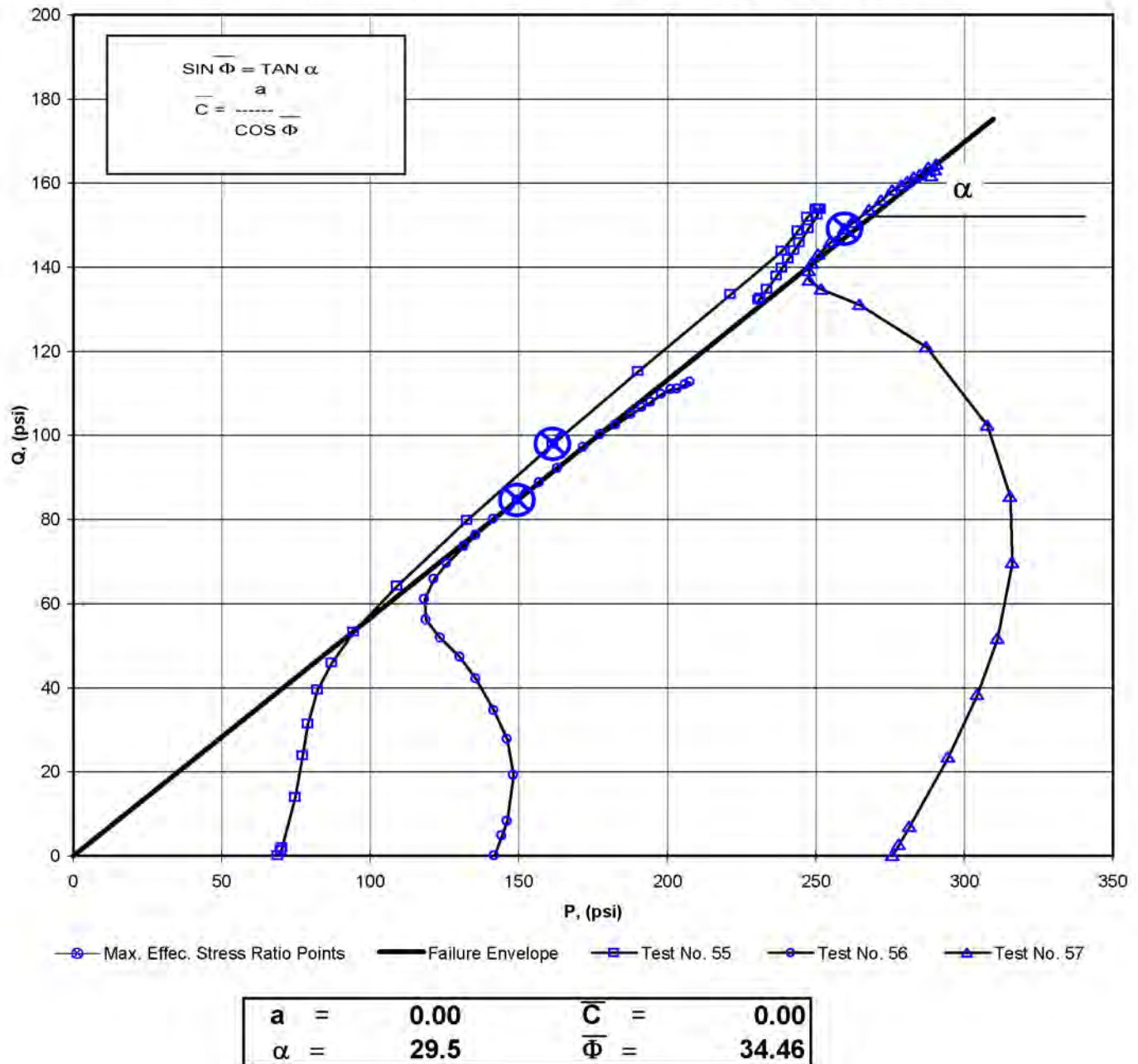
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1665.81	1646.82	1637.49
Weight of Tube (g)	422.56	417.51	420.9
Weight of Wet Sample (g)	1243.25	1229.31	1216.59
Length 1 (in)	5.983	5.9	5.949
Length 2 (in)	5.984	5.91	5.943
Length 3 (in)	5.983	5.909	5.957
Top Diameter (in)	2.888	2.888	2.882
Middle Diameter (in)	2.878	2.887	2.881
Bottom Diameter (in)	2.876	2.881	2.883
Average Length (in)	5.983333	5.906333	5.949667
Average Area (in ²)	6.517	6.539	6.523
Sample Volume (cm ³)	639.03	632.85	636.02
Unit Wet Weight (g/cm ³)	1.95	1.94	1.91
Unit Wet Weight (pcf)	121.46	121.27	119.42
Unit Dry Weight (pcf)	96.14	95.99	94.52
Unit Dry Weight (g/cm ³)	1.54	1.54	1.51
Initial Burette Reading	24	48	48
Final Burette Reading	13.7	30.9	21.8
Initial Dial Reading	33	48	64
Dial Reading After Saturation	46	120	75
Dial Reading After Consolidation	53	150	224
Volume Change during Consolidation	10.3	17.1	26.2
Volume Change during Saturation	4.17	23.14	3.53
Volume at Shear (cm ³)	*These 624.56	592.61	606.29
Volume of Solids (cm ³)	measurements 375.60	371.39	367.54
Volume of Voids (cm ³)	are all 248.97	221.22	238.75
Volume of Water (cm ³)	at 264.95	251.98	254.98
Void Ratio, e	shear 0.663	0.596	0.650

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	401.0-404.6
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/26/13

Approved By: DB

Date: 12/5/13

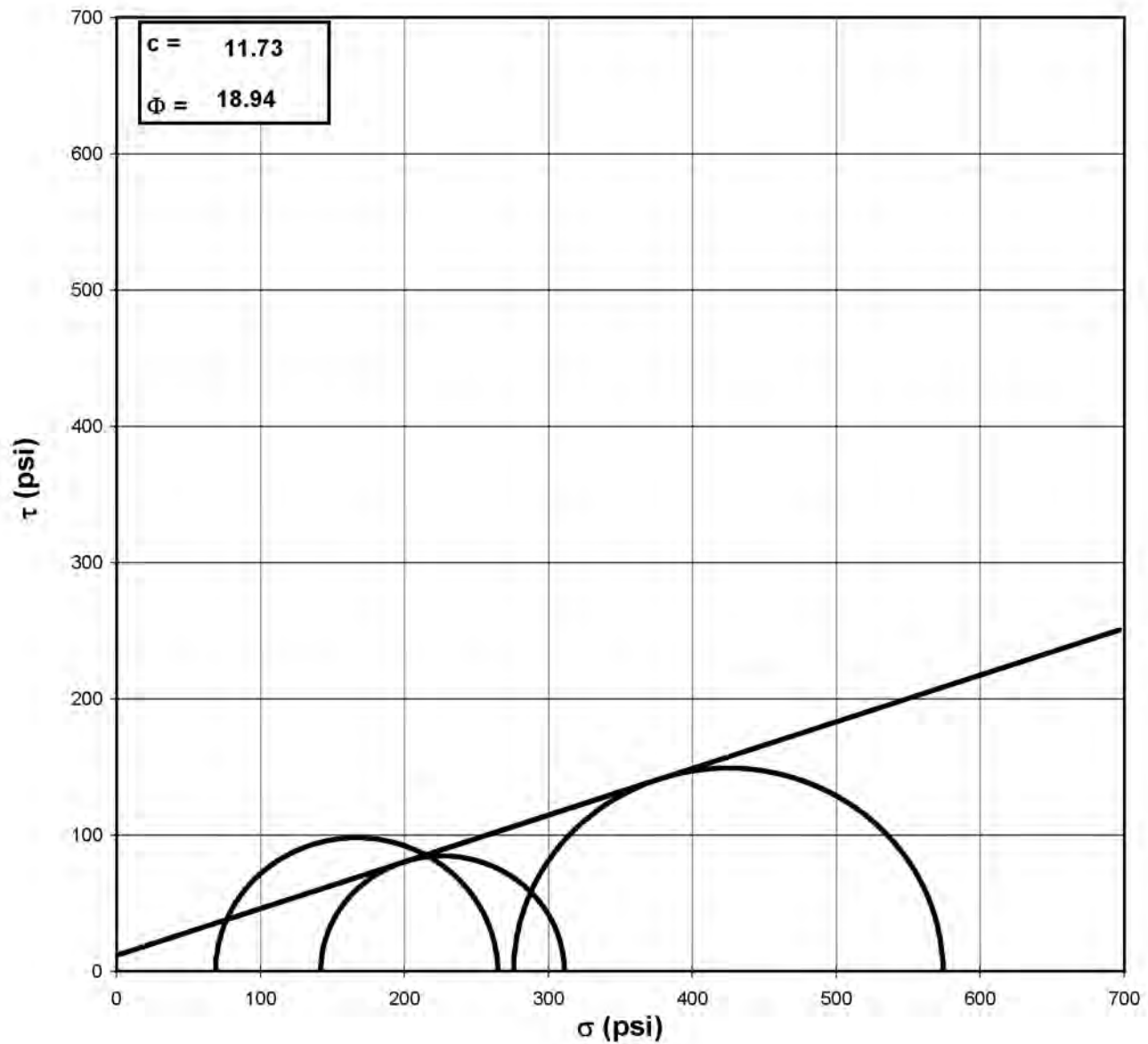
DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-040
 Visual Description: Greenish Gray Silty Sand (Undisturbed)

Boring No.: R-6-1b
 Depth (ft): 401.0-404.6
 Sample No.: ST-82



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM

Date: 11/26/13

Approved By: DB

Date: 12/5/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	403.5-404.0
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	55

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.947	Diameter 1:	2.880
Length 2:	5.948	Diameter 2:	2.892
Length 3:	5.933	Diameter 3:	2.882
Avg. Length:	5.943	Avg. Diam.:	2.885

PRESSURES (psi)

Cell Pressure (psi)	90.5
Back Pressure (psi)	21.6
Eff. Conf. Pressure (psi)	68.9
Pore Pressure Response (%)	100

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	36.0
Final Change (ml)	12.0

MAXIMUM OBLIQUITY POINTS

P	=	161.53
Q	=	97.95

Initial Dial Reading (mil)	64
Dial Reading After Saturation (mil)	67
Dial Reading After Consolidation (mil)	81

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
17.2	0.000	21.6
33.7	0.001	21.9
42.2	0.003	22.2
194.7	0.006	29.5
323.9	0.010	37.1
420.6	0.015	42.8
525.1	0.023	47.6
609.4	0.031	49.4
704.4	0.043	49.2
850.5	0.063	45.7
1058.3	0.092	37.8
1302.2	0.125	26.9
1536.9	0.158	15.5
1789.8	0.197	2.7
1936.6	0.226	-4.4
2015.4	0.268	-5.0
2080.0	0.324	-4.9
2128.2	0.384	-5.9
2147.3	0.428	-6.6
2168.7	0.487	-7.3
2167.6	0.533	-7.8
2138.7	0.578	-8.0
2109.9	0.622	-8.2
2093.9	0.653	-8.3
2076.8	0.683	-8.4
2057.2	0.713	-8.4
2042.6	0.744	-8.4
2013.6	0.790	-8.3
1999.5	0.836	-8.2
2005.8	0.866	-8.1
2013.9	0.895	-8.0

Tested By: JCM Date: 11/26/13 Input Checked By: KC Date: 12/5/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	403.5-404.0
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	68.9	Stage No.	1
		Test No	55

INITIAL DIMENSIONS

Initial Sample Length (in)	5.94
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.54
Initial Sample Volume (in ³)	38.84

VOLUME CHANGE

Volume After Consolidation (in ³)	38.05
Length After Consolidation (in)	5.93
Area After Consolidation (in ²)	6.421

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	2.58	0.26	71.21	68.6	1.038	0.10	69.92	1.29
0.04	3.89	0.57	72.22	68.3	1.057	0.15	70.27	1.95
0.10	27.62	7.93	88.59	61.0	1.453	0.29	74.78	13.81
0.17	47.68	15.46	101.12	53.4	1.892	0.32	77.28	23.84
0.25	62.66	21.15	110.41	47.7	2.312	0.34	79.08	31.33
0.39	78.79	25.96	121.73	42.9	2.835	0.33	82.33	39.40
0.53	91.75	27.75	132.90	41.1	3.230	0.30	87.02	45.87
0.72	106.25	27.65	147.51	41.3	3.576	0.26	94.38	53.13
1.06	128.39	24.13	173.17	44.8	3.868	0.19	108.97	64.20
1.55	159.64	16.20	212.35	52.7	4.029	0.10	132.53	79.82
2.11	195.90	5.32	259.48	63.6	4.081	0.03	161.53	97.95
2.66	230.38	-6.15	305.42	75.0	4.070	-0.03	190.23	115.19
3.32	266.90	-18.92	354.72	87.8	4.039	-0.07	221.27	133.45
3.82	287.52	-26.02	382.44	94.9	4.029	-0.09	238.68	143.76
4.52	297.12	-26.60	392.62	95.5	4.111	-0.09	244.06	148.56
5.47	303.69	-26.54	399.13	95.4	4.182	-0.09	247.28	151.85
6.48	307.47	-27.47	403.84	96.4	4.191	-0.09	250.10	153.73
7.22	307.82	-28.19	404.90	97.1	4.171	-0.09	251.00	153.91
8.22	307.54	-28.93	405.37	97.8	4.144	-0.09	251.60	153.77
8.99	304.81	-29.36	403.07	98.3	4.102	-0.10	250.66	152.41
9.76	298.17	-29.64	396.71	98.5	4.026	-0.10	247.63	149.08
10.50	291.69	-29.84	390.43	98.7	3.954	-0.10	244.58	145.84
11.01	287.81	-29.94	386.65	98.8	3.912	-0.10	242.74	143.90
11.52	283.80	-29.98	382.68	98.9	3.870	-0.11	240.78	141.90
12.03	279.50	-30.02	378.42	98.9	3.826	-0.11	238.67	139.75
12.55	275.86	-29.99	374.75	98.9	3.790	-0.11	236.82	137.93
13.33	269.49	-29.92	368.30	98.8	3.727	-0.11	233.56	134.74
14.10	265.19	-29.80	363.89	98.7	3.687	-0.11	231.29	132.59
14.61	264.47	-29.73	363.09	98.6	3.681	-0.11	230.86	132.23
15.10	264.02	-29.65	362.57	98.5	3.679	-0.11	230.56	132.01

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	403.5-404.0
Project No.	2013-465-001	Sample No.	ST-82
Lab ID #	2013-465-001-040	Test No.	55

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G334	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G546	2/13/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	404.0-404.5
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	56

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.929	Diameter 1:	2.872
Length 2:	5.904	Diameter 2:	2.881
Length 3:	5.928	Diameter 3:	2.886
Avg. Length	5.920	Avg. Diam.:	2.880

PRESSURES (psi)

Cell Pressure (psi)	163.4
Back Pressure (psi)	21.5
Eff. Conf. Pressure (psi)	141.9
Pore Pressure	
Response (%)	100

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	23.5
Final Change (ml)	24.5

MAXIMUM OBLIQUITY POINTS

P	=	149.53
Q	=	84.61

Initial Dial Reading (mil)	31
Dial Reading After Saturation (mil)	37
Dial Reading After Consolidation (mil)	84

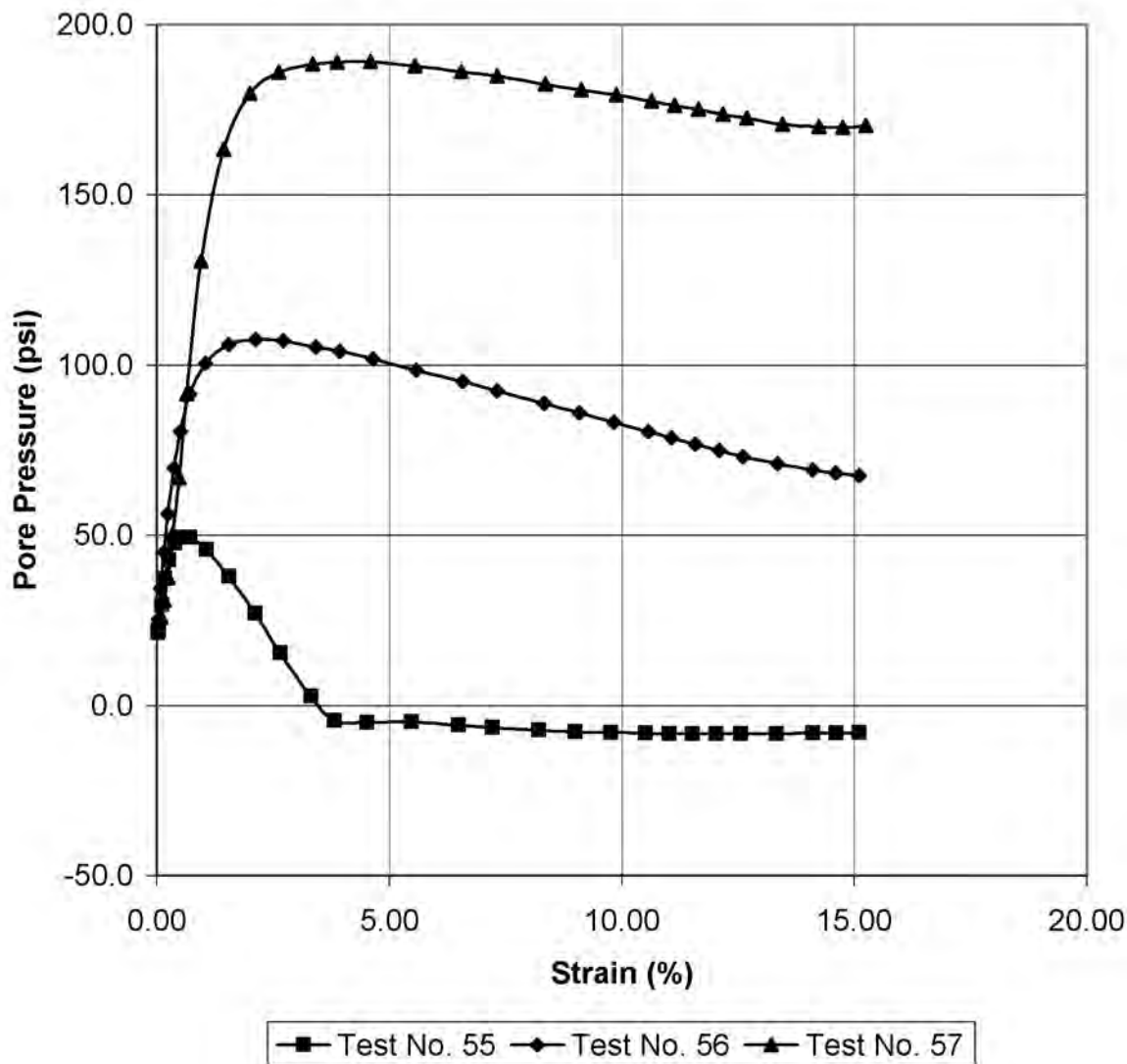
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
33.8	0.000	21.5
93.9	0.001	23.7
137.0	0.002	25.4
276.0	0.005	34.3
384.2	0.010	45.1
469.0	0.014	56.2
565.7	0.022	69.8
632.1	0.030	80.4
690.7	0.042	91.4
747.8	0.062	100.6
814.3	0.091	106.1
879.7	0.125	107.5
934.5	0.160	107.1
993.4	0.201	105.3
1033.2	0.231	104.0
1090.1	0.273	101.8
1162.4	0.328	98.5
1230.4	0.386	95.1
1286.5	0.430	92.4
1368.3	0.489	88.7
1421.9	0.534	86.0
1465.4	0.577	83.1
1511.8	0.620	80.5
1543.4	0.650	78.5
1569.9	0.680	76.7
1605.9	0.710	74.9
1632.5	0.740	73.1
1647.4	0.783	71.0
1676.3	0.828	69.2
1696.2	0.857	68.3
1715.7	0.886	67.5

Tested By: JCM Date: 11/26/13 Input Checked By: KC Date: 12/5/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**
ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	401.0-404.6
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	404.0-404.5
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	141.9	Stage No.	1
		Test No	56

INITIAL DIMENSIONS

Initial Sample Length (in)	5.92
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.56

VOLUME CHANGE

Volume After Consolidation (in ³)	36.95
Length After Consolidation (in)	5.87
Area After Consolidation (in ²)	6.297

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	9.55	2.21	149.24	139.7	1.068	0.23	144.47	4.78
0.03	16.38	3.93	154.35	138.0	1.119	0.24	146.16	8.19
0.08	38.43	12.80	167.53	129.1	1.298	0.33	148.32	19.22
0.16	55.55	23.57	173.88	118.3	1.469	0.42	146.11	27.78
0.25	68.94	34.72	176.12	107.2	1.643	0.50	141.65	34.47
0.38	84.14	48.34	177.70	93.6	1.899	0.57	135.63	42.07
0.52	94.52	58.87	177.56	83.0	2.138	0.62	130.29	47.26
0.71	103.58	69.92	175.57	72.0	2.439	0.67	123.77	51.79
1.06	112.20	79.10	175.00	62.8	2.786	0.70	118.90	56.10
1.55	122.03	84.58	179.35	57.3	3.129	0.69	118.34	61.01
2.14	131.46	86.01	187.36	55.9	3.352	0.65	121.63	65.73
2.72	139.14	85.57	195.46	56.3	3.470	0.62	125.90	69.57
3.42	147.18	83.82	205.26	58.1	3.534	0.57	131.67	73.59
3.93	152.46	82.46	211.90	59.4	3.565	0.54	135.67	76.23
4.65	159.95	80.29	221.56	61.6	3.596	0.50	141.58	79.97
5.58	169.23	76.98	234.15	64.9	3.607	0.45	149.53	84.61
6.58	177.54	73.65	245.79	68.3	3.601	0.41	157.02	88.77
7.33	184.36	70.90	255.36	71.0	3.596	0.38	163.18	92.18
8.33	194.27	67.23	268.94	74.7	3.602	0.35	171.80	97.13
9.09	200.39	64.46	277.83	77.4	3.587	0.32	177.64	100.19
9.83	204.99	61.64	285.24	80.3	3.554	0.30	182.75	102.49
10.57	209.90	58.96	292.85	82.9	3.531	0.28	187.89	104.95
11.07	213.19	57.04	298.06	84.9	3.512	0.27	191.46	106.60
11.59	215.68	55.25	302.34	86.7	3.489	0.26	194.50	107.84
12.10	219.45	53.43	307.92	88.5	3.480	0.24	198.20	109.72
12.60	221.89	51.57	312.23	90.3	3.456	0.23	201.28	110.95
13.35	222.03	49.45	314.48	92.4	3.402	0.22	203.46	111.02
14.11	224.05	47.70	318.25	94.2	3.378	0.21	206.23	112.03
14.61	225.43	46.82	320.51	95.1	3.371	0.21	207.80	112.71
15.10	226.77	46.03	322.63	95.9	3.365	0.20	209.25	113.38

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	404.0-404.5
Project No.	2013-465-001	Sample No.	ST-82
Lab ID #	2013-465-001-040	Test No.	56

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G331	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G1456	8/30/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	G1510-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	403.0-403.5
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	57

PRESSURES (psi)

Cell Pressure (psi)	297.0
Back Pressure (psi)	21.0
Eff. Conf. Pressure (psi)	276.0
Pore Pressure	
Response (%)	99

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	259.83
Q	=	149.06

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.914	Diameter 1:	2.883
Length 2:	5.915	Diameter 2:	2.888
Length 3:	5.912	Diameter 3:	2.886
Avg. Length:	5.914	Avg. Diam.:	2.886

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	31.3
Final Change (ml)	16.7

Initial Dial Reading (mil)	63
Dial Reading After Saturation (mil)	74
Dial Reading After Consolidation (mil)	184

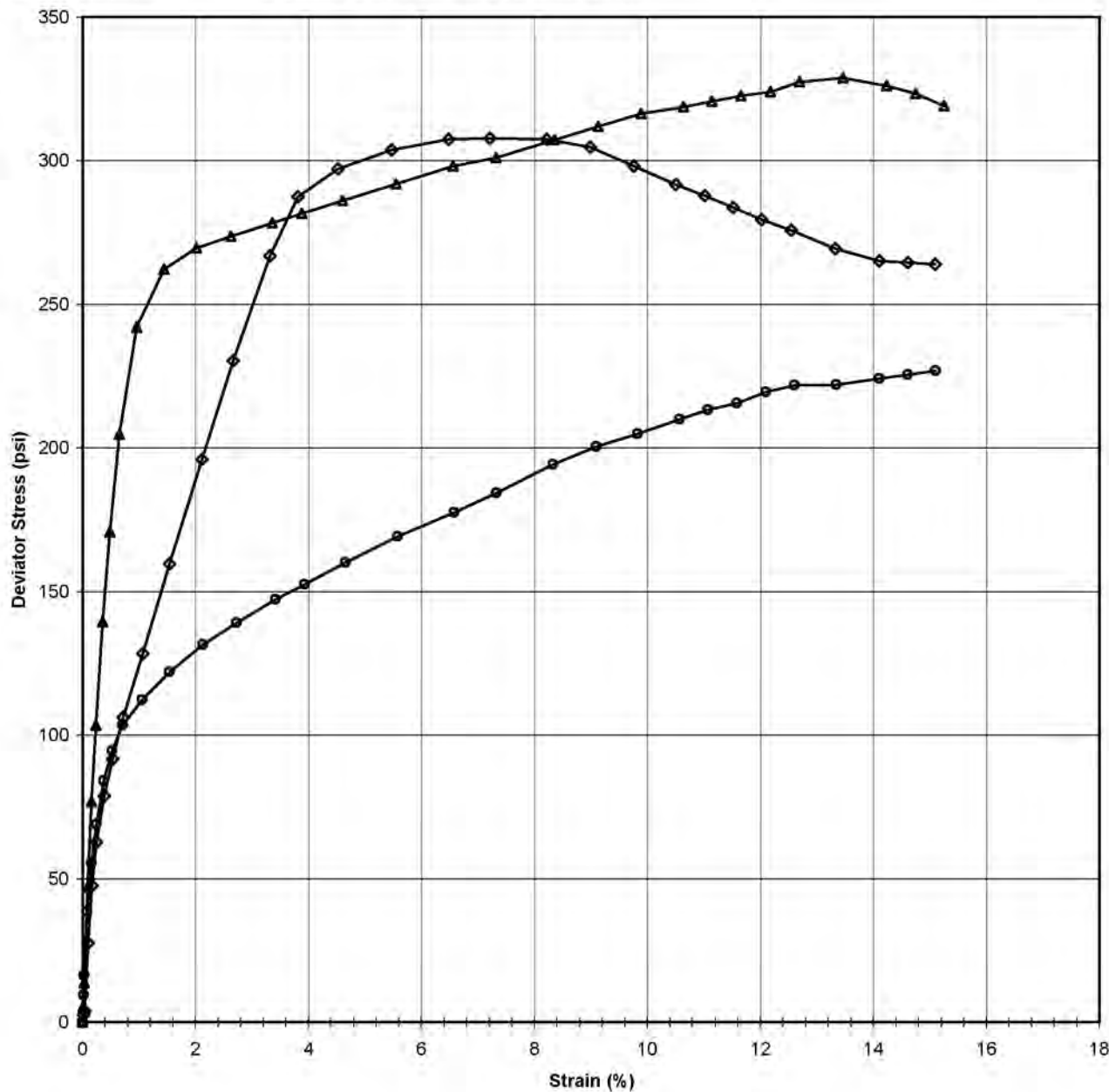
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
63.1	0.000	21.0
97.3	0.001	21.6
152.8	0.002	22.2
366.5	0.005	25.9
559.7	0.009	30.9
732.7	0.014	37.5
967.1	0.021	50.4
1172.4	0.028	66.8
1394.4	0.038	91.5
1642.2	0.056	130.6
1782.9	0.083	163.3
1840.9	0.117	179.8
1879.9	0.152	185.9
1924.7	0.195	188.4
1957.2	0.225	189.0
2001.8	0.267	189.1
2060.6	0.322	187.8
2125.1	0.380	186.2
2163.0	0.424	184.9
2230.3	0.484	182.5
2281.3	0.529	180.8
2332.9	0.573	179.3
2368.4	0.616	177.4
2395.5	0.645	176.3
2423.0	0.675	175.1
2447.1	0.706	173.7
2486.9	0.735	172.6
2519.6	0.780	170.8
2521.4	0.825	169.9
2515.1	0.854	169.8
2496.9	0.884	170.3

Tested By:	JCM	Date:	11/26/13	Input Checked By:	KC	Date:	12/5/13
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DCN: C1-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**
ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	401.0-404.6
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



—◆— Test No. 55

—■— Test No. 56

—▲— Test No. 57

E50 Test No. 55 16006.4

E50 Test No. 56 22005.41

E50 Test No. 57 37844.07

Tested By: JCM

Date: 11/26/13

Approved By: DB

Date: 12/5/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	403.0-403.5
Project No.:	2013-465-001	Sample No.:	ST-82
Lab ID:	2013-465-001-040		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	276.0	Stage No.	1
		Test No	57

INITIAL DIMENSIONS

Initial Sample Length (in)	5.91
Initial Sample Diameter (in)	2.89
Initial Sample Area (in ²)	6.54
Initial Sample Volume (in ³)	38.68

VOLUME CHANGE

Volume After Consolidation (in ³)	37.44
Length After Consolidation (in)	5.79
Area After Consolidation (in ²)	6.463

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	5.29	0.56	280.73	275.4	1.019	0.11	278.08	2.65
0.03	13.88	1.24	288.63	274.8	1.051	0.09	281.69	6.94
0.09	46.90	4.85	318.05	271.1	1.173	0.10	294.60	23.45
0.16	76.71	9.89	342.82	266.1	1.288	0.13	304.46	38.35
0.24	103.35	16.48	362.88	259.5	1.398	0.16	311.20	51.68
0.36	139.37	29.38	385.98	246.6	1.565	0.21	316.30	69.68
0.48	170.80	45.78	401.01	230.2	1.742	0.27	315.61	85.40
0.65	204.64	70.46	410.18	205.5	1.996	0.35	307.86	102.32
0.96	241.96	109.59	408.37	166.4	2.454	0.46	287.39	120.98
1.44	262.25	142.25	395.99	133.7	2.961	0.55	264.87	131.12
2.01	269.51	158.81	386.70	117.2	3.300	0.60	251.94	134.76
2.63	273.70	164.92	384.77	111.1	3.464	0.61	247.92	136.85
3.36	278.35	167.39	386.96	108.6	3.563	0.61	247.79	139.17
3.88	281.67	168.03	389.64	108.0	3.609	0.60	248.81	140.84
4.60	286.15	168.08	394.07	107.9	3.651	0.59	251.00	143.07
5.55	291.88	166.85	401.03	109.2	3.674	0.58	255.09	145.94
6.56	298.11	165.22	408.89	110.8	3.691	0.56	259.83	149.06
7.32	301.10	163.94	413.16	112.1	3.687	0.55	262.61	150.55
8.36	307.27	161.51	421.75	114.5	3.684	0.53	268.12	153.63
9.13	311.86	159.82	428.03	116.2	3.684	0.52	272.10	155.93
9.88	316.46	158.34	434.11	117.7	3.690	0.51	275.89	158.23
10.64	318.72	156.45	438.27	119.6	3.666	0.50	278.91	159.36
11.14	320.65	155.32	441.34	120.7	3.657	0.49	281.01	160.33
11.65	322.56	154.06	444.50	121.9	3.645	0.48	283.22	161.28
12.18	323.91	152.72	447.19	123.3	3.627	0.48	285.24	161.96
12.69	327.40	151.55	451.84	124.4	3.631	0.47	288.14	163.70
13.46	328.89	149.78	455.11	126.2	3.606	0.46	290.67	164.45
14.24	326.19	148.89	453.30	127.1	3.566	0.46	290.21	163.10
14.75	323.41	148.80	450.61	127.2	3.543	0.46	288.90	161.71
15.26	319.09	149.26	445.83	126.7	3.518	0.47	286.29	159.55

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	403.0-403.5
Project No.	2013-465-001	Sample No.	ST-82
Lab ID #	2013-465-001-040	Test No.	57

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G323	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G456	2/13/14
Timing Device	G489	5/13/14
Flow Pump	G1509-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-040 Specific Gravity (measured) 2.6
 Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-6-1b	R-6-1b	R-6-1b
Depth (ft):	403.5-404.0	404.0-404.5	403.0-403.5
Sample No.:	ST-82	ST-82	ST-82
Test No.	T55	T56	T57
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.6	21.5	21.0
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	28.2	28.2	28.2
Total Unit Weight (pcf)	121.4	117.8	115.6
Dry Unit Weight (pcf)	94.7	91.9	90.2
Moisture Content (%) (FINAL)	26.5	27.7	29.8
Initial State Void Ratio, e	0.714	0.767	0.800
Void Ratio at Shear, e	0.679	0.693	0.743



Tested By: JCM Date: 11/26/13 Input Checked By: KC Date: 12/5/13
 DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T55	T56	T57
Tare Number	914	914	914
Weight of Tare & Wet Sample (g)	238.7	238.7	238.7
Weight of Tare & Dry Sample (g)	210.46	210.46	210.46
Weight of Tare (g)	110.32	110.32	110.32
Moisture Content (%) (INITIAL)	28.20	28.20	28.20
Tare Number	2485	685	607
Weight of Tare & Wet Sample (g)	1306.34	1231.05	277.01
Weight of Tare & Dry Sample (g)	1052.63	985.24	232.39
Weight of Tare (g)	95.68	97.36	82.77
Moisture Content (%) (FINAL)	26.51	27.69	29.82

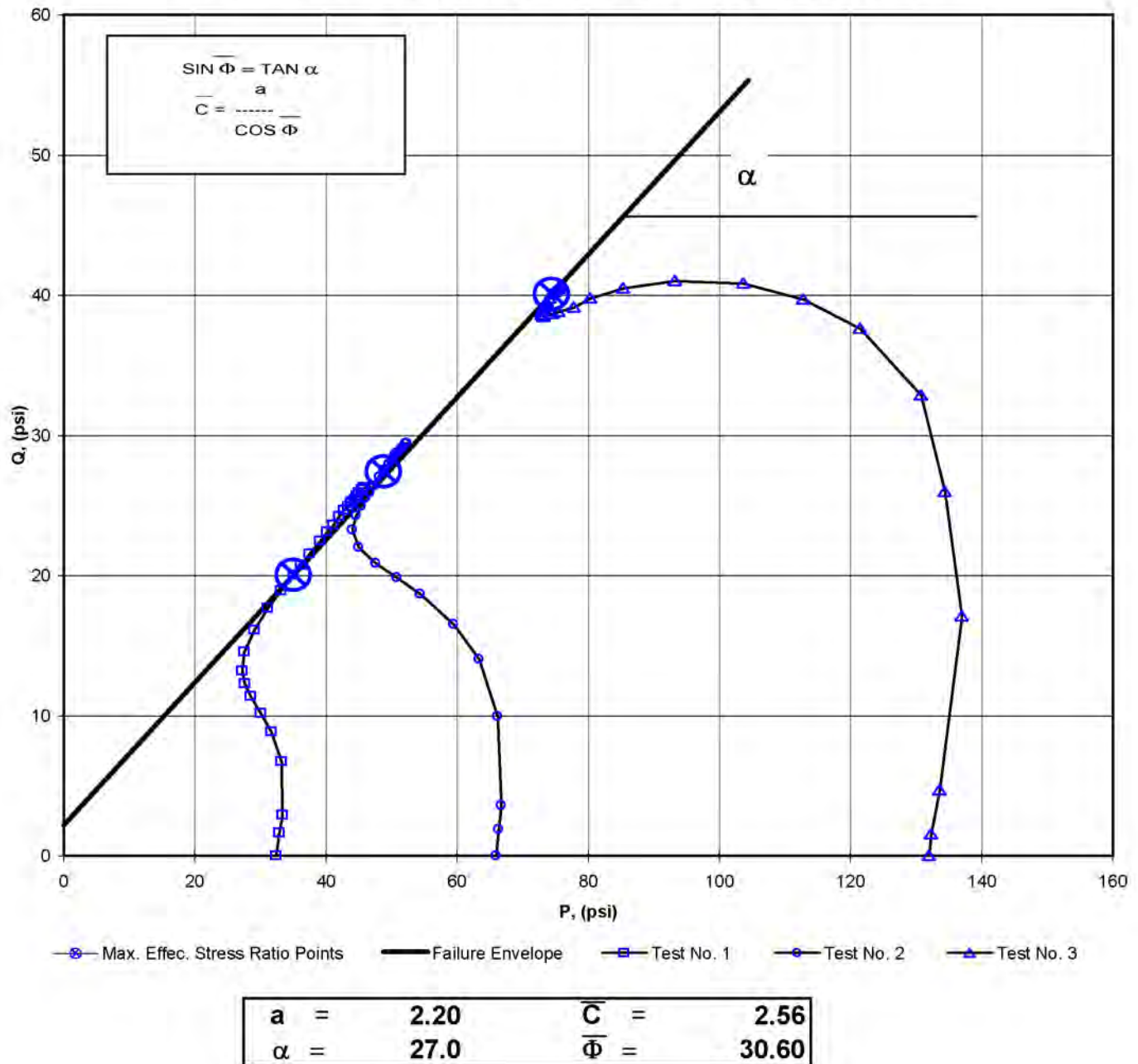
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1657.58	1611.78	1590.6
Weight of Tube (g)	420.09	419.97	417.28
Weight of Wet Sample (g)	1237.49	1191.81	1173.32
Length 1 (in)	5.947	5.929	5.914
Length 2 (in)	5.948	5.904	5.915
Length 3 (in)	5.933	5.928	5.912
Top Diameter (in)	2.88	2.872	2.883
Middle Diameter (in)	2.892	2.881	2.888
Bottom Diameter (in)	2.882	2.886	2.886
Average Length (in)	5.942667	5.920333	5.913667
Average Area (in ²)	6.536	6.513	6.540
Sample Volume (cm ³)	636.45	631.86	633.78
Unit Wet Weight (g/cm ³)	1.94	1.89	1.85
Unit Wet Weight (pcf)	121.39	117.75	115.58
Unit Dry Weight (pcf)	94.69	91.85	90.15
Unit Dry Weight (g/cm ³)	1.52	1.47	1.44
Initial Burette Reading	48	48	48
Final Burette Reading	36	23.5	31.3
Initial Dial Reading	64	31	63
Dial Reading After Saturation	67	37	74
Dial Reading After Consolidation	81	84	184
Volume Change during Consolidation	12	24.5	16.7
Volume Change during Saturation	0.96	1.92	3.54
Volume at Shear (cm ³)	623.49	605.44	613.55
Volume of Solids (cm ³)	371.26	357.56	352.01
Volume of Voids (cm ³)	252.22	247.88	261.54
Volume of Water (cm ³)	255.92	257.37	272.94
Void Ratio, e	0.679	0.693	0.743

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	190.1-190.6
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		
	Gray Silty Sand (Undisturbed)		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 10/28/13

Approved By: DB

Date: 11/20/13

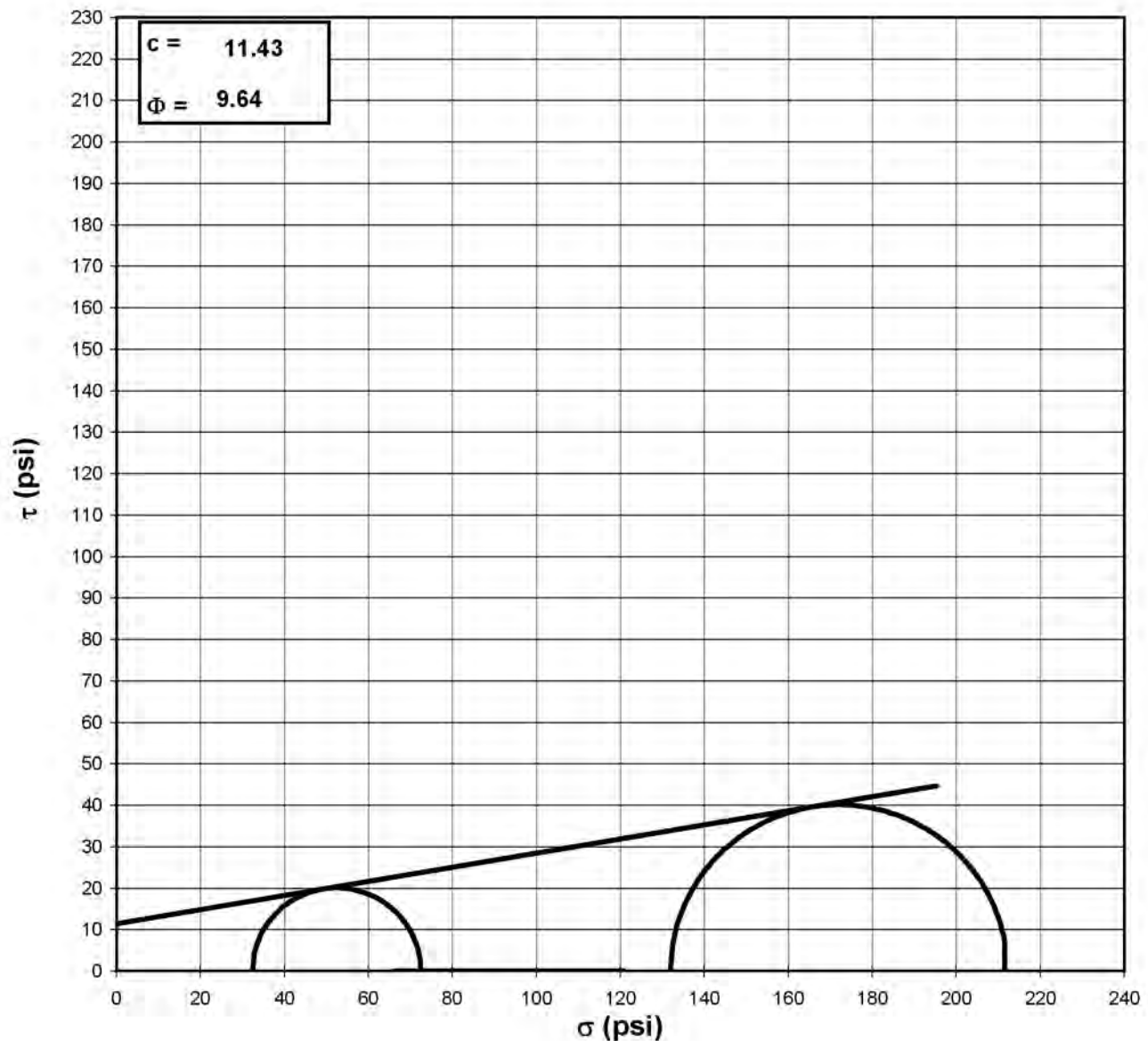
DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-003
 Visual Description: Gray Silty Sand (Undisturbed)

Boring No.: R-7-1
 Depth (ft): 190.1-190.6
 Sample No.: ST-4



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM

Date: 10/28/13

Approved By: DB

Date: 11/20/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	190.1-190.6
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Visual Description: Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	1

PRESSURES (psi)

Cell Pressure (psi)	64.1
Back Pressure (psi)	31.7
Eff. Conf. Pressure (psi)	32.4
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	35.07
Q	=	20.05

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.923	Diameter 1:	2.872
Length 2:	5.923	Diameter 2:	2.884
Length 3:	5.919	Diameter 3:	2.880
Avg. Length:	5.922	Avg. Diam.:	2.879

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	34.1
Final Change (ml)	13.9

Initial Dial Reading (mil)	63
Dial Reading After Saturation (mil)	78
Dial Reading After Consolidation (mil)	112

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
14.6	0.000	31.7
35.3	0.001	32.8
51.6	0.002	33.6
100.2	0.007	37.6
127.6	0.012	41.3
144.5	0.018	44.2
160.3	0.027	46.9
172.1	0.035	48.7
184.1	0.047	50.1
202.1	0.068	51.1
223.2	0.098	51.1
244.5	0.133	50.6
262.6	0.168	49.9
279.4	0.210	49.1
289.8	0.239	48.6
302.6	0.280	48.1
317.9	0.337	47.4
329.8	0.396	47.0
339.3	0.441	46.6
352.0	0.499	46.3
360.5	0.544	46.0
367.3	0.589	45.6
373.7	0.634	45.4
377.3	0.663	45.4
382.2	0.692	45.1
387.4	0.721	45.1
392.7	0.751	45.0
399.6	0.796	44.7
404.7	0.840	44.6
407.6	0.870	44.6
409.8	0.900	44.3

Tested By:	JCM	Date:	10/28/13	Input Checked By:	KC	Date:	11/20/13
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CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
 ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	190.1-190.6
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Visual Description: Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	32.4	Stage No.	1
		Test No	1

INITIAL DIMENSIONS

Initial Sample Length (in)	5.92
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.54

VOLUME CHANGE

Volume After Consolidation (in ³)	37.40
Length After Consolidation (in)	5.87
Area After Consolidation (in ²)	6.368

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	3.26	1.11	34.55	31.3	1.104	0.34	32.92	1.63
0.03	5.81	1.92	36.28	30.5	1.191	0.33	33.38	2.90
0.11	13.43	5.88	39.95	26.5	1.506	0.44	33.23	6.71
0.21	17.71	9.60	40.52	22.8	1.777	0.54	31.66	8.86
0.31	20.34	12.47	40.26	19.9	2.021	0.61	30.09	10.17
0.46	22.78	15.23	39.95	17.2	2.327	0.67	28.56	11.39
0.60	24.58	17.04	39.94	15.4	2.600	0.69	27.65	12.29
0.80	26.40	18.39	40.42	14.0	2.884	0.70	27.21	13.20
1.16	29.11	19.40	42.11	13.0	3.239	0.67	27.56	14.56
1.66	32.22	19.43	45.19	13.0	3.485	0.60	29.08	16.11
2.26	35.28	18.90	48.78	13.5	3.614	0.54	31.14	17.64
2.87	37.83	18.18	52.05	14.2	3.661	0.48	33.14	18.92
3.57	40.11	17.38	55.13	15.0	3.670	0.43	35.07	20.05
4.07	41.46	16.88	56.98	15.5	3.670	0.41	36.25	20.73
4.77	43.08	16.42	59.05	16.0	3.696	0.38	37.51	21.54
5.74	44.90	15.73	61.57	16.7	3.693	0.35	39.12	22.45
6.75	46.17	15.27	63.30	17.1	3.695	0.33	40.21	23.08
7.51	47.16	14.87	64.70	17.5	3.690	0.32	41.11	23.58
8.50	48.49	14.57	66.32	17.8	3.719	0.30	42.07	24.24
9.26	49.29	14.27	67.42	18.1	3.718	0.29	42.77	24.64
10.03	49.84	13.92	68.32	18.5	3.698	0.28	43.40	24.92
10.79	50.31	13.73	68.97	18.7	3.695	0.27	43.82	25.15
11.29	50.53	13.72	69.21	18.7	3.705	0.27	43.95	25.27
11.78	50.92	13.41	69.91	19.0	3.682	0.26	44.45	25.46
12.28	51.36	13.39	70.37	19.0	3.702	0.26	44.69	25.68
12.79	51.78	13.26	70.91	19.1	3.706	0.26	45.02	25.89
13.55	52.27	13.01	71.66	19.4	3.696	0.25	45.52	26.14
14.31	52.49	12.87	72.02	19.5	3.688	0.25	45.77	26.25
14.82	52.57	12.89	72.08	19.5	3.694	0.25	45.80	26.28
15.33	52.55	12.63	72.32	19.8	3.658	0.24	46.05	26.27

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	190.1-190.6
Project No.	2013-465-001	Sample No.	ST-4
Lab ID #	2013-465-001-003	Test No.	1

Equipment	Equipment ID#	Calibration Due Date
Oven	G256	10/12/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G332	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G836B	1/8/14
Pore Pressure Transducer	G836A	1/8/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G041	2/22/14
Timing Device	G489	5/13/14
Balance	G1395	6/4/14
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	189.6-190.1
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Visual Description: Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	2

PRESSURES (psi)

Cell Pressure (psi)	97.6
Back Pressure (psi)	31.6
Eff. Conf. Pressure (psi)	66.0
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	48.85
Q	=	27.42

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.946	Diameter 1:	2.878
Length 2:	5.948	Diameter 2:	2.875
Length 3:	5.944	Diameter 3:	2.875
Avg. Length	5.946	Avg. Diam.:	2.876

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	25.8
Final Change (ml)	22.2

Initial Dial Reading (mil)	56
Dial Reading After Saturation (mil)	63
Dial Reading After Consolidation (mil)	132

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
18.7	0.000	31.6
42.4	0.001	33.1
64.3	0.002	34.4
144.4	0.006	41.3
196.3	0.011	48.2
228.4	0.017	54.6
256.0	0.025	61.9
271.4	0.033	66.6
284.6	0.045	70.8
300.4	0.065	74.6
317.5	0.095	76.7
332.7	0.133	77.2
343.8	0.168	77.1
353.6	0.210	77.0
360.5	0.239	76.8
369.2	0.280	76.6
381.3	0.336	76.4
390.9	0.397	76.2
396.0	0.443	76.1
405.0	0.501	75.9
411.9	0.544	75.7
420.1	0.589	75.6
425.9	0.635	75.5
429.1	0.666	75.3
432.0	0.696	75.3
435.6	0.726	75.2
440.2	0.755	75.0
445.5	0.798	74.9
453.0	0.842	74.9
456.4	0.873	74.7
459.5	0.904	74.6

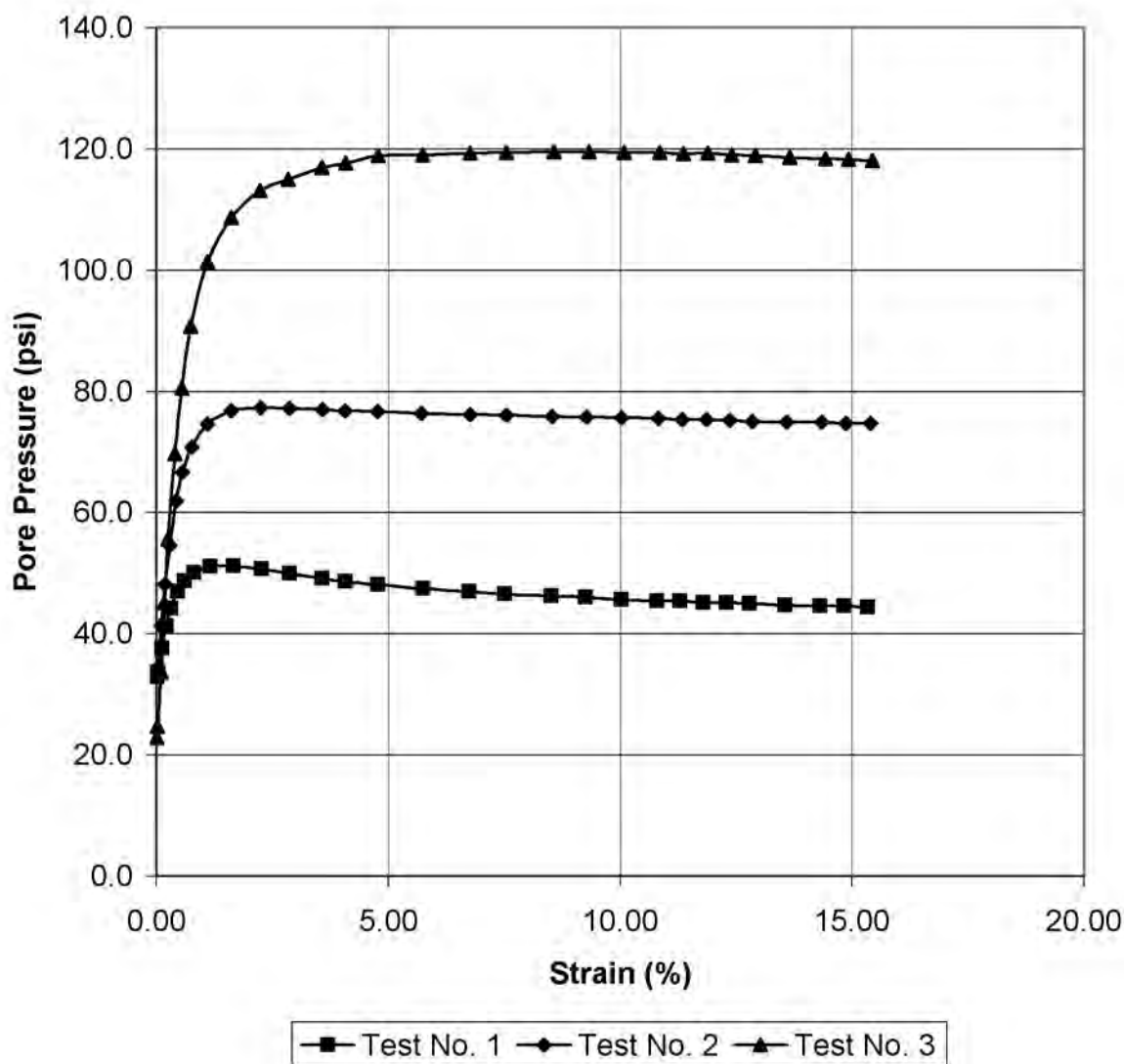
Tested By:	JCM	Date:	10/28/13	Input Checked By:	KC	Date:	11/20/13
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DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	190.1-190.6
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	189.6-190.1
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Visual Description: Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	66.0	Stage No.	1
		Test No	2

INITIAL DIMENSIONS

Initial Sample Length (in)	5.95
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.50
Initial Sample Volume (in ³)	38.63

VOLUME CHANGE

Volume After Consolidation (in ³)	37.14
Length After Consolidation (in)	5.87
Area After Consolidation (in ²)	6.326

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	3.75	1.47	68.28	64.5	1.058	0.39	66.41	1.88
0.04	7.20	2.83	70.38	63.2	1.114	0.39	66.77	3.60
0.10	19.85	9.68	76.17	56.3	1.352	0.49	66.25	9.92
0.19	28.02	16.62	77.40	49.4	1.567	0.59	63.39	14.01
0.29	33.04	23.01	76.04	43.0	1.769	0.70	59.51	16.52
0.43	37.35	30.26	73.09	35.7	2.045	0.81	54.41	18.67
0.56	39.72	35.04	70.68	31.0	2.283	0.88	50.82	19.86
0.77	41.70	39.22	68.48	26.8	2.557	0.94	47.63	20.85
1.10	44.04	43.01	67.04	23.0	2.915	0.98	45.02	22.02
1.62	46.47	45.14	67.34	20.9	3.228	0.97	44.10	23.24
2.26	48.52	45.63	68.88	20.4	3.382	0.94	44.63	24.26
2.87	49.91	45.54	70.37	20.5	3.440	0.91	45.41	24.96
3.58	51.04	45.41	71.63	20.6	3.479	0.89	46.11	25.52
4.08	51.82	45.16	72.65	20.8	3.487	0.87	46.74	25.91
4.78	52.75	45.01	73.74	21.0	3.513	0.85	47.37	26.38
5.72	54.04	44.79	75.24	21.2	3.548	0.83	48.23	27.02
6.77	54.85	44.57	76.28	21.4	3.559	0.81	48.85	27.42
7.55	55.14	44.46	76.68	21.5	3.559	0.81	49.11	27.57
8.54	55.85	44.25	77.60	21.7	3.568	0.79	49.67	27.92
9.28	56.38	44.12	78.26	21.9	3.577	0.78	50.07	28.19
10.04	57.08	44.01	79.07	22.0	3.596	0.77	50.53	28.54
10.82	57.40	43.89	79.51	22.1	3.597	0.76	50.81	28.70
11.35	57.51	43.73	79.77	22.3	3.582	0.76	51.02	28.75
11.86	57.58	43.67	79.91	22.3	3.578	0.76	51.12	28.79
12.36	57.75	43.56	80.19	22.4	3.574	0.75	51.31	28.88
12.85	58.06	43.44	80.61	22.6	3.574	0.75	51.58	29.03
13.59	58.29	43.35	80.95	22.7	3.573	0.74	51.80	29.15
14.35	58.80	43.25	81.55	22.7	3.585	0.74	52.15	29.40
14.88	58.89	43.06	81.84	22.9	3.567	0.73	52.39	29.45
15.40	58.95	43.04	81.91	23.0	3.568	0.73	52.43	29.48

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	189.6-190.1
Project No.	2013-465-001	Sample No.	ST-4
Lab ID #	2013-465-001-003	Test No.	2

Equipment	Equipment ID#	Calibration Due Date
Oven	G256	10/12/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G330	INITIAL ONLY
Load Cell	G1437	1/7/14
Cell Pressure Transducer	G1438	1/7/14
Pore Pressure Transducer	G1439	1/7/14
Extensometer	G1440	1/7/14
Load Frame	G1434	1/7/14
Dial Indicator	G1190	2/22/14
Timing Device	G489	5/13/14
Balance	G1395	6/4/14
Oven	G1387	8/16/14
Balance	G1394	5/15/14
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	188.9-189.4
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Visual Description: Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	3

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.921	Diameter 1:	2.882
Length 2:	5.903	Diameter 2:	2.878
Length 3:	5.923	Diameter 3:	2.879
Avg. Length:	5.916	Avg. Diam.:	2.880

PRESSURES (psi)

Cell Pressure (psi)	153.6
Back Pressure (psi)	21.6
Eff. Conf. Pressure (psi)	132.0
Pore Pressure Response (%)	98

VOLUME CHANGE

Initial Burette Reading (ml)	72.0
Final Burette Reading (ml)	43.8
Final Change (ml)	28.2

MAXIMUM OBLIQUITY POINTS

P	=	74.44
Q	=	40.09

Initial Dial Reading (mil)	51
Dial Reading After Saturation (mil)	60
Dial Reading After Consolidation (mil)	142

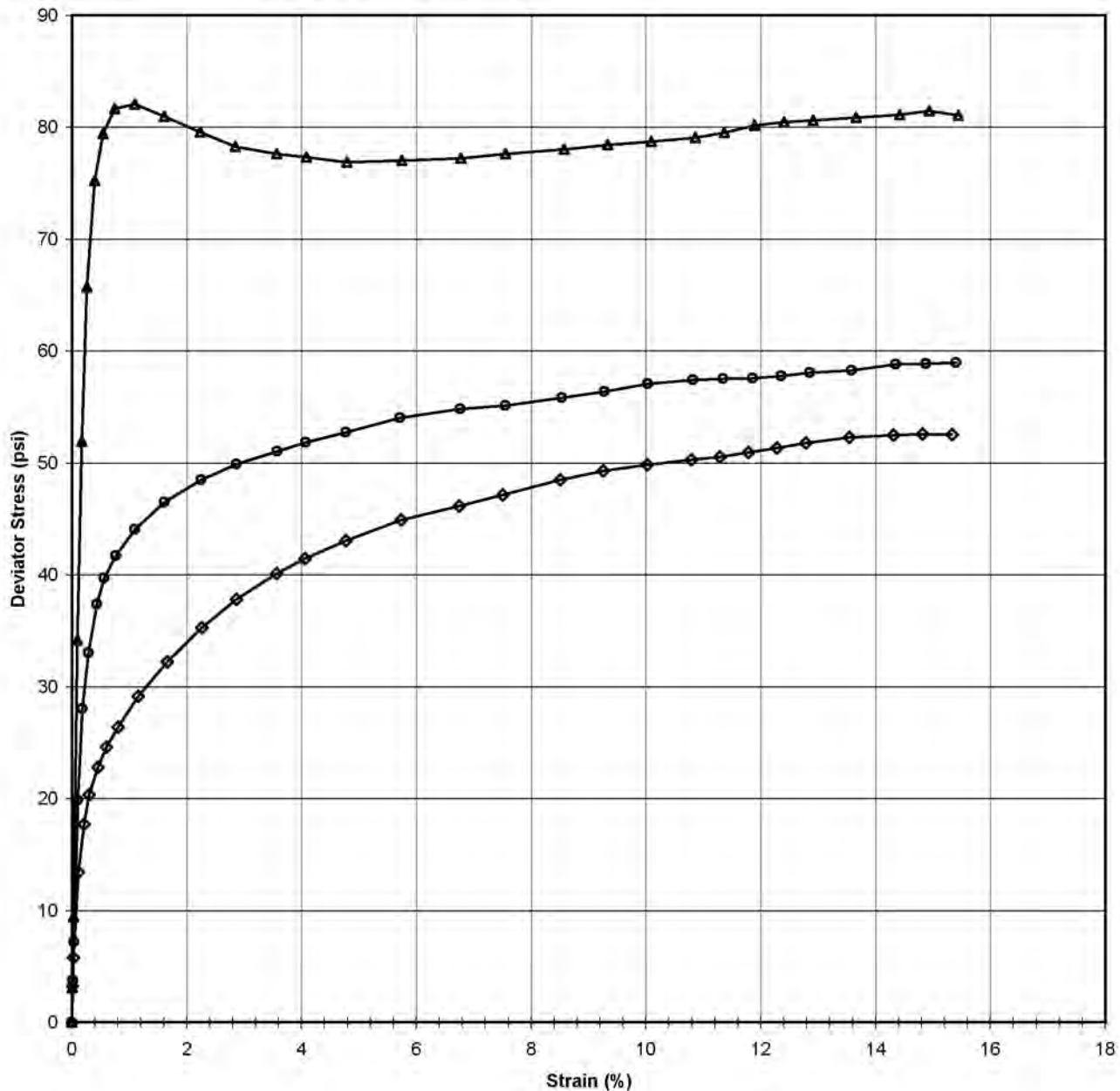
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
27.4	0.000	21.6
47.0	0.001	22.8
86.6	0.002	24.6
242.7	0.006	33.6
354.5	0.010	45.1
441.7	0.015	55.7
502.5	0.023	69.7
529.7	0.032	80.5
544.9	0.044	90.7
549.3	0.064	101.4
544.8	0.094	108.7
539.3	0.130	113.1
534.1	0.166	114.9
533.6	0.208	116.9
534.6	0.238	117.6
535.2	0.279	118.8
541.5	0.335	118.9
548.4	0.395	119.2
555.6	0.440	119.4
564.2	0.500	119.4
571.3	0.544	119.4
578.2	0.588	119.3
585.2	0.632	119.4
591.8	0.662	119.2
599.7	0.692	119.3
605.3	0.723	118.9
609.7	0.752	118.9
616.5	0.796	118.5
623.4	0.840	118.4
629.7	0.870	118.3
630.3	0.900	118.0

Tested By: JCM Date: 10/28/13 Input Checked By: KC Date: 11/20/13

DCN: CI-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	188.0-190.7
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		
Visual Description:	Gray Silty Sand (Undisturbed)		



—◆— Test No. 1

—●— Test No. 2

—▲— Test No. 3

E50 Test No. 1 6777.783

E50 Test No. 2 15034.48

E50 Test No. 3 31812.57

Tested By: JCM

Date: 10/28/13

Approved By: DB

Date: 11/20/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	188.9-189.4
Project No.:	2013-465-001	Sample No.:	ST-4
Lab ID:	2013-465-001-003		

Visual Description: Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	132.0	Stage No.	1
		Test No	3

INITIAL DIMENSIONS

Initial Sample Length (in)	5.92
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.53

VOLUME CHANGE

Volume After Consolidation (in ³)	36.63
Length After Consolidation (in)	5.82
Area After Consolidation (in ²)	6.289

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	3.11	1.22	133.89	130.8	1.024	0.40	132.33	1.56
0.03	9.40	3.04	138.37	129.0	1.073	0.33	133.67	4.70
0.10	34.19	12.03	154.17	120.0	1.285	0.36	137.07	17.10
0.17	51.92	23.48	160.44	108.5	1.478	0.46	134.48	25.96
0.26	65.70	34.05	163.65	97.9	1.671	0.53	130.80	32.85
0.40	75.25	48.07	159.18	83.9	1.897	0.65	121.55	37.62
0.55	79.43	58.86	152.56	73.1	2.086	0.76	112.85	39.71
0.75	81.67	69.08	144.59	62.9	2.298	0.86	103.75	40.84
1.10	82.08	79.76	134.31	52.2	2.571	0.99	93.28	41.04
1.62	80.95	87.08	125.87	44.9	2.802	1.10	85.40	40.47
2.23	79.58	91.46	120.11	40.5	2.963	1.17	80.33	39.79
2.85	78.27	93.31	116.97	38.7	3.023	1.22	77.83	39.14
3.57	77.62	95.29	114.33	36.7	3.115	1.25	75.52	38.81
4.09	77.34	96.03	113.31	36.0	3.150	1.27	74.64	38.67
4.79	76.87	97.22	111.65	34.8	3.210	1.29	73.22	38.43
5.75	77.04	97.31	111.73	34.7	3.221	1.29	73.21	38.52
6.77	77.23	97.62	111.61	34.4	3.247	1.29	72.99	38.62
7.55	77.64	97.77	111.86	34.2	3.268	1.29	73.05	38.82
8.58	78.04	97.82	112.22	34.2	3.283	1.28	73.20	39.02
9.34	78.41	97.84	112.57	34.2	3.295	1.27	73.37	39.20
10.09	78.75	97.73	113.02	34.3	3.298	1.27	73.65	39.37
10.86	79.06	97.78	113.28	34.2	3.310	1.26	73.75	39.53
11.37	79.54	97.61	113.93	34.4	3.313	1.25	74.16	39.77
11.89	80.18	97.65	114.53	34.3	3.335	1.24	74.44	40.09
12.40	80.49	97.34	115.14	34.7	3.322	1.23	74.90	40.24
12.92	80.63	97.27	115.37	34.7	3.321	1.23	75.05	40.32
13.67	80.87	96.92	115.95	35.1	3.306	1.22	75.51	40.44
14.42	81.10	96.76	116.34	35.2	3.301	1.22	75.79	40.55
14.93	81.47	96.66	116.81	35.3	3.306	1.21	76.07	40.74
15.44	81.06	96.43	116.63	35.6	3.279	1.21	76.10	40.53

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	188.9-189.4
Project No.	2013-465-001	Sample No.	ST-4
Lab ID #	2013-465-001-003	Test No.	3

Equipment	Equipment ID#	Calibration Due Date
Oven	G1396	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G306	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G720	3/18/14
Timing Device	G489	5/13/14
Flow Pump	G1509-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-003 Specific Gravity (measured) 2.63
 Visual Description: Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	190.1-190.6	189.6-190.1	188.9-189.4
Sample No.:	ST-4	ST-4	ST-4
Test No.	T1	T2	T3
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	31.7	31.6	21.6
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	31.5	31.5	31.5
Total Unit Weight (pcf)	117.0	115.3	115.0
Dry Unit Weight (pcf)	89.0	87.7	87.4
Moisture Content (%) (FINAL)	31.8	31.2	29.9
Initial State Void Ratio, e	0.845	0.872	0.878
Void Ratio at Shear, e	0.791	0.800	0.786



Tested By: JCM Date: 10/28/13 Input Checked By: KC Date: 11/20/13
 DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T1	T2	T3
Tare Number	560	560	560
Weight of Tare & Wet Sample (g)	161.29	161.29	161.29
Weight of Tare & Dry Sample (g)	142.44	142.44	142.44
Weight of Tare (g)	82.61	82.61	82.61
Moisture Content (%) (INITIAL)	31.51	31.51	31.51
Tare Number	528	610	51
Weight of Tare & Wet Sample (g)	1228.49	317.29	1299.84
Weight of Tare & Dry Sample (g)	955.28	261.65	1047.14
Weight of Tare (g)	95.03	83.25	201.25
Moisture Content (%) (FINAL)	31.76	31.19	29.87

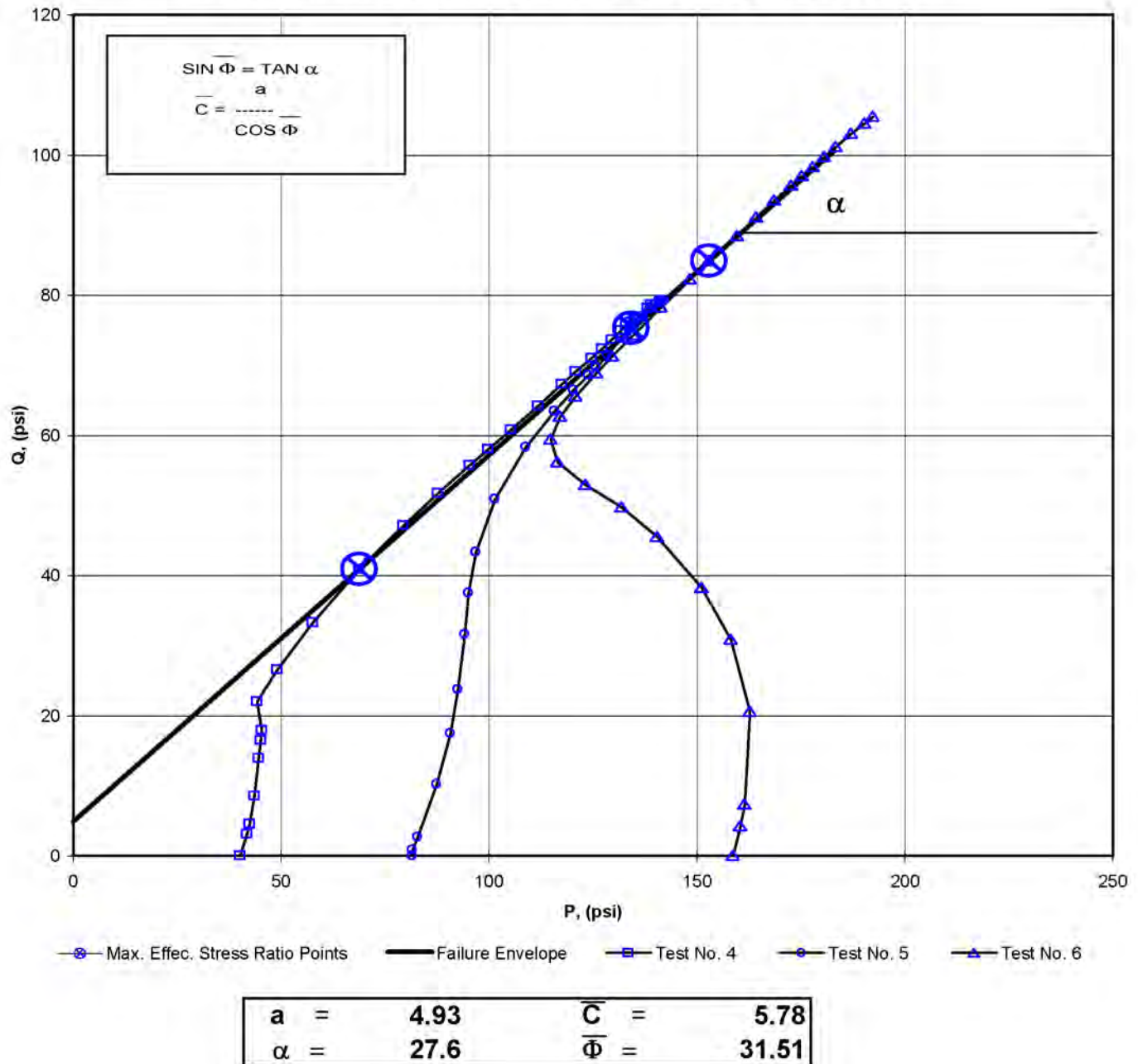
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1596.45	1583.7	1580.7
Weight of Tube (g)	412.68	414.3	418.13
Weight of Wet Sample (g)	1183.77	1169.4	1162.57
Length 1 (in)	5.923	5.946	5.921
Length 2 (in)	5.923	5.948	5.903
Length 3 (in)	5.919	5.944	5.923
Top Diameter (in)	2.872	2.878	2.882
Middle Diameter (in)	2.884	2.875	2.878
Bottom Diameter (in)	2.88	2.875	2.879
Average Length (in)	5.921667	5.946	5.915667
Average Area (in ²)	6.508	6.496	6.513
Sample Volume (cm ³)	631.56	632.99	631.36
Unit Wet Weight (g/cm ³)	1.87	1.85	1.84
Unit Wet Weight (pcf)	117.02	115.34	114.96
Unit Dry Weight (pcf)	88.98	87.70	87.42
Unit Dry Weight (g/cm ³)	1.43	1.41	1.40
Initial Burette Reading	48	48	72
Final Burette Reading	34.1	25.8	43.8
Initial Dial Reading	63	56	51
Dial Reading After Saturation	78	63	60
Dial Reading After Consolidation	112	132	142
Volume Change during Consolidation	13.9	22.2	28.2
Volume Change during Saturation	4.80	2.24	2.88
Volume at Shear (cm ³)	612.87	608.55	600.28
Volume of Solids (cm ³)	342.27	338.11	336.14
Volume of Voids (cm ³)	270.60	270.44	264.14
Volume of Water (cm ³)	285.89	277.34	264.10
Void Ratio, e	0.791	0.800	0.786

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	232.0-234.7
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 10/29/13

Approved By: DB

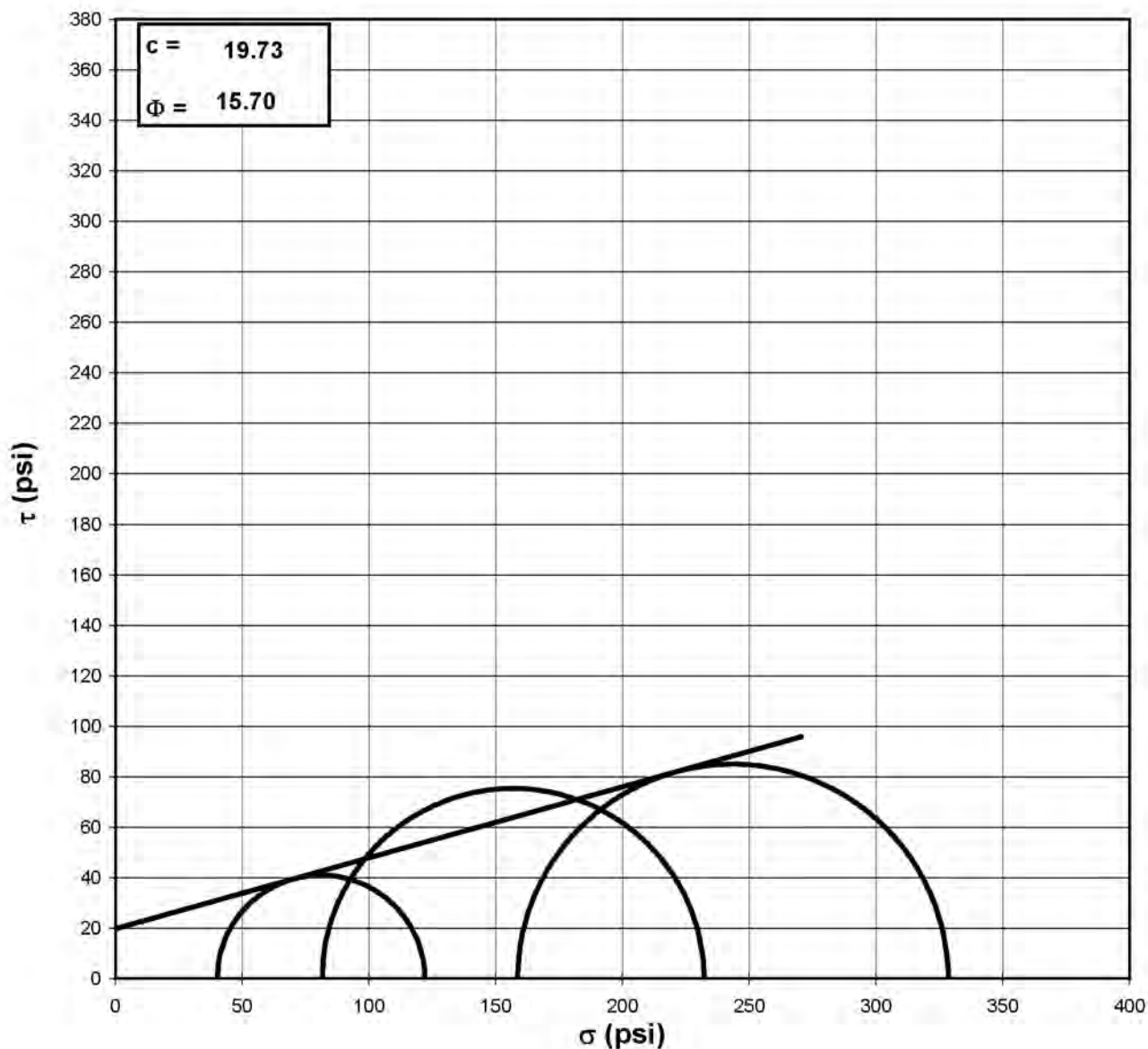
Date: 11/20/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	232.0-234.7
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 10/29/13 Approved By: DB Date: 11/20/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	233.6-234.1
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	4

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.887	Diameter 1:	2.881
Length 2:	5.889	Diameter 2:	2.868
Length 3:	5.884	Diameter 3:	2.877
Avg. Length:	5.887	Avg. Diam.:	2.875

PRESSURES (psi)

Cell Pressure (psi)	62.0
Back Pressure (psi)	21.8
Eff. Conf. Pressure (psi)	40.2
Pore Pressure	
Response (%)	100

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	37.3
Final Change (ml)	10.7

MAXIMUM OBLIQUITY POINTS

P	=	68.90
Q	=	40.95

Initial Dial Reading (mil)	52
Dial Reading After Saturation (mil)	58
Dial Reading After Consolidation (mil)	82

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
14.3	0.000	21.8
54.0	0.001	23.2
72.2	0.003	24.1
123.8	0.006	26.9
192.8	0.013	31.4
226.0	0.017	33.4
244.5	0.019	34.5
297.5	0.034	39.8
356.7	0.046	39.4
444.4	0.065	37.7
546.5	0.094	34.0
630.3	0.129	29.7
694.6	0.164	26.0
752.9	0.204	22.4
786.5	0.233	20.2
830.3	0.274	17.5
884.1	0.330	14.4
936.4	0.389	11.8
968.8	0.432	10.2
1005.8	0.491	8.4
1033.1	0.534	7.2
1059.4	0.579	6.1
1086.9	0.624	5.2
1103.1	0.654	4.6
1116.8	0.683	4.1
1128.0	0.711	3.6
1135.7	0.740	3.2
1149.8	0.785	2.6
1179.3	0.830	2.0
1193.5	0.859	1.7
1202.9	0.889	1.4

Tested By: JCM Date: 10/29/13 Input Checked By: KC Date: 11/20/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	233.6-234.1
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	40.2	Stage No.	1
		Test No	4

INITIAL DIMENSIONS

Initial Sample Length (in)	5.89
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.49
Initial Sample Volume (in ³)	38.22

VOLUME CHANGE

Volume After Consolidation (in ³)	37.45
Length After Consolidation (in)	5.86
Area After Consolidation (in ²)	6.395

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	6.21	1.43	44.98	38.8	1.160	0.23	41.88	3.10
0.05	9.06	2.27	46.98	37.9	1.239	0.25	42.45	4.53
0.11	17.10	5.12	52.18	35.1	1.487	0.30	43.63	8.55
0.22	27.86	9.56	58.50	30.6	1.909	0.34	44.57	13.93
0.28	33.01	11.64	61.57	28.6	2.156	0.35	45.07	16.50
0.33	35.88	12.75	63.34	27.5	2.307	0.36	45.40	17.94
0.57	44.03	18.03	66.19	22.2	2.986	0.41	44.18	22.01
0.78	53.13	17.64	75.69	22.6	3.355	0.33	49.12	26.56
1.11	66.51	15.85	90.86	24.3	3.732	0.24	57.60	33.26
1.60	81.89	12.25	109.84	28.0	3.930	0.15	68.90	40.95
2.20	94.21	7.94	126.47	32.3	3.920	0.08	79.36	47.10
2.80	103.40	4.22	139.39	36.0	3.874	0.04	87.69	51.70
3.48	111.47	0.59	151.08	39.6	3.814	0.01	95.35	55.74
3.98	115.94	-1.63	157.77	41.8	3.771	-0.01	99.80	57.97
4.68	121.62	-4.33	166.16	44.5	3.731	-0.04	105.35	60.81
5.64	128.33	-7.38	175.92	47.6	3.697	-0.06	111.75	64.17
6.64	134.62	-9.99	184.81	50.2	3.682	-0.07	117.50	67.31
7.38	138.24	-11.59	190.02	51.8	3.669	-0.08	120.91	69.12
8.38	142.04	-13.40	195.64	53.6	3.650	-0.09	124.62	71.02
9.13	144.77	-14.61	199.58	54.8	3.641	-0.10	127.19	72.38
9.88	147.28	-15.68	203.16	55.9	3.636	-0.11	129.52	73.64
10.65	149.85	-16.61	206.67	56.8	3.638	-0.11	131.74	74.93
11.16	151.25	-17.17	208.63	57.4	3.636	-0.11	133.00	75.63
11.65	152.30	-17.71	210.21	57.9	3.630	-0.12	134.06	76.15
12.14	153.00	-18.21	211.41	58.4	3.619	-0.12	134.91	76.50
12.64	153.19	-18.59	211.98	58.8	3.606	-0.12	135.39	76.60
13.41	153.75	-19.22	213.17	59.4	3.588	-0.12	136.29	76.88
14.17	156.36	-19.77	216.32	60.0	3.607	-0.13	138.15	78.18
14.67	157.33	-20.09	217.62	60.3	3.610	-0.13	138.95	78.67
15.18	157.64	-20.38	218.22	60.6	3.602	-0.13	139.40	78.82

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	233.6-234.1
Project No.	2013-465-001	Sample No.	ST-7
Lab ID #	2013-465-001-005	Test No.	4

Equipment	Equipment ID#	Calibration Due Date
Oven	G256	10/12/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G318	INITIAL ONLY
Load Cell	G1310	1.8-14
Cell Pressure Transducer	G836B	1/8/14
Pore Pressure Transducer	G836A	1/8/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G1456	8/30/14
Timing Device	G489	5/13/14
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	234.1-234.6
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	5

PRESSURES (psi)

Cell Pressure (psi)	102.9
Back Pressure (psi)	21.3
Eff. Conf. Pressure (psi)	81.6
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	134.24
Q	=	75.30

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.967	Diameter 1:	2.876
Length 2:	5.964	Diameter 2:	2.870
Length 3:	5.969	Diameter 3:	2.876
Avg. Length	5.967	Avg. Diam.:	2.874

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	31.7
Final Change (ml)	16.3

Initial Dial Reading (mil)	66
Dial Reading After Saturation (mil)	70
Dial Reading After Consolidation (mil)	115

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
23.0	0.000	21.3
33.3	0.002	22.1
56.2	0.003	22.6
153.0	0.008	25.6
245.6	0.012	29.6
326.0	0.017	34.1
426.3	0.024	40.3
502.3	0.033	45.2
578.0	0.043	49.4
677.4	0.062	52.4
776.0	0.090	52.3
847.0	0.124	50.6
891.9	0.161	49.0
926.1	0.204	47.5
946.6	0.235	46.9
976.7	0.276	45.9
1017.9	0.331	44.9
1048.3	0.390	44.0
1062.2	0.436	43.4
1091.7	0.497	42.6
1115.1	0.541	42.2
1132.4	0.585	41.8
1150.3	0.628	41.3
1156.1	0.659	40.9
1159.5	0.690	40.8
1164.8	0.720	40.5
1177.1	0.751	40.4
1187.7	0.795	40.2
1194.9	0.838	40.0
1204.5	0.868	39.8
1210.1	0.898	39.9

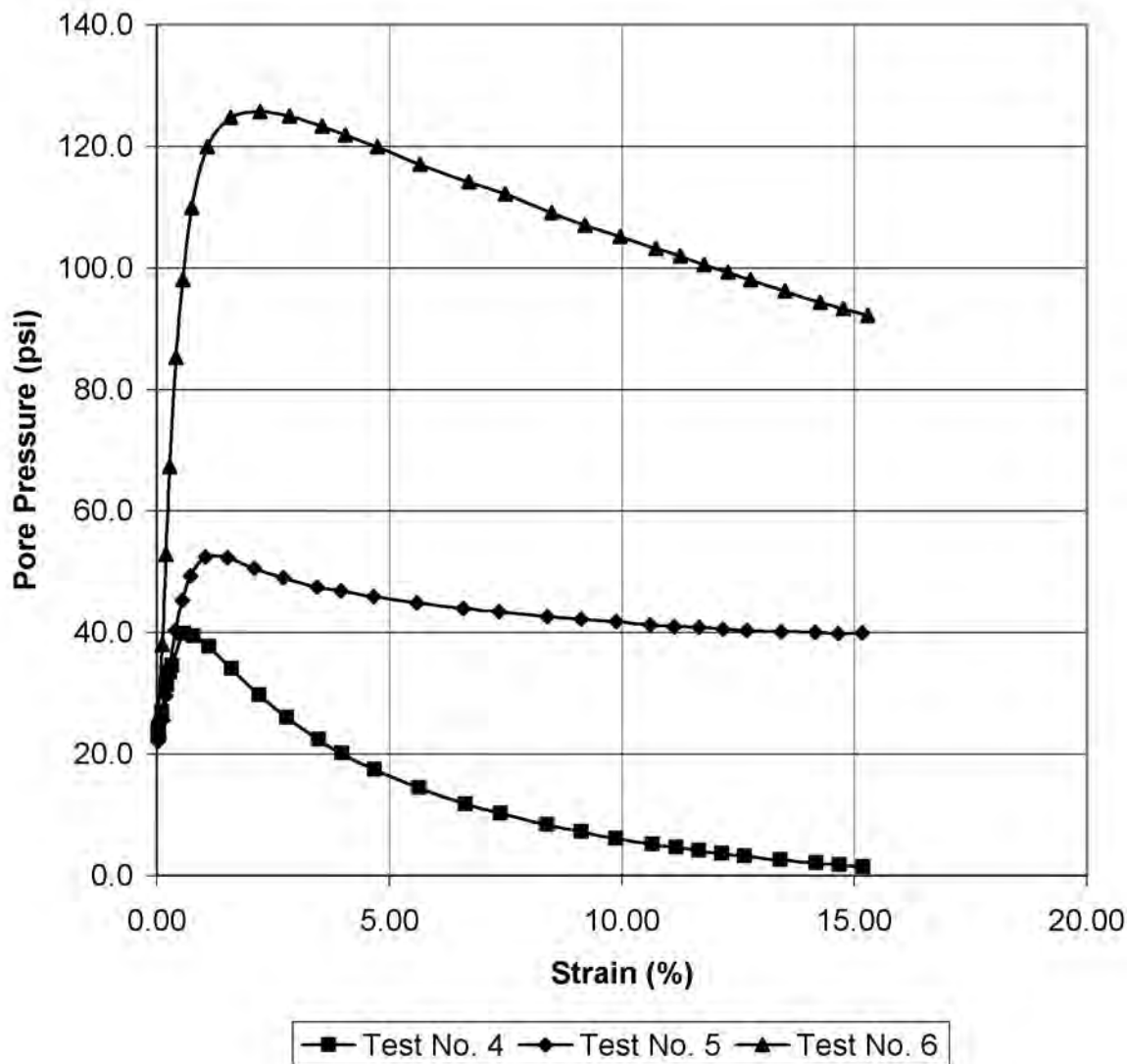
Tested By:	JCM	Date:	10/29/13	Input Checked By:	KC	Date:	11/20/13
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DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	232.0-234.7
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	234.1-234.6
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	81.6	Stage No.	1
		Test No	5

INITIAL DIMENSIONS

Initial Sample Length (in)	5.97
Initial Sample Diameter (in)	2.87
Initial Sample Area (in ²)	6.49
Initial Sample Volume (in ³)	38.71

VOLUME CHANGE

Volume After Consolidation (in ³)	37.63
Length After Consolidation (in)	5.92
Area After Consolidation (in ²)	6.360

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.03	1.62	0.78	82.44	80.8	1.020	0.48	81.63	0.81
0.05	5.22	1.32	85.50	80.3	1.065	0.25	82.89	2.61
0.13	20.41	4.29	97.72	77.3	1.264	0.21	87.51	10.21
0.20	34.93	8.29	108.24	73.3	1.476	0.24	90.78	17.46
0.28	47.51	12.82	116.29	68.8	1.691	0.27	92.54	23.75
0.41	63.16	19.01	125.75	62.6	2.009	0.30	94.17	31.58
0.55	74.94	23.94	132.60	57.7	2.300	0.32	95.13	37.47
0.73	86.62	28.07	140.15	53.5	2.618	0.32	96.84	43.31
1.05	101.81	31.08	152.33	50.5	3.015	0.31	101.42	50.91
1.52	116.60	31.04	167.16	50.6	3.306	0.27	108.86	58.30
2.10	126.84	29.29	179.15	52.3	3.425	0.23	115.73	63.42
2.72	132.91	27.67	186.84	53.9	3.464	0.21	120.39	66.45
3.45	137.10	26.20	192.50	55.4	3.475	0.19	123.95	68.55
3.97	139.46	25.56	195.50	56.0	3.489	0.18	125.77	69.73
4.66	142.96	24.57	200.00	57.0	3.507	0.17	128.52	71.48
5.60	147.68	23.59	205.70	58.0	3.546	0.16	131.86	73.84
6.59	150.60	22.66	209.54	58.9	3.555	0.15	134.24	75.30
7.37	151.36	22.13	210.83	59.5	3.545	0.15	135.15	75.68
8.40	153.93	21.33	214.20	60.3	3.554	0.14	137.23	76.97
9.13	156.04	20.94	216.69	60.7	3.573	0.13	138.67	78.02
9.88	157.19	20.45	218.34	61.1	3.571	0.13	139.75	78.60
10.62	158.43	19.99	220.04	61.6	3.572	0.13	140.83	79.22
11.13	158.34	19.64	220.30	62.0	3.556	0.12	141.13	79.17
11.66	157.87	19.52	219.94	62.1	3.543	0.12	141.01	78.93
12.17	157.68	19.24	220.04	62.4	3.528	0.12	141.20	78.84
12.69	158.45	19.09	220.96	62.5	3.535	0.12	141.73	79.22
13.44	158.53	18.86	221.26	62.7	3.527	0.12	142.00	79.26
14.17	158.17	18.72	221.05	62.9	3.516	0.12	141.96	79.09
14.66	158.54	18.55	221.59	63.1	3.514	0.12	142.32	79.27
15.17	158.33	18.63	221.30	63.0	3.515	0.12	142.13	79.17

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	234.1-234.6
Project No.	2013-465-001	Sample No.	ST-7
Lab ID #	2013-465-001-005	Test No.	5

Equipment	Equipment ID#	Calibration Due Date
Oven	G256	10/12/14
Balance	G1043	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G317	INITIAL ONLY
Load Cell	G1437	1/7/14
Cell Pressure Transducer	G1438	1/7/14
Pore Pressure Transducer	G1439	1/7/14
Extensometer	G1440	1/7/14
Load Frame	G1434	1/7/14
Dial Indicator	G456	2/13/14
Timing Device	G489	5/13/14
Balance	G1395	6/4/14
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	233.1-233.6
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	6

PRESSURES (psi)

Cell Pressure (psi)	180.2
Back Pressure (psi)	21.5
Eff. Conf. Pressure (psi)	158.7
Pore Pressure	
Response (%)	98

MAXIMUM OBLIQUITY POINTS

P	=	152.98
Q	=	84.89

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.803	Diameter 1:	2.891
Length 2:	5.795	Diameter 2:	2.883
Length 3:	5.800	Diameter 3:	2.882
Avg. Length:	5.799	Avg. Diam.:	2.885

VOLUME CHANGE

Initial Burette Reading (ml)	72.0
Final Burette Reading (ml)	51.6
Final Change (ml)	20.4

Initial Dial Reading (mil)	52
Dial Reading After Saturation (mil)	56
Dial Reading After Consolidation (mil)	129

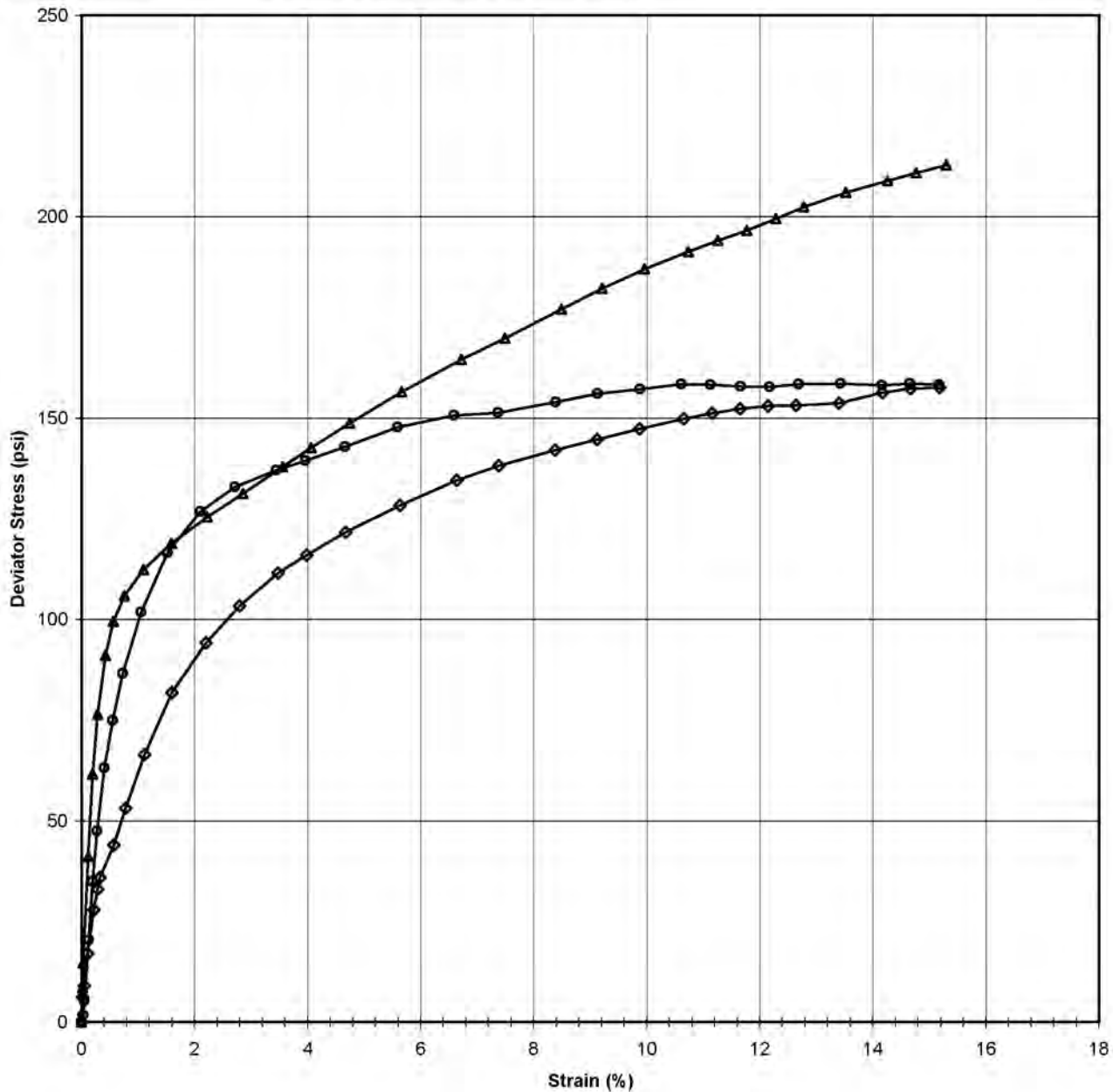
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
34.6	0.000	21.5
89.2	0.001	23.9
128.2	0.002	26.0
297.7	0.007	37.9
429.7	0.012	52.8
525.0	0.016	67.3
619.0	0.024	85.3
674.5	0.032	98.0
716.4	0.043	109.9
761.1	0.063	119.9
806.9	0.091	124.8
854.8	0.127	125.7
898.2	0.164	124.9
948.7	0.204	123.3
985.1	0.232	121.9
1033.0	0.272	119.8
1095.6	0.324	117.0
1162.9	0.385	114.1
1208.4	0.429	112.1
1271.6	0.486	109.0
1318.0	0.527	106.9
1363.0	0.570	105.1
1404.8	0.614	103.1
1433.4	0.644	101.9
1460.0	0.674	100.5
1489.0	0.703	99.3
1518.3	0.731	98.0
1558.5	0.774	96.1
1593.1	0.816	94.3
1617.1	0.845	93.3
1641.4	0.875	92.1

Tested By: JCM	Date: 10/29/13	Input Checked By: KC	Date: 11/20/13
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DCN: CFS28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	232.0-234.7
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



—◆— Test No. 4

—●— Test No. 5

—▲— Test No. 6

E50 Test No. 4 8508.856

E50 Test No. 5 13547.34

E50 Test No. 6 23276.7

Tested By: JCM

Date: 10/29/13

Approved By: DB

Date: 11/20/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	233.1-233.6
Project No.:	2013-465-001	Sample No.:	ST-7
Lab ID:	2013-465-001-005		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	158.7	Stage No.	1
		Test No	6

INITIAL DIMENSIONS

Initial Sample Length (in)	5.80
Initial Sample Diameter (in)	2.89
Initial Sample Area (in ²)	6.54
Initial Sample Volume (in ³)	37.92

VOLUME CHANGE

Volume After Consolidation (in ³)	36.60
Length After Consolidation (in)	5.72
Area After Consolidation (in ²)	6.395

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	8.54	2.42	164.82	156.3	1.055	0.29	160.55	4.27
0.03	14.64	4.49	168.85	154.2	1.095	0.31	161.53	7.32
0.12	41.09	16.44	183.35	142.3	1.289	0.41	162.80	20.55
0.20	61.65	31.30	189.05	127.4	1.484	0.52	158.22	30.83
0.29	76.46	45.77	189.39	112.9	1.677	0.61	151.16	38.23
0.42	90.99	63.76	185.93	94.9	1.958	0.72	140.43	45.50
0.57	99.49	76.51	181.67	82.2	2.211	0.78	131.93	49.74
0.76	105.80	88.37	176.12	70.3	2.504	0.85	123.23	52.90
1.10	112.36	98.38	172.68	60.3	2.863	0.89	116.50	56.18
1.59	118.84	103.28	174.26	55.4	3.144	0.89	114.84	59.42
2.23	125.39	104.21	179.88	54.5	3.301	0.85	117.19	62.70
2.86	131.18	103.43	186.44	55.3	3.374	0.80	120.85	65.59
3.56	137.84	101.77	194.78	56.9	3.421	0.75	125.85	68.92
4.06	142.60	100.39	200.91	58.3	3.445	0.72	129.61	71.30
4.74	148.71	98.35	209.07	60.4	3.464	0.67	134.71	74.36
5.67	156.50	95.52	219.69	63.2	3.477	0.62	141.44	78.25
6.72	164.57	92.63	230.64	66.1	3.491	0.57	148.36	82.28
7.49	169.79	90.62	237.87	68.1	3.494	0.54	152.98	84.89
8.49	176.99	87.51	248.18	71.2	3.486	0.50	159.68	88.50
9.21	182.19	85.44	255.45	73.3	3.487	0.48	164.36	91.09
9.96	187.02	83.58	262.14	75.1	3.490	0.46	168.63	93.51
10.74	191.25	81.64	268.32	77.1	3.482	0.44	172.69	95.63
11.26	194.10	80.41	272.38	78.3	3.479	0.42	175.33	97.05
11.78	196.64	79.03	276.31	79.7	3.468	0.41	177.99	98.32
12.29	199.48	77.80	280.38	80.9	3.466	0.40	180.64	99.74
12.78	202.36	76.48	284.58	82.2	3.461	0.39	183.40	101.18
13.52	206.08	74.63	290.15	84.1	3.451	0.37	187.11	103.04
14.27	208.92	72.77	294.86	85.9	3.431	0.36	190.39	104.46
14.77	210.89	71.79	297.80	86.9	3.427	0.35	192.35	105.45
15.30	212.81	70.60	300.91	88.1	3.415	0.34	194.51	106.40

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	233.1-233.6
Project No.	2013-465-001	Sample No.	ST-7
Lab ID #	2013-465-001-005	Test No.	6

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G307	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G150	2/22/14
Timing Device	G489	5/13/14
Flow Pump	G1511-1	1/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-005 Specific Gravity (measured) 2.65
 Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	233.6-234.1	234.1-234.6	233.1-233.6
Sample No.:	ST-7	ST-7	ST-7
Test No.	T4	T5	T6
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.8	21.3	21.5
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	19.7	19.7	19.7
Total Unit Weight (pcf)	121.4	122.0	119.5
Dry Unit Weight (pcf)	101.5	101.9	99.8
Moisture Content (%) (FINAL)	27.1	25.2	27.3
Initial State Void Ratio, e	0.631	0.623	0.657
Void Ratio at Shear, e	0.598	0.579	0.600



Tested By: JCM Date: 10/29/13 Input Checked By: KC Date: 11/20/13
 DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T4	T5	T6
Tare Number	538	538	538
Weight of Tare & Wet Sample (g)	205.89	205.89	205.89
Weight of Tare & Dry Sample (g)	185.49	185.49	185.49
Weight of Tare (g)	81.93	81.93	81.93
Moisture Content (%) (INITIAL)	19.70	19.70	19.70
Tare Number	592	631	54
Weight of Tare & Wet Sample (g)	221.82	1296.87	1357.85
Weight of Tare & Dry Sample (g)	191.91	1055.55	1110.54
Weight of Tare (g)	81.39	98.34	204.81
Moisture Content (%) (FINAL)	27.06	25.21	27.31

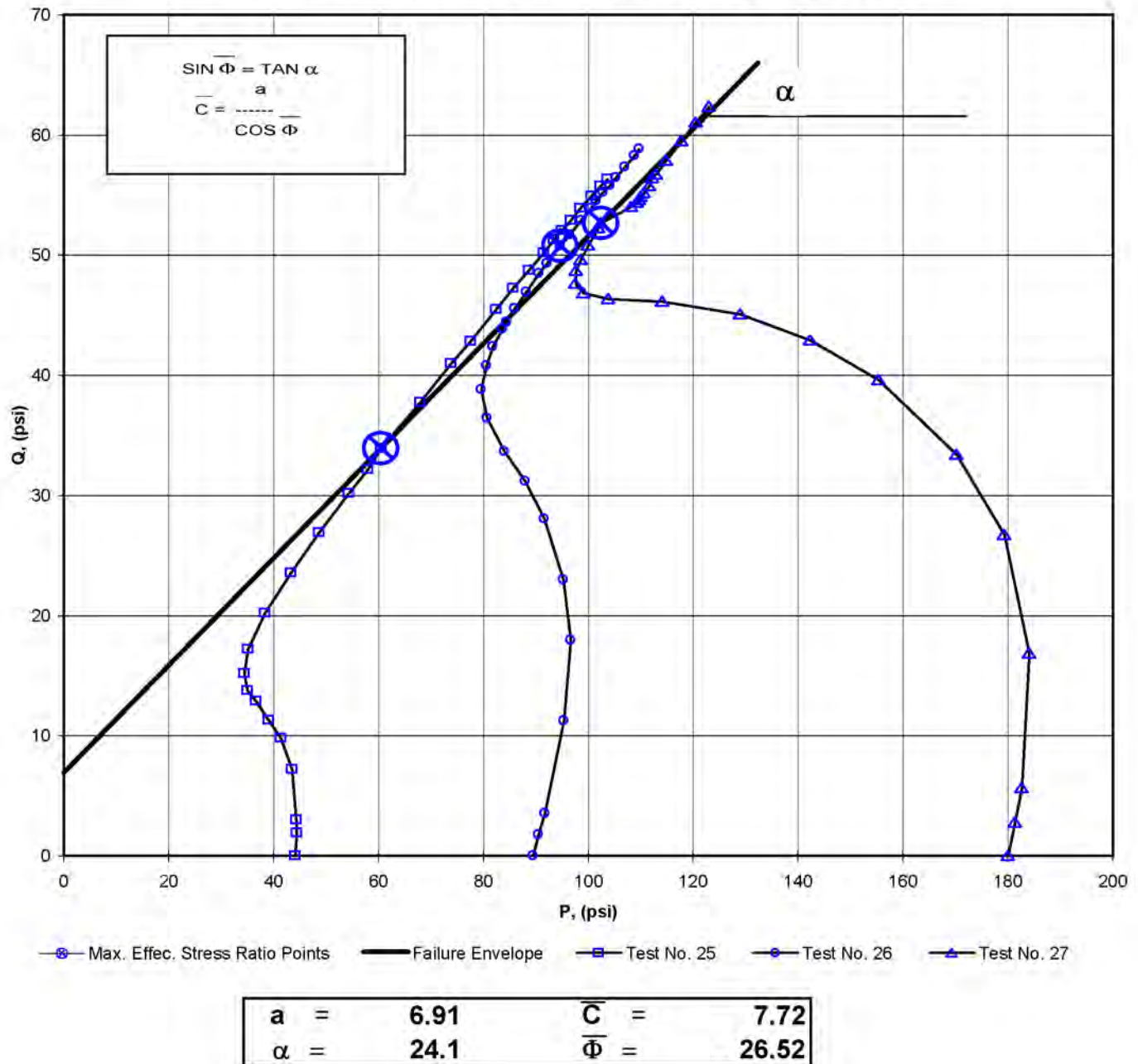
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1628.58	1658.93	1591.73
Weight of Tube (g)	410.19	419.73	402.45
Weight of Wet Sample (g)	1218.39	1239.2	1189.28
Length 1 (in)	5.887	5.967	5.803
Length 2 (in)	5.889	5.964	5.795
Length 3 (in)	5.884	5.969	5.8
Top Diameter (in)	2.881	2.876	2.891
Middle Diameter (in)	2.868	2.87	2.883
Bottom Diameter (in)	2.877	2.876	2.882
Average Length (in)	5.886667	5.966667	5.799333
Average Area (in ²)	6.493	6.487	6.539
Sample Volume (cm ³)	626.38	634.30	621.39
Unit Wet Weight (g/cm ³)	1.95	1.95	1.91
Unit Wet Weight (pcf)	121.43	121.97	119.49
Unit Dry Weight (pcf)	101.45	101.89	99.82
Unit Dry Weight (g/cm ³)	1.63	1.63	1.60
Initial Burette Reading	48	48	72
Final Burette Reading	37.3	31.7	51.6
Initial Dial Reading	52	66	52
Dial Reading After Saturation	58	70	56
Dial Reading After Consolidation	82	115	129
Volume Change during Consolidation	10.7	16.3	20.4
Volume Change during Saturation	1.92	1.28	1.29
Volume at Shear (cm ³)	*These 613.76	616.73	599.70
Volume of Solids (cm ³)	measurements 384.11	390.67	374.93
Volume of Voids (cm ³)	are all 229.66	226.06	224.77
Volume of Water (cm ³)	at 275.47	261.00	271.29
Void Ratio, e	shear 0.598	0.579	0.600

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	255.0-257.5
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/10/13

Approved By: DB

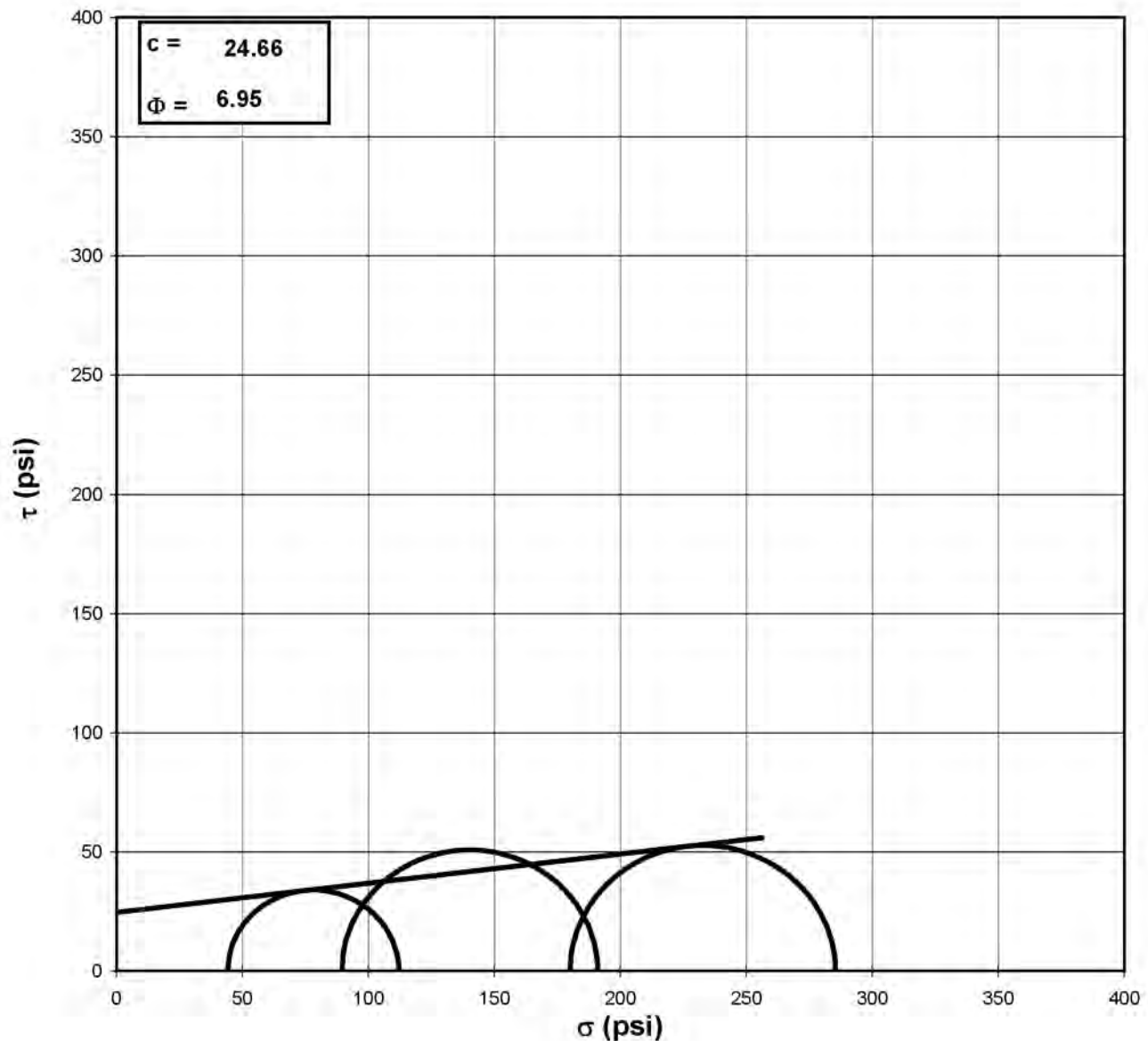
Date: 12/3/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	255.0-257.5
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 11/10/13 Approved By: DB Date: 12/3/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	256.4-256.9
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	25

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.926	Diameter 1:	2.881
Length 2:	5.927	Diameter 2:	2.878
Length 3:	5.928	Diameter 3:	2.883
Avg. Length:	5.927	Avg. Diam.:	2.881

PRESSURES (psi)

Cell Pressure (psi)	66.2
Back Pressure (psi)	22.0
Eff. Conf. Pressure (psi)	44.2
Pore Pressure	
Response (%)	99

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	34.1
Final Change (ml)	13.9

MAXIMUM OBLIQUITY POINTS

P	=	60.53
Q	=	33.93

Initial Dial Reading (mil)	59
Dial Reading After Saturation (mil)	74
Dial Reading After Consolidation (mil)	117

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
11.3	0.000	22.0
35.3	0.001	23.6
49.7	0.002	24.9
103.1	0.007	29.9
136.7	0.012	34.6
155.9	0.018	38.4
176.7	0.026	42.4
188.2	0.036	44.9
206.4	0.047	46.9
233.9	0.069	48.3
274.0	0.099	48.0
319.2	0.135	46.4
365.0	0.170	44.4
410.9	0.210	41.9
439.7	0.239	40.3
466.5	0.280	39.6
523.4	0.338	35.9
572.6	0.398	33.2
602.9	0.441	31.4
646.2	0.500	29.2
676.3	0.545	27.7
703.6	0.591	26.3
730.7	0.636	24.9
750.6	0.665	24.0
765.3	0.694	23.2
782.1	0.724	22.3
801.3	0.753	21.5
823.7	0.799	20.4
843.0	0.845	19.6
856.7	0.875	18.8
871.4	0.905	18.1

Tested By:	JCM	Date:	11/10/13	Input Checked By:	KC	Date:	12/3/13
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CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
 ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	256.4-256.9
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	44.2	Stage No.	1
		Test No	25

INITIAL DIMENSIONS

Initial Sample Length (in)	5.93
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.52
Initial Sample Volume (in ³)	38.63

VOLUME CHANGE

Volume After Consolidation (in ³)	37.49
Length After Consolidation (in)	5.87
Area After Consolidation (in ²)	6.387

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	3.76	1.65	46.31	42.6	1.088	0.44	44.43	1.88
0.04	6.01	2.85	47.36	41.3	1.145	0.48	44.35	3.00
0.12	14.35	7.87	50.69	36.3	1.395	0.55	43.51	7.18
0.20	19.59	12.58	51.20	31.6	1.619	0.65	41.41	9.79
0.30	22.57	16.37	50.40	27.8	1.811	0.73	39.12	11.28
0.45	25.77	20.38	49.60	23.8	2.082	0.80	36.71	12.89
0.61	27.52	22.93	48.79	21.3	2.294	0.84	35.03	13.76
0.80	30.31	24.87	49.64	19.3	2.568	0.83	34.48	15.15
1.18	34.44	26.26	52.38	17.9	2.920	0.77	35.16	17.22
1.69	40.43	26.03	58.60	18.2	3.226	0.65	38.38	20.22
2.29	47.11	24.43	66.88	19.8	3.382	0.52	43.33	23.55
2.89	53.78	22.36	75.61	21.8	3.463	0.42	48.72	26.89
3.58	60.31	19.94	84.57	24.3	3.486	0.33	54.42	30.16
4.07	64.35	18.33	90.21	25.9	3.488	0.29	58.04	32.17
4.77	67.87	17.60	94.47	26.6	3.551	0.26	60.53	33.93
5.76	75.56	13.94	105.82	30.3	3.497	0.19	68.04	37.78
6.77	81.92	11.25	114.88	33.0	3.486	0.14	73.91	40.96
7.52	85.65	9.43	120.42	34.8	3.464	0.11	77.59	42.83
8.52	90.93	7.23	127.91	37.0	3.459	0.08	82.44	45.47
9.28	94.46	5.68	132.98	38.5	3.452	0.06	85.75	47.23
10.06	97.48	4.25	137.43	39.9	3.440	0.04	88.69	48.74
10.84	100.42	2.89	141.73	41.3	3.431	0.03	91.52	50.21
11.34	102.63	2.03	144.80	42.2	3.433	0.02	93.49	51.31
11.83	104.07	1.19	147.08	43.0	3.420	0.01	95.05	52.04
12.33	105.80	0.35	149.65	43.9	3.413	0.00	96.75	52.90
12.83	107.81	-0.45	152.47	44.7	3.415	0.00	98.56	53.91
13.61	109.87	-1.57	155.64	45.8	3.401	-0.01	100.70	54.94
14.39	111.47	-2.44	158.10	46.6	3.390	-0.02	102.37	55.73
14.90	112.63	-3.18	160.00	47.4	3.377	-0.03	103.69	56.31
15.41	113.91	-3.86	161.96	48.1	3.370	-0.03	105.01	56.95

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	256.4-256.9
Project No.	2013-465-001	Sample No.	ST-9
Lab ID #	2013-465-001-007	Test No.	25

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G318	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G546	2/13/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	256.9-257.4
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	26

PRESSURES (psi)

Cell Pressure (psi)	111.3
Back Pressure (psi)	21.8
Eff. Conf. Pressure (psi)	89.5
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	94.73
Q	=	50.75

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.952	Diameter 1:	2.876
Length 2:	5.945	Diameter 2:	2.878
Length 3:	5.943	Diameter 3:	2.880
Avg. Length	5.947	Avg. Diam.:	2.878

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	30.5
Final Change (ml)	17.5

Initial Dial Reading (mil)	52
Dial Reading After Saturation (mil)	58
Dial Reading After Consolidation (mil)	110

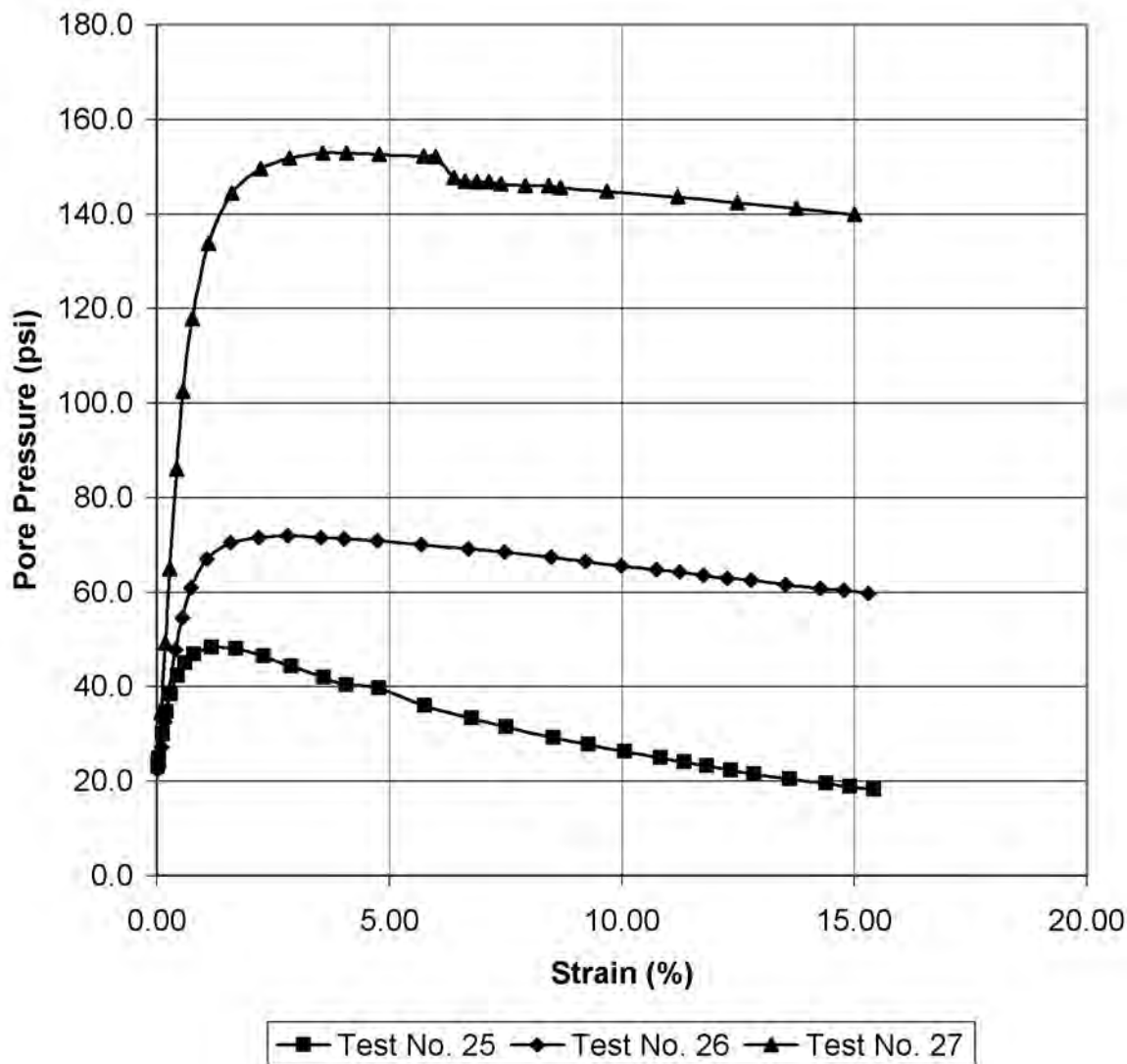
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
20.0	0.000	21.8
42.3	0.001	22.5
64.9	0.002	23.1
163.5	0.006	27.2
248.8	0.011	32.5
313.7	0.016	39.0
378.7	0.024	47.7
419.1	0.032	54.5
452.0	0.044	60.9
489.0	0.064	67.0
522.2	0.093	70.4
551.4	0.129	71.5
575.7	0.166	71.9
598.8	0.208	71.5
609.4	0.238	71.2
628.9	0.279	70.8
654.0	0.335	70.0
681.8	0.395	69.1
698.7	0.441	68.4
726.3	0.499	67.3
745.6	0.544	66.5
768.4	0.589	65.5
788.9	0.633	64.7
802.7	0.663	64.2
816.9	0.693	63.6
830.3	0.723	62.9
844.2	0.753	62.5
864.2	0.796	61.6
885.8	0.841	60.7
899.4	0.871	60.3
912.6	0.901	59.7

Tested By: JCM Date: 11/10/13 Input Checked By: KC Date: 12/3/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	255.0-257.5
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	256.9-257.4
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	89.5	Stage No.	1
		Test No	26

INITIAL DIMENSIONS

Initial Sample Length (in)	5.95
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.69

VOLUME CHANGE

Volume After Consolidation (in ³)	37.50
Length After Consolidation (in)	5.89
Area After Consolidation (in ²)	6.368

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	3.51	0.68	92.32	88.8	1.039	0.19	90.57	1.75
0.03	7.05	1.29	95.26	88.2	1.080	0.18	91.74	3.53
0.10	22.52	5.38	106.64	84.1	1.268	0.24	95.38	11.26
0.18	35.86	10.74	114.63	78.8	1.455	0.30	96.69	17.93
0.27	46.00	17.20	118.30	72.3	1.636	0.37	95.30	23.00
0.41	56.10	25.92	119.68	63.6	1.882	0.46	91.63	28.05
0.55	62.33	32.66	119.17	56.8	2.096	0.52	88.00	31.16
0.74	67.33	39.11	117.72	50.4	2.336	0.58	84.05	33.67
1.08	72.85	45.15	117.20	44.3	2.643	0.62	80.77	36.43
1.58	77.61	48.65	118.46	40.9	2.900	0.63	79.66	38.81
2.20	81.61	49.71	121.40	39.8	3.051	0.61	80.60	40.81
2.82	84.79	50.06	124.23	39.4	3.150	0.59	81.83	42.40
3.53	87.68	49.66	127.52	39.8	3.201	0.57	83.68	43.84
4.04	88.81	49.41	128.90	40.1	3.215	0.56	84.49	44.41
4.74	91.09	49.02	131.57	40.5	3.250	0.54	86.02	45.54
5.69	93.90	48.18	135.22	41.3	3.272	0.51	88.27	46.95
6.71	96.95	47.28	139.16	42.2	3.297	0.49	90.69	48.47
7.48	98.60	46.61	141.50	42.9	3.299	0.47	92.19	49.30
8.48	101.51	45.53	145.48	44.0	3.308	0.45	94.73	50.75
9.23	103.42	44.68	148.24	44.8	3.307	0.43	96.53	51.71
10.00	105.78	43.74	151.54	45.8	3.312	0.41	98.65	52.89
10.75	107.76	42.87	154.39	46.6	3.311	0.40	100.51	53.88
11.25	109.08	42.42	156.15	47.1	3.317	0.39	101.61	54.54
11.77	110.41	41.78	158.13	47.7	3.314	0.38	102.93	55.21
12.28	111.62	41.11	160.02	48.4	3.307	0.37	104.21	55.81
12.78	112.88	40.67	161.71	48.8	3.312	0.36	105.27	56.44
13.52	114.64	39.76	164.39	49.7	3.305	0.35	107.06	57.32
14.27	116.55	38.92	167.12	50.6	3.304	0.33	108.85	58.27
14.79	117.68	38.54	168.64	51.0	3.309	0.33	109.80	58.84
15.30	118.72	37.90	170.32	51.6	3.301	0.32	110.96	59.36

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	256.9-257.4
Project No.	2013-465-001	Sample No.	ST-9
Lab ID #	2013-465-001-007	Test No.	26

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G317	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G1457	8/30/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	255.9-256.4
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	27

PRESSURES (psi)

Cell Pressure (psi)	201.8
Back Pressure (psi)	21.7
Eff. Conf. Pressure (psi)	180.1
Pore Pressure	
Response (%)	99

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	102.44
Q	=	52.64

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.940	Diameter 1:	2.879
Length 2:	5.940	Diameter 2:	2.873
Length 3:	5.944	Diameter 3:	2.875
Avg. Length:	5.941	Avg. Diam.:	2.876

VOLUME CHANGE

Initial Burette Reading (ml)	72.0
Final Burette Reading (ml)	44.5
Final Change (ml)	27.5

Initial Dial Reading (mil)	42
Dial Reading After Saturation (mil)	48
Dial Reading After Consolidation (mil)	132

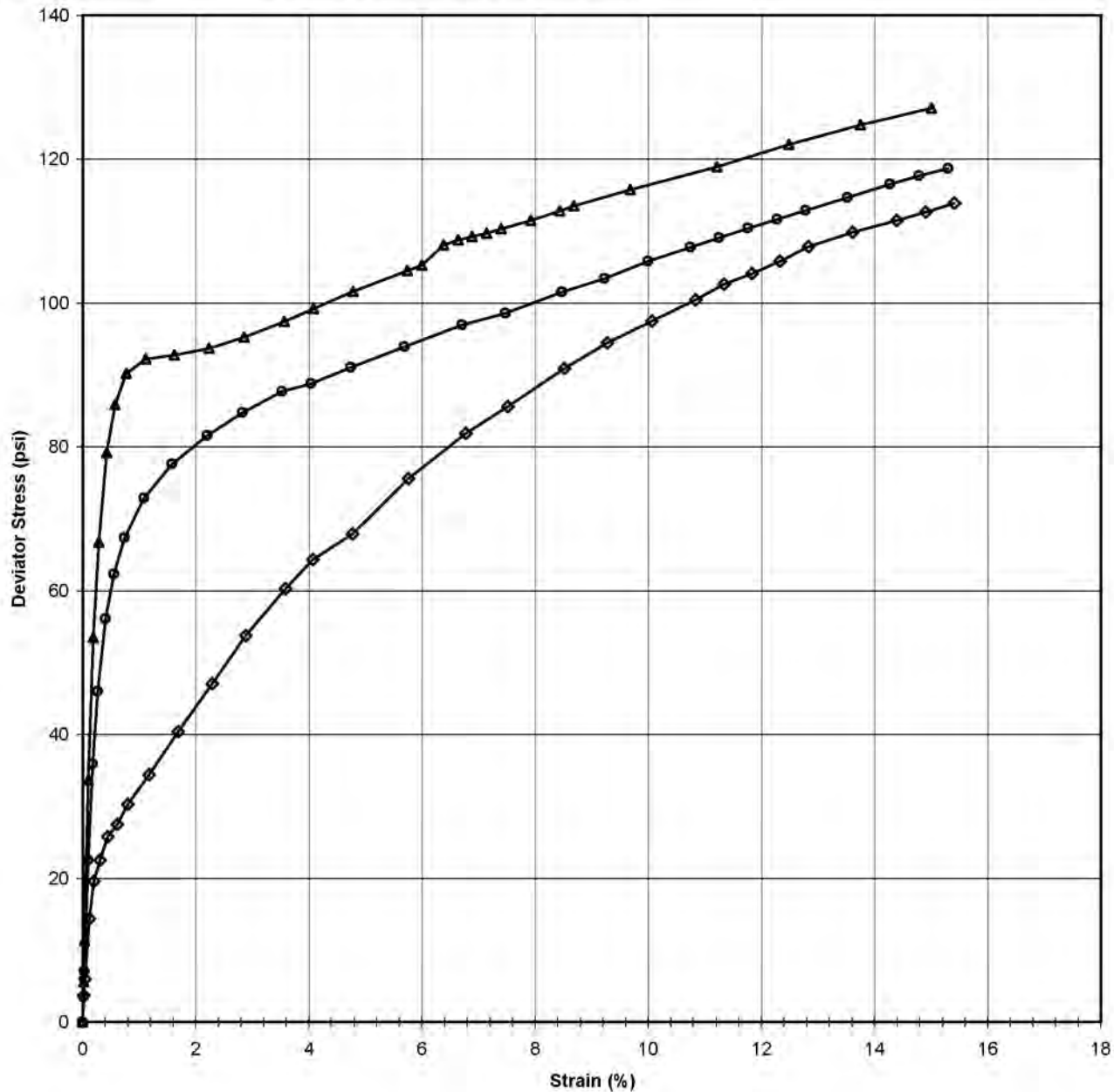
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
36.2	0.000	21.7
71.1	0.001	23.1
107.3	0.002	24.7
248.0	0.006	34.5
372.7	0.011	49.1
457.1	0.017	64.8
536.2	0.025	85.9
579.0	0.033	102.4
607.5	0.045	117.8
622.7	0.066	133.7
628.9	0.095	144.3
639.0	0.131	149.6
652.9	0.167	151.8
671.5	0.209	152.7
686.7	0.239	152.8
707.2	0.280	152.5
733.4	0.336	152.1
740.5	0.351	152.0
761.8	0.374	147.6
768.8	0.388	146.9
773.9	0.403	146.7
779.2	0.418	146.7
785.5	0.433	146.3
797.7	0.464	145.9
810.9	0.494	145.9
817.6	0.508	145.5
841.9	0.566	144.8
878.8	0.656	143.5
913.2	0.731	142.3
945.8	0.805	141.1
976.4	0.878	139.8

Tested By:	JCM	Date:	11/21/13	Input Checked By:	KC	Date:	12/3/13
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DCN: CFS28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	255.0-257.5
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



—◆— Test No. 25

—■— Test No. 26

—▲— Test No. 27

E50 Test No. 25 3001.511

E50 Test No. 26 15192.92

E50 Test No. 27 28239.82

Tested By: JCM

Date: 11/21/13

Approved By: DB

Date: 12/3/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	255.9-256.4
Project No.:	2013-465-001	Sample No.:	ST-9
Lab ID:	2013-465-001-007		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	180.1	Stage No.	1
		Test No	27

INITIAL DIMENSIONS

Initial Sample Length (in)	5.94
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.49
Initial Sample Volume (in ³)	38.59

VOLUME CHANGE

Volume After Consolidation (in ³)	36.79
Length After Consolidation (in)	5.85
Area After Consolidation (in ²)	6.288

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	5.56	1.44	184.22	178.7	1.031	0.26	181.44	2.78
0.03	11.31	3.02	188.39	177.1	1.064	0.27	182.73	5.65
0.10	33.66	12.80	200.96	167.3	1.201	0.38	184.13	16.83
0.19	53.42	27.42	206.10	152.7	1.350	0.52	179.39	26.71
0.28	66.74	43.15	203.70	137.0	1.487	0.65	170.32	33.37
0.43	79.19	64.22	195.07	115.9	1.683	0.82	155.48	39.59
0.57	85.83	80.66	185.27	99.4	1.863	0.95	142.36	42.91
0.77	90.16	96.08	174.18	84.0	2.073	1.08	129.10	45.08
1.12	92.23	112.02	160.31	68.1	2.355	1.23	114.19	46.12
1.62	92.73	122.62	150.21	57.5	2.613	1.34	103.84	46.37
2.23	93.72	127.86	145.97	52.2	2.794	1.38	99.11	46.86
2.85	95.28	130.09	145.29	50.0	2.905	1.38	97.65	47.64
3.57	97.43	131.04	146.49	49.1	2.986	1.36	97.77	48.72
4.08	99.23	131.13	148.21	49.0	3.026	1.33	98.59	49.62
4.78	101.61	130.83	150.87	49.3	3.062	1.30	100.07	50.80
5.74	104.51	130.43	154.18	49.7	3.104	1.26	101.93	52.26
6.00	105.29	130.30	155.08	49.8	3.114	1.25	102.44	52.64
6.39	108.03	125.90	162.23	54.2	2.993	1.18	108.22	54.02
6.64	108.77	125.17	163.70	54.9	2.980	1.16	109.31	54.39
6.89	109.23	124.98	164.36	55.1	2.982	1.16	109.74	54.62
7.14	109.72	124.95	164.87	55.1	2.989	1.15	110.01	54.86
7.40	110.34	124.64	165.80	55.5	2.990	1.14	110.63	55.17
7.92	111.51	124.22	167.39	55.9	2.996	1.13	111.64	55.76
8.43	112.81	124.21	168.70	55.9	3.018	1.11	112.30	56.41
8.68	113.49	123.81	169.78	56.3	3.016	1.10	113.04	56.74
9.68	115.73	123.05	172.78	57.0	3.029	1.07	114.91	57.87
11.21	118.98	121.77	177.31	58.3	3.040	1.03	117.82	59.49
12.49	122.05	120.61	181.54	59.5	3.052	1.00	120.52	61.03
13.75	124.76	119.39	185.48	60.7	3.055	0.97	123.09	62.38
15.01	127.08	118.08	189.10	62.0	3.049	0.94	125.56	63.54

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	255.9-256.4
Project No.	2013-465-001	Sample No.	ST-9
Lab ID #	2013-465-001-007	Test No.	27

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G322	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G456	2/13/14
Timing Device	G489	5/13/14
Flow Pump	G1509-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-007 Specific Gravity (measured) 2.67
 Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	256.4-256.9	256.9-257.4	255.9-256.4
Sample No.:	ST-9	ST-9	ST-9
Test No.	T25	T26	T27
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	22.0	21.8	21.7
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	25.3	25.3	25.3
Total Unit Weight (pcf)	122.2	120.3	120.7
Dry Unit Weight (pcf)	97.5	96.0	96.3
Moisture Content (%) (FINAL)	24.6	25.6	25.0
Initial State Void Ratio, e	0.710	0.737	0.731
Void Ratio at Shear, e	0.660	0.684	0.650



Tested By: JCM Date: 11/10/13 Input Checked By: KC Date: 12/3/13
 DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T25	T26	T27
Tare Number	615	615	615
Weight of Tare & Wet Sample (g)	165.03	165.03	165.03
Weight of Tare & Dry Sample (g)	148.69	148.69	148.69
Weight of Tare (g)	84.2	84.2	84.2
Moisture Content (%) (INITIAL)	25.34	25.34	25.34
Tare Number	894	59	649
Weight of Tare & Wet Sample (g)	309.69	1391.27	1250.11
Weight of Tare & Dry Sample (g)	270.35	1148.52	1019.46
Weight of Tare (g)	110.27	200.52	98.29
Moisture Content (%) (FINAL)	24.58	25.61	25.04

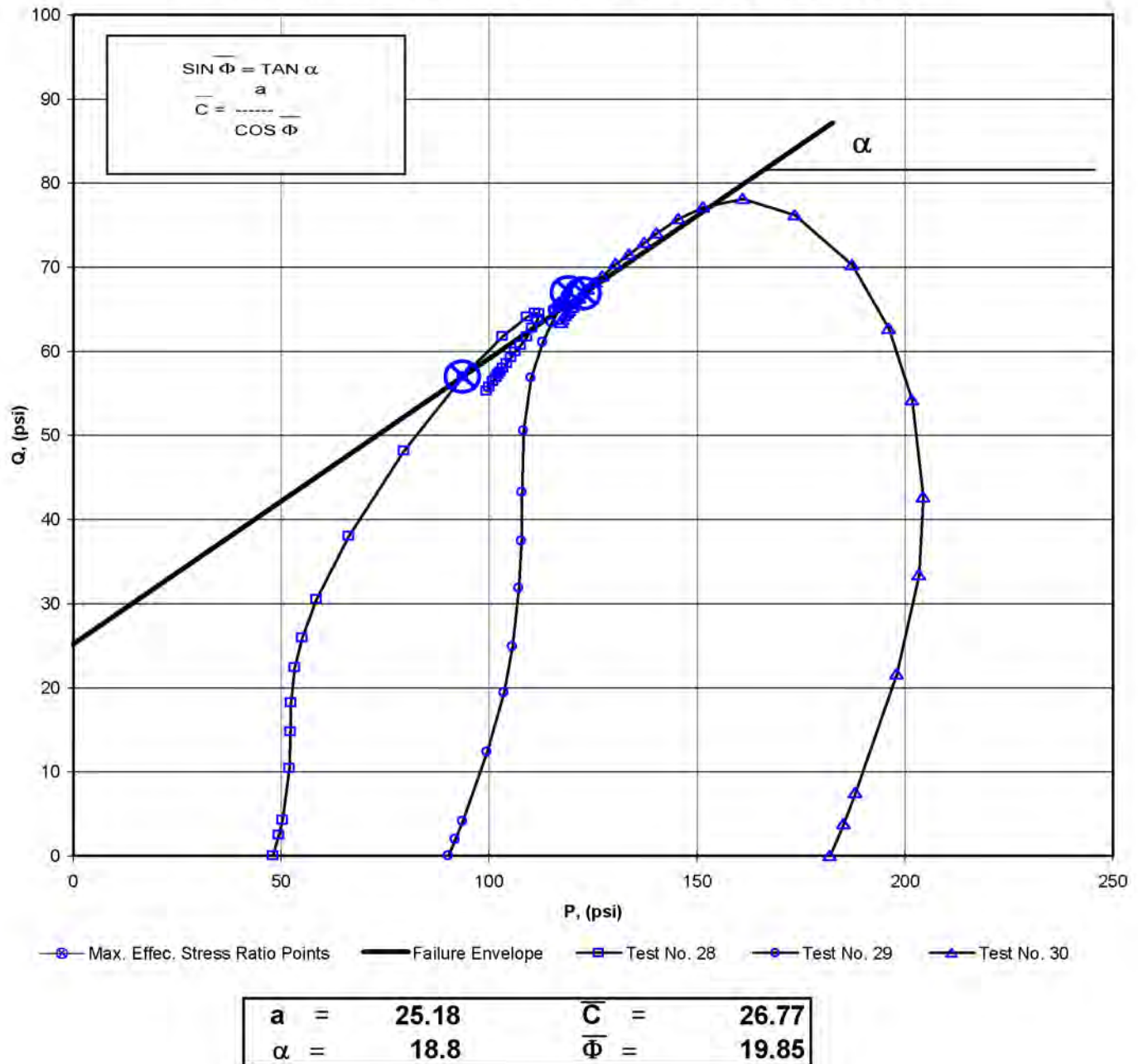
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1652.83	1639.75	1640.71
Weight of Tube (g)	414.25	418.42	418.04
Weight of Wet Sample (g)	1238.58	1221.33	1222.67
Length 1 (in)	5.926	5.952	5.94
Length 2 (in)	5.927	5.945	5.94
Length 3 (in)	5.928	5.943	5.944
Top Diameter (in)	2.881	2.876	2.879
Middle Diameter (in)	2.878	2.878	2.873
Bottom Diameter (in)	2.883	2.88	2.875
Average Length (in)	5.927	5.946667	5.941333
Average Area (in ²)	6.517	6.505	6.495
Sample Volume (cm ³)	633.01	633.94	632.34
Unit Wet Weight (g/cm ³)	1.96	1.93	1.93
Unit Wet Weight (pcf)	122.15	120.28	120.71
Unit Dry Weight (pcf)	97.46	95.96	96.31
Unit Dry Weight (g/cm ³)	1.56	1.54	1.54
Initial Burette Reading	48	48	72
Final Burette Reading	34.1	30.5	44.5
Initial Dial Reading	59	52	42
Dial Reading After Saturation	74	58	48
Dial Reading After Consolidation	117	110	132
Volume Change during Consolidation	13.9	17.5	27.5
Volume Change during Saturation	4.81	1.92	1.92
Volume at Shear (cm ³)	*These 614.31	614.52	602.93
Volume of Solids (cm ³)	measurements 370.11	364.96	365.36
Volume of Voids (cm ³)	are all 244.19	249.56	237.57
Volume of Water (cm ³)	at 242.85	249.52	244.25
Void Ratio, e	shear 0.660	0.684	0.650

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	266.0-268.7
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/10/13

Approved By: DB

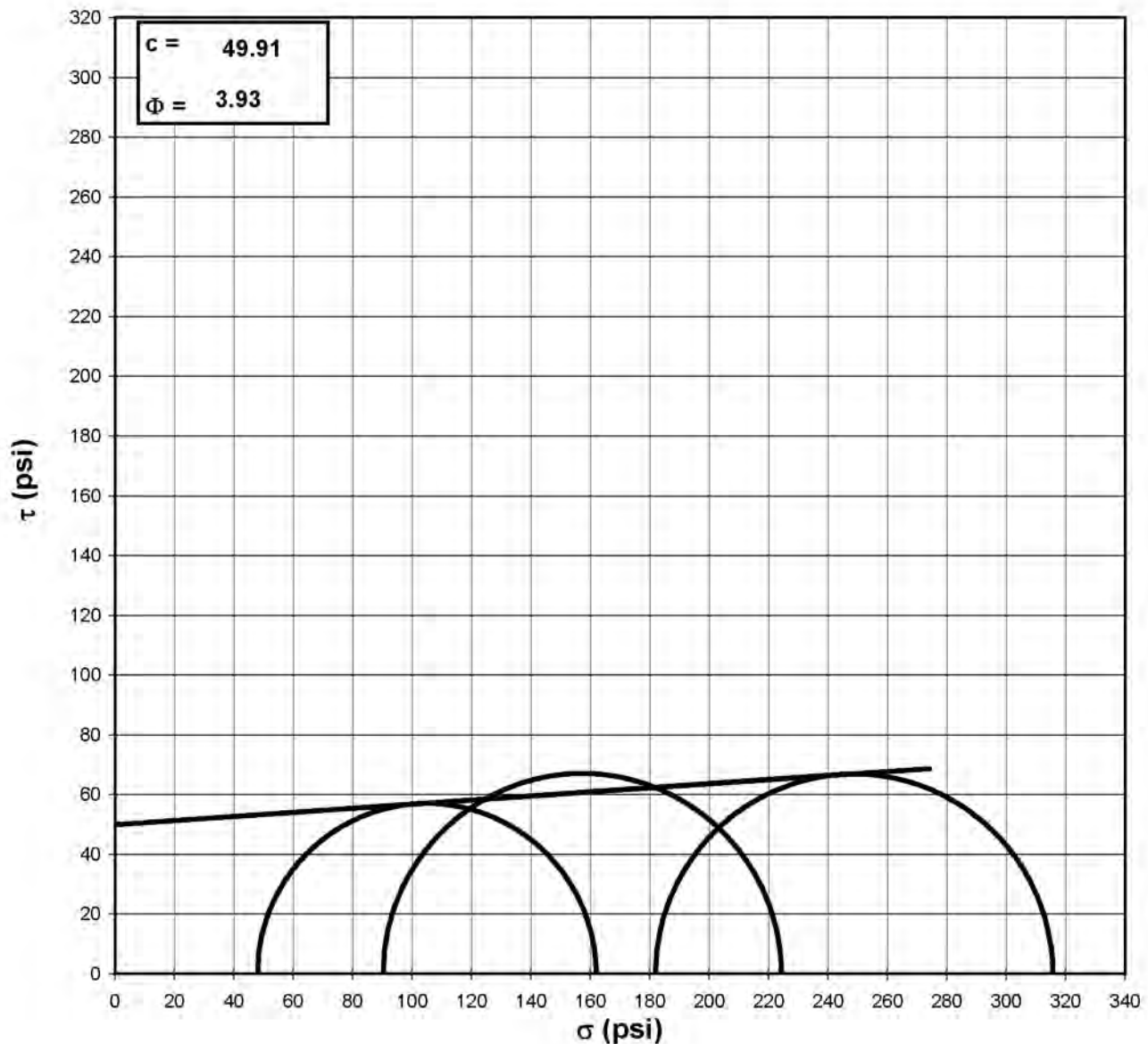
Date: 11/25/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	266.0-268.7
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 11/10/13 Approved By: DB Date: 11/25/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	268.1-268.6
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	28

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.961	Diameter 1:	2.877
Length 2:	5.953	Diameter 2:	2.872
Length 3:	5.954	Diameter 3:	2.881
Avg. Length:	5.956	Avg. Diam.:	2.877

PRESSURES (psi)

Cell Pressure (psi)	69.6
Back Pressure (psi)	21.6
Eff. Conf. Pressure (psi)	48.0
Pore Pressure Response (%)	98

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	31.1
Final Change (ml)	52.0

MAXIMUM OBLIQUITY POINTS

P	=	93.67
Q	=	56.99

Initial Dial Reading (mil)	52
Dial Reading After Saturation (mil)	58
Dial Reading After Consolidation (mil)	109

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
12.7	0.000	21.6
42.5	0.001	22.6
63.6	0.002	23.5
137.4	0.007	28.0
190.5	0.013	32.2
232.0	0.018	35.4
282.7	0.027	38.7
325.7	0.036	40.5
381.9	0.047	41.6
474.4	0.068	41.3
600.4	0.097	38.2
712.7	0.132	32.9
776.2	0.168	28.2
810.3	0.209	24.6
820.3	0.239	23.1
825.6	0.280	22.1
824.9	0.338	21.7
820.7	0.398	21.9
813.7	0.442	22.2
809.2	0.501	22.7
805.6	0.545	23.1
803.3	0.590	23.5
800.6	0.636	23.9
797.6	0.666	24.2
796.1	0.695	24.3
796.6	0.724	24.6
795.7	0.754	24.8
795.8	0.799	25.1
794.3	0.844	25.3
792.1	0.874	25.5
790.9	0.905	25.6

Tested By: JCM Date: 11/10/13 Input Checked By: KC Date: 11/25/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	268.1-268.6
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	48.0	Stage No.	1
		Test No	28

INITIAL DIMENSIONS

Initial Sample Length (in)	5.96
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.50
Initial Sample Volume (in ³)	38.71

VOLUME CHANGE

Volume After Consolidation (in ³)	35.42
Length After Consolidation (in)	5.90
Area After Consolidation (in ²)	6.004

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	4.97	0.97	51.99	47.0	1.106	0.20	49.51	2.48
0.03	8.48	1.92	54.57	46.1	1.184	0.23	50.33	4.24
0.12	20.74	6.38	62.36	41.6	1.498	0.31	51.99	10.37
0.21	29.55	10.56	66.99	37.4	1.789	0.36	52.22	14.77
0.31	36.40	13.82	70.59	34.2	2.065	0.39	52.38	18.20
0.46	44.77	17.06	75.71	30.9	2.447	0.39	53.33	22.38
0.61	51.81	18.89	80.92	29.1	2.780	0.37	55.01	25.91
0.80	60.99	19.96	89.03	28.0	3.175	0.33	58.53	30.49
1.15	76.01	19.66	104.34	28.3	3.682	0.26	66.34	38.00
1.64	96.28	16.60	127.68	31.4	4.066	0.18	79.54	48.14
2.24	113.97	11.32	150.66	36.7	4.107	0.10	93.67	56.99
2.84	123.54	6.56	164.98	41.4	3.981	0.05	103.21	61.77
3.54	128.14	2.97	173.17	45.0	3.846	0.02	109.10	64.07
4.05	129.06	1.48	175.59	46.5	3.774	0.01	111.06	64.53
4.75	128.95	0.45	176.49	47.5	3.712	0.00	112.02	64.47
5.73	127.52	0.08	175.44	47.9	3.661	0.00	111.68	63.76
6.75	125.48	0.30	173.18	47.7	3.631	0.00	110.44	62.74
7.50	123.40	0.63	170.78	47.4	3.605	0.01	109.08	61.70
8.49	121.39	1.15	168.24	46.9	3.591	0.01	107.55	60.69
9.24	119.85	1.55	166.30	46.5	3.580	0.01	106.38	59.92
10.00	118.51	1.95	164.56	46.1	3.573	0.02	105.30	59.25
10.78	117.07	2.31	162.76	45.7	3.562	0.02	104.22	58.54
11.29	115.96	2.56	161.40	45.4	3.552	0.02	103.42	57.98
11.78	115.10	2.74	160.37	45.3	3.543	0.02	102.81	57.55
12.27	114.53	2.97	159.56	45.0	3.543	0.03	102.30	57.26
12.78	113.74	3.20	158.54	44.8	3.539	0.03	101.67	56.87
13.55	112.74	3.46	157.28	44.5	3.531	0.03	100.91	56.37
14.31	111.54	3.71	155.83	44.3	3.518	0.03	100.06	55.77
14.82	110.57	3.88	154.69	44.1	3.506	0.04	99.40	55.28
15.33	109.73	4.00	153.72	44.0	3.494	0.04	98.86	54.86

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	268.1-268.6
Project No.	2013-465-001	Sample No.	ST-10
Lab ID #	2013-465-001-008	Test No.	28

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G319	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G1456	8/30/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	267.6-268.1
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	29

PRESSURES (psi)

Cell Pressure (psi)	112.0
Back Pressure (psi)	21.7
Eff. Conf. Pressure (psi)	90.3
Pore Pressure	
Response (%)	97

MAXIMUM OBLIQUITY POINTS

P	=	119.22
Q	=	67.01

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.964	Diameter 1:	2.879
Length 2:	5.949	Diameter 2:	2.874
Length 3:	5.952	Diameter 3:	2.871
Avg. Length	5.955	Avg. Diam.:	2.875

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	28.4
Final Change (ml)	19.6

Initial Dial Reading (mil)	50
Dial Reading After Saturation (mil)	68
Dial Reading After Consolidation (mil)	129

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
22.3	0.000	21.7
47.3	0.001	22.1
74.4	0.002	22.5
178.3	0.006	24.7
267.9	0.011	27.8
337.7	0.016	31.2
425.5	0.024	36.5
497.8	0.032	41.6
572.3	0.043	47.3
667.5	0.063	54.2
751.1	0.092	58.6
810.4	0.128	60.1
845.5	0.164	60.3
875.3	0.206	60.1
887.0	0.236	60.0
898.7	0.277	59.9
911.2	0.332	59.8
925.7	0.394	59.8
936.9	0.439	59.8
942.0	0.499	59.9
941.8	0.544	60.0
947.2	0.588	60.2
952.8	0.633	60.4
959.2	0.664	60.5
963.9	0.694	60.6
965.5	0.724	60.7
967.0	0.753	60.9
969.9	0.798	61.1
977.4	0.843	61.3
986.0	0.873	61.4
991.4	0.902	61.6

Tested By:	JCM	Date:	11/10/13	Input Checked By:	KC	Date:	11/25/13
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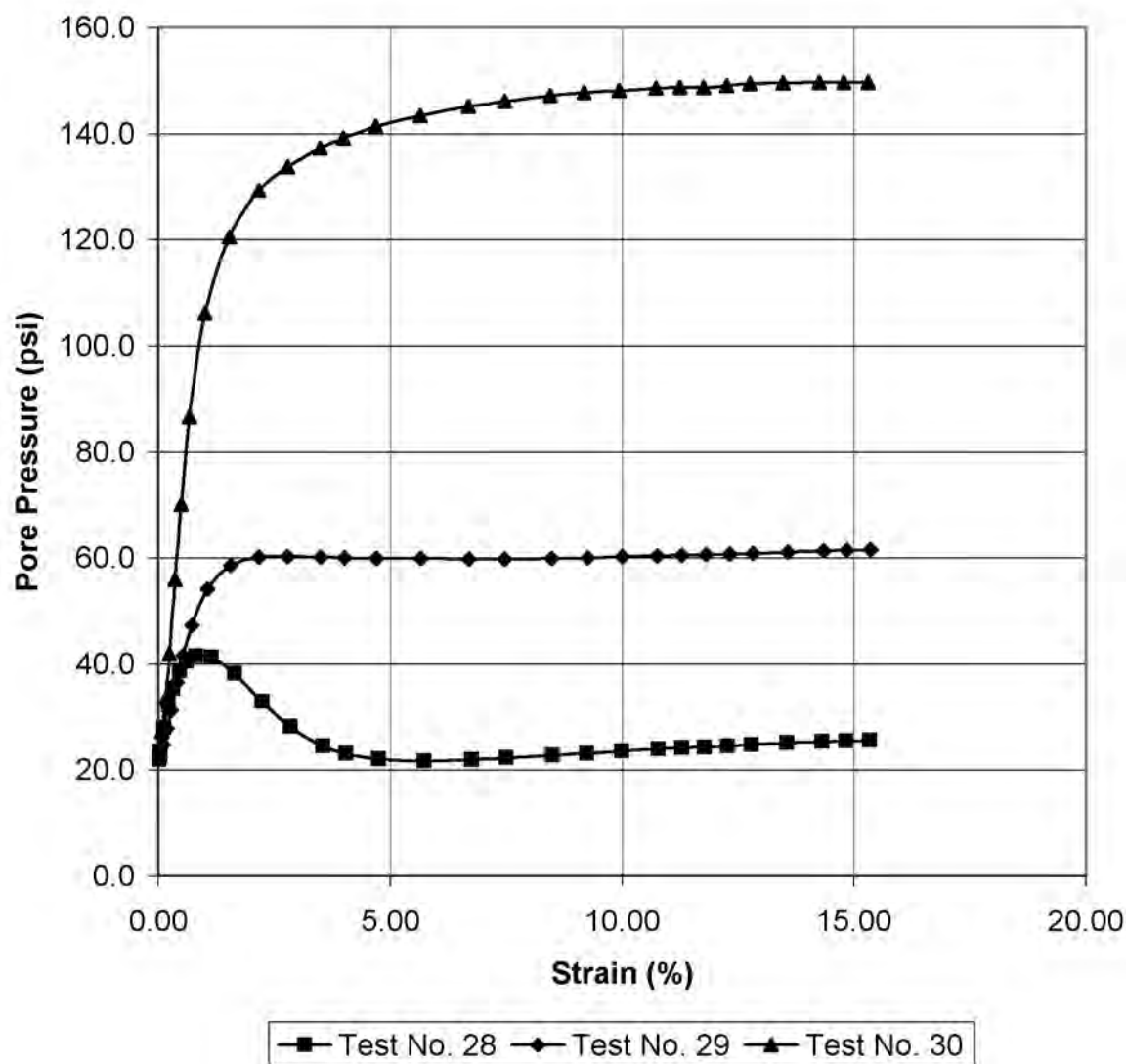
DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	266.0-268.7
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	267.6-268.1
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	90.3	Stage No.	1
		Test No	29

INITIAL DIMENSIONS

Initial Sample Length (in)	5.96
Initial Sample Diameter (in)	2.87
Initial Sample Area (in ²)	6.49
Initial Sample Volume (in ³)	38.65

VOLUME CHANGE

Volume After Consolidation (in ³)	37.10
Length After Consolidation (in)	5.88
Area After Consolidation (in ²)	6.314

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	3.96	0.39	93.87	89.9	1.044	0.10	91.89	1.98
0.04	8.25	0.77	97.78	89.5	1.092	0.10	93.65	4.13
0.10	24.68	3.03	111.95	87.3	1.283	0.13	99.61	12.34
0.19	38.82	6.12	123.00	84.2	1.461	0.16	103.59	19.41
0.28	49.80	9.53	130.58	80.8	1.617	0.20	105.67	24.90
0.40	63.60	14.84	139.05	75.5	1.843	0.24	107.25	31.80
0.54	74.90	19.90	145.30	70.4	2.064	0.27	107.85	37.45
0.73	86.47	25.62	151.15	64.7	2.337	0.31	107.92	43.24
1.06	101.09	32.46	158.94	57.8	2.748	0.33	108.39	50.55
1.56	113.61	36.94	166.97	53.4	3.129	0.34	110.17	56.81
2.17	122.10	38.45	173.96	51.9	3.355	0.32	112.91	61.05
2.79	126.74	38.57	178.47	51.7	3.450	0.31	115.10	63.37
3.50	130.36	38.42	182.24	51.9	3.513	0.30	117.06	65.18
4.01	131.44	38.30	183.45	52.0	3.528	0.30	117.72	65.72
4.71	132.26	38.21	184.35	52.1	3.539	0.30	118.22	66.13
5.66	132.81	38.14	184.97	52.2	3.546	0.30	118.56	66.40
6.70	133.49	38.07	185.72	52.2	3.556	0.29	118.97	66.74
7.47	134.02	38.09	186.23	52.2	3.567	0.29	119.22	67.01
8.49	133.29	38.23	185.37	52.1	3.560	0.30	118.72	66.65
9.26	132.13	38.32	184.11	52.0	3.542	0.30	118.04	66.07
10.01	131.82	38.50	183.62	51.8	3.545	0.30	117.71	65.91
10.76	131.50	38.69	183.11	51.6	3.548	0.30	117.36	65.75
11.29	131.61	38.81	183.11	51.5	3.556	0.30	117.30	65.81
11.82	131.50	38.92	182.87	51.4	3.560	0.31	117.12	65.75
12.33	130.96	39.03	182.24	51.3	3.554	0.31	116.75	65.48
12.82	130.42	39.19	181.52	51.1	3.552	0.31	116.32	65.21
13.58	129.69	39.40	180.59	50.9	3.548	0.31	115.74	64.84
14.35	129.55	39.60	180.25	50.7	3.555	0.32	115.48	64.77
14.85	129.95	39.74	180.51	50.6	3.570	0.32	115.54	64.97
15.36	129.90	39.90	180.31	50.4	3.577	0.32	115.36	64.95

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	267.6-268.1
Project No.	2013-465-001	Sample No.	ST-10
Lab ID #	2013-465-001-008	Test No.	29

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G320	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G1295	3/4/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	267.1-267.6
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	30

PRESSURES (psi)

Cell Pressure (psi)	203.6
Back Pressure (psi)	21.6
Eff. Conf. Pressure (psi)	182.0
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	122.72
Q	=	66.85

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.875	Diameter 1:	2.883
Length 2:	5.868	Diameter 2:	2.880
Length 3:	5.861	Diameter 3:	2.882
Avg. Length:	5.868	Avg. Diam.:	2.882

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	21.8
Final Change (ml)	26.2

Initial Dial Reading (mil)	44
Dial Reading After Saturation (mil)	64
Dial Reading After Consolidation (mil)	118

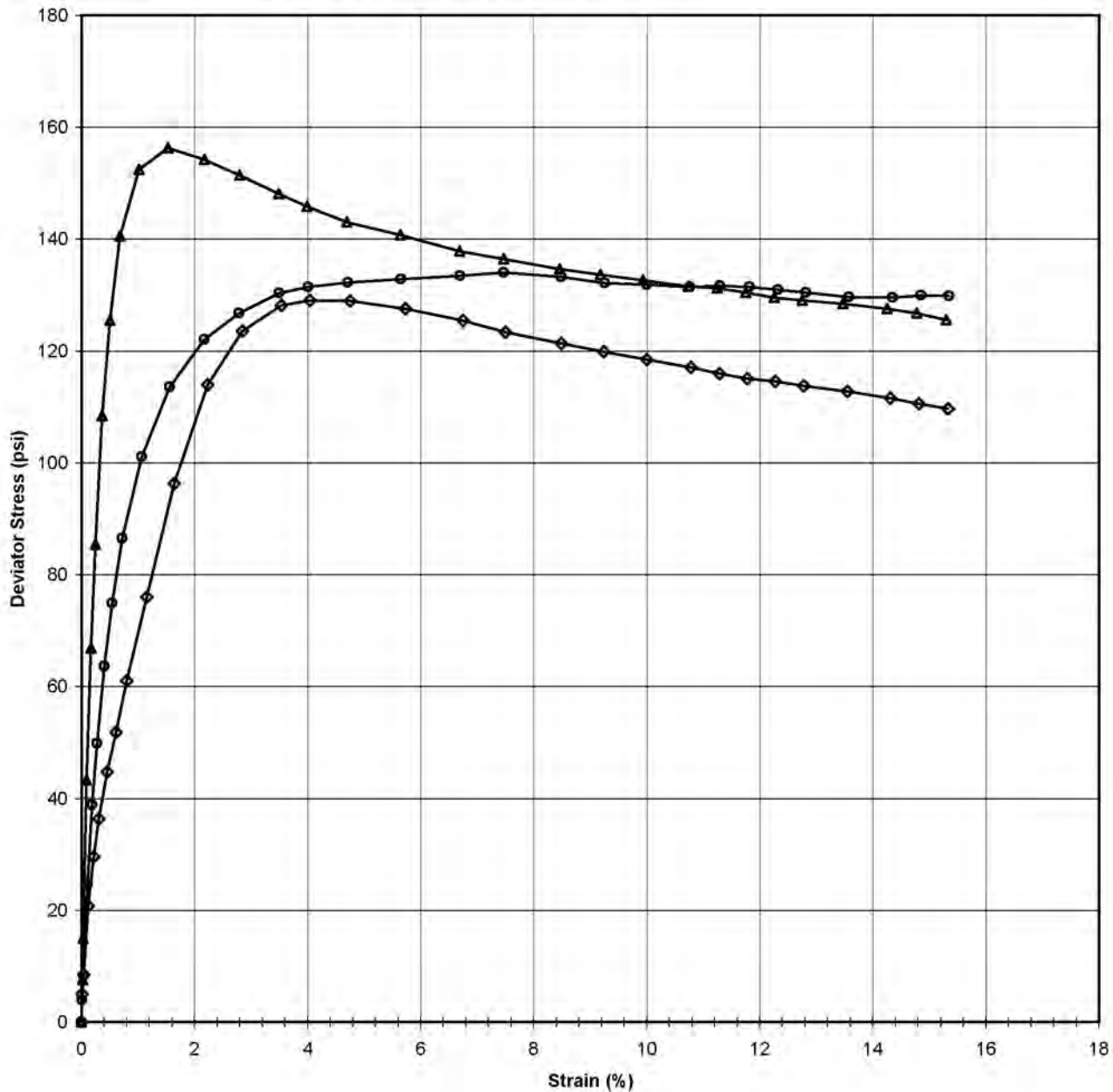
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
38.2	0.000	21.6
85.6	0.001	22.1
131.8	0.002	22.9
309.5	0.005	27.2
457.4	0.010	33.6
574.1	0.014	41.8
719.1	0.021	55.9
827.6	0.029	70.1
924.3	0.039	86.5
1002.3	0.059	106.1
1032.1	0.089	120.6
1025.7	0.126	129.2
1013.9	0.162	133.7
999.0	0.202	137.3
989.4	0.231	139.1
977.9	0.272	141.4
972.1	0.327	143.4
963.1	0.388	145.2
961.4	0.433	146.1
959.4	0.490	147.1
960.1	0.532	147.7
960.2	0.576	148.1
960.7	0.622	148.6
964.2	0.652	148.7
963.7	0.681	148.7
962.7	0.710	149.1
964.8	0.739	149.4
967.7	0.781	149.5
969.6	0.826	149.6
969.9	0.856	149.6
966.6	0.887	149.7

Tested By: JCM Date: 11/18/13 Input Checked By: KC Date: 11/25/13

DCN: CFS28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	266.0-268.7
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



—◆— Test No. 28

—■— Test No. 29

—▲— Test No. 30

E50 Test No. 28 7925.991

E50 Test No. 29 15106.76

E50 Test No. 30 39592.26

Tested By: JCM

Date: 11/18/13

Approved By: DB

Date: 11/25/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	267.1-267.6
Project No.:	2013-465-001	Sample No.:	ST-10
Lab ID:	2013-465-001-008		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	182.0	Stage No.	1
		Test No	30

INITIAL DIMENSIONS

Initial Sample Length (in)	5.87
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.52
Initial Sample Volume (in ³)	38.27

VOLUME CHANGE

Volume After Consolidation (in ³)	36.28
Length After Consolidation (in)	5.79
Area After Consolidation (in ²)	6.262

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	7.57	0.47	189.10	181.5	1.042	0.06	185.32	3.79
0.03	14.94	1.27	195.67	180.7	1.083	0.08	188.20	7.47
0.09	43.29	5.59	219.70	176.4	1.245	0.13	198.05	21.64
0.17	66.83	11.98	236.85	170.0	1.393	0.18	203.44	33.42
0.25	85.37	20.24	247.13	161.8	1.528	0.24	204.44	42.69
0.37	108.34	34.32	256.02	147.7	1.734	0.32	201.85	54.17
0.50	125.44	48.48	258.97	133.5	1.939	0.39	196.25	62.72
0.68	140.55	64.93	257.62	117.1	2.201	0.46	187.35	70.28
1.01	152.41	84.54	249.87	97.5	2.564	0.55	173.67	76.20
1.53	156.29	98.96	239.33	83.0	2.882	0.63	161.19	78.14
2.18	154.28	107.57	228.71	74.4	3.073	0.70	151.57	77.14
2.79	151.46	112.14	221.32	69.9	3.168	0.74	145.59	75.73
3.49	148.09	115.68	214.41	66.3	3.233	0.78	140.36	74.04
3.99	145.83	117.53	210.31	64.5	3.262	0.81	137.39	72.92
4.69	143.02	119.75	205.27	62.2	3.298	0.84	133.76	71.51
5.65	140.73	121.83	200.89	60.2	3.339	0.87	130.53	70.36
6.69	137.83	123.59	196.23	58.4	3.360	0.90	127.32	68.91
7.47	136.41	124.51	193.91	57.5	3.373	0.91	125.70	68.21
8.46	134.67	125.53	191.14	56.5	3.385	0.93	123.81	67.33
9.19	133.70	126.13	189.57	55.9	3.393	0.94	122.72	66.85
9.94	132.60	126.52	188.09	55.5	3.390	0.95	121.79	66.30
10.74	131.51	127.01	186.50	55.0	3.391	0.97	120.75	65.76
11.25	131.25	127.11	186.14	54.9	3.391	0.97	120.51	65.63
11.76	130.42	127.13	185.29	54.9	3.377	0.97	120.08	65.21
12.26	129.55	127.49	184.05	54.5	3.377	0.98	119.28	64.77
12.75	129.10	127.78	183.33	54.2	3.381	0.99	118.78	64.55
13.48	128.44	127.93	182.52	54.1	3.375	1.00	118.29	64.22
14.25	127.54	128.05	181.49	54.0	3.364	1.00	117.72	63.77
14.78	126.80	128.04	180.76	54.0	3.350	1.01	117.36	63.40
15.30	125.57	128.05	179.52	53.9	3.328	1.02	116.74	62.79

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	267.1-267.6
Project No.	2013-465-001	Sample No.	ST-10
Lab ID #	2013-465-001-008	Test No.	30

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G322	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G041	2/22/14
Timing Device	G489	5/13/14
Flow Pump	G1511-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-008 Specific Gravity (measured) 2.67

Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	268.1-268.6	267.6-268.1	267.1-267.6
Sample No.:	ST-10	ST-10	ST-10
Test No.	T28	T29	T30
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.6	21.7	21.6
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	27.5	27.5	27.5
Total Unit Weight (pcf)	120.0	115.1	119.7
Dry Unit Weight (pcf)	94.2	90.3	93.9
Moisture Content (%) (FINAL)	27.5	28.4	27.0
Initial State Void Ratio, e	0.770	0.845	0.775
Void Ratio at Shear, e	0.718	0.771	0.683



Tested By: JCM Date: 11/10/13 Input Checked By: KC Date: 11/25/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T28	T29	T30
Tare Number	785	785	785
Weight of Tare & Wet Sample (g)	241.37	241.37	241.37
Weight of Tare & Dry Sample (g)	207.74	207.74	207.74
Weight of Tare (g)	85.3	85.3	85.3
Moisture Content (%) (INITIAL)	27.47	27.47	27.47
Tare Number	701	897	582
Weight of Tare & Wet Sample (g)	1295.01	328.39	1253.75
Weight of Tare & Dry Sample (g)	1036.98	280.03	1005.19
Weight of Tare (g)	98.86	109.77	83.89
Moisture Content (%) (FINAL)	27.51	28.40	26.98

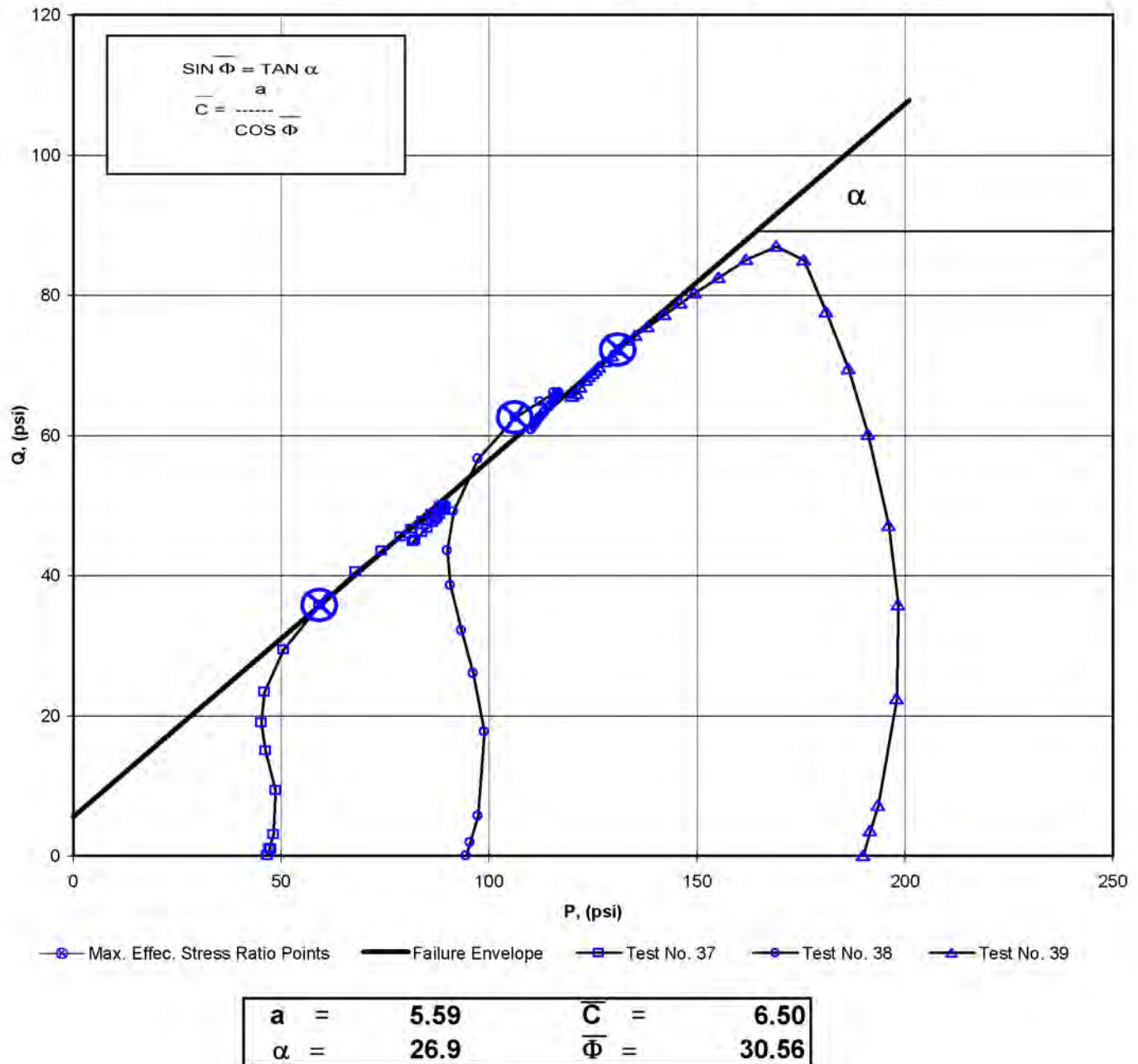
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1641.62	1585.58	1617.22
Weight of Tube (g)	421.96	417.45	414.83
Weight of Wet Sample (g)	1219.66	1168.13	1202.39
Length 1 (in)	5.961	5.964	5.875
Length 2 (in)	5.953	5.949	5.868
Length 3 (in)	5.954	5.952	5.861
Top Diameter (in)	2.877	2.879	2.883
Middle Diameter (in)	2.872	2.874	2.88
Bottom Diameter (in)	2.881	2.871	2.882
Average Length (in)	5.956	5.955	5.868
Average Area (in)	6.499	6.490	6.522
Sample Volume (cm ³)	634.34	633.36	627.15
Unit Wet Weight (g/cm ³)	1.92	1.84	1.92
Unit Wet Weight (pcf)	120.03	115.14	119.69
Unit Dry Weight (pcf)	94.17	90.33	93.90
Unit Dry Weight (g/cm ³)	1.51	1.45	1.50
Initial Burette Reading	48	48	48
Final Burette Reading	31.1	28.4	21.8
Initial Dial Reading	52	50	44
Dial Reading After Saturation	58	68	64
Dial Reading After Consolidation	109	129	118
Volume Change during Consolidation	16.9	19.6	26.2
Volume Change during Saturation	1.92	5.74	6.41
Volume at Shear (cm ³)	615.53	608.01	594.53
Volume of Solids (cm ³)	358.37	343.23	353.30
Volume of Voids (cm ³)	257.16	264.78	241.24
Volume of Water (cm ³)	263.18	260.30	254.50
Void Ratio, e	0.718	0.771	0.683

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	277.0-279.7
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/17/13

Approved By: DB

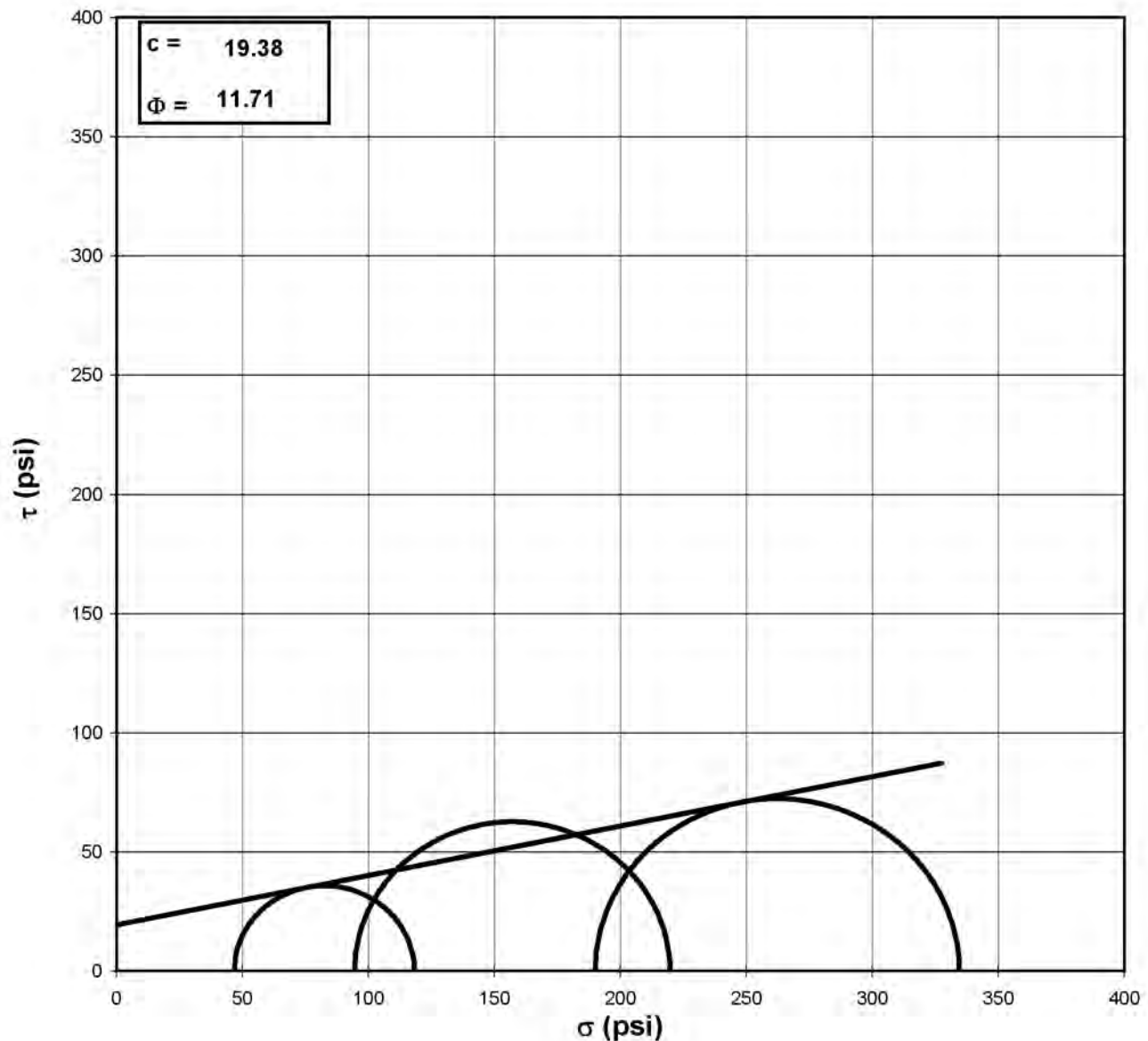
Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	277.0-279.7
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 11/17/13 Approved By: DB Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	278.1-278.6
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	37

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.935	Diameter 1:	2.880
Length 2:	5.952	Diameter 2:	2.884
Length 3:	5.957	Diameter 3:	2.883
Avg. Length:	5.948	Avg. Diam.:	2.882

PRESSURES (psi)

Cell Pressure (psi)	68.6
Back Pressure (psi)	21.8
Eff. Conf. Pressure (psi)	46.8
Pore Pressure Response (%)	100

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	33.9
Final Change (ml)	14.1

MAXIMUM OBLIQUITY POINTS

P	=	59.29
Q	=	35.74

Initial Dial Reading (mil)	53
Dial Reading After Saturation (mil)	72
Dial Reading After Consolidation (mil)	110

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
8.0	0.000	21.8
8.0	0.003	21.9
19.8	0.006	22.0
21.9	0.013	22.5
46.7	0.014	23.5
126.6	0.018	29.2
200.3	0.025	37.4
251.9	0.033	42.4
308.6	0.044	46.0
387.8	0.064	47.5
471.1	0.092	45.0
536.8	0.127	41.1
578.1	0.163	37.8
609.5	0.206	35.3
627.5	0.236	33.9
647.1	0.276	32.4
666.3	0.332	31.2
687.4	0.390	30.1
696.2	0.436	29.5
700.7	0.498	29.1
706.7	0.541	28.9
706.0	0.586	28.8
704.2	0.631	29.1
701.4	0.660	29.3
700.5	0.691	29.4
699.5	0.722	29.7
691.7	0.752	30.1
688.0	0.797	30.8
678.3	0.841	31.4
679.7	0.870	31.8
678.3	0.901	32.0

Tested By: JCM Date: 11/17/13 Input Checked By: KC Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	278.1-278.6
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	46.8	Stage No.	1
		Test No	37

INITIAL DIMENSIONS

Initial Sample Length (in)	5.95
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.52
Initial Sample Volume (in ³)	38.81

VOLUME CHANGE

Volume After Consolidation (in ³)	37.58
Length After Consolidation (in)	5.89
Area After Consolidation (in ²)	6.379

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.05	0.01	0.13	46.68	46.7	1.000	17.23	46.68	0.00
0.11	1.84	0.17	48.47	46.6	1.040	0.09	47.55	0.92
0.22	2.18	0.66	48.32	46.1	1.047	0.30	47.23	1.09
0.24	6.05	1.65	51.19	45.1	1.134	0.27	48.17	3.02
0.31	18.54	7.40	57.93	39.4	1.470	0.40	48.67	9.27
0.42	30.01	15.58	61.23	31.2	1.961	0.52	46.23	15.01
0.55	38.02	20.59	64.23	26.2	2.451	0.54	45.22	19.01
0.74	46.78	24.16	69.42	22.6	3.066	0.52	46.03	23.39
1.08	58.90	25.66	80.04	21.1	3.786	0.44	50.59	29.45
1.56	71.47	23.25	95.02	23.6	4.035	0.33	59.29	35.74
2.15	81.11	19.34	108.57	27.5	3.954	0.24	68.01	40.55
2.76	86.91	16.01	117.69	30.8	3.823	0.18	74.24	43.45
3.49	91.00	13.51	124.29	33.3	3.733	0.15	78.79	45.50
4.00	93.23	12.05	127.98	34.7	3.683	0.13	81.36	46.62
4.68	95.49	10.57	131.72	36.2	3.636	0.11	83.97	47.75
5.64	97.37	9.36	134.81	37.4	3.601	0.10	86.13	48.69
6.62	99.46	8.34	137.92	38.5	3.586	0.08	88.19	49.73
7.40	99.90	7.72	138.98	39.1	3.556	0.08	89.03	49.95
8.45	99.42	7.34	138.89	39.5	3.519	0.07	89.18	49.71
9.18	99.47	7.08	139.19	39.7	3.504	0.07	89.46	49.74
9.94	98.55	6.96	138.39	39.8	3.474	0.07	89.11	49.28
10.71	97.45	7.29	136.96	39.5	3.466	0.07	88.24	48.72
11.21	96.52	7.47	135.84	39.3	3.454	0.08	87.59	48.26
11.73	95.83	7.64	135.00	39.2	3.447	0.08	87.08	47.92
12.25	95.13	7.94	134.00	38.9	3.448	0.08	86.43	47.57
12.77	93.49	8.33	131.96	38.5	3.430	0.09	85.21	46.75
13.53	92.18	8.97	130.01	37.8	3.437	0.10	83.92	46.09
14.27	90.08	9.63	127.25	37.2	3.424	0.11	82.21	45.04
14.77	89.74	10.00	126.53	36.8	3.439	0.11	81.66	44.87
15.29	89.00	10.17	125.63	36.6	3.430	0.11	81.13	44.50

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	278.1-278.6
Project No.	2013-465-001	Sample No.	ST-11
Lab ID #	2013-465-001-009	Test No.	37

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G312	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G720	3/18/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	278.6-279.1
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	38

PRESSURES (psi)

Cell Pressure (psi)	116.3
Back Pressure (psi)	21.7
Eff. Conf. Pressure (psi)	94.6
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	106.29
Q	=	62.56

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.967	Diameter 1:	2.879
Length 2:	5.956	Diameter 2:	2.887
Length 3:	5.920	Diameter 3:	2.872
Avg. Length	5.948	Avg. Diam.:	2.879

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	29.0
Final Change (ml)	19.0

Initial Dial Reading (mil)	54
Dial Reading After Saturation (mil)	78
Dial Reading After Consolidation (mil)	148

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
20.4	0.000	21.7
44.6	0.001	22.8
92.5	0.002	24.6
245.0	0.005	35.1
350.7	0.011	46.0
428.5	0.016	54.9
511.3	0.024	64.1
575.5	0.034	69.8
648.6	0.045	73.9
746.6	0.064	75.5
826.0	0.092	72.6
859.6	0.127	68.7
882.3	0.162	66.7
886.4	0.204	65.8
893.2	0.233	65.5
891.5	0.277	65.4
896.0	0.333	65.4
899.7	0.392	65.5
901.6	0.437	65.6
908.0	0.498	65.8
913.0	0.543	66.0
915.0	0.588	66.1
919.3	0.633	66.2
917.5	0.662	66.3
918.8	0.692	66.4
921.1	0.723	66.5
920.2	0.753	66.6
921.7	0.799	66.7
921.2	0.843	66.8
925.7	0.872	66.9
917.9	0.902	67.0

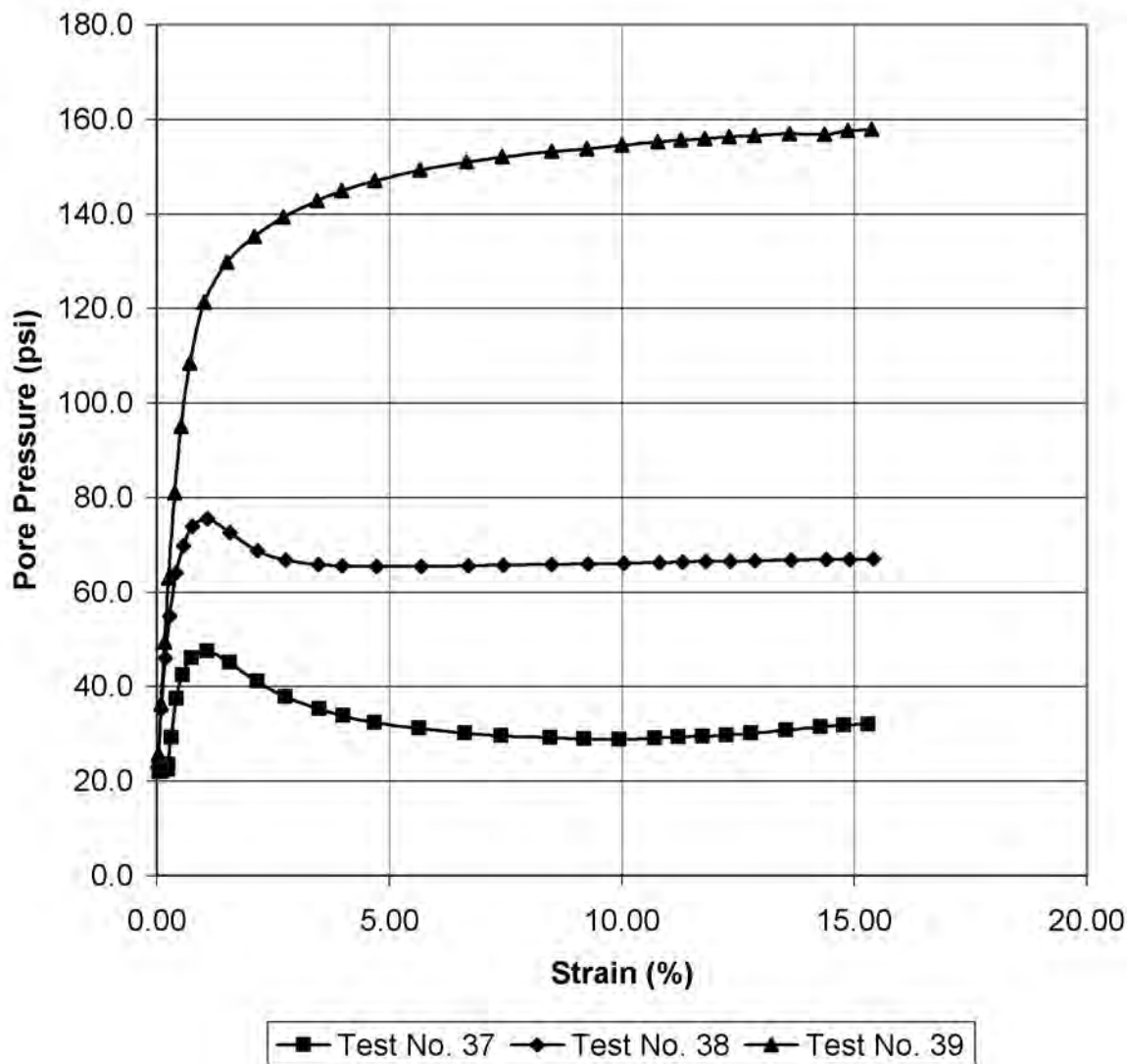
Tested By:	JCM	Date:	11/17/13	Input Checked By:	KC	Date:	12/4/13
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DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	277.0-279.7
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	278.6-279.1
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	94.6	Stage No.	1
		Test No	38

INITIAL DIMENSIONS

Initial Sample Length (in)	5.95
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.73

VOLUME CHANGE

Volume After Consolidation (in ³)	37.10
Length After Consolidation (in)	5.85
Area After Consolidation (in ²)	6.338

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	3.81	1.05	97.36	93.5	1.041	0.28	95.46	1.91
0.03	11.38	2.90	103.08	91.7	1.124	0.25	97.39	5.69
0.09	35.41	13.42	116.59	81.2	1.436	0.38	98.88	17.70
0.19	52.02	24.35	122.27	70.3	1.740	0.47	96.26	26.01
0.28	64.21	33.20	125.61	61.4	2.046	0.52	93.51	32.11
0.42	77.14	42.42	129.32	52.2	2.478	0.55	90.75	38.57
0.57	87.08	48.10	133.58	46.5	2.873	0.55	90.04	43.54
0.76	98.36	52.20	140.75	42.4	3.320	0.53	91.58	49.18
1.09	113.32	53.83	154.09	40.8	3.780	0.48	97.43	56.66
1.58	125.11	50.87	168.84	43.7	3.861	0.41	106.29	62.56
2.18	129.53	47.03	177.10	47.6	3.723	0.36	112.33	64.76
2.77	132.22	45.05	181.77	49.6	3.668	0.34	115.66	66.11
3.48	131.89	44.14	182.35	50.5	3.614	0.33	116.40	65.94
3.99	132.23	43.81	183.02	50.8	3.604	0.33	116.90	66.11
4.73	130.94	43.70	181.84	50.9	3.573	0.33	116.37	65.47
5.69	130.29	43.69	181.20	50.9	3.559	0.34	116.05	65.14
6.70	129.45	43.82	180.23	50.8	3.549	0.34	115.50	64.73
7.46	128.67	43.92	179.35	50.7	3.539	0.34	115.01	64.33
8.50	128.14	44.09	178.64	50.5	3.537	0.34	114.58	64.07
9.27	127.78	44.25	178.13	50.3	3.538	0.35	114.24	63.89
10.04	126.98	44.39	177.19	50.2	3.529	0.35	113.70	63.49
10.81	126.50	44.53	176.57	50.1	3.526	0.35	113.32	63.25
11.31	125.53	44.64	175.49	50.0	3.513	0.36	112.72	62.77
11.82	125.00	44.74	174.86	49.9	3.507	0.36	112.36	62.50
12.34	124.58	44.78	174.40	49.8	3.500	0.36	112.11	62.29
12.86	123.71	44.90	173.41	49.7	3.489	0.36	111.55	61.85
13.65	122.81	45.00	172.41	49.6	3.476	0.37	111.01	61.40
14.40	121.66	45.12	171.14	49.5	3.459	0.37	110.31	60.83
14.90	121.55	45.21	170.94	49.4	3.461	0.37	110.16	60.78
15.41	119.79	45.28	169.11	49.3	3.429	0.38	109.22	59.89

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	278.6-279.1
Project No.	2013-465-001	Sample No.	ST-11
Lab ID #	2013-465-001-009	Test No.	38

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G313	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G721	2/22/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	279.1-279.6
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	39

PRESSURES (psi)

Cell Pressure (psi)	212.0
Back Pressure (psi)	21.9
Eff. Conf. Pressure (psi)	190.1
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	131.08
Q	=	72.23

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.871	Diameter 1:	2.877
Length 2:	5.895	Diameter 2:	2.884
Length 3:	5.875	Diameter 3:	2.871
Avg. Length:	5.880	Avg. Diam.:	2.877

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	24.6
Final Change (ml)	23.4

Initial Dial Reading (mil)	45
Dial Reading After Saturation (mil)	64
Dial Reading After Consolidation (mil)	132

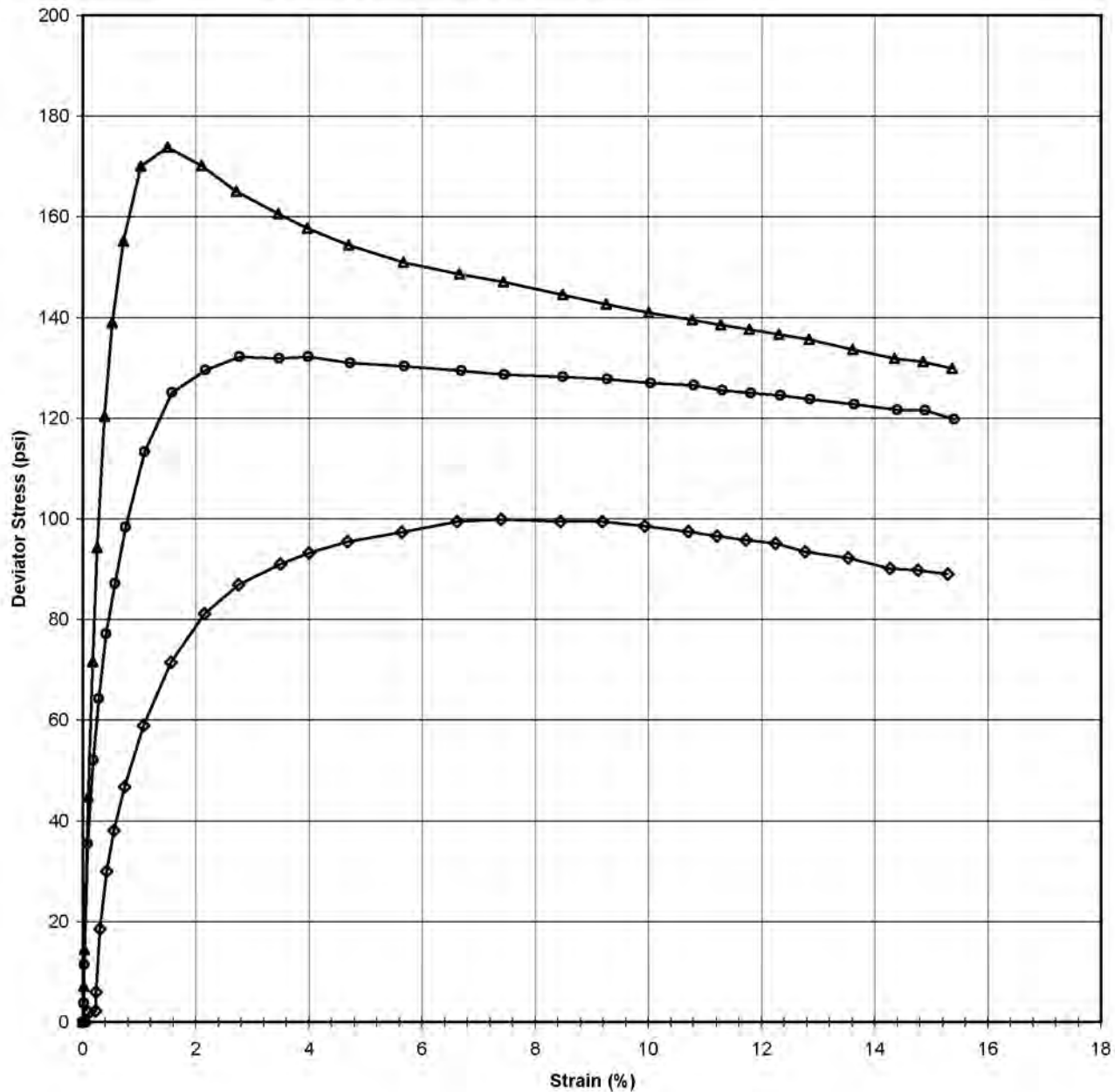
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
41.7	0.000	21.9
86.0	0.001	23.8
132.6	0.002	25.6
323.2	0.006	36.2
492.5	0.010	49.3
636.2	0.015	62.9
801.1	0.022	80.9
920.0	0.030	95.0
1024.5	0.042	108.4
1122.2	0.059	121.2
1151.8	0.087	129.7
1135.0	0.122	135.2
1108.7	0.158	139.3
1088.1	0.200	142.7
1075.0	0.230	144.8
1060.9	0.272	146.9
1047.9	0.328	149.3
1042.9	0.386	151.0
1041.0	0.431	152.0
1034.6	0.492	153.2
1030.3	0.536	153.7
1027.0	0.580	154.6
1024.8	0.624	155.2
1023.5	0.654	155.6
1023.3	0.683	155.8
1021.9	0.713	156.3
1020.2	0.744	156.5
1014.8	0.789	156.9
1009.9	0.832	156.8
1010.8	0.861	157.5
1006.9	0.891	157.9

Tested By:	JCM	Date:	11/17/13	Input Checked By:	KC	Date:	12/4/13
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DCN: CFS28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	277.0-279.7
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



◆ Test No. 37

■ Test No. 38

▲ Test No. 39

E50 Test No. 37 6924.496

E50 Test No. 38 23223.93

E50 Test No. 39 40021.69

Tested By: JCM

Date: 11/17/13

Approved By: DB

Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	279.1-279.6
Project No.:	2013-465-001	Sample No.:	ST-11
Lab ID:	2013-465-001-009		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	190.1	Stage No.	1
		Test No	39

INITIAL DIMENSIONS

Initial Sample Length (in)	5.88
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.50
Initial Sample Volume (in ³)	38.24

VOLUME CHANGE

Volume After Consolidation (in ³)	36.44
Length After Consolidation (in)	5.79
Area After Consolidation (in ²)	6.290

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	7.05	1.94	195.21	188.2	1.037	0.28	191.68	3.52
0.03	14.44	3.72	200.82	186.4	1.077	0.26	193.60	7.22
0.10	44.72	14.32	220.50	175.8	1.254	0.32	198.14	22.36
0.18	71.55	27.42	234.23	162.7	1.440	0.38	198.45	35.78
0.26	94.27	40.99	243.39	149.1	1.632	0.43	196.25	47.14
0.39	120.27	59.05	251.33	131.1	1.918	0.49	191.19	60.14
0.53	138.91	73.08	255.92	117.0	2.187	0.53	186.47	69.45
0.72	155.14	86.47	258.77	103.6	2.497	0.56	181.20	77.57
1.03	170.03	99.31	260.83	90.8	2.873	0.58	175.81	85.02
1.50	173.85	107.84	256.11	82.3	3.113	0.62	169.18	86.92
2.10	170.17	113.31	246.96	76.8	3.216	0.67	161.88	85.09
2.72	165.03	117.39	237.74	72.7	3.270	0.71	155.22	82.51
3.46	160.62	120.81	229.90	69.3	3.318	0.75	149.59	80.31
3.97	157.76	122.92	224.94	67.2	3.348	0.78	146.06	78.88
4.70	154.44	125.03	219.51	65.1	3.373	0.81	142.29	77.22
5.67	150.90	127.36	213.64	62.7	3.405	0.84	138.19	75.45
6.66	148.58	129.10	209.58	61.0	3.436	0.87	135.29	74.29
7.44	147.07	130.10	207.08	60.0	3.451	0.88	133.54	73.54
8.49	144.47	131.25	203.32	58.8	3.455	0.91	131.08	72.23
9.25	142.63	131.82	200.91	58.3	3.447	0.92	129.60	71.31
10.01	140.98	132.67	198.41	57.4	3.455	0.94	127.92	70.49
10.78	139.46	133.32	196.24	56.8	3.456	0.96	126.51	69.73
11.28	138.50	133.67	194.93	56.4	3.454	0.97	125.68	69.25
11.79	137.66	133.94	193.82	56.2	3.451	0.97	124.99	68.83
12.31	136.66	134.40	192.37	55.7	3.454	0.98	124.03	68.33
12.85	135.59	134.56	191.13	55.5	3.441	0.99	123.34	67.79
13.61	133.66	134.98	188.78	55.1	3.425	1.01	121.95	66.83
14.36	131.84	134.94	187.00	55.2	3.390	1.02	121.08	65.92
14.86	131.19	135.65	185.64	54.5	3.409	1.03	120.05	65.59
15.38	129.86	136.01	183.95	54.1	3.401	1.05	119.02	64.93

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	279.1-279.6
Project No.	2013-465-001	Sample No.	ST-11
Lab ID #	2013-465-001-009	Test No.	39

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G314	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G1294	3/4/14
Timing Device	G489	5/13/14
Flow Pump	G1510-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-009 Specific Gravity (measured) 2.63

Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	278.1-278.6	278.6-279.1	279.1-279.6
Sample No.:	ST-11	ST-11	ST-11
Test No.	T37	T38	T39
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.8	21.7	21.9
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	30.5	30.5	30.5
Total Unit Weight (pcf)	118.6	118.6	119.4
Dry Unit Weight (pcf)	90.9	90.8	91.5
Moisture Content (%) (FINAL)	29.5	28.4	28.2
Initial State Void Ratio, e	0.807	0.808	0.795
Void Ratio at Shear, e	0.750	0.732	0.711



Tested By: JCM Date: 11/17/13 Input Checked By: KC Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T37	T38	T39
Tare Number	1125	1125	1125
Weight of Tare & Wet Sample (g)	238.65	238.65	238.65
Weight of Tare & Dry Sample (g)	202.5	202.5	202.5
Weight of Tare (g)	84.1	84.1	84.1
Moisture Content (%) (INITIAL)	30.53	30.53	30.53
Tare Number	607	690	1453
Weight of Tare & Wet Sample (g)	403.8	1275.05	1316.95
Weight of Tare & Dry Sample (g)	330.72	1014.4	1059.06
Weight of Tare (g)	82.8	95.45	145.52
Moisture Content (%) (FINAL)	29.48	28.36	28.23

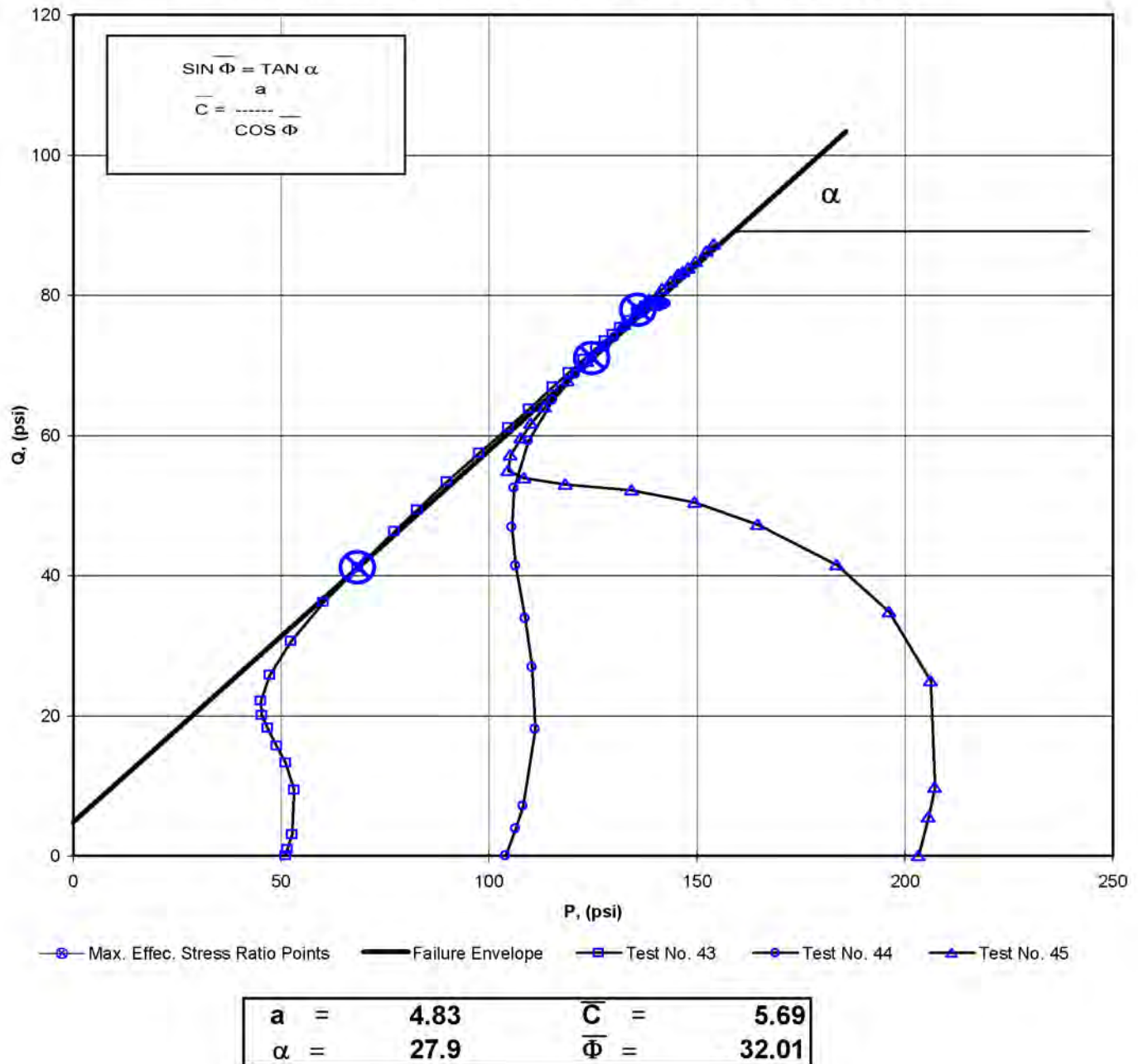
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1624.2	1621.62	1608.83
Weight of Tube (g)	415.96	416.45	410.61
Weight of Wet Sample (g)	1208.24	1205.17	1198.22
Length 1 (in)	5.935	5.967	5.871
Length 2 (in)	5.952	5.956	5.895
Length 3 (in)	5.957	5.92	5.875
Top Diameter (in)	2.88	2.879	2.877
Middle Diameter (in)	2.884	2.887	2.884
Bottom Diameter (in)	2.883	2.872	2.871
Average Length (in)	5.948	5.947667	5.880333
Average Area (in ²)	6.525	6.511	6.502
Sample Volume (cm ³)	635.99	634.63	626.58
Unit Wet Weight (g/cm ³)	1.90	1.90	1.91
Unit Wet Weight (pcf)	118.60	118.56	119.39
Unit Dry Weight (pcf)	90.86	90.82	91.46
Unit Dry Weight (g/cm ³)	1.46	1.46	1.47
Initial Burette Reading	48	48	48
Final Burette Reading	33.9	29	24.6
Initial Dial Reading	53	54	45
Dial Reading After Saturation	72	78	64
Dial Reading After Consolidation	110	148	132
Volume Change during Consolidation	14.1	19	23.4
Volume Change during Saturation	6.09	7.68	6.07
Volume at Shear (cm ³)	*These 615.80	607.95	597.10
Volume of Solids (cm ³)	measurements 351.95	351.06	349.03
Volume of Voids (cm ³)	are all 263.85	256.89	248.07
Volume of Water (cm ³)	at 272.85	261.88	259.14
Void Ratio, e	shear 0.750	0.732	0.711

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.0-300.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/19/13

Approved By: DB

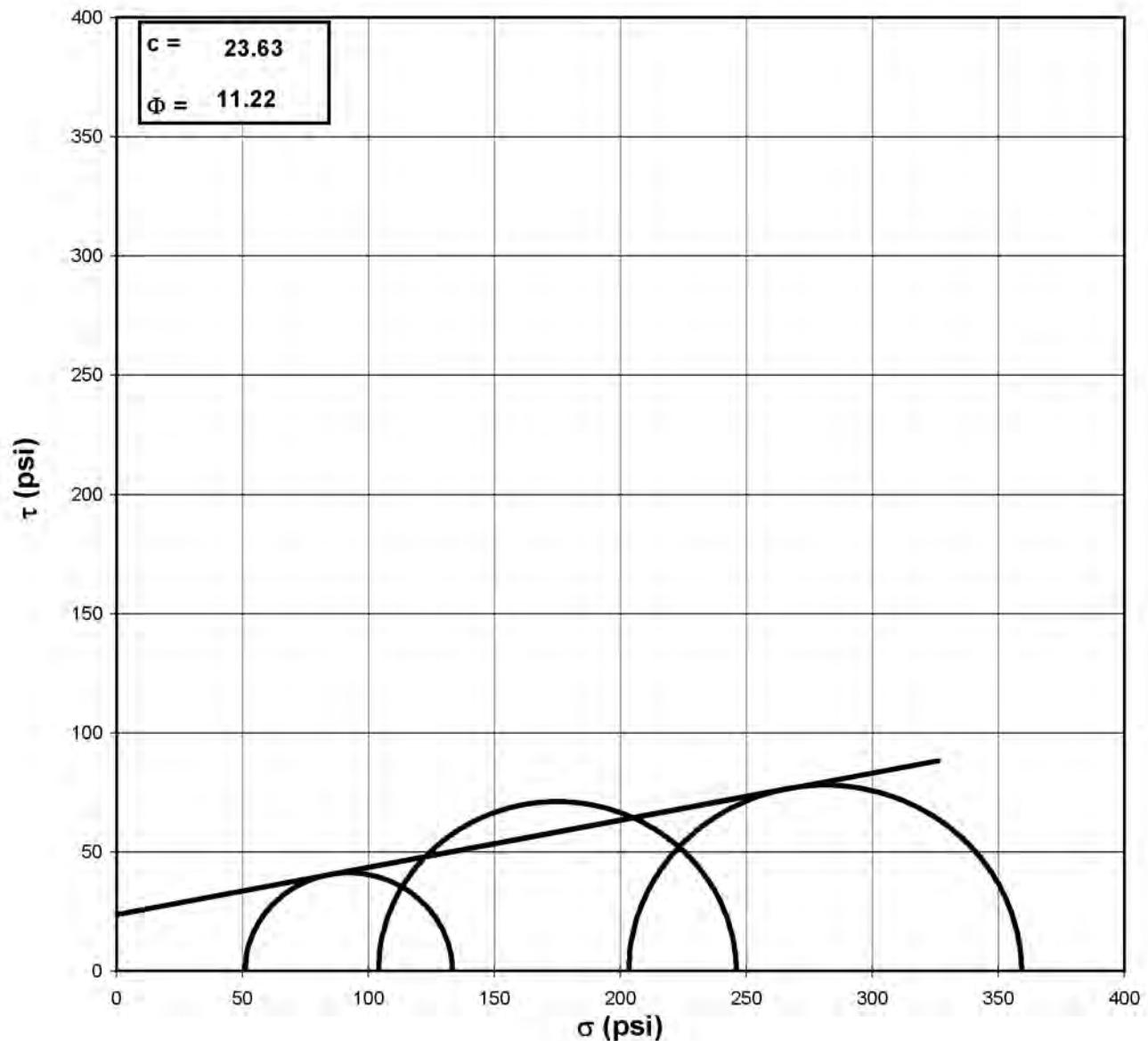
Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.0-300.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 11/19/13 Approved By: DB Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	299.2-299.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	43

PRESSURES (psi)

Cell Pressure (psi)	72.5
Back Pressure (psi)	21.4
Eff. Conf. Pressure (psi)	51.1
Pore Pressure	
Response (%)	99

MAXIMUM OBLIQUITY POINTS

P	=	68.48
Q	=	41.12

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.914	Diameter 1:	2.877
Length 2:	5.918	Diameter 2:	2.881
Length 3:	5.918	Diameter 3:	2.870
Avg. Length:	5.917	Avg. Diam.:	2.876

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	29.5
Final Change (ml)	18.5

Initial Dial Reading (mil)	50
Dial Reading After Saturation (mil)	110
Dial Reading After Consolidation (mil)	156

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
13.7	0.000	21.4
24.9	0.001	21.9
51.3	0.002	22.8
130.3	0.006	28.6
178.5	0.011	34.6
209.2	0.016	39.2
241.2	0.025	44.0
264.0	0.034	47.1
290.7	0.046	49.5
338.3	0.066	51.1
400.7	0.095	50.7
473.7	0.130	48.4
540.1	0.164	45.1
610.0	0.204	41.5
653.7	0.233	39.1
710.3	0.275	35.9
772.1	0.332	32.3
828.8	0.390	28.9
870.9	0.434	26.6
923.0	0.493	24.0
958.5	0.537	22.3
992.9	0.583	20.6
1024.1	0.627	19.1
1044.0	0.656	18.1
1062.7	0.686	17.2
1083.5	0.715	16.4
1103.8	0.745	15.5
1131.2	0.791	14.4
1153.4	0.836	13.4
1169.1	0.865	12.6
1185.8	0.895	12.1

Tested By: JCM Date: 11/19/13 Input Checked By: KC Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	299.2-299.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	51.1	Stage No.	1
		Test No	43

INITIAL DIMENSIONS

Initial Sample Length (in)	5.92
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.50
Initial Sample Volume (in ³)	38.44

VOLUME CHANGE

Volume After Consolidation (in ³)	36.14
Length After Consolidation (in)	5.81
Area After Consolidation (in ²)	6.219

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	1.81	0.45	52.45	50.6	1.036	0.25	51.55	0.90
0.03	6.04	1.44	55.70	49.7	1.122	0.24	52.68	3.02
0.11	18.72	7.24	62.58	43.9	1.427	0.39	53.22	9.36
0.19	26.45	13.18	64.37	37.9	1.698	0.50	51.15	13.23
0.28	31.35	17.79	64.66	33.3	1.941	0.57	48.99	15.68
0.43	36.42	22.57	64.94	28.5	2.277	0.63	46.73	18.21
0.58	40.02	25.69	65.43	25.4	2.575	0.65	45.42	20.01
0.78	44.19	28.06	67.23	23.0	2.918	0.64	45.14	22.09
1.14	51.61	29.67	73.04	21.4	3.408	0.58	47.23	25.80
1.63	61.21	29.34	82.97	21.8	3.813	0.48	52.37	30.60
2.24	72.31	27.02	96.38	24.1	4.003	0.38	60.23	36.15
2.82	82.25	23.74	109.60	27.4	4.007	0.29	68.48	41.12
3.51	92.51	20.08	123.53	31.0	3.982	0.22	77.28	46.26
4.01	98.78	17.74	132.14	33.4	3.961	0.18	82.75	49.39
4.74	106.71	14.55	143.26	36.6	3.919	0.14	89.91	53.35
5.71	114.99	10.90	155.18	40.2	3.861	0.10	97.69	57.49
6.72	122.25	7.54	165.81	43.6	3.807	0.06	104.68	61.13
7.47	127.53	5.21	173.43	45.9	3.779	0.04	109.66	63.77
8.49	133.80	2.65	182.25	48.5	3.761	0.02	115.35	66.90
9.25	137.86	0.87	188.09	50.2	3.745	0.01	119.16	68.93
10.04	141.64	-0.80	193.54	51.9	3.729	-0.01	122.72	70.82
10.80	144.92	-2.32	198.34	53.4	3.713	-0.02	125.88	72.46
11.30	146.95	-3.33	201.38	54.4	3.700	-0.02	127.90	73.48
11.80	148.76	-4.25	204.11	55.3	3.688	-0.03	129.73	74.38
12.31	150.84	-5.04	206.98	56.1	3.687	-0.03	131.56	75.42
12.82	152.80	-5.85	209.75	57.0	3.683	-0.04	133.35	76.40
13.61	155.24	-6.96	213.29	58.1	3.674	-0.05	135.68	77.62
14.38	156.89	-7.97	215.96	59.1	3.656	-0.05	137.51	78.45
14.89	158.11	-8.75	217.96	59.9	3.642	-0.06	138.91	79.05
15.40	159.43	-9.35	219.88	60.4	3.637	-0.06	140.17	79.72

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	299.2-299.7
Project No.	2013-465-001	Sample No.	ST-13
Lab ID #	2013-465-001-011	Test No.	43

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G332	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G1457	8/30/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.7-299.2
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	44

PRESSURES (psi)

Cell Pressure (psi)	125.7
Back Pressure (psi)	21.7
Eff. Conf. Pressure (psi)	104.0
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	124.85
Q	=	71.00

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.972	Diameter 1:	2.877
Length 2:	5.945	Diameter 2:	2.868
Length 3:	5.963	Diameter 3:	2.867
Avg. Length	5.960	Avg. Diam.:	2.871

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	28.2
Final Change (ml)	19.8

Initial Dial Reading (mil)	56
Dial Reading After Saturation (mil)	70
Dial Reading After Consolidation (mil)	110

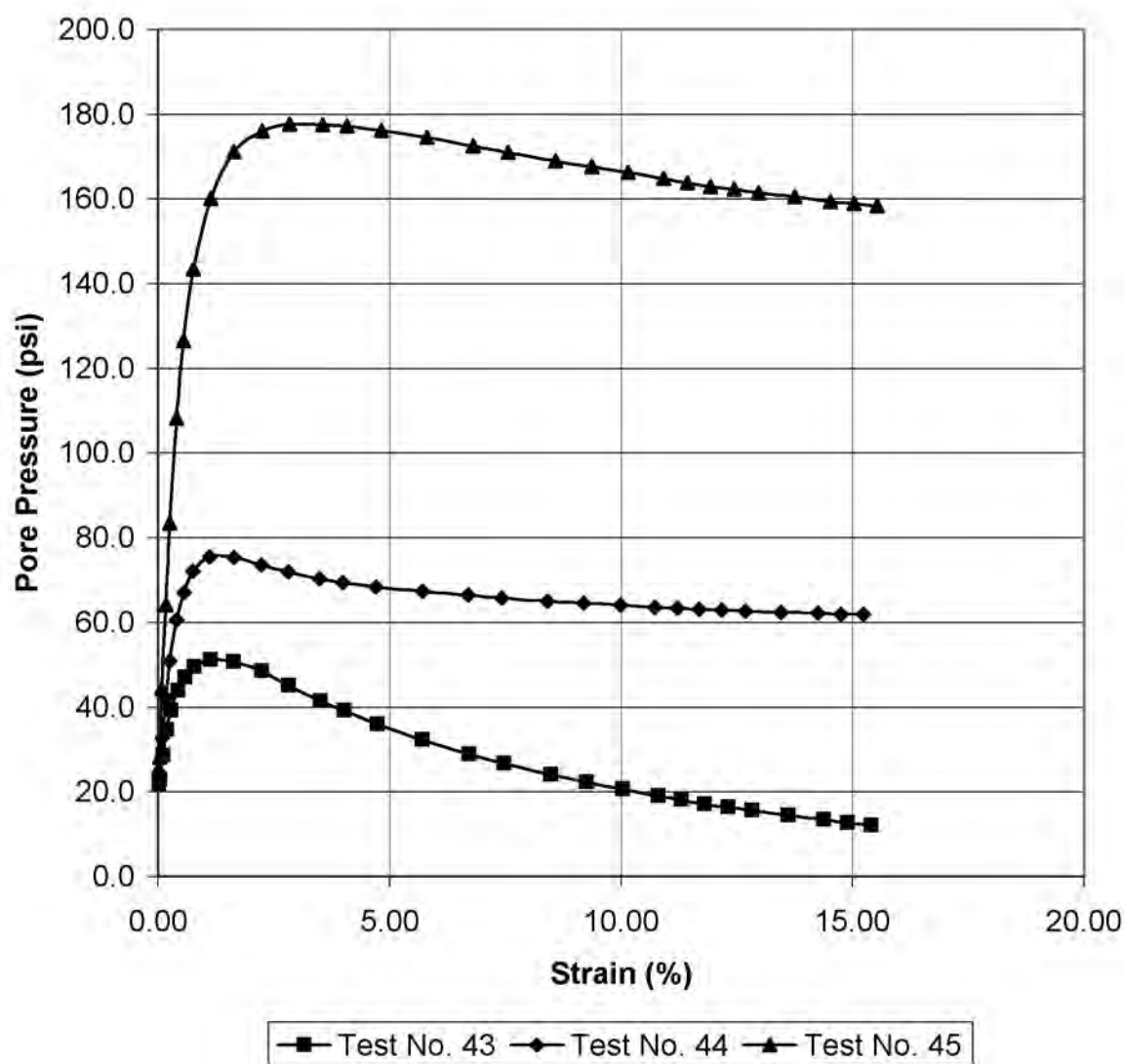
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
29.8	0.000	21.7
77.9	0.001	23.0
118.9	0.002	24.6
256.8	0.006	32.7
368.3	0.010	42.2
456.3	0.015	50.9
551.8	0.024	60.6
622.5	0.033	67.1
693.8	0.044	72.1
782.2	0.066	75.5
860.1	0.097	75.4
912.8	0.132	73.6
947.5	0.166	71.9
977.5	0.206	70.3
997.5	0.235	69.4
1024.7	0.278	68.3
1053.5	0.337	67.4
1071.6	0.396	66.4
1084.4	0.439	65.8
1104.6	0.497	65.0
1125.2	0.543	64.5
1133.9	0.590	64.1
1142.4	0.634	63.5
1144.5	0.663	63.4
1146.9	0.691	63.1
1150.5	0.719	62.9
1159.7	0.749	62.6
1174.9	0.795	62.4
1182.3	0.842	62.2
1191.3	0.872	61.9
1196.8	0.900	61.9

Tested By: JCM Date: 11/19/13 Input Checked By: KC Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.0-300.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.7-299.2
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	104.0	Stage No.	1
		Test No	44

INITIAL DIMENSIONS

Initial Sample Length (in)	5.96
Initial Sample Diameter (in)	2.87
Initial Sample Area (in ²)	6.47
Initial Sample Volume (in ³)	38.57

VOLUME CHANGE

Volume After Consolidation (in ³)	37.09
Length After Consolidation (in)	5.91
Area After Consolidation (in ²)	6.281

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	7.66	1.33	110.33	102.7	1.075	0.17	106.50	3.83
0.03	14.18	2.86	115.32	101.1	1.140	0.20	108.23	7.09
0.10	36.11	10.95	129.16	93.0	1.388	0.30	111.11	18.06
0.18	53.80	20.49	137.31	83.5	1.644	0.38	110.41	26.90
0.26	67.72	29.16	142.56	74.8	1.905	0.43	108.70	33.86
0.40	82.78	38.90	147.88	65.1	2.272	0.47	106.49	41.39
0.57	93.84	45.38	152.46	58.6	2.601	0.48	105.54	46.92
0.75	104.93	50.40	158.52	53.6	2.958	0.48	106.06	52.46
1.12	118.47	53.75	168.71	50.2	3.358	0.45	109.48	59.23
1.64	130.03	53.69	180.34	50.3	3.584	0.41	115.33	65.01
2.23	137.45	51.87	189.59	52.1	3.637	0.38	120.86	68.73
2.82	142.00	50.15	195.85	53.8	3.637	0.35	124.85	71.00
3.49	145.63	48.55	201.08	55.4	3.626	0.33	128.26	72.81
3.99	147.92	47.71	204.22	56.3	3.628	0.32	130.25	73.96
4.70	150.95	46.63	208.32	57.4	3.631	0.31	132.85	75.47
5.71	153.68	45.68	212.00	58.3	3.635	0.30	135.16	76.84
6.71	154.75	44.71	214.04	59.3	3.610	0.29	136.66	77.38
7.43	155.43	44.09	215.34	59.9	3.595	0.28	137.62	77.72
8.42	156.73	43.33	217.40	60.7	3.583	0.28	139.03	78.36
9.19	158.38	42.80	219.58	61.2	3.588	0.27	140.39	79.19
9.99	158.23	42.36	219.87	61.6	3.567	0.27	140.76	79.12
10.73	158.14	41.77	220.37	62.2	3.541	0.26	141.30	79.07
11.22	157.57	41.69	219.88	62.3	3.529	0.26	141.09	78.79
11.70	157.05	41.39	219.66	62.6	3.509	0.26	141.13	78.53
12.18	156.70	41.16	219.54	62.8	3.494	0.26	141.19	78.35
12.69	157.07	40.94	220.13	63.1	3.491	0.26	141.59	78.54
13.46	157.78	40.69	221.09	63.3	3.492	0.26	142.20	78.89
14.25	157.34	40.46	220.88	63.5	3.476	0.26	142.21	78.67
14.76	157.64	40.20	221.44	63.8	3.471	0.26	142.62	78.82
15.24	157.49	40.16	221.33	63.8	3.467	0.26	142.58	78.75

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	298.7-299.2
Project No.	2013-465-001	Sample No.	ST-13
Lab ID #	2013-465-001-011	Test No.	44

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G330	INITIAL ONLY
Load Cell	G1437	1/7/14
Cell Pressure Transducer	G1513	11/7/14
Pore Pressure Transducer	G1515	11/7/14
Extensometer	G1516	11/7/14
Load Frame	G1434	1/7/14
Dial Indicator	G528	8/30/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	G1510-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.2-298.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	45

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.873	Diameter 1:	2.881
Length 2:	5.885	Diameter 2:	2.872
Length 3:	5.881	Diameter 3:	2.884
Avg. Length:	5.880	Avg. Diam.:	2.879

PRESSURES (psi)

Cell Pressure (psi)	225.6
Back Pressure (psi)	22.2
Eff. Conf. Pressure (psi)	203.4
Pore Pressure	
Response (%)	100

VOLUME CHANGE

Initial Burette Reading (ml)	72.0
Final Burette Reading (ml)	31.7
Final Change (ml)	40.3

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	135.88
Q	=	77.92

Initial Dial Reading (mil)	42
Dial Reading After Saturation (mil)	56
Dial Reading After Consolidation (mil)	171

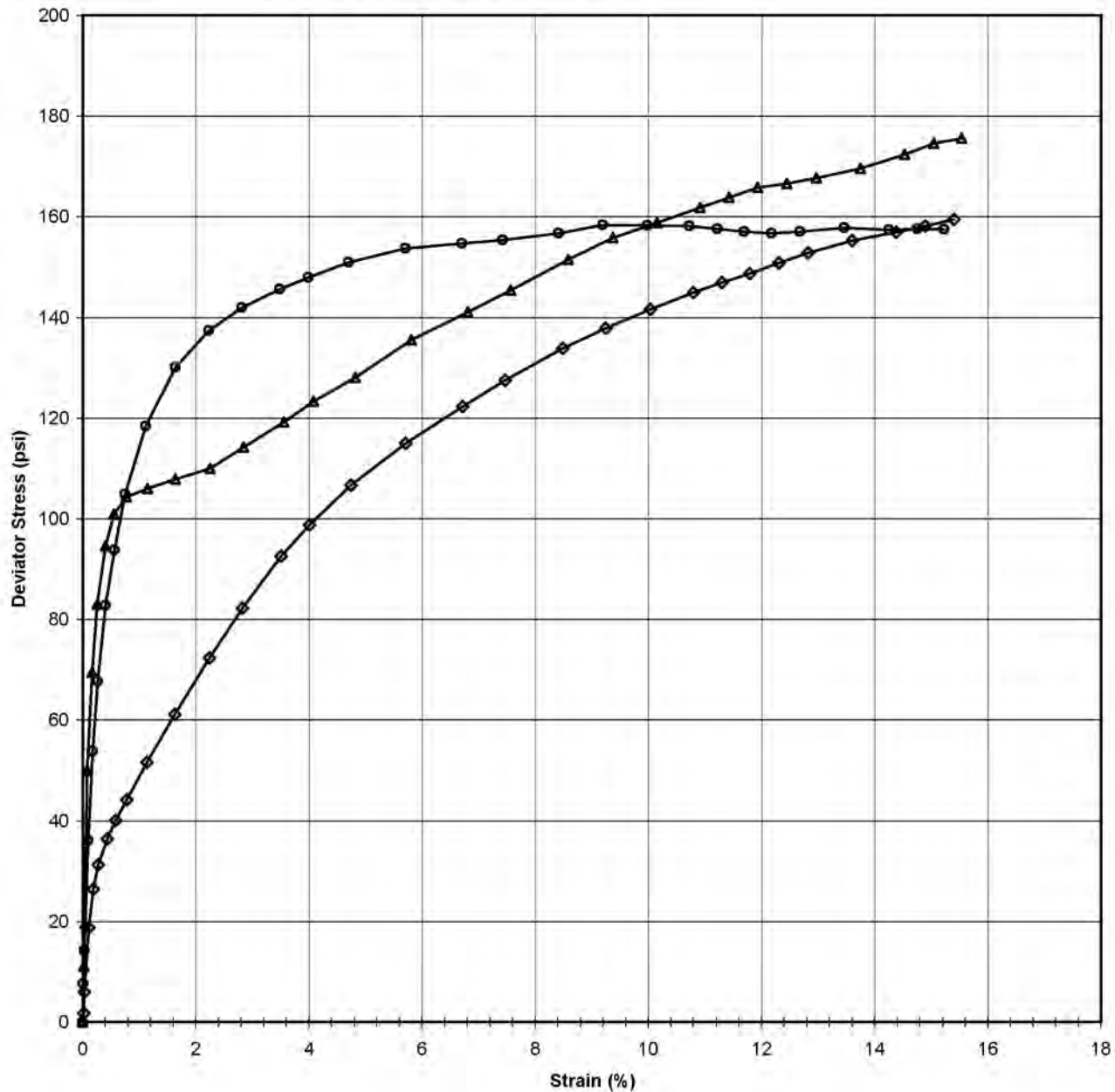
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
44.7	0.000	22.2
113.1	0.001	25.4
165.8	0.002	28.1
353.4	0.005	44.3
475.2	0.010	64.1
559.0	0.015	83.4
631.5	0.023	108.2
672.0	0.032	126.5
694.8	0.044	143.4
707.4	0.066	160.1
722.6	0.094	171.0
740.2	0.130	176.0
771.6	0.164	177.6
808.8	0.204	177.5
839.6	0.235	177.1
876.7	0.277	176.1
934.1	0.334	174.5
980.1	0.392	172.4
1017.1	0.435	171.0
1069.1	0.494	168.9
1107.5	0.539	167.6
1136.9	0.584	166.2
1167.4	0.628	164.8
1187.8	0.657	163.7
1208.4	0.686	162.9
1221.0	0.716	162.2
1235.5	0.746	161.4
1260.0	0.791	160.6
1291.0	0.836	159.4
1314.8	0.865	158.8
1329.8	0.894	158.3

Tested By:	JCM	Date:	11/19/13	Input Checked By:	KC	Date:	12/4/13
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DCN: CFS28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.0-300.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



—◆— Test No. 43

—●— Test No. 44

—▲— Test No. 45

E50 Test No. 43 6482.568

E50 Test No. 44 24281.12

E50 Test No. 45 34612.11

Tested By: JCM

Date: 11/19/13

Approved By: DB

Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	298.2-298.7
Project No.:	2013-465-001	Sample No.:	ST-13
Lab ID:	2013-465-001-011		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	203.4	Stage No.	1
		Test No	45

INITIAL DIMENSIONS

Initial Sample Length (in)	5.88
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.28

VOLUME CHANGE

Volume After Consolidation (in ³)	35.54
Length After Consolidation (in)	5.75
Area After Consolidation (in ²)	6.181

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	11.07	3.18	211.29	200.2	1.055	0.29	205.75	5.53
0.03	19.58	5.91	217.07	197.5	1.099	0.30	207.28	9.79
0.08	49.91	22.12	231.19	181.3	1.275	0.44	206.24	24.95
0.17	69.53	41.86	231.07	161.5	1.430	0.60	196.30	34.76
0.26	83.00	61.22	225.18	142.2	1.584	0.74	183.68	41.50
0.41	94.56	85.97	211.99	117.4	1.805	0.91	164.71	47.28
0.56	100.93	104.32	200.01	99.1	2.019	1.03	149.55	50.47
0.77	104.38	121.18	186.60	82.2	2.269	1.16	134.41	52.19
1.14	106.00	137.91	171.49	65.5	2.619	1.30	118.49	53.00
1.64	107.88	148.84	162.44	54.6	2.977	1.38	108.50	53.94
2.25	109.99	153.75	159.64	49.6	3.215	1.40	104.65	55.00
2.85	114.26	155.35	162.30	48.0	3.378	1.36	105.18	57.13
3.56	119.24	155.30	167.34	48.1	3.479	1.30	107.72	59.62
4.08	123.35	154.94	171.81	48.5	3.545	1.26	110.14	61.68
4.82	128.11	153.95	177.57	49.5	3.591	1.20	113.51	64.06
5.81	135.54	152.26	186.69	51.1	3.650	1.12	118.91	67.77
6.81	141.03	150.24	194.19	53.2	3.653	1.07	123.68	70.52
7.57	145.43	148.79	200.04	54.6	3.663	1.02	127.32	72.71
8.59	151.51	146.67	208.24	56.7	3.671	0.97	132.48	75.75
9.37	155.83	145.43	213.80	58.0	3.688	0.93	135.88	77.92
10.15	158.78	144.05	218.13	59.4	3.675	0.91	138.74	79.39
10.92	161.81	142.60	222.61	60.8	3.661	0.88	141.71	80.90
11.43	163.81	141.54	225.67	61.9	3.648	0.86	143.77	81.90
11.93	165.83	140.73	228.49	62.7	3.646	0.85	145.58	82.91
12.45	166.63	140.03	230.00	63.4	3.629	0.84	146.68	83.32
12.97	167.69	139.22	231.87	64.2	3.613	0.83	148.02	83.84
13.75	169.59	138.37	234.62	65.0	3.608	0.82	149.82	84.79
14.53	172.35	137.18	238.57	66.2	3.603	0.80	152.39	86.18
15.04	174.59	136.62	241.37	66.8	3.614	0.78	154.07	87.29
15.54	175.61	136.09	242.92	67.3	3.609	0.77	155.11	87.80

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	298.2-298.7
Project No.	2013-465-001	Sample No.	ST-13
Lab ID #	2013-465-001-011	Test No.	45

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G336	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G546	2/12/14
Timing Device	G489	5/13/14
Flow Pump	G1511-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-011 Specific Gravity (measured) 2.66

Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	299.2-299.7	298.7-299.2	298.2-298.7
Sample No.:	ST-13	ST-13	ST-13
Test No.	T43	T44	T45
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.4	21.7	22.2
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	26.9	26.9	26.9
Total Unit Weight (pcf)	124.8	125.5	122.2
Dry Unit Weight (pcf)	98.3	98.8	96.3
Moisture Content (%) (FINAL)	22.1	23.0	22.1
Initial State Void Ratio, e	0.689	0.680	0.725
Void Ratio at Shear, e	0.589	0.616	0.602



Tested By: JCM Date: 11/19/13 Input Checked By: KC Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T43	T44	T45
Tare Number	785	785	785
Weight of Tare & Wet Sample (g)	279.7	279.7	279.7
Weight of Tare & Dry Sample (g)	238.44	238.44	238.44
Weight of Tare (g)	85.34	85.34	85.34
Moisture Content (%) (INITIAL)	26.95	26.95	26.95
Tare Number	960	22	46
Weight of Tare & Wet Sample (g)	1359	1449.65	1389.46
Weight of Tare & Dry Sample (g)	1131.11	1216.81	1174.81
Weight of Tare (g)	99.18	203.11	204.98
Moisture Content (%) (FINAL)	22.08	22.97	22.13

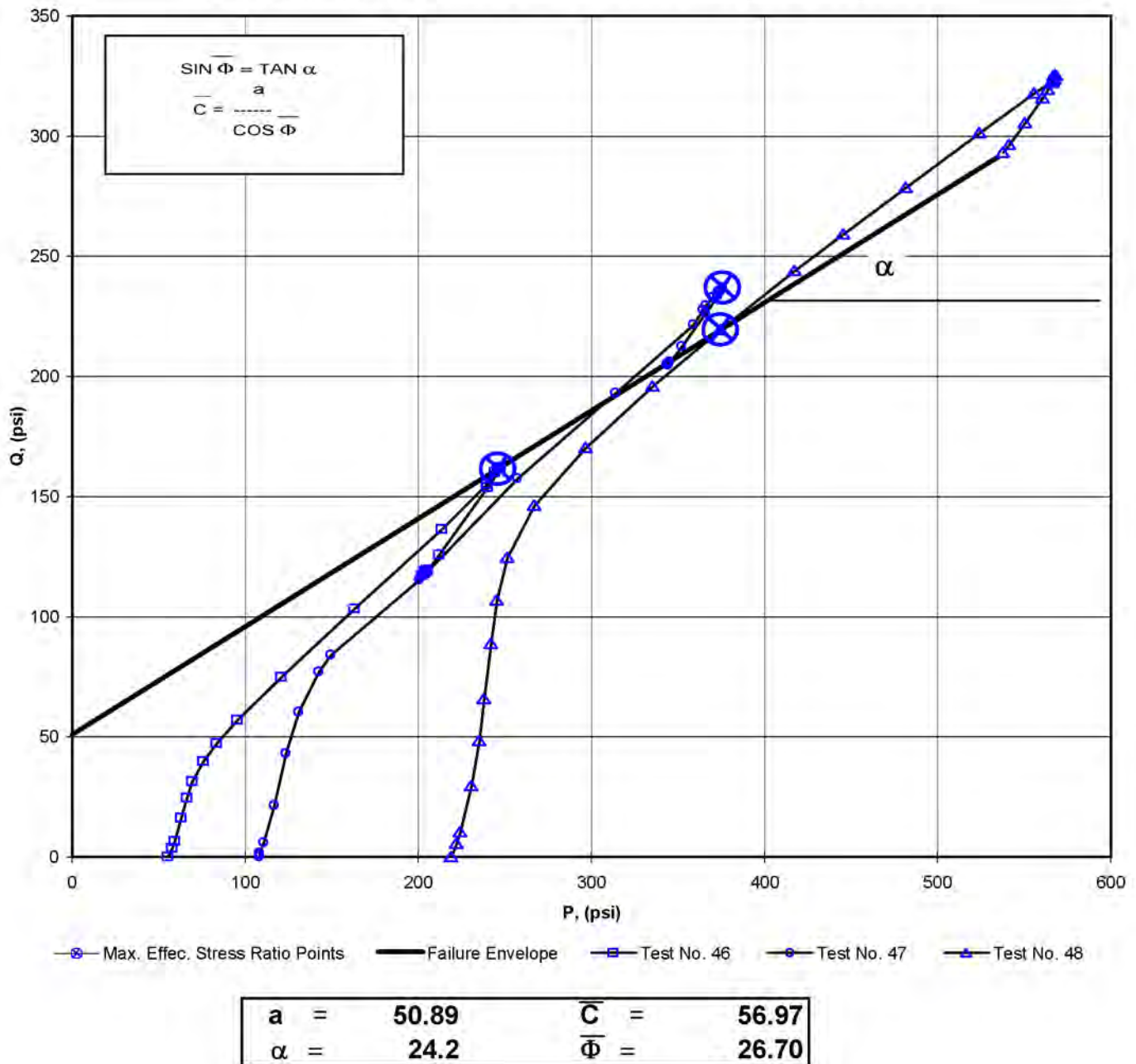
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1672.08	1682.14	1635.67
Weight of Tube (g)	413.23	411.76	407.77
Weight of Wet Sample (g)	1258.85	1270.38	1227.9
Length 1 (in)	5.914	5.972	5.873
Length 2 (in)	5.918	5.945	5.885
Length 3 (in)	5.918	5.963	5.881
Top Diameter (in)	2.877	2.877	2.881
Middle Diameter (in)	2.881	2.868	2.872
Bottom Diameter (in)	2.87	2.867	2.884
Average Length (in)	5.916667	5.96	5.879667
Average Area (in ²)	6.496	6.472	6.510
Sample Volume (cm ³)	629.86	632.12	627.23
Unit Wet Weight (g/cm ³)	2.00	2.01	1.96
Unit Wet Weight (pcf)	124.77	125.47	122.22
Unit Dry Weight (pcf)	98.29	98.83	96.27
Unit Dry Weight (g/cm ³)	1.57	1.58	1.54
Initial Burette Reading	48	48	72
Final Burette Reading	29.5	28.2	31.7
Initial Dial Reading	50	56	42
Dial Reading After Saturation	110	70	56
Dial Reading After Consolidation	156	110	171
Volume Change during Consolidation	18.5	19.8	40.3
Volume Change during Saturation	19.16	4.45	4.48
Volume at Shear (cm ³)	*These 592.20	607.87	582.45
Volume of Solids (cm ³)	measurements 372.79	376.20	363.62
Volume of Voids (cm ³)	are all 219.41	231.67	218.83
Volume of Water (cm ³)	at 218.99	229.85	214.08
Void Ratio, e	shear 0.589	0.616	0.602

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	319.7-322.2
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/21/13

Approved By: DB

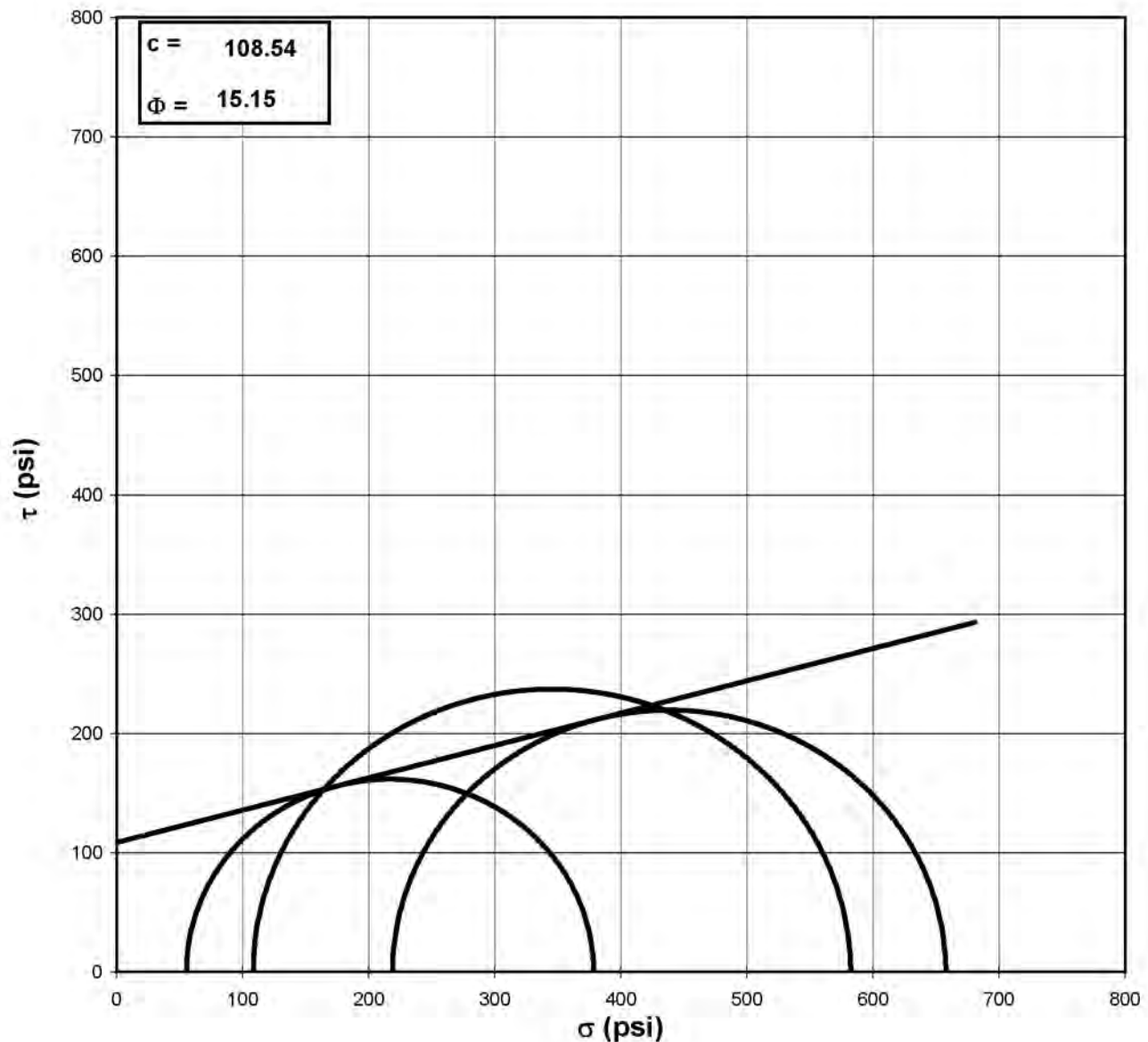
Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	319.7-322.2
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 11/21/13 Approved By: DB Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	321.5-322.0
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	46

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.808	Diameter 1:	2.867
Length 2:	5.882	Diameter 2:	2.884
Length 3:	5.817	Diameter 3:	2.871
Avg. Length:	5.836	Avg. Diam.:	2.874

PRESSURES (psi)

Cell Pressure (psi)	76.2
Back Pressure (psi)	20.7
Eff. Conf. Pressure (psi)	55.5
Pore Pressure	
Response (%)	99

VOLUME CHANGE

Initial Burette Reading (ml)	24.0
Final Burette Reading (ml)	15.1
Final Change (ml)	8.9

MAXIMUM OBLIQUITY POINTS

P	=	246.04
Q	=	161.46

Initial Dial Reading (mil)	69
Dial Reading After Saturation (mil)	66
Dial Reading After Consolidation (mil)	78

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
31.4	0.000	20.7
76.1	0.001	22.0
113.9	0.002	23.2
237.1	0.008	29.1
345.9	0.013	34.4
434.0	0.019	38.0
544.4	0.026	40.2
639.9	0.034	39.9
765.6	0.044	37.5
1001.1	0.063	30.1
1374.8	0.089	16.0
1815.0	0.119	-1.2
2072.9	0.152	-8.6
2154.4	0.195	-8.3
2186.0	0.225	-8.4
2211.8	0.267	-8.9
2223.9	0.321	-9.6
2141.4	0.381	-10.1
1772.3	0.429	-10.1
1700.5	0.491	-10.0
1715.8	0.536	-9.8
1729.9	0.578	-9.7
1737.8	0.621	-9.5
1740.4	0.652	-9.4
1746.0	0.682	-9.3
1760.4	0.713	-9.3
1779.0	0.742	-9.2
1793.6	0.786	-9.1
1802.3	0.830	-9.0
1794.2	0.859	-9.0
1793.2	0.887	-8.9

Tested By:	JCM	Date:	11/21/13	Input Checked By:	KC	Date:	12/4/13
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CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
 ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	321.5-322.0
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	55.5	Stage No.	1
		Test No	46

INITIAL DIMENSIONS

Initial Sample Length (in)	5.84
Initial Sample Diameter (in)	2.87
Initial Sample Area (in ²)	6.49
Initial Sample Volume (in ³)	37.86

VOLUME CHANGE

Volume After Consolidation (in ³)	37.37
Length After Consolidation (in)	5.83
Area After Consolidation (in ²)	6.414

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	6.97	1.27	61.20	54.2	1.129	0.18	57.71	3.49
0.04	12.85	2.53	65.82	53.0	1.243	0.20	59.40	6.42
0.13	32.02	8.42	79.10	47.1	1.680	0.27	63.09	16.01
0.23	48.92	13.68	90.73	41.8	2.170	0.28	66.28	24.46
0.32	62.56	17.26	100.80	38.2	2.636	0.28	69.52	31.28
0.45	79.62	19.46	115.66	36.0	3.209	0.25	75.85	39.81
0.58	94.31	19.18	130.63	36.3	3.597	0.21	83.47	47.16
0.76	113.60	16.78	152.32	38.7	3.934	0.15	95.52	56.80
1.08	149.55	9.36	195.69	46.1	4.241	0.06	120.92	74.78
1.52	206.26	-4.65	266.41	60.2	4.429	-0.02	163.28	103.13
2.05	272.37	-21.86	349.73	77.4	4.521	-0.08	213.55	136.19
2.62	309.96	-29.25	394.71	84.8	4.657	-0.10	239.73	154.98
3.35	319.92	-28.98	404.39	84.5	4.787	-0.09	244.43	159.96
3.87	322.92	-29.08	407.50	84.6	4.818	-0.09	246.04	161.46
4.58	324.36	-29.62	409.49	85.1	4.810	-0.09	247.31	162.18
5.52	322.96	-30.31	408.78	85.8	4.764	-0.09	247.29	161.48
6.53	307.47	-30.79	393.76	86.3	4.563	-0.10	240.03	153.74
7.36	251.44	-30.84	337.78	86.3	3.912	-0.12	212.06	125.72
8.42	238.31	-30.66	324.47	86.2	3.766	-0.13	205.31	119.16
9.19	238.47	-30.51	324.48	86.0	3.773	-0.13	205.25	119.23
9.92	238.55	-30.38	324.42	85.9	3.778	-0.13	205.15	119.27
10.66	237.66	-30.20	323.37	85.7	3.773	-0.13	204.53	118.83
11.18	236.64	-30.15	322.29	85.6	3.763	-0.13	203.97	118.32
11.71	236.01	-30.03	321.54	85.5	3.759	-0.13	203.54	118.00
12.24	236.58	-29.97	322.05	85.5	3.768	-0.13	203.76	118.29
12.73	237.76	-29.91	323.17	85.4	3.784	-0.13	204.29	118.88
13.49	237.67	-29.79	322.96	85.3	3.787	-0.13	204.13	118.83
14.25	236.76	-29.71	321.97	85.2	3.778	-0.13	203.59	118.38
14.74	234.32	-29.67	319.49	85.2	3.751	-0.13	202.33	117.16
15.22	232.85	-29.58	317.94	85.1	3.737	-0.13	201.51	116.43

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	321.5-322.0
Project No.	2013-465-001	Sample No.	ST-16
Lab ID #	2013-465-001-013	Test No.	46

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G331	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G041	2/22/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	321.0-321.5
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	47

PRESSURES (psi)

Cell Pressure (psi)	130.1
Back Pressure (psi)	21.7
Eff. Conf. Pressure (psi)	108.4
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	375.80
Q	=	236.93

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.814	Diameter 1:	2.872
Length 2:	5.812	Diameter 2:	2.874
Length 3:	5.811	Diameter 3:	2.871
Avg. Length	5.812	Avg. Diam.:	2.872

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	38.1
Final Change (ml)	9.9

Initial Dial Reading (mil)	67
Dial Reading After Saturation (mil)	70
Dial Reading After Consolidation (mil)	82

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
24.8	0.000	21.7
37.9	0.001	22.8
40.2	0.002	22.8
44.6	0.008	23.1
102.0	0.012	25.4
297.4	0.017	34.5
575.4	0.023	49.3
798.6	0.031	59.4
1015.2	0.042	64.5
1106.6	0.047	64.5
1516.7	0.080	44.6
2073.4	0.110	30.0
2548.6	0.140	8.8
2939.4	0.177	-7.6
3035.9	0.205	-7.1
3082.3	0.248	-6.8
3154.3	0.288	-7.4
3218.1	0.346	-8.3
3265.7	0.387	-8.8
3271.4	0.447	-9.2
3305.9	0.492	-9.4
3307.1	0.535	-9.6
3234.6	0.580	-9.7
3055.0	0.609	-9.7
2962.2	0.639	-9.6
2983.5	0.668	-9.5
3008.2	0.697	-9.3
3040.1	0.741	-9.1
3053.1	0.786	-9.0
3067.1	0.815	-8.8
3063.0	0.845	-8.7

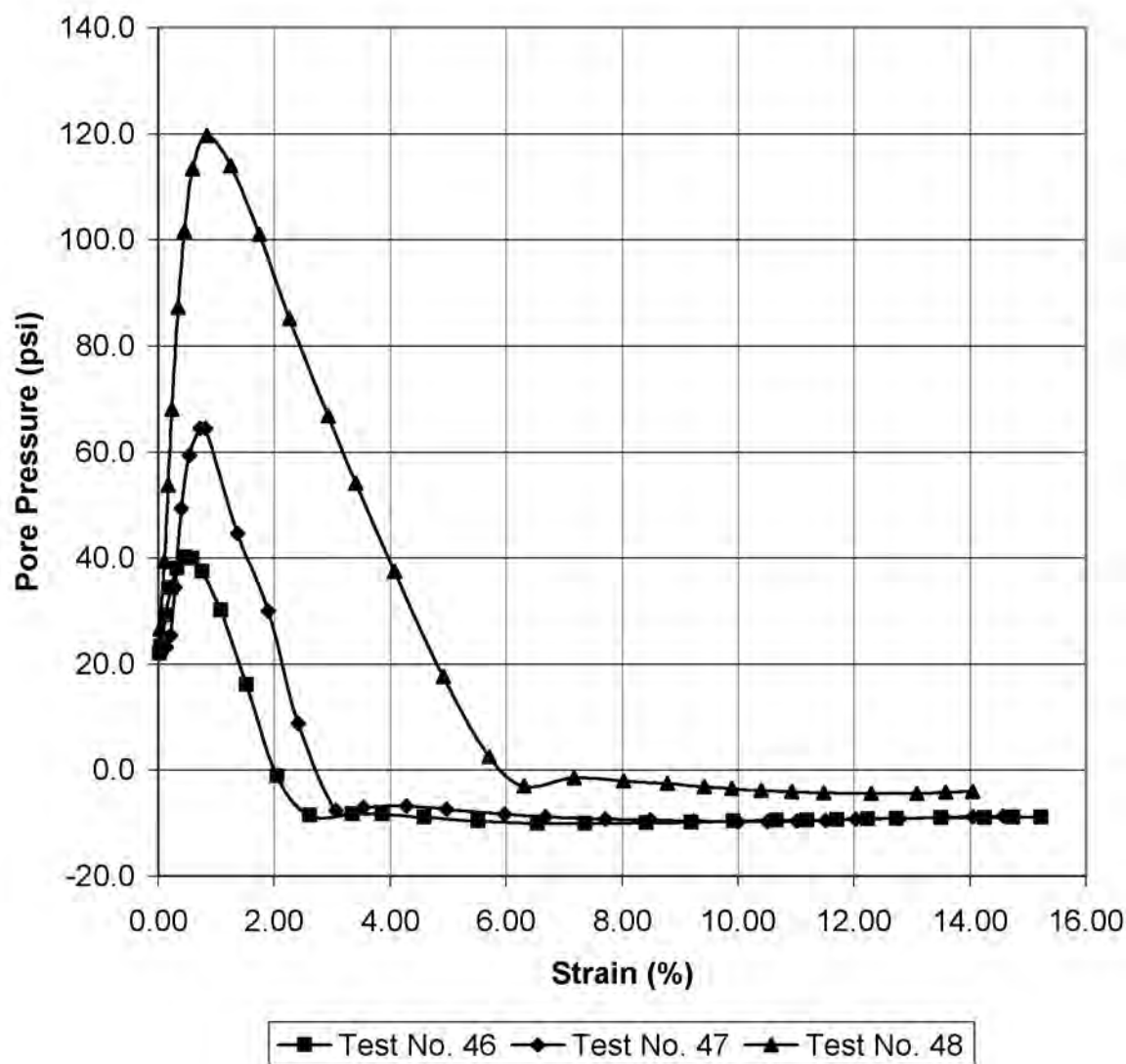
Tested By:	JCM	Date:	11/21/13	Input Checked By:	KC	Date:	12/4/13
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DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	319.7-322.2
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	321.0-321.5
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	108.4	Stage No.	1
		Test No	47

INITIAL DIMENSIONS

Initial Sample Length (in)	5.81
Initial Sample Diameter (in)	2.87
Initial Sample Area (in ²)	6.48
Initial Sample Volume (in ³)	37.66

VOLUME CHANGE

Volume After Consolidation (in ³)	37.00
Length After Consolidation (in)	5.80
Area After Consolidation (in ²)	6.382

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	2.05	1.06	109.39	107.3	1.019	0.52	108.36	1.03
0.04	2.41	1.14	109.67	107.3	1.022	0.47	108.46	1.21
0.14	3.10	1.44	110.06	107.0	1.029	0.46	108.51	1.55
0.22	12.07	3.72	116.75	104.7	1.115	0.31	110.72	6.03
0.29	42.59	12.79	138.19	95.6	1.445	0.30	116.90	21.29
0.40	85.93	27.63	166.71	80.8	2.064	0.32	123.74	42.97
0.54	120.58	37.67	191.31	70.7	2.705	0.31	131.02	60.29
0.72	154.06	42.75	219.71	65.6	3.347	0.28	142.68	77.03
0.82	168.11	42.77	233.74	65.6	3.561	0.25	149.69	84.06
1.37	230.54	22.91	316.04	85.5	3.697	0.10	200.76	115.27
1.90	314.89	8.27	415.02	100.1	4.145	0.03	257.57	157.44
2.41	385.90	-12.88	507.18	121.3	4.182	-0.03	314.23	192.95
3.06	442.69	-29.28	580.38	137.7	4.215	-0.07	359.03	221.35
3.53	455.12	-28.78	592.30	137.2	4.318	-0.06	364.74	227.56
4.28	458.53	-28.53	595.46	136.9	4.349	-0.06	366.20	229.27
4.97	465.94	-29.08	603.42	137.5	4.389	-0.06	370.45	232.97
5.97	470.46	-29.98	608.84	138.4	4.400	-0.06	373.61	235.23
6.68	473.86	-30.47	612.73	138.9	4.412	-0.06	375.80	236.93
7.72	469.43	-30.94	608.77	139.3	4.369	-0.07	374.06	234.71
8.49	470.46	-31.14	610.00	139.5	4.372	-0.07	374.77	235.23
9.23	466.79	-31.29	606.48	139.7	4.342	-0.07	373.09	233.40
10.00	452.65	-31.42	592.47	139.8	4.237	-0.07	366.15	226.32
10.51	424.86	-31.41	564.67	139.8	4.039	-0.07	352.24	212.43
11.02	409.54	-31.29	549.23	139.7	3.932	-0.08	344.46	204.77
11.51	410.20	-31.15	549.75	139.6	3.939	-0.08	344.65	205.10
12.03	411.23	-31.03	550.65	139.4	3.949	-0.08	345.04	205.61
12.79	412.04	-30.82	551.25	139.2	3.960	-0.07	345.24	206.02
13.56	410.16	-30.65	549.22	139.1	3.950	-0.07	344.14	205.08
14.06	409.68	-30.54	548.61	138.9	3.949	-0.07	343.77	204.84
14.57	406.67	-30.43	545.50	138.8	3.929	-0.07	342.17	203.34

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	321.0-321.5
Project No.	2013-465-001	Sample No.	ST-16
Lab ID #	2013-465-001-013	Test No.	47

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G334	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G590	3/14/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	G1511-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	320.5-321.0
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	48

PRESSURES (psi)

Cell Pressure (psi)	240.6
Back Pressure (psi)	21.5
Eff. Conf. Pressure (psi)	219.1
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	374.82
Q	=	219.34

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.883	Diameter 1:	2.879
Length 2:	5.897	Diameter 2:	2.875
Length 3:	5.897	Diameter 3:	2.874
Avg. Length:	5.892	Avg. Diam.:	2.876

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	33.9
Final Change (ml)	14.1

Initial Dial Reading (mil)	62
Dial Reading After Saturation (mil)	64
Dial Reading After Consolidation (mil)	103

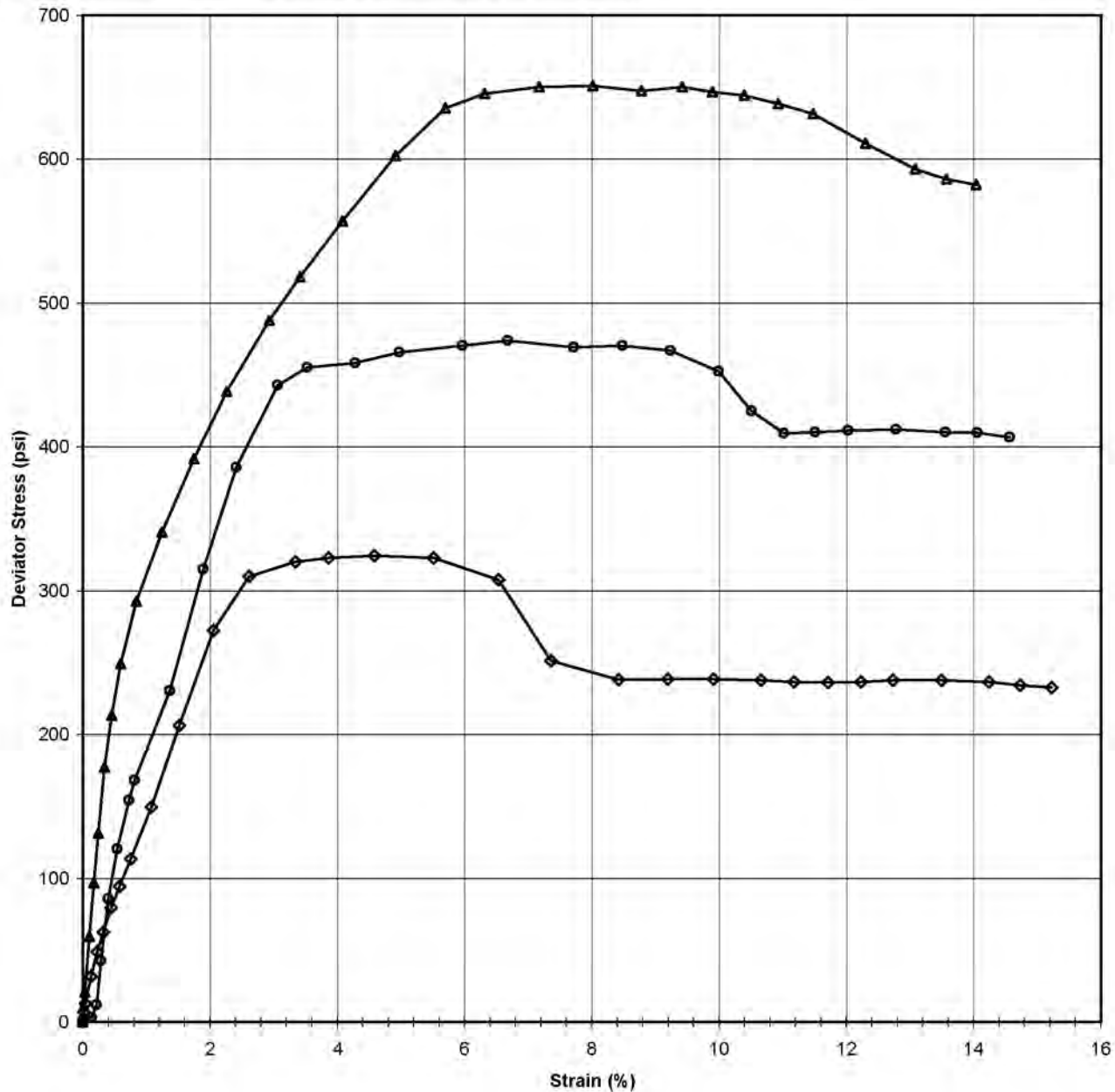
LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
41.3	0.000	21.5
111.6	0.001	24.0
175.0	0.002	26.6
420.3	0.006	39.3
660.2	0.010	53.7
881.9	0.014	68.0
1176.6	0.020	87.1
1410.2	0.027	101.6
1642.5	0.035	113.4
1926.6	0.049	119.6
2244.1	0.073	113.9
2587.6	0.102	100.9
2908.5	0.133	85.1
3251.2	0.171	66.8
3469.6	0.200	54.0
3750.8	0.239	37.4
4089.7	0.288	17.6
4346.6	0.334	2.5
4444.4	0.369	-3.1
4515.3	0.420	-1.5
4563.1	0.469	-2.1
4575.0	0.514	-2.6
4627.9	0.551	-3.1
4627.4	0.579	-3.5
4635.7	0.609	-3.8
4621.2	0.640	-4.1
4600.2	0.671	-4.3
4492.5	0.720	-4.5
4399.5	0.766	-4.4
4373.0	0.795	-4.3
4369.9	0.822	-4.1

Tested By:	JCM	Date:	11/21/13	Input Checked By:	KC	Date:	12/4/13
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DCN: CFS-28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	319.7-322.2
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



◆ Test No. 46

● Test No. 47

▲ Test No. 48

E50 Test No. 46 13803.89

E50 Test No. 47 16759.71

E50 Test No. 48 45636.4

Tested By: JCM

Date: 11/21/13

Approved By: DB

Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	320.5-321.0
Project No.:	2013-465-001	Sample No.:	ST-16
Lab ID:	2013-465-001-013		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	219.1	Stage No.	1
		Test No	48

INITIAL DIMENSIONS

Initial Sample Length (in)	5.89
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.50
Initial Sample Volume (in ³)	38.28

VOLUME CHANGE

Volume After Consolidation (in ³)	37.38
Length After Consolidation (in)	5.85
Area After Consolidation (in ²)	6.388

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	11.01	2.48	227.63	216.6	1.051	0.22	222.13	5.50
0.04	20.92	5.10	234.92	214.0	1.098	0.24	224.46	10.46
0.11	59.26	17.78	260.58	201.3	1.294	0.30	230.95	29.63
0.17	96.71	32.19	283.62	186.9	1.517	0.33	235.26	48.35
0.24	131.28	46.49	303.89	172.6	1.761	0.35	238.25	65.64
0.34	177.11	65.64	330.57	153.5	2.154	0.37	242.02	88.55
0.46	213.30	80.10	352.31	139.0	2.535	0.38	245.66	106.65
0.59	249.17	91.91	376.35	127.2	2.959	0.37	251.77	124.58
0.85	292.64	98.09	413.65	121.0	3.418	0.34	267.33	146.32
1.25	340.53	92.40	467.23	126.7	3.688	0.27	296.96	170.27
1.75	391.62	79.43	531.29	139.7	3.804	0.20	335.48	195.81
2.27	438.67	63.61	594.16	155.5	3.821	0.15	374.82	219.34
2.93	487.75	45.28	661.57	173.8	3.806	0.09	417.69	243.88
3.41	518.34	32.55	704.89	186.6	3.778	0.06	445.72	259.17
4.08	557.00	15.91	760.19	203.2	3.741	0.03	481.69	278.50
4.92	602.58	-3.88	825.56	223.0	3.702	-0.01	524.27	301.29
5.70	635.52	-19.00	873.62	238.1	3.669	-0.03	555.86	317.76
6.31	645.75	-24.57	889.42	243.7	3.650	-0.04	566.54	322.87
7.17	650.14	-22.98	892.22	242.1	3.686	-0.04	567.15	325.07
8.02	651.07	-23.59	893.76	242.7	3.683	-0.04	568.22	325.53
8.78	647.37	-24.11	890.58	243.2	3.662	-0.04	566.89	323.69
9.42	650.34	-24.59	894.03	243.7	3.669	-0.04	568.86	325.17
9.89	646.88	-24.98	890.96	244.1	3.650	-0.04	567.52	323.44
10.40	644.40	-25.29	888.79	244.4	3.637	-0.04	566.59	322.20
10.93	638.58	-25.58	883.27	244.7	3.610	-0.04	563.97	319.29
11.48	631.75	-25.81	876.66	244.9	3.580	-0.04	560.78	315.88
12.30	611.06	-25.98	856.14	245.1	3.493	-0.04	550.61	305.53
13.08	592.98	-25.90	837.98	245.0	3.420	-0.04	541.49	296.49
13.58	586.01	-25.75	830.86	244.9	3.393	-0.04	537.86	293.01
14.04	582.44	-25.60	827.14	244.7	3.380	-0.04	535.92	291.22

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	320.5-321.0
Project No.	2013-465-001	Sample No.	ST-16
Lab ID #	2013-465-001-013	Test No.	48

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G323	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G150	2/22/14
Timing Device	G489	5/13/14
Flow Pump	G1510-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-013 Specific Gravity (measured) 2.61
 Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	321.5-322.0	321.0-321.5	320.5-321.0
Sample No.:	ST-16	ST-16	ST-16
Test No.	T46	T47	T48
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	20.7	21.7	21.5
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	24.3	24.3	24.3
Total Unit Weight (pcf)	124.6	122.3	120.4
Dry Unit Weight (pcf)	100.3	98.4	96.9
Moisture Content (%) (FINAL)	24.6	26.5	27.1
Initial State Void Ratio, e	0.625	0.655	0.681
Void Ratio at Shear, e	0.604	0.626	0.642



Tested By: JCM Date: 11/21/13 Input Checked By: KC Date: 12/4/13
 DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T46	T47	T48
Tare Number	2725	2725	2725
Weight of Tare & Wet Sample (g)	191.98	191.98	191.98
Weight of Tare & Dry Sample (g)	155.79	155.79	155.79
Weight of Tare (g)	6.73	6.73	6.73
Moisture Content (%) (INITIAL)	24.28	24.28	24.28
Tare Number	897	972	301
Weight of Tare & Wet Sample (g)	362.46	1269.66	1274.13
Weight of Tare & Dry Sample (g)	312.67	1024.8	1025.41
Weight of Tare (g)	109.86	101.74	106.49
Moisture Content (%) (FINAL)	24.55	26.53	27.07

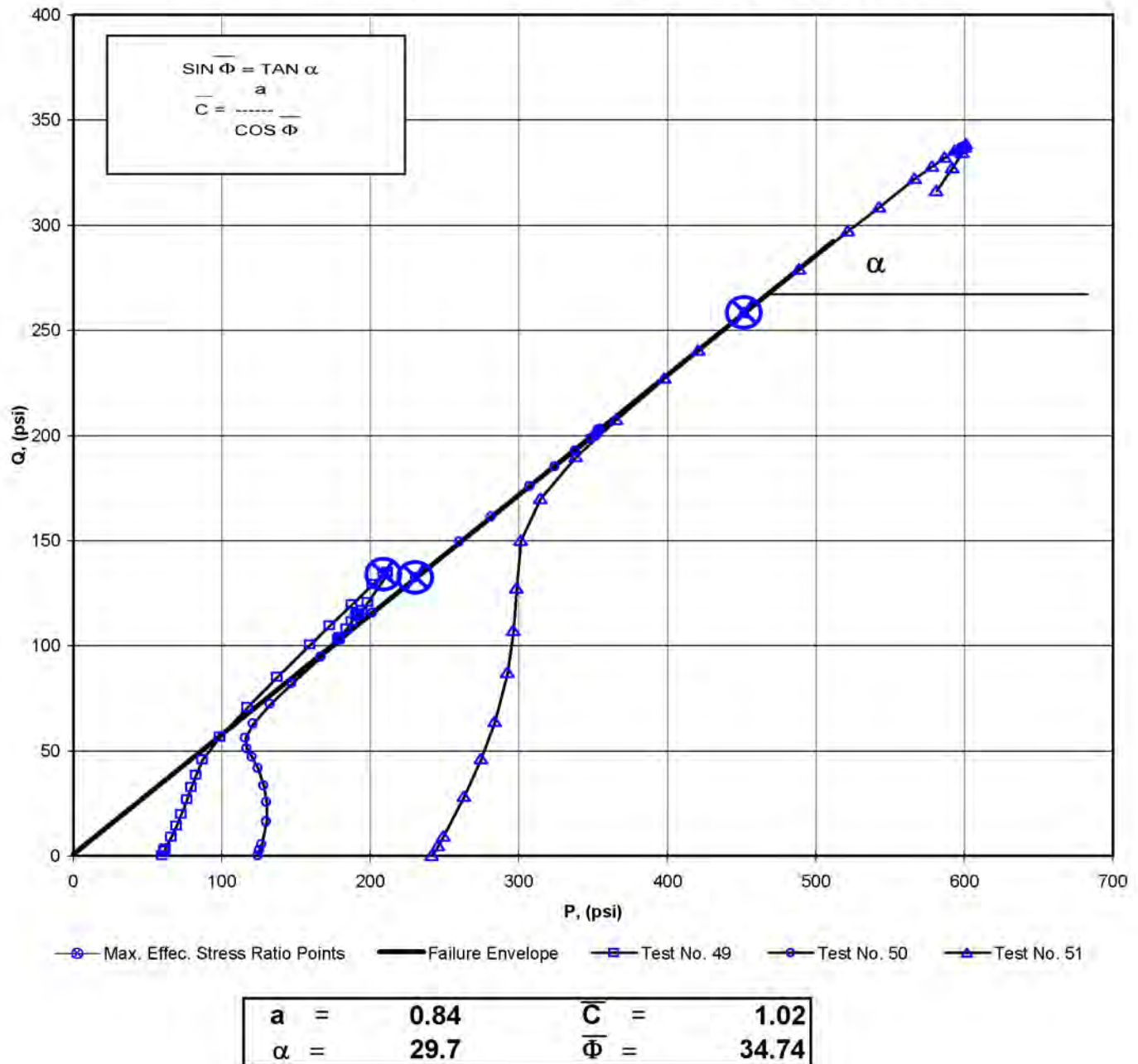
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1647.09	1614.54	1624.78
Weight of Tube (g)	408.61	405.35	414.61
Weight of Wet Sample (g)	1238.48	1209.19	1210.17
Length 1 (in)	5.808	5.814	5.883
Length 2 (in)	5.882	5.812	5.897
Length 3 (in)	5.817	5.811	5.897
Top Diameter (in)	2.867	2.872	2.879
Middle Diameter (in)	2.884	2.874	2.875
Bottom Diameter (in)	2.871	2.871	2.874
Average Length (in)	5.835667	5.812333	5.892333
Average Area (in ²)	6.487	6.480	6.496
Sample Volume (cm ³)	620.38	617.18	627.27
Unit Wet Weight (g/cm ³)	2.00	1.96	1.93
Unit Wet Weight (pcf)	124.63	122.31	120.44
Unit Dry Weight (pcf)	100.28	98.42	96.91
Unit Dry Weight (g/cm ³)	1.61	1.58	1.55
Initial Burette Reading	24	48	48
Final Burette Reading	15.1	38.1	33.9
Initial Dial Reading	69	67	62
Dial Reading After Saturation	66	70	64
Dial Reading After Consolidation	78	82	103
Volume Change during Consolidation	8.9	9.9	14.1
Volume Change during Saturation	-0.96	0.96	0.64
Volume at Shear (cm ³)	*These 612.43	606.32	612.53
Volume of Solids (cm ³)	measurements 381.81	372.78	373.09
Volume of Voids (cm ³)	are all 230.62	233.54	239.45
Volume of Water (cm ³)	at 244.65	258.10	263.56
Void Ratio, e	shear 0.604	0.626	0.642

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.0-356.0
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/23/13

Approved By: DB

Date: 12/5/13

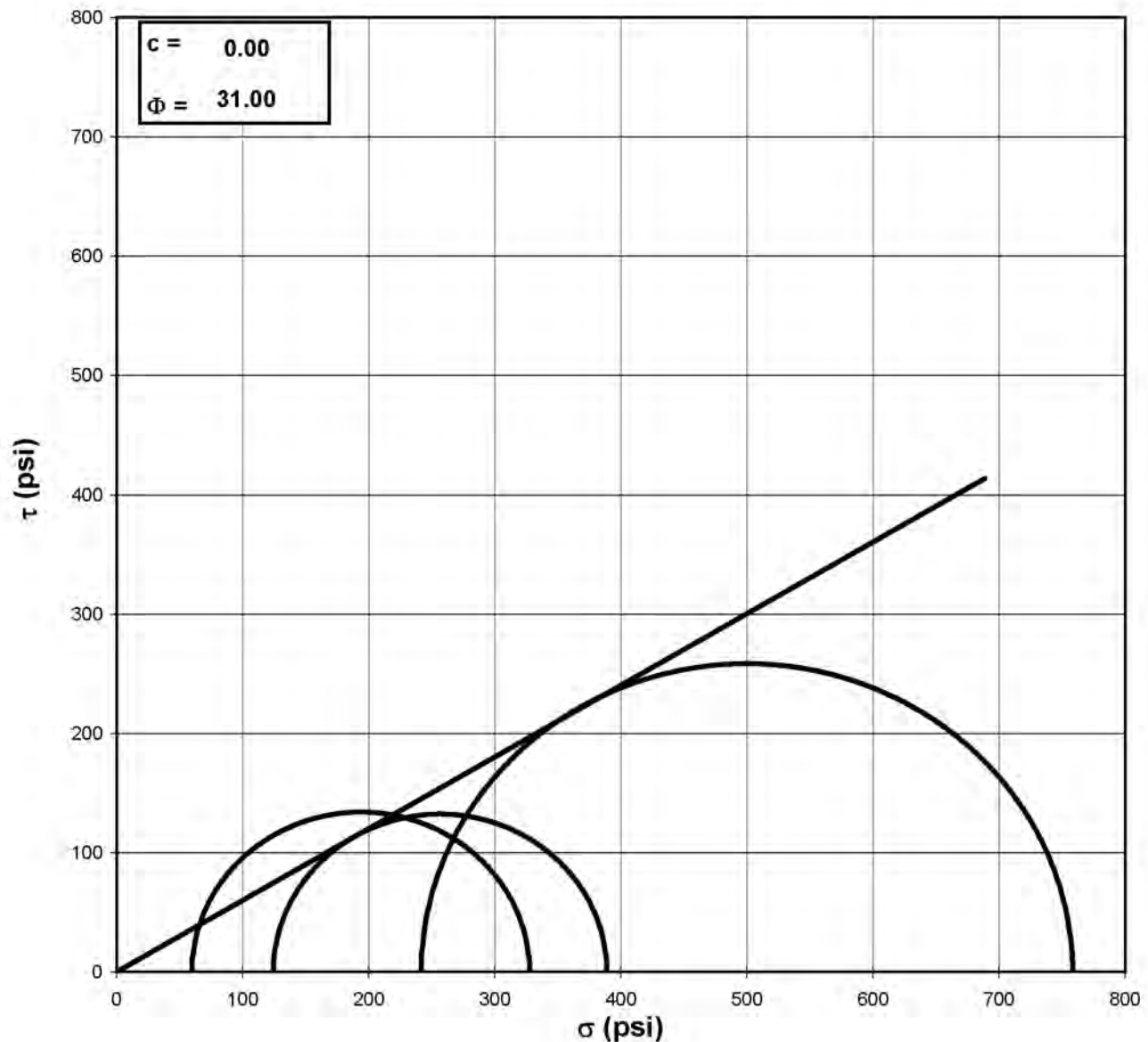
DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-017
 Visual Description: Greenish Gray Silty Sand (Undisturbed)

Boring No.: R-7-1
 Depth (ft): 354.0-356.0
 Sample No.: ST-20



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM

Date: 11/23/13

Approved By: DB

Date: 12/5/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	355.4-355.9
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	49

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.812	Diameter 1:	2.877
Length 2:	5.822	Diameter 2:	2.883
Length 3:	5.827	Diameter 3:	2.876
Avg. Length:	5.820	Avg. Diam.:	2.879

PRESSURES (psi)

Cell Pressure (psi)	81.3
Back Pressure (psi)	21.4
Eff. Conf. Pressure (psi)	59.9
Pore Pressure	
Response (%)	97

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	35.0
Final Change (ml)	13.0

MAXIMUM OBLIQUITY POINTS

P	=	209.23
Q	=	133.88

Initial Dial Reading (mil)	51
Dial Reading After Saturation (mil)	72
Dial Reading After Consolidation (mil)	96

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
14.9	0.000	21.4
43.1	0.001	22.1
58.0	0.002	22.5
127.7	0.007	24.1
195.5	0.013	26.0
263.8	0.018	28.2
356.1	0.025	31.4
429.8	0.033	34.3
505.7	0.044	37.0
600.3	0.063	39.9
744.4	0.090	38.8
930.6	0.123	34.5
1124.1	0.156	28.7
1333.9	0.198	21.9
1460.4	0.227	17.9
1605.4	0.266	13.0
1749.6	0.319	8.6
1833.6	0.375	6.0
1862.0	0.421	4.6
1864.5	0.482	3.5
1699.4	0.527	3.2
1659.8	0.571	3.6
1653.6	0.614	4.0
1653.5	0.644	4.3
1658.7	0.674	4.5
1661.9	0.704	4.7
1636.9	0.734	4.9
1599.7	0.779	5.2
1553.0	0.823	5.5
1548.5	0.851	5.7
1550.0	0.880	5.9

Tested By: JCM Date: 11/23/13 Input Checked By: KC Date: 12/5/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	355.4-355.9
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	59.9	Stage No.	1
		Test No	49

INITIAL DIMENSIONS

Initial Sample Length (in)	5.82
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	37.88

VOLUME CHANGE

Volume After Consolidation (in ³)	36.68
Length After Consolidation (in)	5.78
Area After Consolidation (in ²)	6.351

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	4.43	0.72	63.61	59.2	1.075	0.17	61.39	2.22
0.04	6.79	1.09	65.59	58.8	1.115	0.17	62.20	3.39
0.13	17.73	2.73	74.90	57.2	1.310	0.16	66.04	8.87
0.22	28.38	4.65	83.63	55.3	1.514	0.17	69.44	14.19
0.31	39.07	6.76	92.22	53.1	1.735	0.18	72.68	19.54
0.44	53.49	10.03	103.36	49.9	2.073	0.19	76.61	26.75
0.58	64.96	12.89	111.97	47.0	2.382	0.20	79.49	32.48
0.76	76.69	15.59	121.01	44.3	2.731	0.21	82.66	38.35
1.09	91.18	18.47	132.61	41.4	3.201	0.21	87.02	45.59
1.57	113.07	17.42	155.55	42.5	3.661	0.16	99.02	56.53
2.13	141.12	13.12	187.90	46.8	4.017	0.10	117.34	70.56
2.71	169.94	7.29	222.54	52.6	4.230	0.04	137.58	84.97
3.43	200.58	0.53	259.95	59.4	4.379	0.00	159.66	100.29
3.93	218.66	-3.48	282.04	63.4	4.450	-0.02	172.71	109.33
4.61	238.89	-8.36	307.15	68.3	4.500	-0.04	187.71	119.45
5.53	258.05	-12.77	330.72	72.7	4.551	-0.05	201.69	129.02
6.50	267.77	-15.45	343.12	75.3	4.554	-0.06	209.23	133.88
7.28	269.67	-16.78	346.36	76.7	4.517	-0.06	211.52	134.84
8.34	266.96	-17.87	344.73	77.8	4.433	-0.07	211.25	133.48
9.13	241.03	-18.17	319.09	78.1	4.087	-0.08	198.58	120.51
9.88	233.41	-17.79	311.10	77.7	4.004	-0.08	194.40	116.71
10.63	230.61	-17.43	307.94	77.3	3.982	-0.08	192.63	115.31
11.15	229.24	-17.08	306.22	77.0	3.978	-0.08	191.60	114.62
11.67	228.63	-16.89	305.42	76.8	3.978	-0.08	191.10	114.32
12.19	227.73	-16.71	304.33	76.6	3.973	-0.08	190.47	113.86
12.71	222.93	-16.54	299.37	76.4	3.917	-0.08	187.90	111.47
13.48	215.89	-16.22	292.01	76.1	3.836	-0.08	184.06	107.95
14.24	207.69	-15.88	283.47	75.8	3.741	-0.08	179.62	103.85
14.74	205.90	-15.67	281.47	75.6	3.725	-0.08	178.52	102.95
15.24	204.87	-15.46	280.23	75.4	3.719	-0.08	177.80	102.44

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	355.4-355.9
Project No.	2013-465-001	Sample No.	ST-20
Lab ID #	2013-465-001-017	Test No.	49

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G332	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G1457	8/30/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



A-1111

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.4-354.9
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	50

PRESSURES (psi)

Cell Pressure (psi)	145.9
Back Pressure (psi)	21.4
Eff. Conf. Pressure (psi)	124.5
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

P	=	230.58
Q	=	132.24

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.530	Diameter 1:	2.873
Length 2:	5.538	Diameter 2:	2.875
Length 3:	5.515	Diameter 3:	2.877
Avg. Length	5.528	Avg. Diam.:	2.875

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	30.0
Final Change (ml)	18.0

Initial Dial Reading (mil)	59
Dial Reading After Saturation (mil)	71
Dial Reading After Consolidation (mil)	108

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
33.4	0.000	21.4
65.9	0.001	22.8
99.8	0.002	24.1
236.1	0.005	31.6
354.5	0.010	40.9
453.4	0.014	50.5
560.0	0.022	63.0
626.5	0.030	72.0
679.1	0.040	79.7
747.6	0.059	85.8
838.5	0.086	87.5
961.6	0.119	85.0
1095.3	0.152	80.3
1268.1	0.191	73.3
1380.3	0.218	68.3
1560.2	0.256	59.6
1800.3	0.307	47.6
2046.6	0.360	34.7
2226.7	0.402	25.4
2450.0	0.458	13.9
2598.9	0.498	6.2
2726.6	0.538	-0.1
2832.5	0.579	-4.5
2880.3	0.606	-5.6
2912.7	0.633	-5.6
2935.8	0.661	-5.5
2958.9	0.689	-5.7
2985.8	0.731	-6.1
2998.2	0.771	-6.5
2979.4	0.798	-6.7
2956.5	0.825	-6.9

Tested By: JCM Date: 11/23/13 Input Checked By: KC Date: 12/5/13

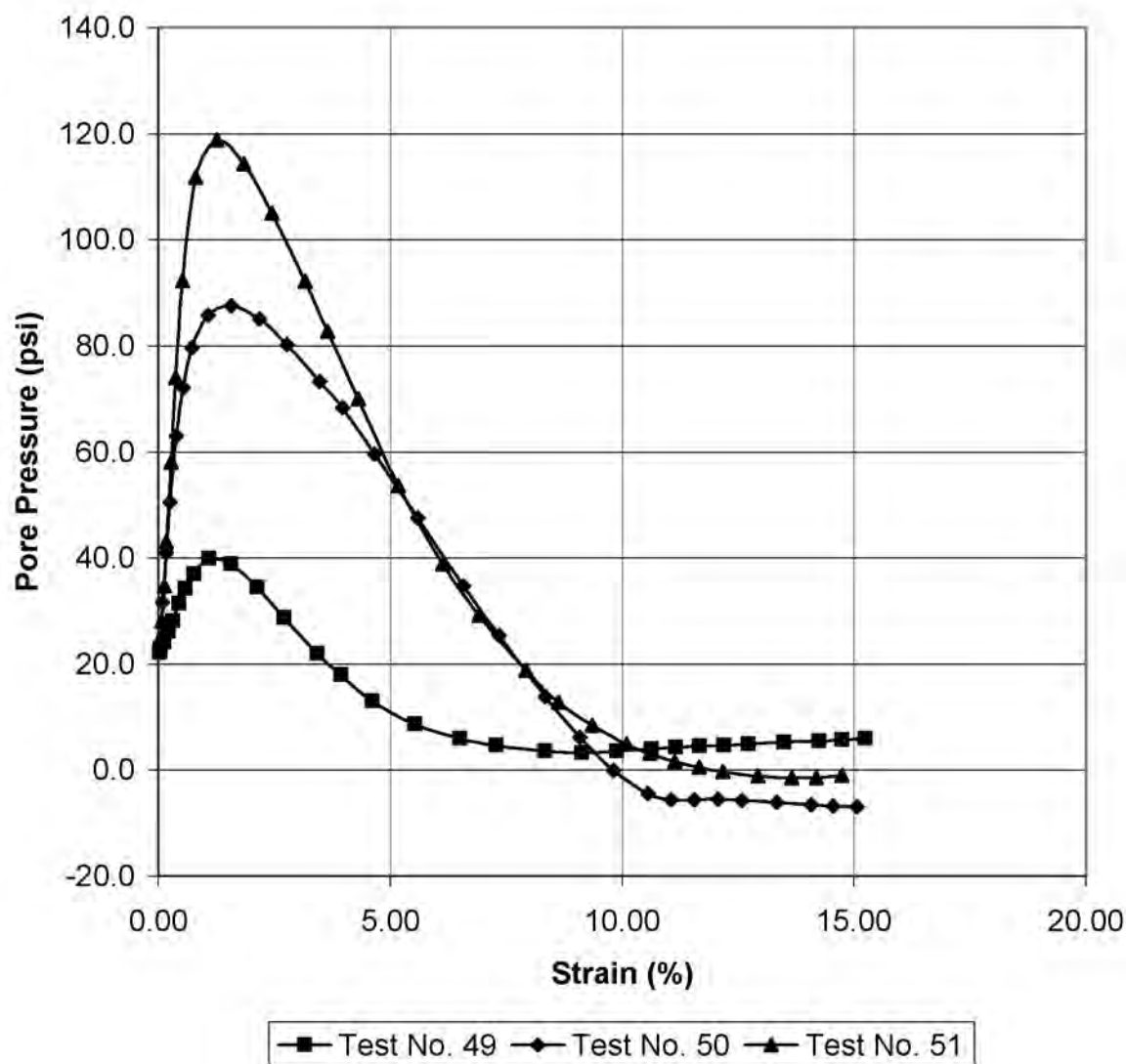
DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.0-356.0
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.4-354.9
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	124.5	Stage No.	1
		Test No	50

INITIAL DIMENSIONS

Initial Sample Length (in)	5.53
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.49
Initial Sample Volume (in ³)	35.88

VOLUME CHANGE

Volume After Consolidation (in ³)	34.55
Length After Consolidation (in)	5.48
Area After Consolidation (in ²)	6.307

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	5.15	1.42	128.23	123.1	1.042	0.28	125.66	2.58
0.04	10.52	2.73	132.30	121.8	1.086	0.26	127.03	5.26
0.09	32.11	10.25	146.36	114.3	1.281	0.32	130.31	16.06
0.18	50.82	19.50	155.82	105.0	1.484	0.38	130.41	25.41
0.26	66.42	29.13	161.78	95.4	1.696	0.44	128.57	33.21
0.40	83.17	41.59	166.08	82.9	2.003	0.50	124.49	41.59
0.54	93.53	50.63	167.40	73.9	2.266	0.54	120.64	46.76
0.73	101.63	58.26	167.87	66.2	2.534	0.57	117.06	50.82
1.08	112.02	64.35	172.17	60.1	2.863	0.57	116.16	56.01
1.57	125.66	66.10	184.06	58.4	3.152	0.53	121.23	62.83
2.18	143.97	63.61	204.86	60.9	3.364	0.44	132.88	71.98
2.78	163.69	58.87	229.32	65.6	3.494	0.36	147.47	81.85
3.48	188.95	51.88	261.57	72.6	3.602	0.27	167.10	94.48
3.98	205.06	46.90	282.66	77.6	3.643	0.23	180.13	102.53
4.67	230.78	38.24	317.04	86.3	3.675	0.17	201.65	115.39
5.60	264.47	26.15	362.82	98.3	3.689	0.10	230.58	132.24
6.58	298.21	13.30	409.41	111.2	3.682	0.04	260.31	149.11
7.35	322.23	4.02	442.71	120.5	3.674	0.01	281.60	161.11
8.35	351.17	-7.51	483.18	132.0	3.660	-0.02	307.60	175.58
9.09	369.83	-15.20	509.52	139.7	3.647	-0.04	324.61	184.91
9.82	385.12	-21.51	531.13	146.0	3.638	-0.06	338.57	192.56
10.56	396.95	-25.88	547.33	150.4	3.640	-0.07	348.86	198.47
11.06	401.51	-27.02	553.02	151.5	3.650	-0.07	352.27	200.75
11.56	403.77	-26.98	555.25	151.5	3.666	-0.07	353.36	201.89
12.07	404.65	-26.91	556.06	151.4	3.673	-0.07	353.74	202.33
12.58	405.53	-27.08	557.11	151.6	3.675	-0.07	354.34	202.77
13.34	405.71	-27.49	557.70	152.0	3.669	-0.07	354.85	202.85
14.07	403.95	-27.90	556.35	152.4	3.651	-0.07	354.37	201.97
14.56	399.13	-28.14	551.76	152.6	3.615	-0.07	352.20	199.56
15.07	393.66	-28.28	546.44	152.8	3.577	-0.07	349.61	196.83

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	354.4-354.9
Project No.	2013-465-001	Sample No.	ST-20
Lab ID #	2013-465-001-017	Test No.	50

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G336	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G041	2/22/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	G1509-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.9-355.4
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	51

PRESSURES (psi)

Cell Pressure (psi)	263.5
Back Pressure (psi)	21.7
Eff. Conf. Pressure (psi)	241.8
Pore Pressure	
Response (%)	100

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	451.77
Q	=	258.28

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.808	Diameter 1:	2.876
Length 2:	5.812	Diameter 2:	2.881
Length 3:	5.807	Diameter 3:	2.877
Avg. Length:	5.809	Avg. Diam.:	2.878

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	30.8
Final Change (ml)	17.2

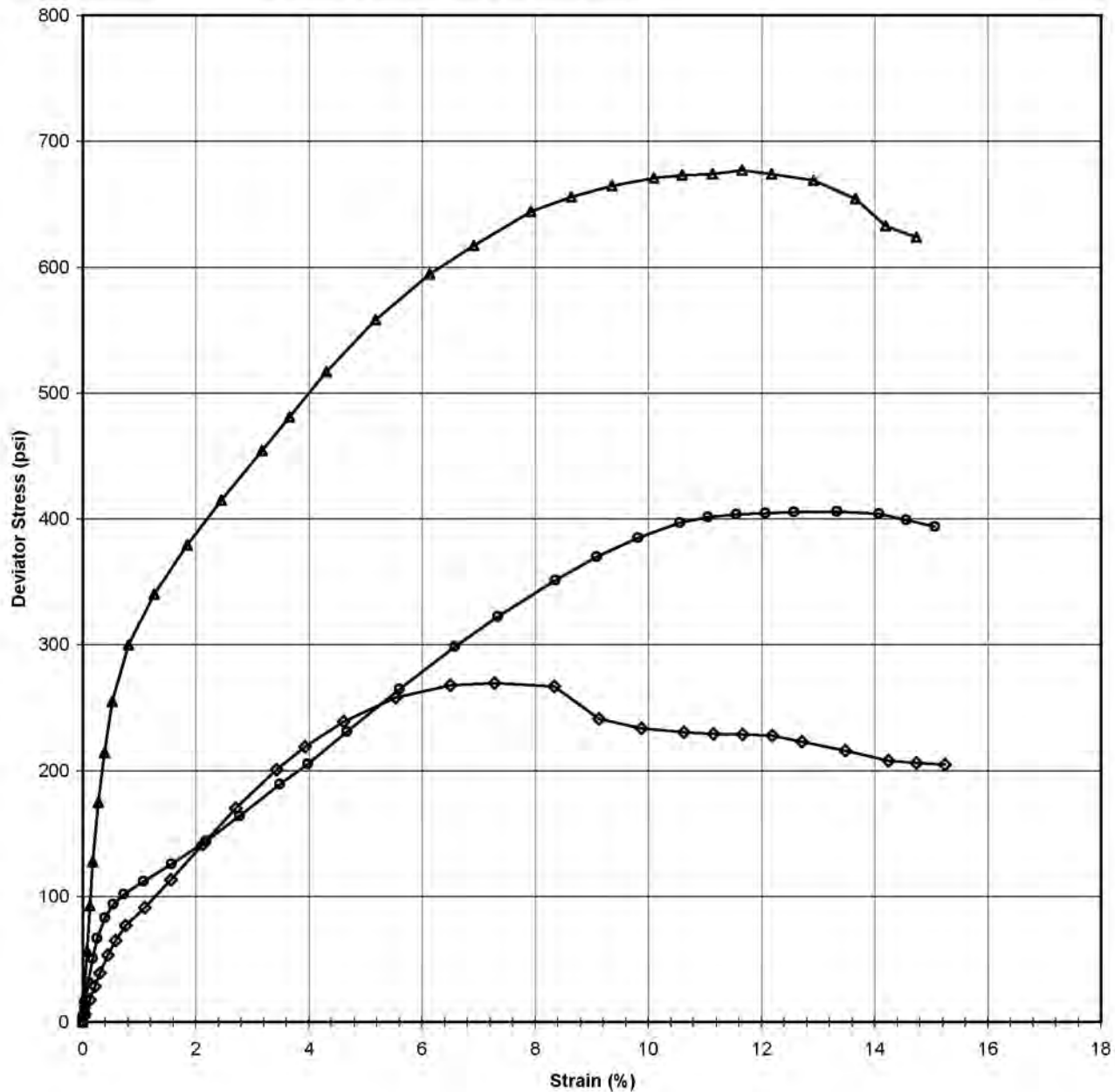
Initial Dial Reading (mil)	48
Dial Reading After Saturation (mil)	48
Dial Reading After Consolidation (mil)	113

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
49.8	0.000	21.7
112.5	0.001	22.6
169.9	0.001	23.4
410.0	0.004	28.1
641.8	0.008	34.7
865.7	0.010	43.0
1167.8	0.016	58.1
1424.2	0.022	74.0
1688.3	0.030	92.3
1982.5	0.047	111.7
2252.0	0.073	118.7
2521.9	0.106	114.3
2768.8	0.141	105.0
3050.4	0.182	92.1
3241.1	0.210	82.6
3502.7	0.248	70.0
3815.1	0.297	53.6
4099.3	0.353	38.8
4291.1	0.397	29.1
4524.1	0.455	18.8
4639.9	0.496	12.8
4738.3	0.537	8.4
4823.9	0.580	4.9
4865.0	0.609	3.1
4899.9	0.640	1.6
4953.1	0.670	0.5
4957.9	0.699	-0.3
4963.3	0.743	-1.1
4898.0	0.785	-1.5
4766.9	0.815	-1.5
4729.0	0.846	-1.0

Tested By:	JCM	Date:	11/23/13	Input Checked By:	KC	Date:	12/5/13
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**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.0-356.0
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



◆ Test No. 49

■ Test No. 50

▲ Test No. 51

E50 Test No. 49 6759.104

E50 Test No. 50 7387.171

E50 Test No. 51 47220.65

Tested By: JCM

Date: 11/23/13

Approved By: DB

Date: 12/5/13

CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	354.9-355.4
Project No.:	2013-465-001	Sample No.:	ST-20
Lab ID:	2013-465-001-017		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	241.8	Stage No.	1
		Test No	51

INITIAL DIMENSIONS

Initial Sample Length (in)	5.81
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	37.79

VOLUME CHANGE

Volume After Consolidation (in ³)	36.74
Length After Consolidation (in)	5.74
Area After Consolidation (in ²)	6.396

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.01	9.79	0.90	250.70	240.9	1.041	0.09	245.80	4.90
0.02	18.78	1.74	258.84	240.1	1.078	0.09	249.45	9.39
0.08	56.27	6.39	291.68	235.4	1.239	0.11	263.55	28.14
0.13	92.43	13.01	321.22	228.8	1.404	0.14	275.01	46.21
0.18	127.33	21.30	347.83	220.5	1.577	0.17	284.16	63.67
0.28	174.29	36.41	379.68	205.4	1.849	0.21	292.54	87.15
0.38	214.06	52.31	403.55	189.5	2.130	0.24	296.52	107.03
0.52	254.82	70.59	426.03	171.2	2.488	0.28	298.62	127.41
0.81	299.70	89.97	451.52	151.8	2.974	0.30	301.67	149.85
1.26	339.95	97.04	484.71	144.8	3.348	0.29	314.73	169.97
1.85	379.35	92.56	528.59	149.2	3.542	0.24	338.91	189.68
2.45	414.67	83.28	573.19	158.5	3.616	0.20	365.86	207.33
3.17	454.26	70.39	625.67	171.4	3.650	0.15	398.54	227.13
3.66	480.70	60.95	661.55	180.9	3.658	0.13	421.20	240.35
4.31	516.56	48.31	710.05	193.5	3.670	0.09	451.77	258.28
5.17	558.23	31.87	768.16	209.9	3.659	0.06	489.04	279.11
6.14	594.25	17.11	818.94	224.7	3.645	0.03	521.81	297.13
6.92	617.21	7.43	851.58	234.4	3.634	0.01	542.97	308.61
7.93	644.06	-2.91	888.77	244.7	3.632	0.00	566.74	322.03
8.63	655.66	-8.93	906.40	250.7	3.615	-0.01	578.57	327.83
9.36	664.41	-13.28	919.49	255.1	3.605	-0.02	587.29	332.21
10.10	671.03	-16.80	929.63	258.6	3.595	-0.03	594.12	335.51
10.60	672.99	-18.65	933.44	260.4	3.584	-0.03	596.94	336.49
11.14	673.83	-20.09	935.72	261.9	3.573	-0.03	598.81	336.92
11.66	677.20	-21.16	940.16	263.0	3.575	-0.03	601.56	338.60
12.18	673.91	-22.03	937.74	263.8	3.554	-0.03	600.78	336.95
12.93	668.89	-22.81	933.50	264.6	3.528	-0.03	599.06	334.44
13.66	654.43	-23.24	919.47	265.0	3.469	-0.04	592.26	327.21
14.19	632.81	-23.18	897.79	265.0	3.388	-0.04	581.39	316.41
14.74	623.74	-22.74	888.28	264.5	3.358	-0.04	576.41	311.87

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	354.9-355.4
Project No.	2013-465-001	Sample No.	ST-20
Lab ID #	2013-465-001-017	Test No.	51

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G330	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G721	2/22/14
Timing Device	G489	5/13/14
Flow Pump	G1510-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-017 Specific Gravity (measured) 2.61

Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	355.4-355.9	354.4-354.9	354.9-355.4
Sample No.:	ST-20	ST-20	ST-20
Test No.	T49	T50	T51
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.4	21.4	21.7
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	24.9	24.9	24.9
Total Unit Weight (pcf)	121.5	119.4	121.7
Dry Unit Weight (pcf)	97.3	95.6	97.4
Moisture Content (%) (FINAL)	26.1	26.6	25.9
Initial State Void Ratio, e	0.675	0.704	0.672
Void Ratio at Shear, e	0.622	0.641	0.626



Tested By: JCM Date: 11/23/13 Input Checked By: KC Date: 12/5/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T49	T50	T51
Tare Number	1706	1706	1706
Weight of Tare & Wet Sample (g)	132.62	132.62	132.62
Weight of Tare & Dry Sample (g)	122.68	122.68	122.68
Weight of Tare (g)	82.8	82.8	82.8
Moisture Content (%) (INITIAL)	24.92	24.92	24.92
Tare Number	39	970	899
Weight of Tare & Wet Sample (g)	1405	1212.44	399.16
Weight of Tare & Dry Sample (g)	1156.74	978.99	339.65
Weight of Tare (g)	206.83	101.45	110.07
Moisture Content (%) (FINAL)	26.14	26.60	25.92

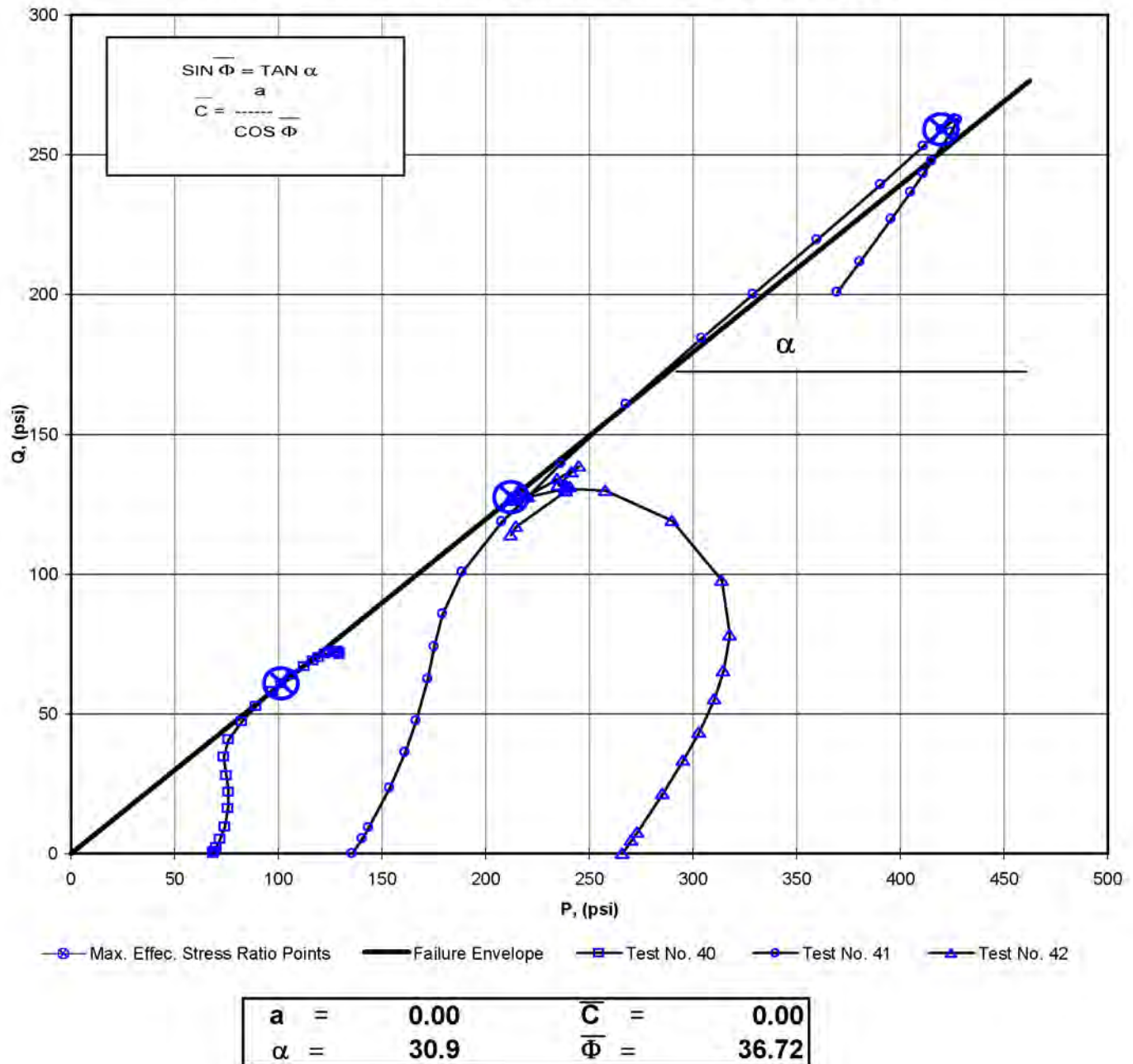
UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1613.08	1419.54	1612.5
Weight of Tube (g)	404.83	294.66	405.08
Weight of Wet Sample (g)	1208.25	1124.88	1207.42
Length 1 (in)	5.812	5.53	5.808
Length 2 (in)	5.822	5.538	5.812
Length 3 (in)	5.827	5.515	5.807
Top Diameter (in)	2.877	2.873	2.876
Middle Diameter (in)	2.883	2.875	2.881
Bottom Diameter (in)	2.876	2.877	2.877
Average Length (in)	5.820333	5.527667	5.809
Average Area (in ²)	6.508	6.492	6.505
Sample Volume (cm ³)	620.76	588.04	619.26
Unit Wet Weight (g/cm ³)	1.95	1.91	1.95
Unit Wet Weight (pcf)	121.51	119.42	121.72
Unit Dry Weight (pcf)	97.27	95.60	97.44
Unit Dry Weight (g/cm ³)	1.56	1.53	1.56
Initial Burette Reading	48	48	48
Final Burette Reading	35	30	30.8
Initial Dial Reading	51	59	48
Dial Reading After Saturation	72	71	48
Dial Reading After Consolidation	96	108	113
Volume Change during Consolidation	13	18	17.2
Volume Change during Saturation	6.72	3.83	0.00
Volume at Shear (cm ³)	*These 601.04	566.21	602.06
Volume of Solids (cm ³)	measurements 370.57	345.00	370.31
Volume of Voids (cm ³)	are all 230.47	221.21	231.75
Volume of Water (cm ³)	at 252.77	239.54	250.53
Void Ratio, e	shear 0.622	0.641	0.626

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	390.0-392.5
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Consolidated Undrained Triaxial Test with Pore Pressure



Tested By: JCM

Date: 11/18/13

Approved By: DB

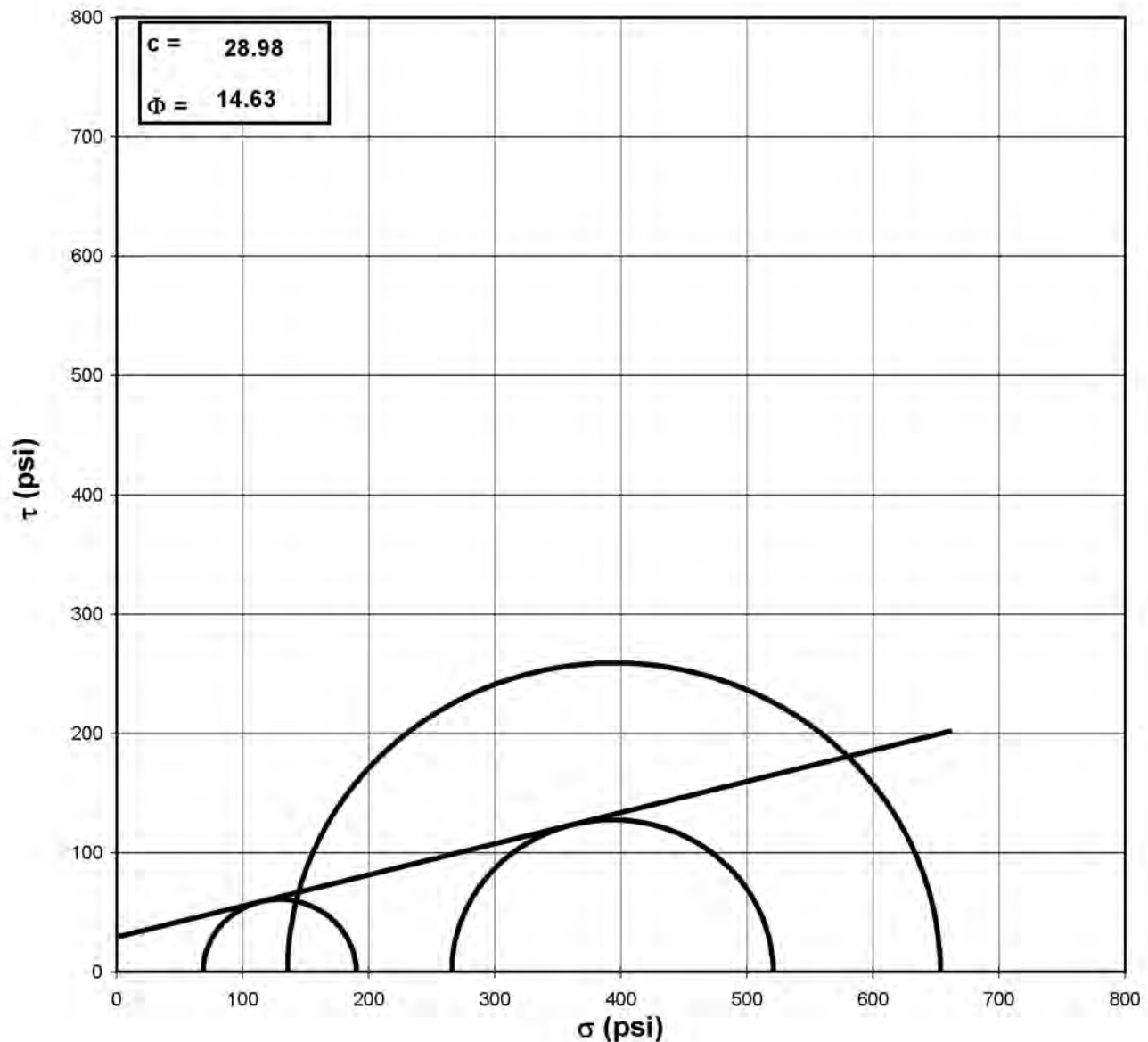
Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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MOHR TOTAL STRENGTH ENVELOPE
 ASTM D4767-11

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	390.0-392.5
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



Failure Based on Maximum Effective Principal Stress Ratio

NOTE: GRAPH NOT TO SCALE

Tested By: JCM Date: 11/18/13 Approved By: DB Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**
ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	391.9-392.4
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	40

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.817	Diameter 1:	2.883
Length 2:	5.806	Diameter 2:	2.873
Length 3:	5.805	Diameter 3:	2.881
Avg. Length:	5.809	Avg. Diam.:	2.879

PRESSURES (psi)

Cell Pressure (psi)	90.6
Back Pressure (psi)	21.9
Eff. Conf. Pressure (psi)	68.7
Pore Pressure	
Response (%)	100

VOLUME CHANGE

Initial Burette Reading (ml)	72.0
Final Burette Reading (ml)	45.1
Final Change (ml)	26.9

MAXIMUM OBLIQUITY POINTS

P	=	101.56
Q	=	60.73

Initial Dial Reading (mil)	57
Dial Reading After Saturation (mil)	90
Dial Reading After Consolidation (mil)	166

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
21.0	0.000	21.9
27.2	0.001	22.1
29.8	0.002	22.2
46.0	0.008	22.5
85.2	0.013	23.7
140.4	0.017	26.0
223.5	0.025	30.9
295.3	0.032	36.6
369.7	0.043	43.4
454.5	0.063	51.2
536.9	0.091	55.2
621.4	0.125	55.4
696.3	0.158	53.9
768.8	0.199	51.4
809.6	0.228	49.8
854.5	0.269	47.6
905.0	0.325	45.1
941.4	0.383	42.7
965.0	0.427	41.3
992.4	0.486	39.3
1010.1	0.530	37.8
1024.1	0.574	36.4
1031.9	0.618	35.3
1038.8	0.647	34.8
1043.9	0.676	34.3
1047.5	0.705	33.8
1048.9	0.735	33.4
1058.3	0.779	32.9
1059.7	0.823	32.4
1063.3	0.852	32.1
1062.9	0.881	31.8

Tested By:	JCM	Date:	11/18/13	Input Checked By:	KC	Date:	12/4/13
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**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	391.9-392.4
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	68.7	Stage No.	1
		Test No	40

INITIAL DIMENSIONS

Initial Sample Length (in)	5.81
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	37.82

VOLUME CHANGE

Volume After Consolidation (in ³)	35.53
Length After Consolidation (in)	5.70
Area After Consolidation (in ²)	6.233

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	0.99	0.21	69.48	68.5	1.015	0.21	68.99	0.50
0.04	1.41	0.27	69.84	68.4	1.021	0.19	69.14	0.70
0.14	4.00	0.65	72.05	68.1	1.059	0.16	70.05	2.00
0.22	10.28	1.82	77.16	66.9	1.154	0.18	72.02	5.14
0.31	19.10	4.09	83.71	64.6	1.296	0.21	74.16	9.55
0.44	32.35	9.00	92.05	59.7	1.542	0.28	75.87	16.17
0.57	43.76	14.65	97.80	54.0	1.810	0.33	75.92	21.88
0.76	55.52	21.55	102.68	47.2	2.177	0.39	74.92	27.76
1.10	68.78	29.25	108.23	39.4	2.744	0.43	73.84	34.39
1.60	81.44	33.27	116.87	35.4	3.299	0.41	76.15	40.72
2.19	94.22	33.49	129.43	35.2	3.676	0.36	82.32	47.11
2.78	105.33	31.96	142.07	36.7	3.867	0.30	89.41	52.66
3.49	115.78	29.52	154.96	39.2	3.955	0.25	97.07	57.89
4.00	121.46	27.87	162.29	40.8	3.975	0.23	101.56	60.73
4.72	127.41	25.72	170.39	43.0	3.965	0.20	106.68	63.70
5.70	133.73	23.16	179.27	45.5	3.937	0.17	112.40	66.86
6.72	137.73	20.81	185.62	47.9	3.876	0.15	116.75	68.86
7.48	140.12	19.35	189.46	49.3	3.839	0.14	119.40	70.06
8.52	142.57	17.36	193.91	51.3	3.777	0.12	122.62	71.28
9.30	143.93	15.86	196.77	52.8	3.724	0.11	124.80	71.97
10.08	144.71	14.51	198.90	54.2	3.671	0.10	126.54	72.36
10.84	144.61	13.44	199.87	55.3	3.617	0.09	127.57	72.30
11.34	144.76	12.88	200.57	55.8	3.593	0.09	128.19	72.38
11.86	144.64	12.38	200.97	56.3	3.568	0.09	128.65	72.32
12.37	144.31	11.92	201.09	56.8	3.542	0.08	128.94	72.16
12.89	143.65	11.46	200.89	57.2	3.510	0.08	129.06	71.83
13.67	143.67	10.96	201.41	57.7	3.488	0.08	129.57	71.83
14.44	142.58	10.53	200.75	58.2	3.451	0.07	129.46	71.29
14.95	142.22	10.17	200.75	58.5	3.430	0.07	129.64	71.11
15.46	141.31	9.89	200.12	58.8	3.403	0.07	129.46	70.66

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	391.9-392.4
Project No.	2013-465-001	Sample No.	ST-23
Lab ID #	2013-465-001-019	Test No.	40

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G331	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G1190	2/22/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	NA	NA

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	390.9-391.4
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	41

PRESSURES (psi)

Cell Pressure (psi)	168.0
Back Pressure (psi)	32.3
Eff. Conf. Pressure (psi)	135.7
Pore Pressure	
Response (%)	97

MAXIMUM OBLIQUITY POINTS

P	=	419.82
Q	=	258.90

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.964	Diameter 1:	2.871
Length 2:	5.961	Diameter 2:	2.882
Length 3:	5.964	Diameter 3:	2.887
Avg. Length	5.963	Avg. Diam.:	2.880

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	32.6
Final Change (ml)	15.4

Initial Dial Reading (mil)	85
Dial Reading After Saturation (mil)	91
Dial Reading After Consolidation (mil)	175

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
48.6	0.000	32.3
117.6	0.001	32.8
167.2	0.002	33.6
351.1	0.006	37.6
514.1	0.011	43.0
662.5	0.016	49.0
856.3	0.024	58.2
1005.7	0.033	66.8
1161.3	0.044	74.4
1359.0	0.064	80.0
1600.4	0.092	78.7
1883.8	0.125	71.0
2173.2	0.159	60.8
2504.1	0.200	47.9
2727.0	0.229	39.0
3009.3	0.270	27.7
3309.1	0.326	16.7
3531.5	0.382	9.9
3640.7	0.426	7.1
3738.5	0.487	4.4
3761.9	0.531	2.8
3728.4	0.575	1.4
3612.9	0.620	0.4
3567.6	0.650	0.0
3492.3	0.680	-0.4
3370.2	0.711	-0.7
3165.6	0.742	-0.9
3035.0	0.789	-0.8

Tested By: JCM Date: 11/18/13 Input Checked By: KC Date: 12/4/13

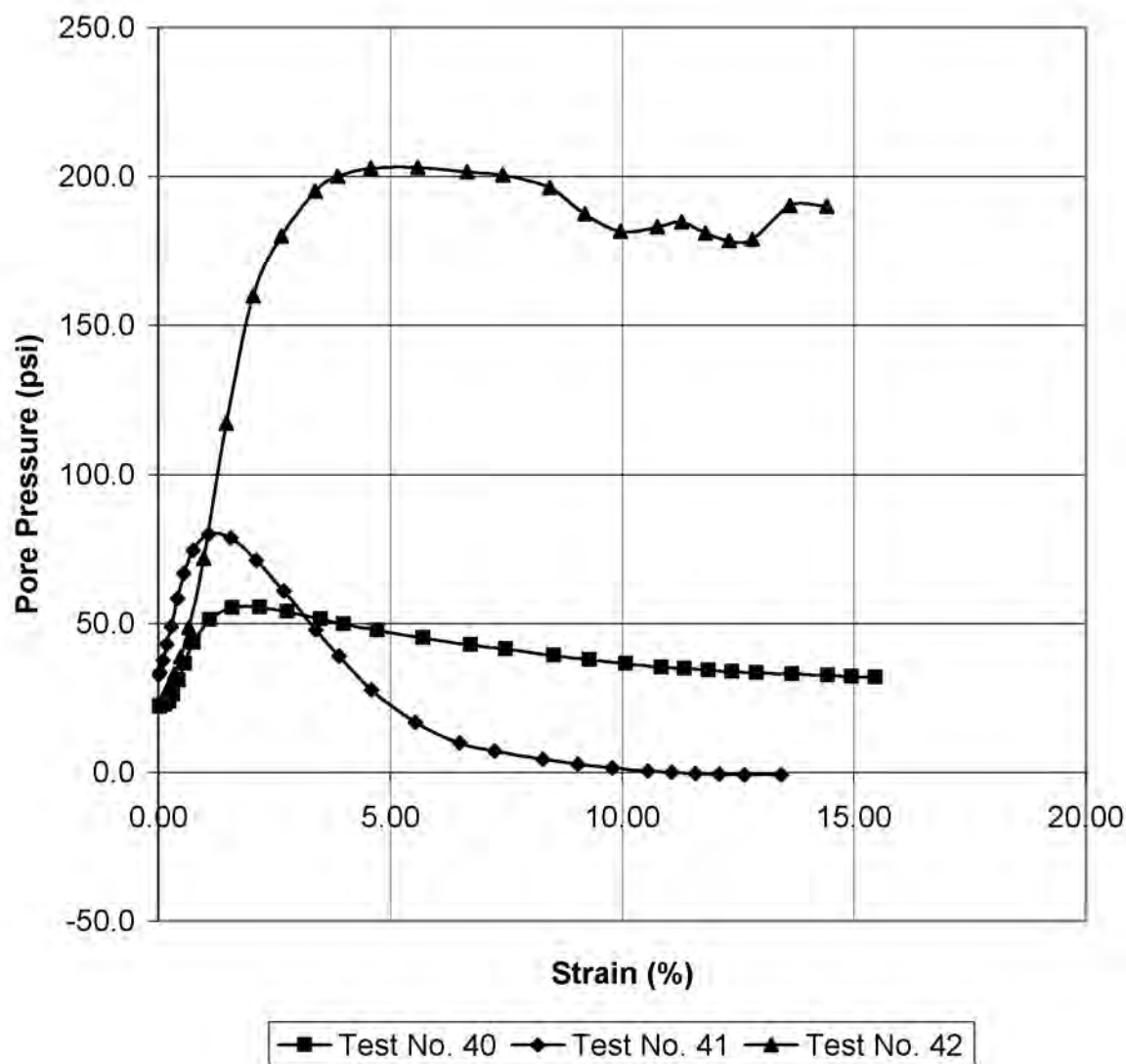
DCN: CT-S28 DATE: 4/12/13 REVISION: 3

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**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	390.0-392.5
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Pore Pressure vs % Strain



**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	390.9-391.4
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	135.7	Stage No.	1
		Test No	41

INITIAL DIMENSIONS

Initial Sample Length (in)	5.96
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.51
Initial Sample Volume (in ³)	38.85

VOLUME CHANGE

Volume After Consolidation (in ³)	37.79
Length After Consolidation (in)	5.87
Area After Consolidation (in ²)	6.434

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	10.73	0.46	145.96	135.2	1.079	0.04	140.60	5.36
0.03	18.43	1.27	152.86	134.4	1.137	0.07	143.64	9.22
0.10	46.96	5.34	177.32	130.4	1.360	0.12	153.84	23.48
0.19	72.21	10.67	197.25	125.0	1.578	0.15	161.14	36.11
0.28	95.15	16.65	214.20	119.0	1.799	0.18	166.62	47.57
0.42	125.00	25.93	234.77	109.8	2.139	0.21	172.27	62.50
0.56	147.92	34.46	249.16	101.2	2.461	0.24	175.20	73.96
0.75	171.63	42.10	265.23	93.6	2.834	0.25	179.41	85.82
1.09	201.44	47.74	289.40	88.0	3.290	0.24	188.68	100.72
1.57	237.40	46.41	326.68	89.3	3.659	0.20	207.98	118.70
2.12	279.17	38.74	376.13	97.0	3.879	0.14	236.55	139.59
2.71	321.25	28.54	428.41	107.2	3.998	0.09	267.78	160.63
3.40	368.65	15.57	488.78	120.1	4.069	0.04	304.45	184.33
3.90	400.03	6.67	529.06	129.0	4.100	0.02	329.04	200.01
4.60	438.98	-4.64	579.33	140.3	4.128	-0.01	359.84	219.49
5.54	478.64	-15.63	629.97	151.3	4.163	-0.03	390.65	239.32
6.50	506.11	-22.38	664.19	158.1	4.202	-0.05	411.13	253.06
7.25	517.80	-25.22	678.72	160.9	4.218	-0.05	419.82	258.90
8.30	525.89	-27.89	689.48	163.6	4.215	-0.05	426.53	262.94
9.05	524.89	-29.55	690.14	165.2	4.176	-0.06	427.69	262.44
9.79	515.92	-30.93	682.55	166.6	4.096	-0.06	424.59	257.96
10.55	495.50	-31.89	663.08	167.6	3.957	-0.07	415.34	247.75
11.07	486.35	-32.31	654.36	168.0	3.895	-0.07	411.19	243.17
11.58	473.24	-32.70	641.64	168.4	3.810	-0.07	405.02	236.62
12.10	453.77	-33.02	622.49	168.7	3.689	-0.08	395.61	226.88
12.64	423.22	-33.21	592.13	168.9	3.506	-0.08	380.52	211.61
13.43	401.80	-33.09	570.59	168.8	3.381	-0.08	369.69	200.90

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	390.9-391.4
Project No.	2013-465-001	Sample No.	ST-23
Lab ID #	2013-465-001-019	Test No.	41

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G309	INITIAL ONLY
Load Cell	G1310	1/8/14
Cell Pressure Transducer	G1073B	11/7/14
Pore Pressure Transducer	G1518	11/7/14
Extensometer	G835	1/8/14
Load Frame	G833	1/8/14
Dial Indicator	G1295	3/4/14
Timing Device	G489	5/13/14
Balance	NA	NA
Flow Pump	G1511-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	391.4-391.9
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Stage No.	1
Test No.	42

PRESSURES (psi)

Cell Pressure (psi)	288.1
Back Pressure (psi)	22.1
Eff. Conf. Pressure (psi)	266.0
Pore Pressure	
Response (%)	97

MAXIMUM OBLIQUITY POINTS

\bar{P}	=	212.57
Q	=	127.41

INITIAL SAMPLE DIMENSIONS (in)

Length 1:	5.927	Diameter 1:	2.875
Length 2:	5.923	Diameter 2:	2.877
Length 3:	5.925	Diameter 3:	2.881
Avg. Length:	5.925	Avg. Diam.:	2.878

VOLUME CHANGE

Initial Burette Reading (ml)	48.0
Final Burette Reading (ml)	38.6
Final Change (ml)	9.4

Initial Dial Reading (mil)	43
Dial Reading After Saturation (mil)	51
Dial Reading After Consolidation (mil)	174

LOAD (LB)	DEFORMATION (IN)	PORE PRESSURE (PSI)
47.9	0.000	22.1
109.6	0.001	22.4
147.7	0.002	22.6
326.4	0.006	24.0
482.5	0.010	25.9
613.7	0.014	28.4
772.9	0.021	33.0
904.2	0.028	38.6
1075.2	0.038	48.4
1336.0	0.057	71.9
1624.9	0.085	117.1
1777.4	0.118	159.9
1797.8	0.154	179.9
1769.8	0.196	195.0
1764.7	0.224	200.0
1773.5	0.266	202.7
1809.1	0.324	202.9
1841.1	0.386	201.6
1858.6	0.431	200.5
1866.2	0.489	196.2
1973.4	0.533	187.5
2055.5	0.577	181.6
2044.0	0.623	183.1
1984.8	0.654	184.6
1997.1	0.684	181.0
1999.6	0.714	178.5
1989.7	0.742	178.9
1814.2	0.789	190.1
1786.0	0.835	190.0

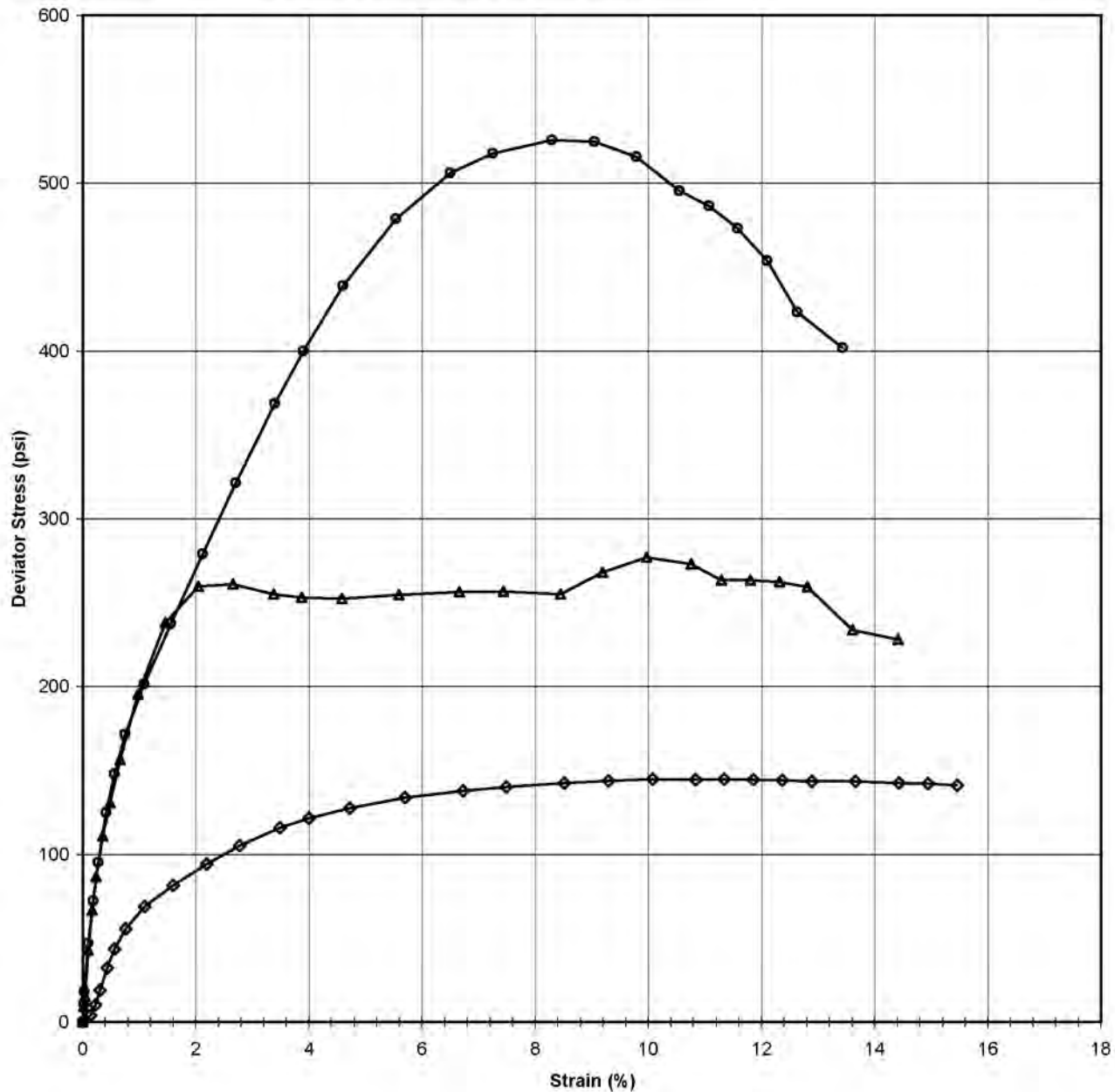
Tested By: JCM Date: 11/18/13 Input Checked By: KC Date: 12/4/13

DCN: CTS-28 DATE: 4/12/13 REVISION: 3

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**CONSOLIDATED UNDRAINED TRIAXIAL TEST
 WITH PORE PRESSURE READINGS
 ASTM D4767-11**

Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	390.0-392.5
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		
Visual Description:	Greenish Gray Silty Sand (Undisturbed)		



◆ Test No. 40

● Test No. 41

▲ Test No. 42

E50 Test No. 40 6795.731

E50 Test No. 41 13971.59

E50 Test No. 42 27450.68

Tested By: JCM

Date: 11/18/13

Approved By: DB

Date: 12/4/13

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**



Client:	Paul C. Rizzo & Associates	Boring No.:	R-7-1
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	391.4-391.9
Project No.:	2013-465-001	Sample No.:	ST-23
Lab ID:	2013-465-001-019		

Visual Description: Greenish Gray Silty Sand (Undisturbed)

Effective Confining Pressure (psi)	266.0	Stage No.	1
		Test No	42

INITIAL DIMENSIONS

Initial Sample Length (in)	5.93
Initial Sample Diameter (in)	2.88
Initial Sample Area (in ²)	6.50
Initial Sample Volume (in ³)	38.54

VOLUME CHANGE

Volume After Consolidation (in ³)	37.81
Length After Consolidation (in)	5.79
Area After Consolidation (in ²)	6.525

Strain (%)	Deviation Stress	ΔU	$\bar{\sigma}_1$	$\bar{\sigma}_3$	Effective Principle Stress Ratio	\bar{A}	\bar{P}	Q
0.02	9.46	0.33	275.12	265.7	1.036	0.04	270.40	4.73
0.04	15.29	0.54	280.75	265.5	1.058	0.04	273.10	7.65
0.10	42.63	1.91	306.72	264.1	1.161	0.05	285.40	21.32
0.17	66.49	3.82	328.67	262.2	1.254	0.06	295.43	33.24
0.24	86.51	6.25	346.25	259.7	1.333	0.07	303.00	43.25
0.36	110.71	10.91	365.81	255.1	1.434	0.10	310.45	55.36
0.48	130.59	16.55	380.05	249.5	1.524	0.13	314.75	65.30
0.66	156.41	26.28	396.13	239.7	1.652	0.17	317.93	78.20
0.98	195.47	49.75	411.71	216.2	1.904	0.26	313.98	97.73
1.47	238.15	94.95	409.19	171.0	2.392	0.41	290.12	119.07
2.04	259.65	137.83	387.82	128.2	3.026	0.55	257.99	129.82
2.66	261.04	157.83	369.21	108.2	3.413	0.62	238.69	130.52
3.38	254.97	172.91	348.05	93.1	3.739	0.70	220.57	127.48
3.87	252.93	177.88	341.06	88.1	3.870	0.73	214.59	126.47
4.59	252.33	180.61	337.72	85.4	3.955	0.74	211.56	126.17
5.59	254.82	180.83	339.98	85.2	3.992	0.73	212.57	127.41
6.66	256.51	179.51	343.01	86.5	3.966	0.72	214.75	128.26
7.44	256.87	178.37	344.50	87.6	3.931	0.72	216.07	128.43
8.44	255.14	174.11	347.02	91.9	3.777	0.70	219.46	127.57
9.19	267.97	165.36	368.61	100.6	3.663	0.64	234.63	133.99
9.97	277.03	159.48	383.54	106.5	3.601	0.59	245.03	138.51
10.76	273.01	161.00	378.01	105.0	3.600	0.61	241.51	136.51
11.29	263.33	162.51	366.82	103.5	3.544	0.64	235.15	131.66
11.81	263.46	158.92	370.55	107.1	3.460	0.62	238.81	131.73
12.32	262.27	156.41	371.86	109.6	3.393	0.61	240.72	131.13
12.81	259.47	156.83	368.64	109.2	3.377	0.62	238.90	129.74
13.62	233.84	168.00	331.84	98.0	3.386	0.74	214.92	116.92
14.41	227.99	167.87	326.12	98.1	3.323	0.76	212.13	113.99

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS**

ASTM D4767-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	391.4-391.9
Project No.	2013-465-001	Sample No.	ST-23
Lab ID #	2013-465-001-019	Test No.	42

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
PI Tape	G1121	1/14/14
Pressure Transducer	G134	1/9/14
Burette, Outflow	G334	INITIAL ONLY
Load Cell	G1311	1/8/14
Cell Pressure Transducer	G1512	11/7/14
Pore Pressure Transducer	G1514	11/7/14
Extensometer	G1073A	1/8/14
Load Frame	G1073	1/8/14
Dial Indicator	G1456	8/30/14
Timing Device	G489	5/13/14
Flow Pump	G1510-1	11/7/14

**CONSOLIDATED UNDRAINED TRIAXIAL TEST
WITH PORE PRESSURE READINGS
ASTM D4767-11**

Client: Paul C. Rizzo & Associates
 Client Reference: Turkey Point Units 6 & 7 Site
 Project No.: 2013-465-001
 Lab ID: 2013-465-001-019 Specific Gravity (measured) 2.6

Visual Description: Greenish Gray Silty Sand (Undisturbed)

SAMPLE CONDITION SUMMARY

Boring No.:	R-7-1	R-7-1	R-7-1
Depth (ft):	391.9-392.4	390.9-391.4	391.4-391.9
Sample No.:	ST-23	ST-23	ST-23
Test No.	T40	T41	T42
Deformation Rate (in/min)	0.002	0.002	0.002
Back Pressure (psi)	21.9	32.3	22.1
Consolidation Time (days)	1	1	1
Moisture Content (%) (INITIAL)	26.8	26.8	26.8
Total Unit Weight (pcf)	116.1	123.1	120.9
Dry Unit Weight (pcf)	91.5	97.1	95.3
Moisture Content (%) (FINAL)	35.1	26.1	29.6
Initial State Void Ratio, e	0.773	0.672	0.702
Void Ratio at Shear, e	0.666	0.627	0.670



Tested By: JCM Date: 11/18/13 Input Checked By: KC Date: 12/4/13

DCN: CT-S28 DATE: 4/12/13 REVISION: 3

CONSOLIDATED UNDRAINED TRIAXIAL TEST WITH PORE PRESSURE READINGS

ASTM D4767-11

MOISTURE CONTENT

	T40	T41	T42
Tare Number	1126	1126	1126
Weight of Tare & Wet Sample (g)	182.1	182.1	182.1
Weight of Tare & Dry Sample (g)	161.54	161.54	161.54
Weight of Tare (g)	84.87	84.87	84.87
Moisture Content (%) (INITIAL)	26.82	26.82	26.82
Tare Number	580	926	649
Weight of Tare & Wet Sample (g)	297.06	1343.81	1308.88
Weight of Tare & Dry Sample (g)	241.79	1085.42	1031.84
Weight of Tare (g)	84.36	95.77	96.84
Moisture Content (%) (FINAL)	35.11	26.11	29.63

UNIT WEIGHT

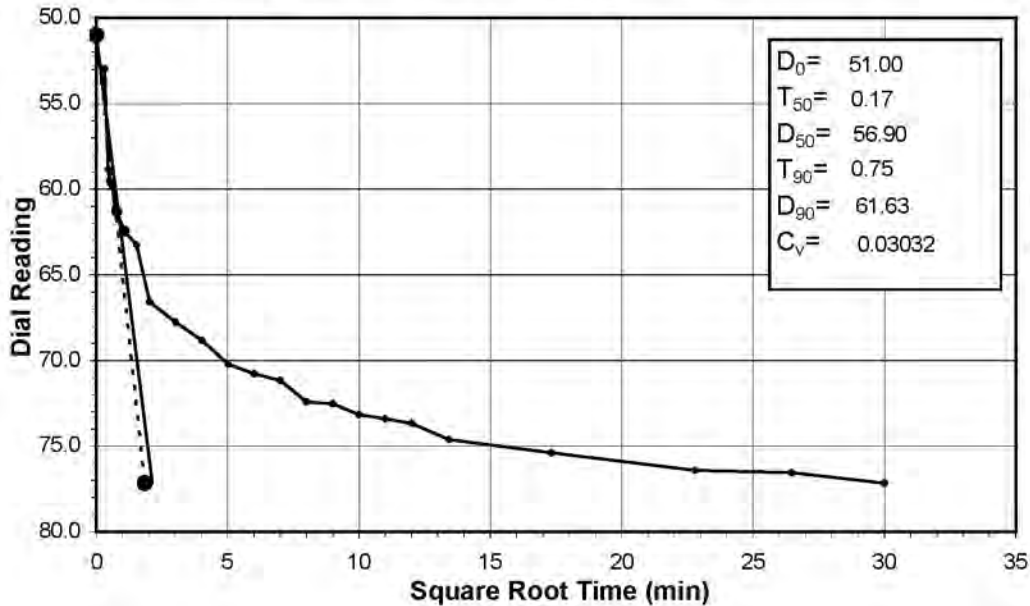
Weight of Tube & Wet Sample (g)	1557.3	1672.34	1637.42
Weight of Tube (g)	405.21	417.37	414.42
Weight of Wet Sample (g)	1152.09	1254.97	1223
Length 1 (in)	5.817	5.964	5.927
Length 2 (in)	5.806	5.961	5.923
Length 3 (in)	5.805	5.964	5.925
Top Diameter (in)	2.883	2.871	2.875
Middle Diameter (in)	2.873	2.882	2.877
Bottom Diameter (in)	2.881	2.887	2.881
Average Length (in)	5.809333	5.963	5.925
Average Area (in ²)	6.510	6.514	6.504
Sample Volume (cm ³)	619.73	636.56	631.48
Unit Wet Weight (g/cm ³)	1.86	1.97	1.94
Unit Wet Weight (pcf)	116.06	123.08	120.91
Unit Dry Weight (pcf)	91.52	97.05	95.34
Unit Dry Weight (g/cm ³)	1.47	1.55	1.53
Initial Burette Reading	72	48	48
Final Burette Reading	45.1	32.6	38.6
Initial Dial Reading	57	85	43
Dial Reading After Saturation	90	91	51
Dial Reading After Consolidation	166	175	174
Volume Change during Consolidation	26.9	15.4	9.4
Volume Change during Saturation	10.56	1.92	2.56
Volume at Shear (cm ³)	*These 582.27	619.24	619.52
Volume of Solids (cm ³)	measurements 349.41	380.61	370.92
Volume of Voids (cm ³)	are all 232.85	238.63	248.60
Volume of Water (cm ³)	at 318.94	258.38	285.75
Void Ratio, e	shear 0.666	0.627	0.670

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

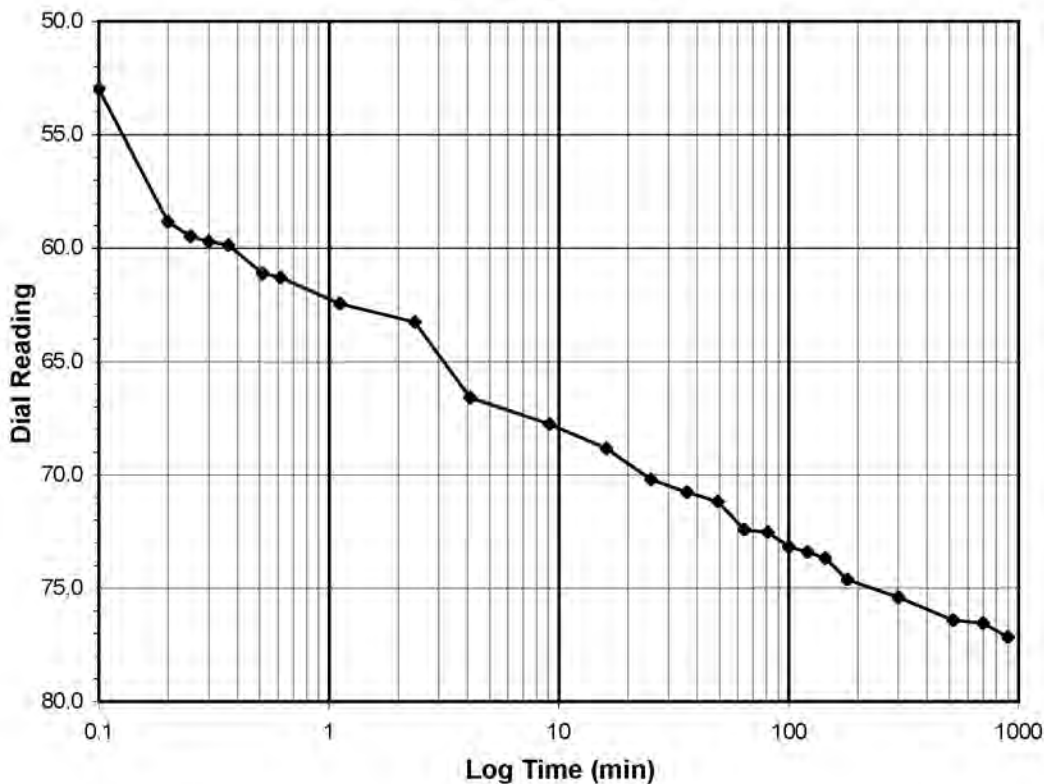
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 77.2
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 12/2/13
 Start Time 11:12:58

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	53.0
0.20	58.8
0.25	59.5
0.30	59.7
0.37	59.9
0.52	61.1
0.62	61.3
1.12	62.4
2.37	63.3
4.12	66.6
9.12	67.8
16.12	68.8
25.13	70.2
36.13	70.8
49.13	71.2
64.13	72.4
81.13	72.5
100.13	73.2
121.13	73.4
144.13	73.7
180.13	74.6
300.13	75.4
520.13	76.4
700.13	76.5
900.15	77.2



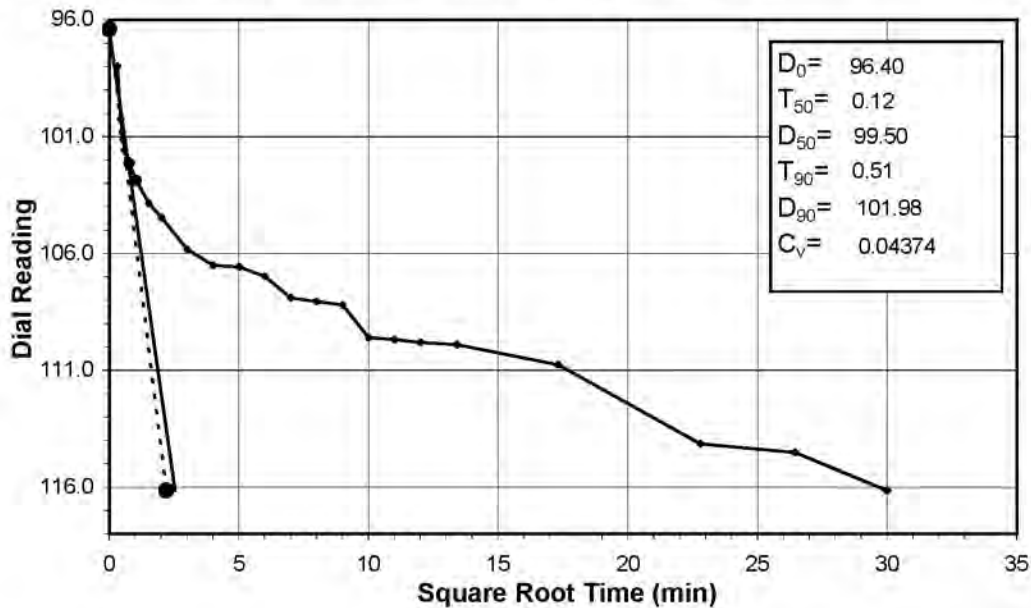
Tested By DB Date 12/2/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

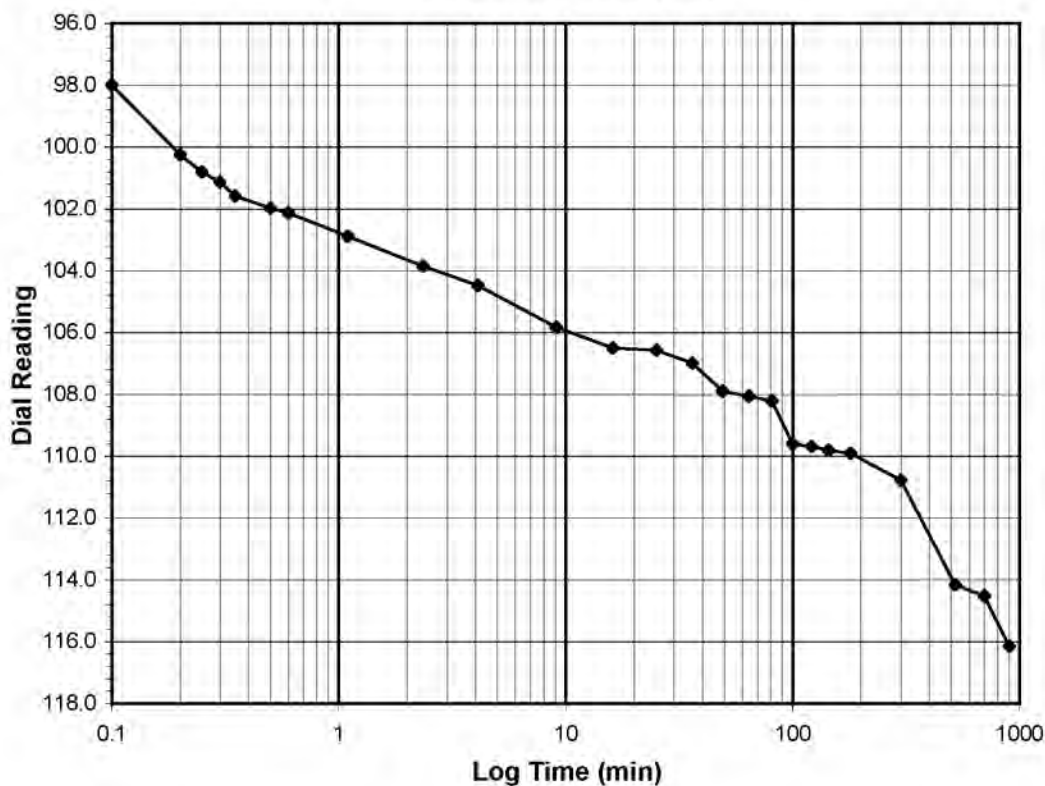
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **116.1**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 12/3/13
 Start Time 2:13:07

Elapsed Time (min)	Dial Reading (div)
Initial	77.2
0.10	98.0
0.20	100.2
0.25	100.8
0.30	101.1
0.35	101.6
0.50	102.0
0.60	102.1
1.10	102.9
2.35	103.8
4.10	104.5
9.10	105.8
16.12	106.5
25.12	106.6
36.12	107.0
49.12	107.9
64.12	108.1
81.12	108.2
100.12	109.6
121.12	109.7
144.12	109.8
180.12	109.9
300.12	110.8
520.12	114.2
700.12	114.5
900.05	116.1



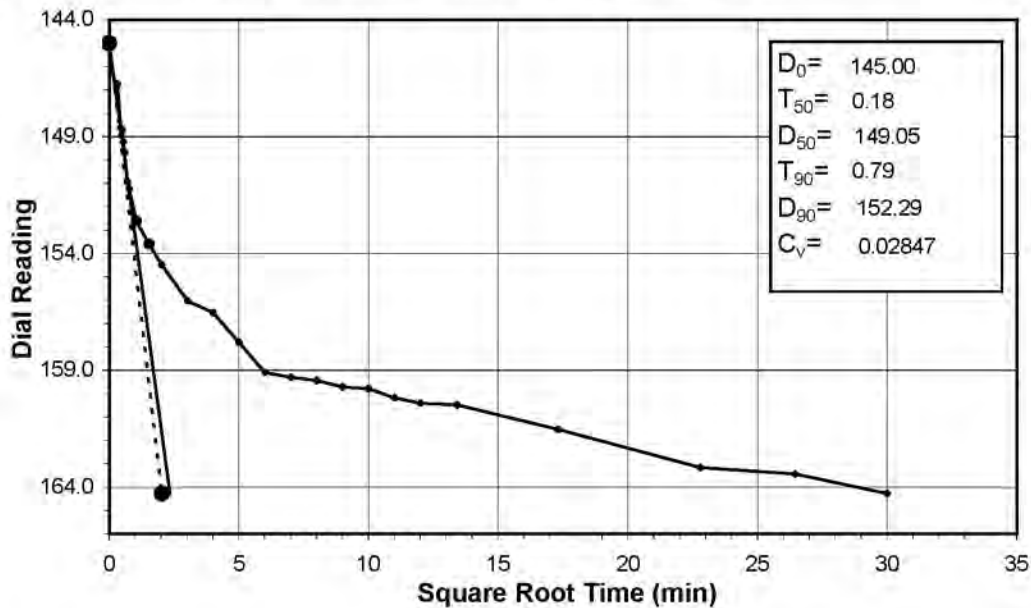
Tested By DB Date 12/3/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

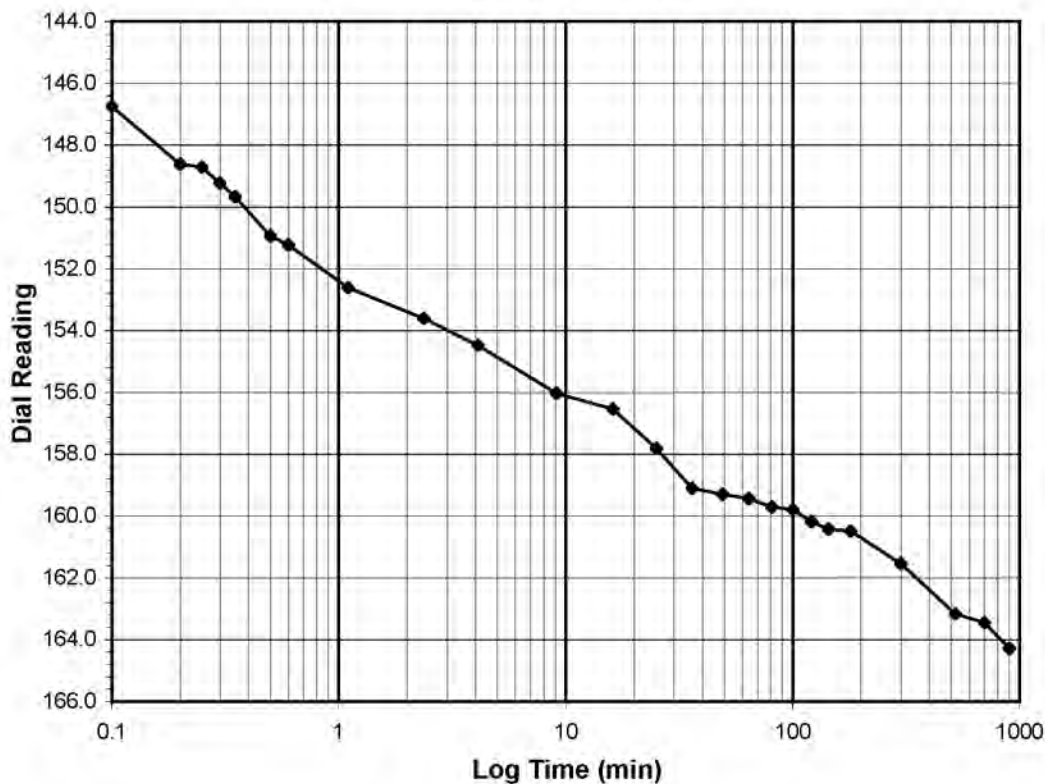
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 164.3
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 12/3/13
 Start Time 17:13:10

Elapsed Time (min)	Dial Reading (div)
Initial	116.1
0.10	146.7
0.20	148.6
0.25	148.7
0.30	149.2
0.35	149.7
0.50	150.9
0.60	151.2
1.10	152.6
2.37	153.6
4.12	154.5
9.12	156.0
16.12	156.5
25.12	157.8
36.12	159.1
49.12	159.3
64.12	159.4
81.12	159.7
100.12	159.8
121.12	160.2
144.12	160.4
180.12	160.5
300.13	161.5
520.13	163.2
700.13	163.4
900.23	164.3



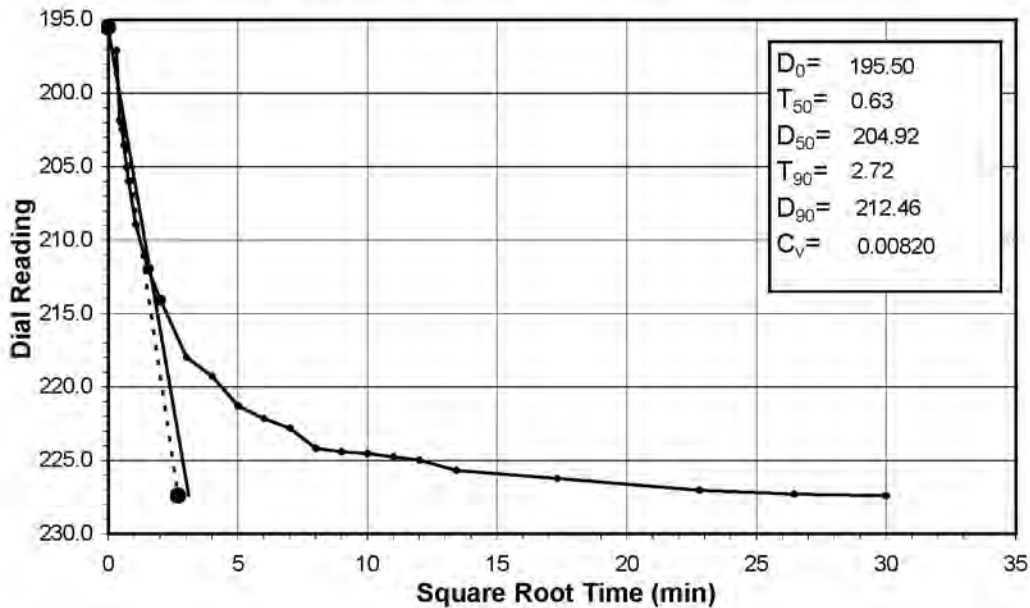
Tested By DB Date 12/3/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

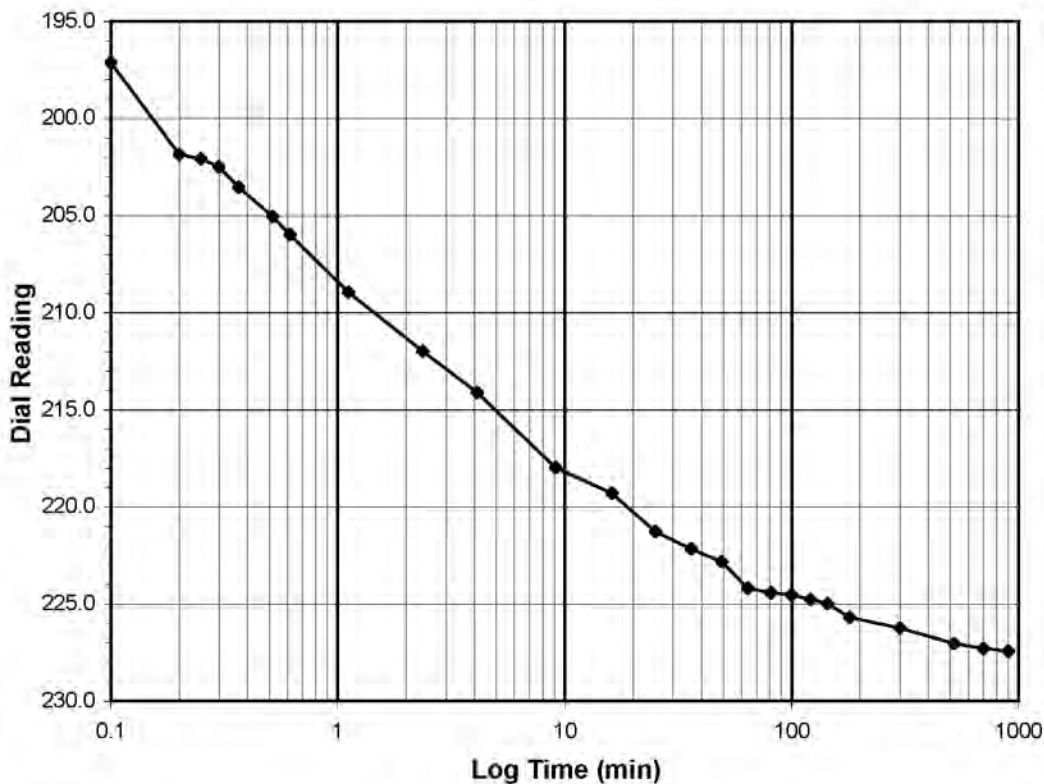
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 227.4
 Consolidometer No. G1427
 1 Division (in) 0.0001
 Start Date 12/4/13
 Start Time 8:13:24

Elapsed Time (min)	Dial Reading (div)
Initial	164.3
0.10	197.1
0.20	201.8
0.25	202.1
0.30	202.5
0.37	203.5
0.52	205.0
0.62	206.0
1.12	208.9
2.37	212.0
4.12	214.1
9.12	218.0
16.12	219.3
25.12	221.3
36.12	222.2
49.12	222.8
64.12	224.2
81.12	224.4
100.13	224.5
121.13	224.8
144.13	225.0
180.13	225.7
300.13	226.2
520.13	227.0
700.13	227.3
900.23	227.4



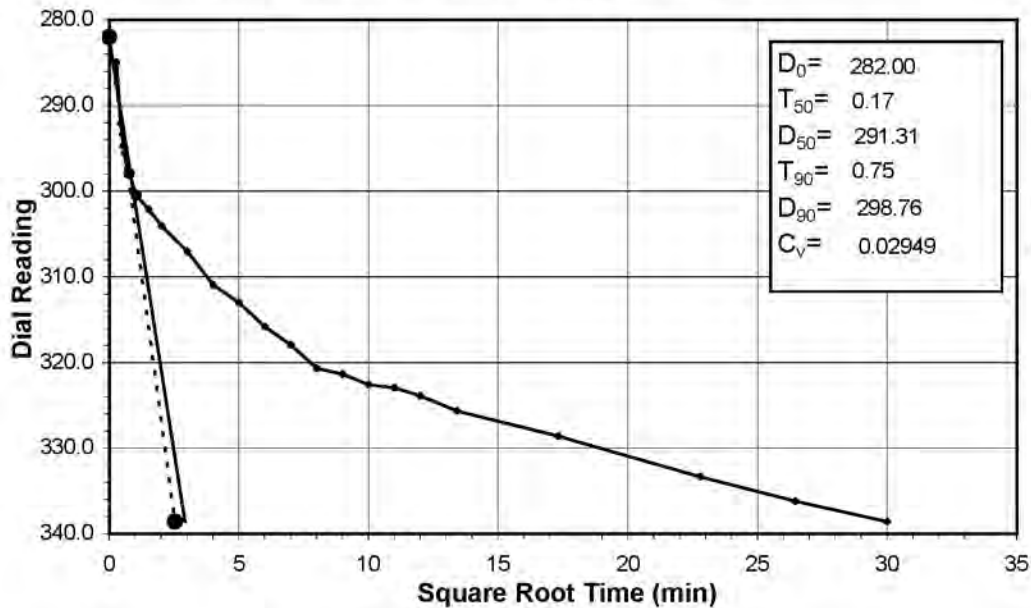
Tested By DB Date 12/4/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

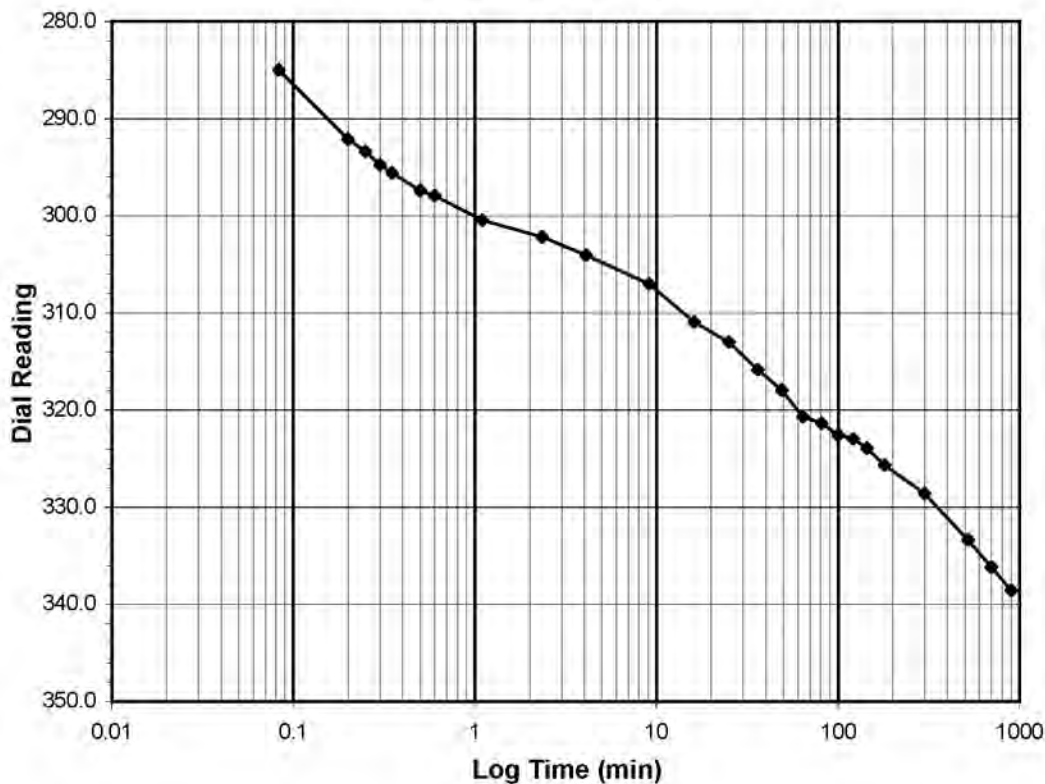
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **338.6**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 12/4/13
 Start Time 23:13:38

Elapsed Time (min)	Dial Reading (div)
Initial	227.4
0.08	285.0
0.20	292.1
0.25	293.4
0.30	294.7
0.35	295.6
0.50	297.4
0.60	297.9
1.10	300.5
2.35	302.2
4.10	304.1
9.10	307.0
16.10	310.9
25.10	313.0
36.10	315.8
49.10	317.9
64.10	320.7
81.10	321.4
100.10	322.6
121.10	323.0
144.10	323.9
180.10	325.7
300.10	328.6
520.10	333.4
700.10	336.2
900.32	338.6



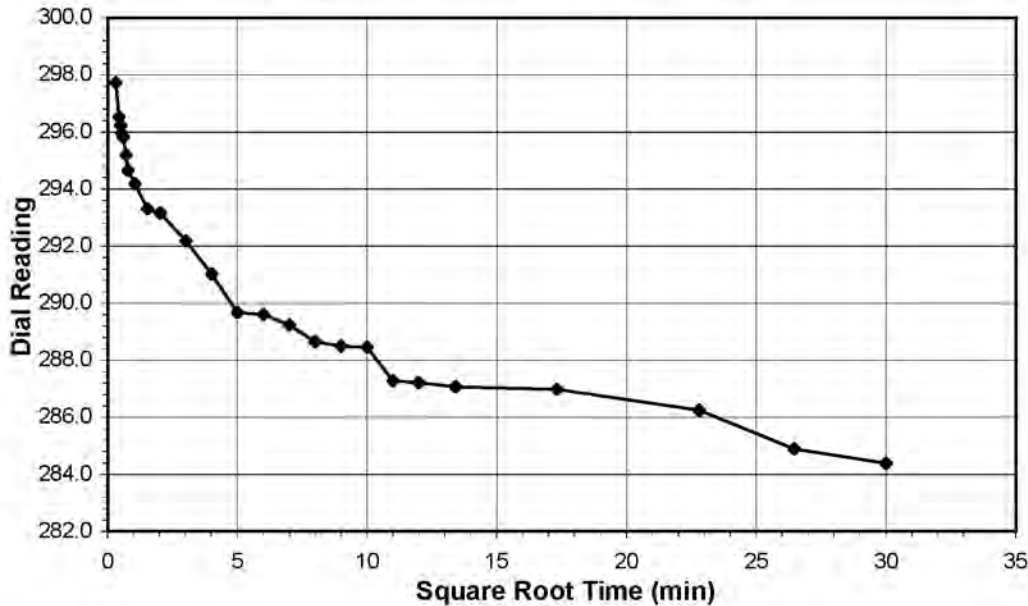
Tested By DB Date 12/4/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

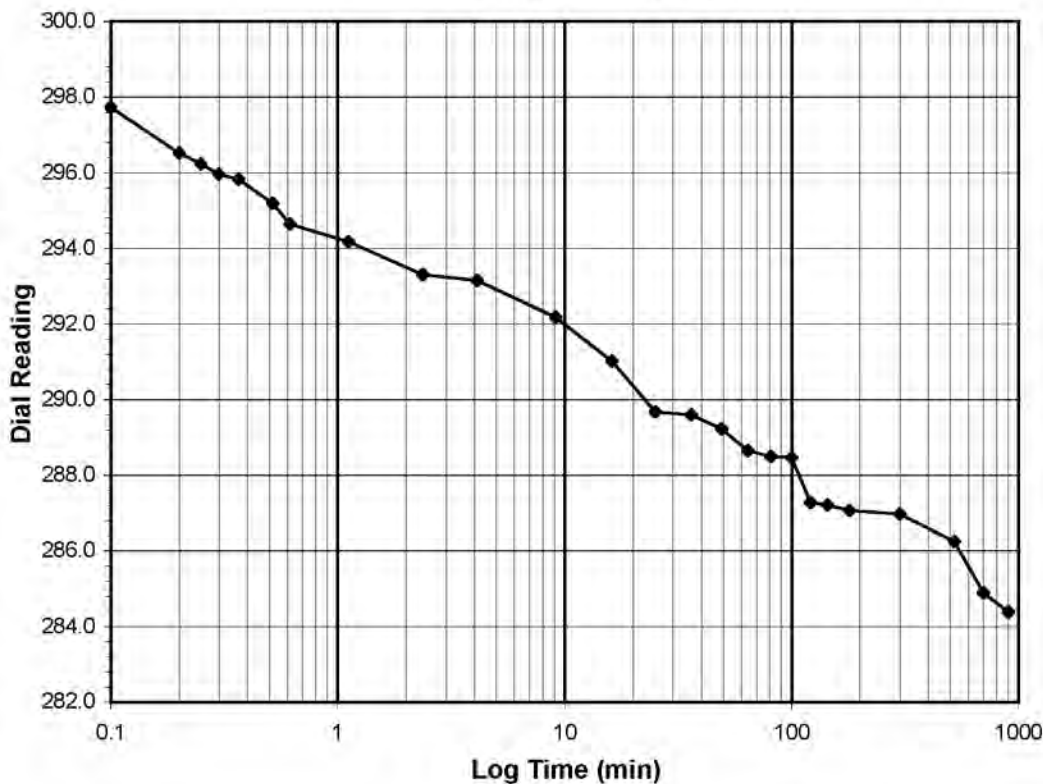
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
 Final Reading (div) 284.4
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 12/5/13
 Start Time 14:13:58

Elapsed Time (min)	Dial Reading (div)
Initial	338.6
0.10	297.7
0.20	296.5
0.25	296.2
0.30	296.0
0.37	295.8
0.52	295.2
0.62	294.6
1.12	294.2
2.37	293.3
4.12	293.2
9.12	292.2
16.12	291.0
25.12	289.7
36.12	289.6
49.12	289.2
64.13	288.6
81.13	288.5
100.13	288.5
121.13	287.3
144.13	287.2
180.13	287.1
300.13	287.0
520.13	286.2
700.13	284.9
900.37	284.4



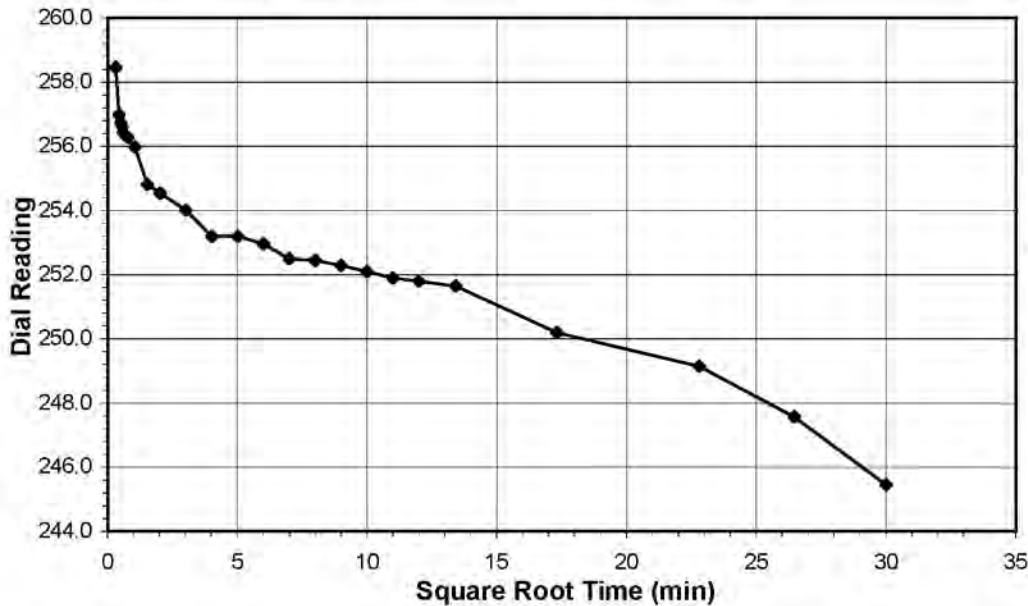
Tested By DB Date 12/5/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

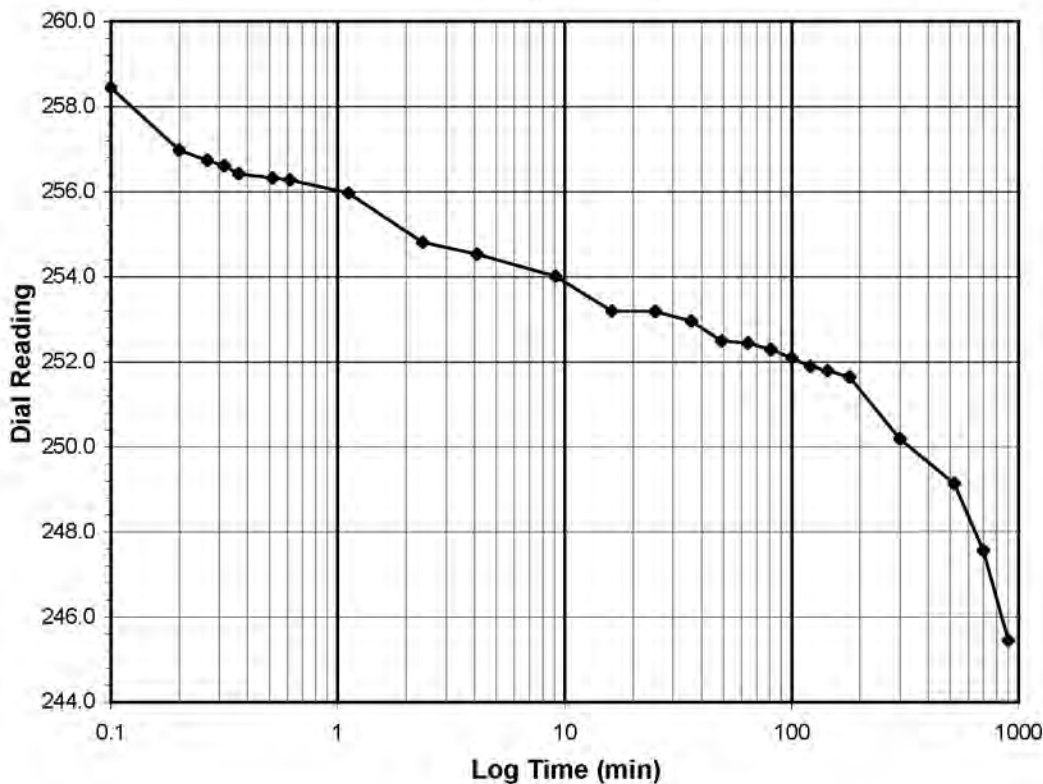
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
Final Reading (div) 245.5
Consolidometer No. G1427
1 Division (in) 0.0001

Start Date 12/6/13
Start Time 5:14:20

Elapsed Time (min)	Dial Reading (div)
Initial	284.4
0.10	258.5
0.20	257.0
0.27	256.7
0.32	256.6
0.37	256.4
0.52	256.3
0.62	256.3
1.12	256.0
2.37	254.8
4.12	254.5
9.12	254.0
16.12	253.2
25.13	253.2
36.13	253.0
49.13	252.5
64.13	252.4
81.13	252.3
100.13	252.1
121.13	251.9
144.13	251.8
180.13	251.6
300.13	250.2
520.13	249.1
700.13	247.6
900.28	245.5



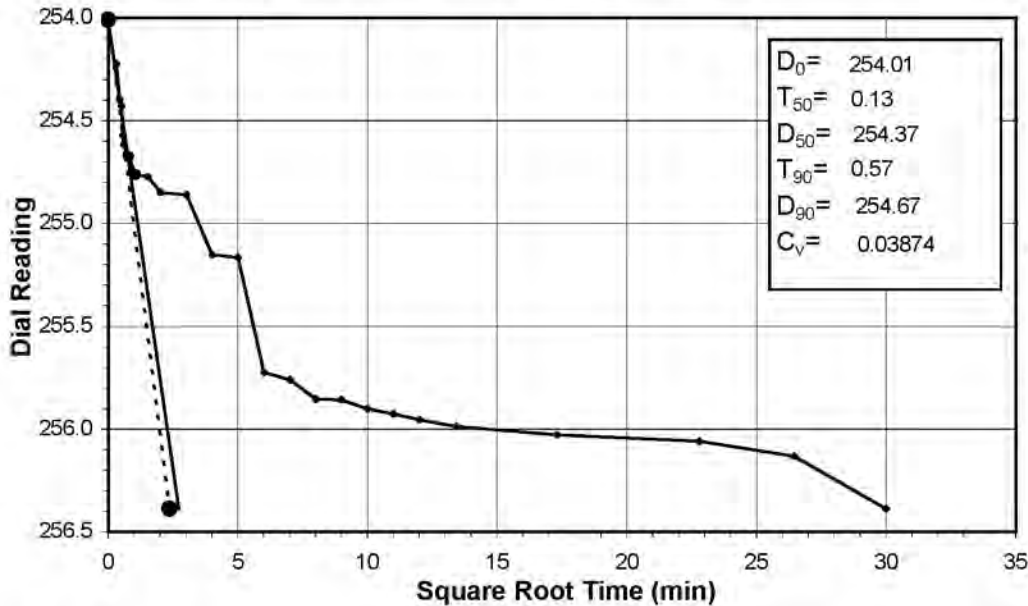
Tested By DB **Date** 12/6/13 **Checked By** NM **Date** 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

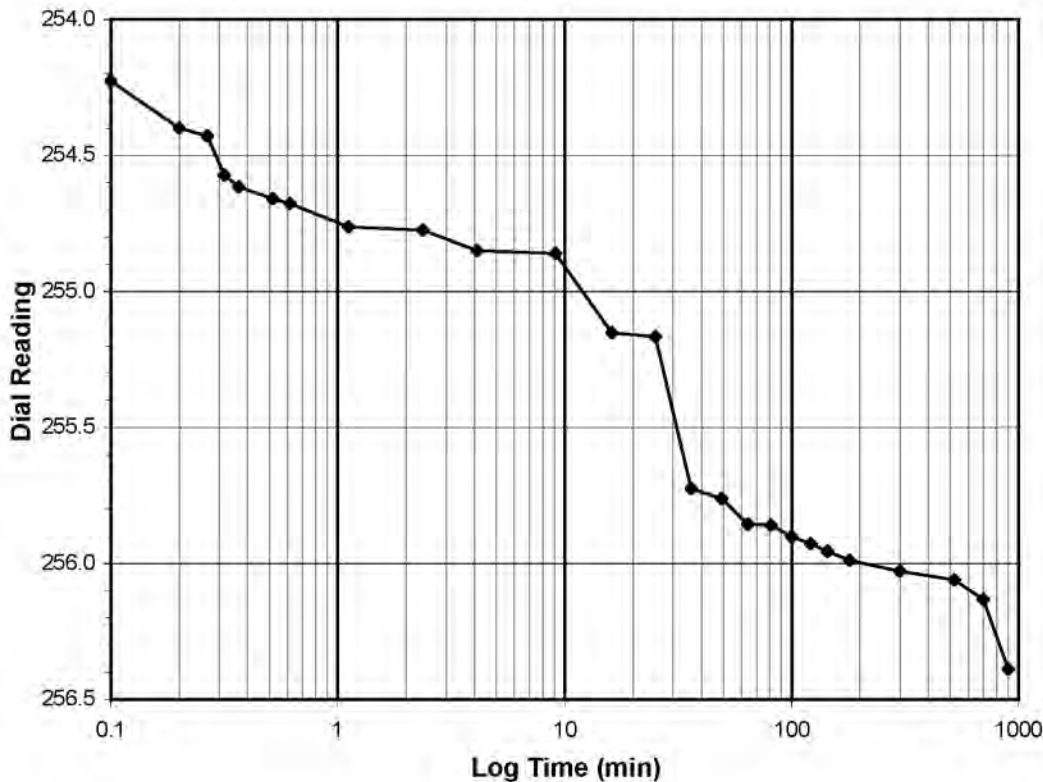
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **256.4**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 12/6/13
 Start Time 20:14:37

Elapsed Time (min)	Dial Reading (div)
Initial	245.5
0.10	254.2
0.20	254.4
0.27	254.4
0.32	254.6
0.37	254.6
0.52	254.7
0.62	254.7
1.12	254.8
2.37	254.8
4.12	254.8
9.12	254.9
16.12	255.2
25.12	255.2
36.13	255.7
49.13	255.8
64.13	255.9
81.13	255.9
100.13	255.9
121.13	255.9
144.13	256.0
180.13	256.0
300.13	256.0
520.13	256.1
700.13	256.1
900.10	256.4



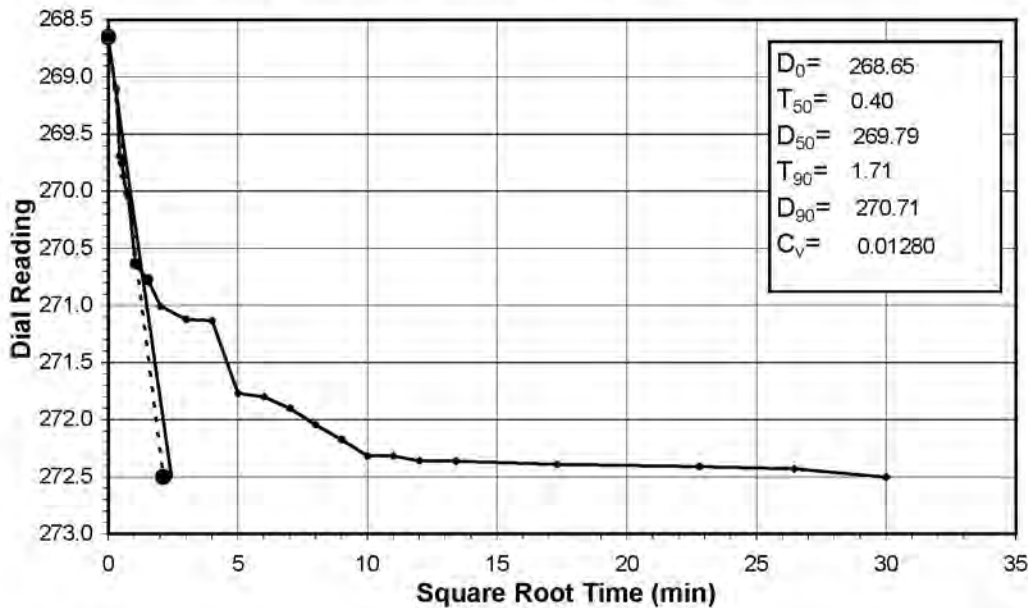
Tested By DB Date 12/6/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

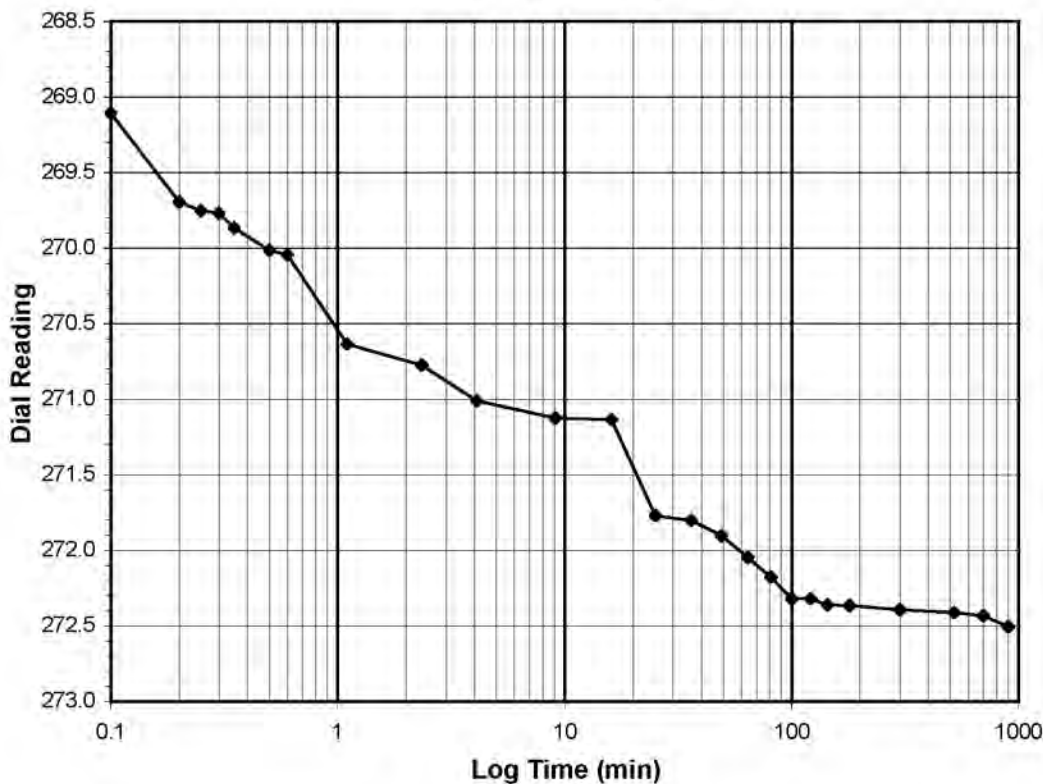
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 272.5
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 12/7/13
 Start Time 11:14:44

Elapsed Time (min)	Dial Reading (div)
Initial	256.4
0.10	269.1
0.20	269.7
0.25	269.8
0.30	269.8
0.35	269.9
0.50	270.0
0.60	270.0
1.10	270.6
2.35	270.8
4.10	271.0
9.10	271.1
16.10	271.1
25.10	271.8
36.12	271.8
49.12	271.9
64.12	272.0
81.12	272.2
100.12	272.3
121.12	272.3
144.12	272.4
180.12	272.4
300.12	272.4
520.12	272.4
700.12	272.4
900.13	272.5



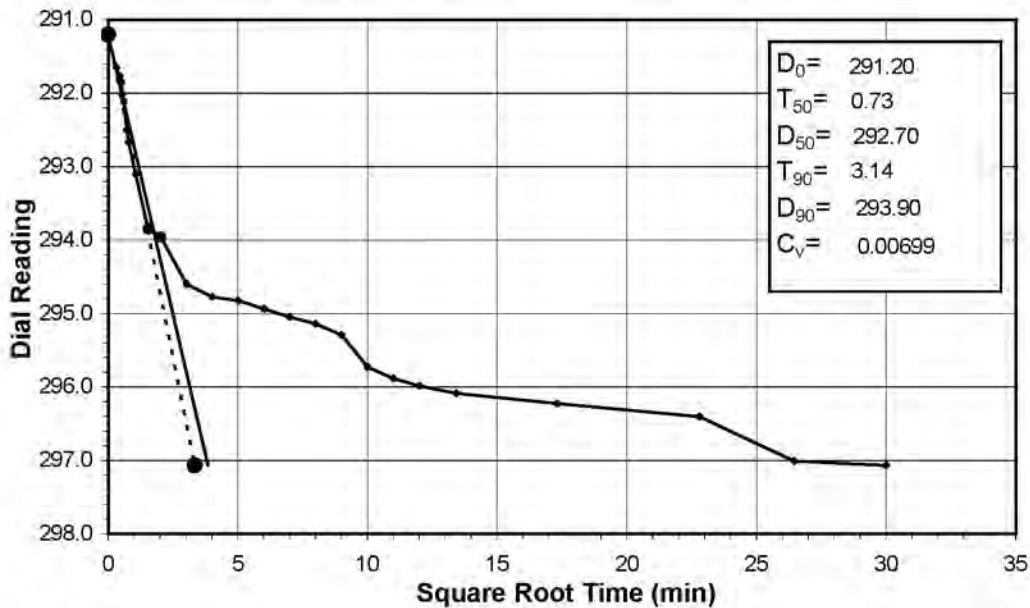
Tested By DB Date 12/7/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

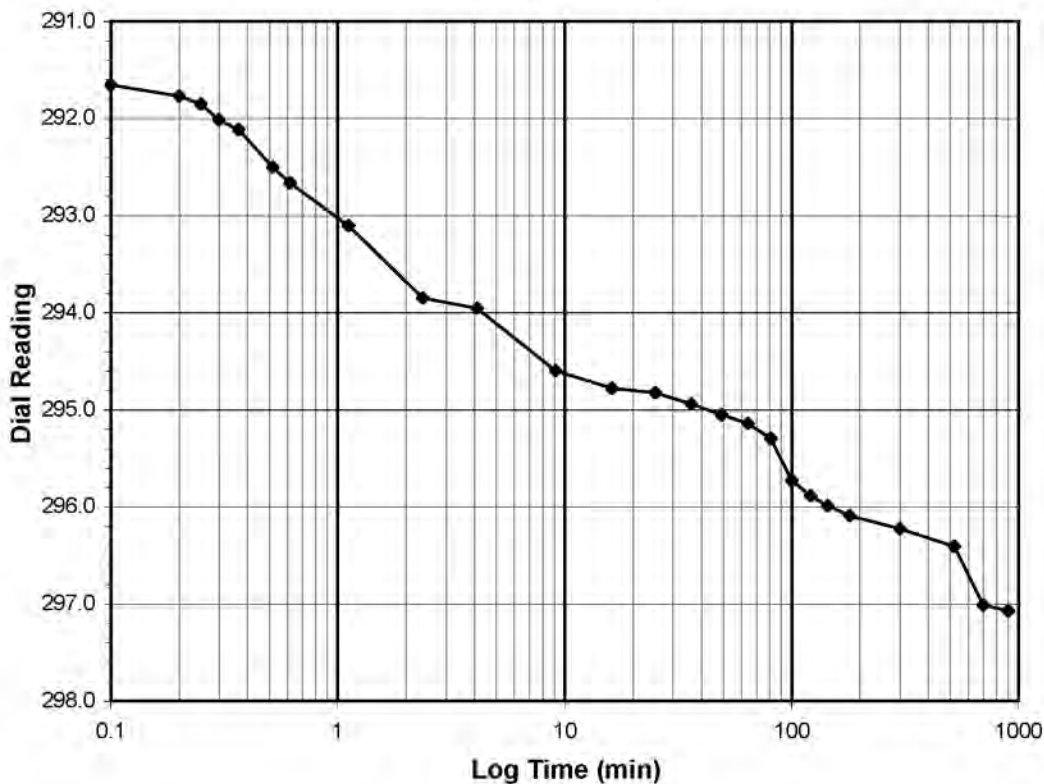
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
Final Reading (div) 297.1
Consolidometer No. G1427
1 Division (in) 0.0001
Start Date 12/8/13
Start Time 2:14:52

Elapsed Time (min)	Dial Reading (div)
Initial	272.5
0.10	291.7
0.20	291.8
0.25	291.8
0.30	292.0
0.37	292.1
0.52	292.5
0.62	292.7
1.12	293.1
2.37	293.8
4.12	294.0
9.12	294.6
16.12	294.8
25.12	294.8
36.12	294.9
49.12	295.0
64.12	295.1
81.12	295.3
100.13	295.7
121.13	295.9
144.13	296.0
180.13	296.1
300.13	296.2
520.13	296.4
700.13	297.0
900.02	297.1



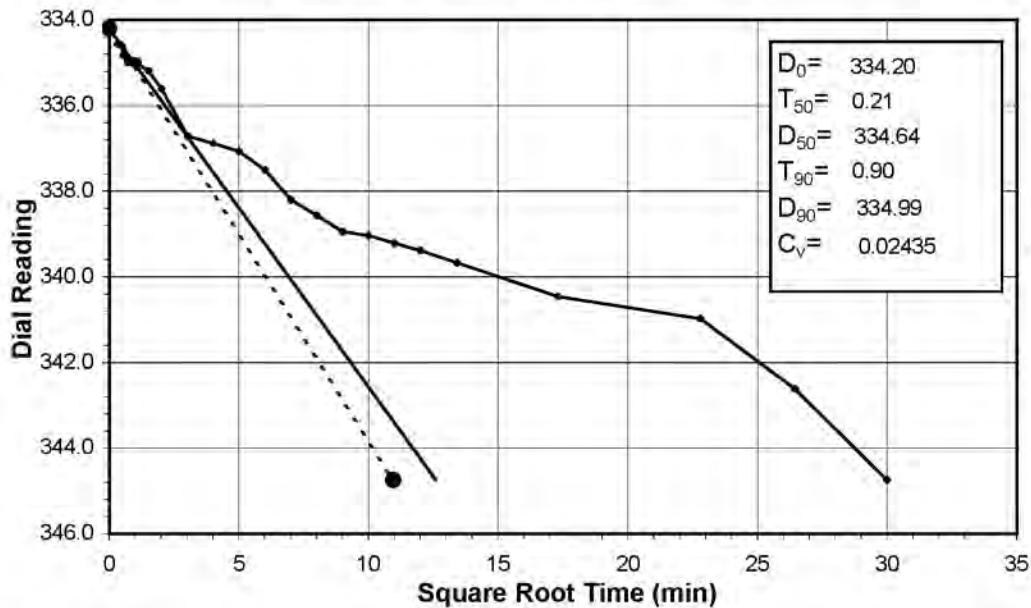
Tested By DB Date 12/8/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

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 Project No. 2013-465-001
 Lab ID 2013-465-001-022

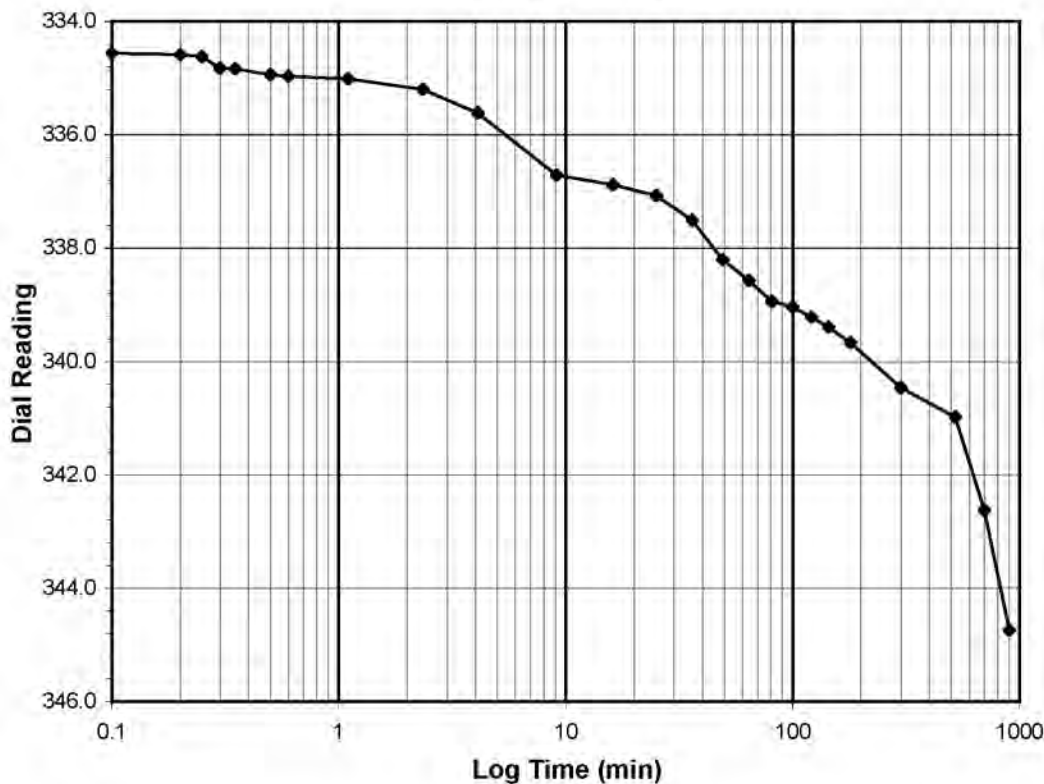
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-4.0
 Final Reading (div) 344.7
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 12/8/13
 Start Time 17:14:53

Elapsed Time (min)	Dial Reading (div)
Initial	297.1
0.10	334.6
0.20	334.6
0.25	334.6
0.30	334.8
0.35	334.8
0.50	334.9
0.60	335.0
1.10	335.0
2.35	335.2
4.10	335.6
9.12	336.7
16.12	336.9
25.12	337.1
36.12	337.5
49.12	338.2
64.12	338.6
81.12	338.9
100.12	339.0
121.12	339.2
144.12	339.4
180.12	339.7
300.12	340.5
520.12	341.0
700.12	342.6
900.35	344.7



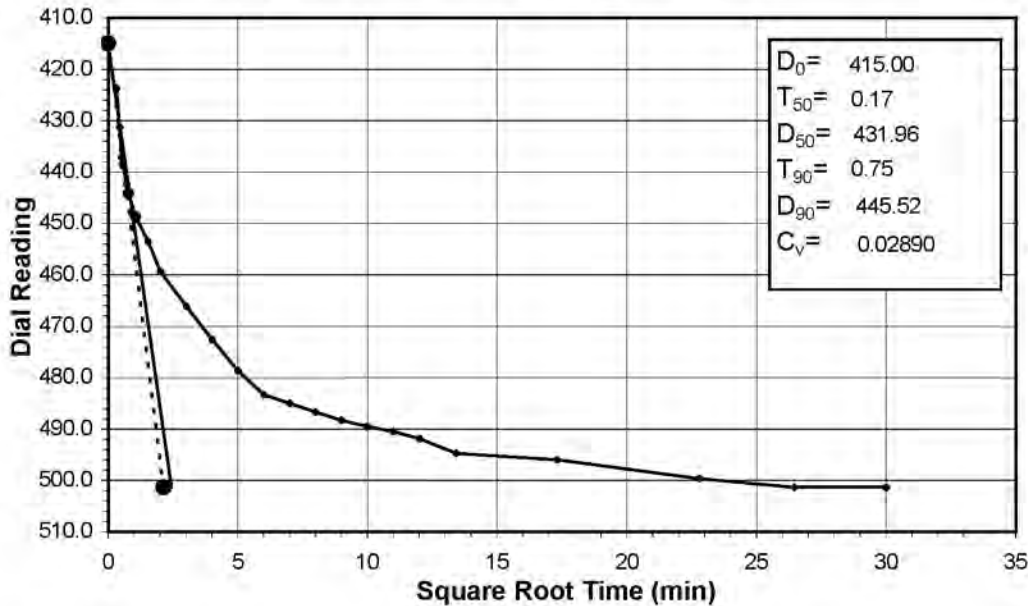
Tested By DB Date 12/8/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

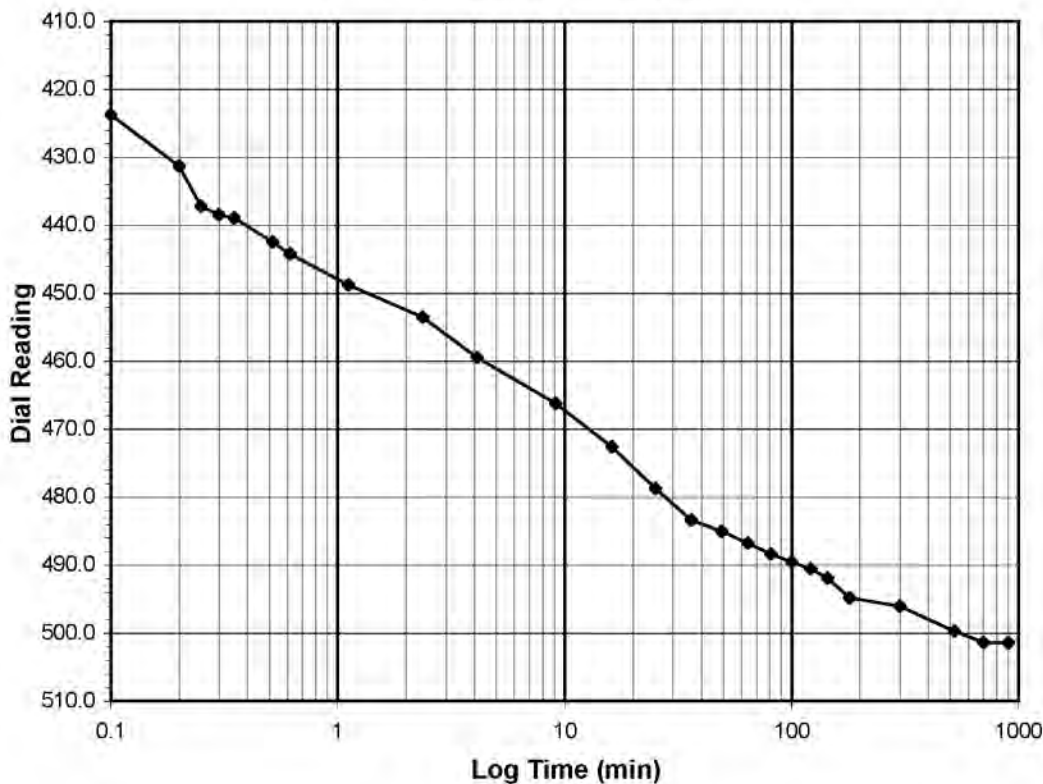
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **501.4**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**
 Start Date **12/9/13**
 Start Time **8:15:14**

Elapsed Time (min)	Dial Reading (div)
Initial	344.7
0.10	423.7
0.20	431.3
0.25	437.1
0.30	438.5
0.35	438.9
0.52	442.4
0.62	444.2
1.12	448.7
2.37	453.5
4.12	459.5
9.12	466.2
16.12	472.6
25.12	478.7
36.12	483.4
49.12	485.0
64.12	486.7
81.12	488.3
100.12	489.5
121.12	490.5
144.13	491.9
180.13	494.8
300.13	496.0
520.13	499.7
700.13	501.3
900.35	501.4



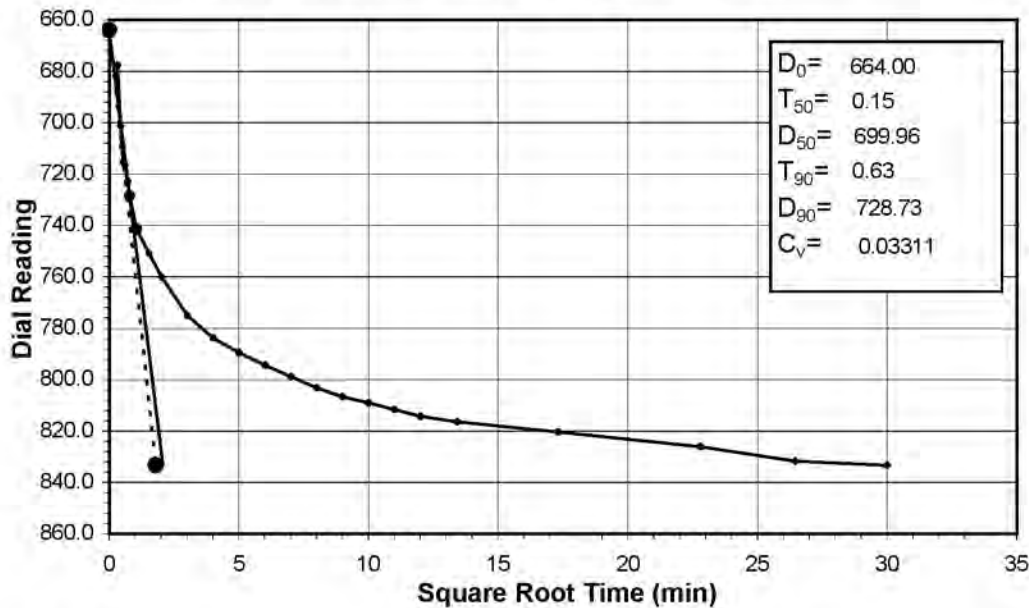
Tested By **DB** Date **12/9/13** Checked By **NM** Date **12/16/13**

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 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

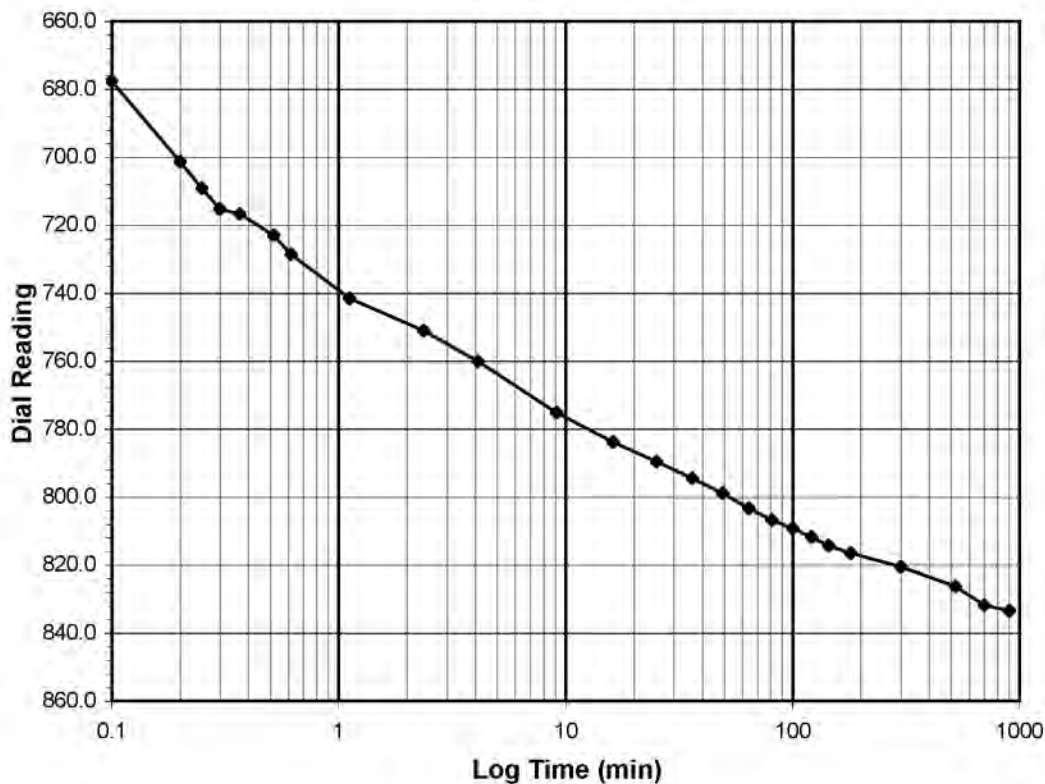
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 833.4
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 12/9/13
 Start Time 23:15:35

Elapsed Time (min)	Dial Reading (div)
Initial	501.4
0.10	677.5
0.20	701.3
0.25	709.0
0.30	715.2
0.37	716.6
0.52	722.9
0.62	728.5
1.12	741.4
2.37	751.0
4.12	760.0
9.12	775.0
16.12	783.7
25.12	789.5
36.12	794.4
49.12	798.8
64.12	803.2
81.12	806.7
100.12	809.1
121.12	811.7
144.12	814.3
180.13	816.4
300.13	820.5
520.13	826.2
700.13	831.7
900.25	833.4



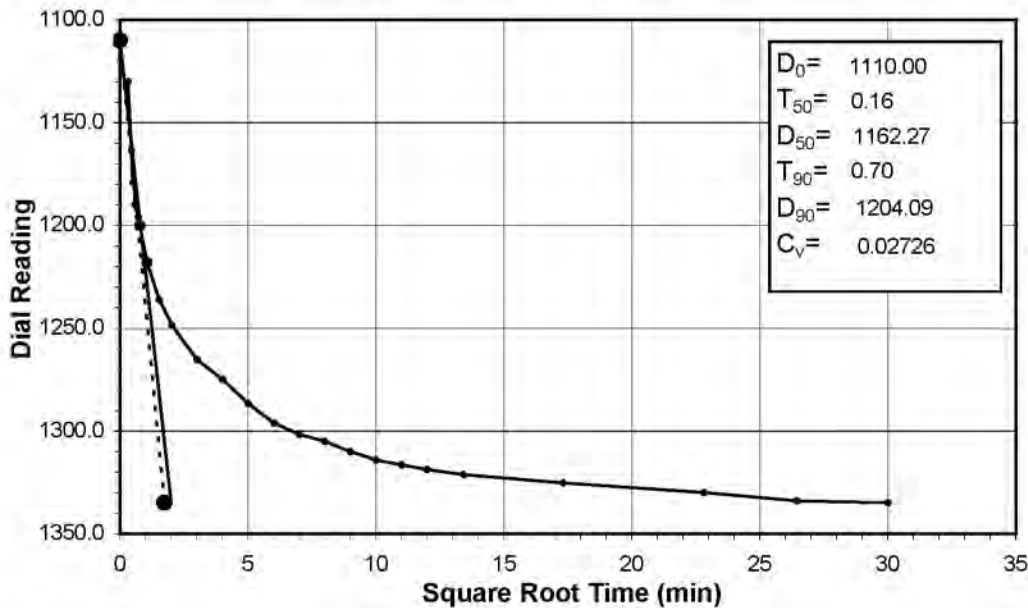
Tested By DB Date 12/9/13 Checked By NM Date 12/16/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

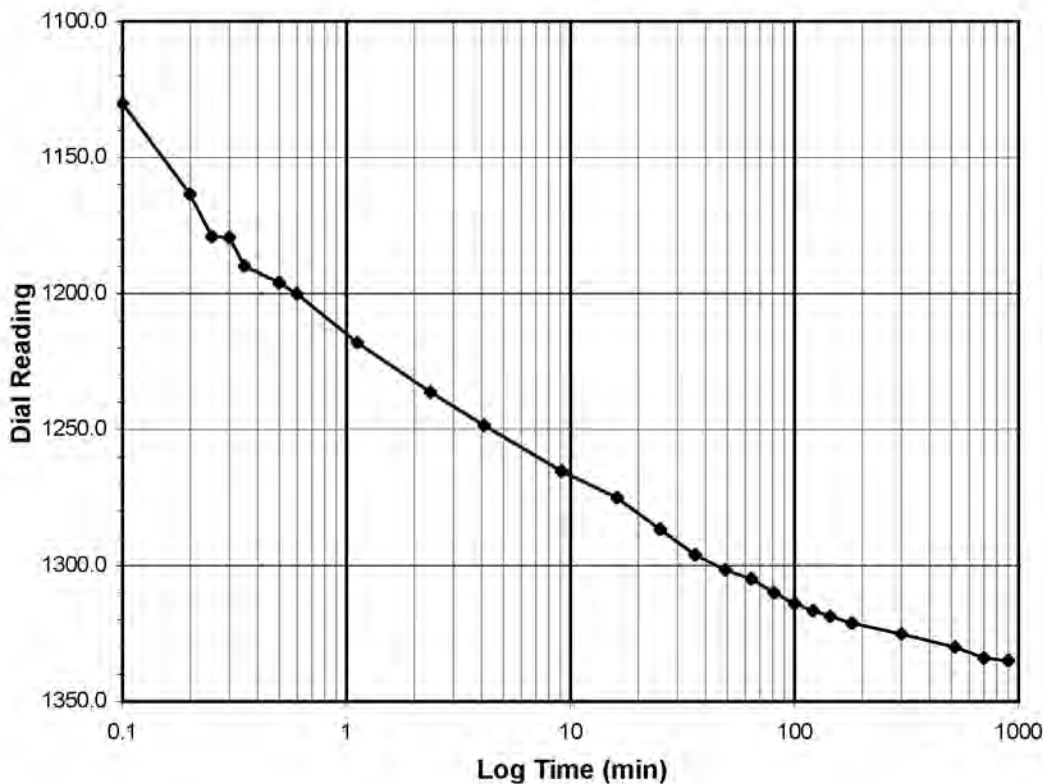
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **1334.9**
 Consolidometer No. **G1427**
 1 Division (in) 0.0001

Start Date 12/10/13
 Start Time 14:15:50

Elapsed Time (min)	Dial Reading (div)
<i>Initial</i>	833.4
0.10	1130.2
0.20	1163.6
0.25	1179.1
0.30	1179.5
0.35	1189.9
0.50	1196.0
0.60	1200.1
1.12	1218.1
2.37	1236.2
4.12	1248.5
9.12	1265.3
16.12	1275.0
25.12	1286.7
36.12	1296.2
49.12	1301.6
64.12	1305.0
81.12	1310.0
100.12	1314.0
121.12	1316.6
144.12	1318.7
180.13	1321.2
300.13	1325.2
520.13	1330.0
700.13	1334.0
900.37	1334.9



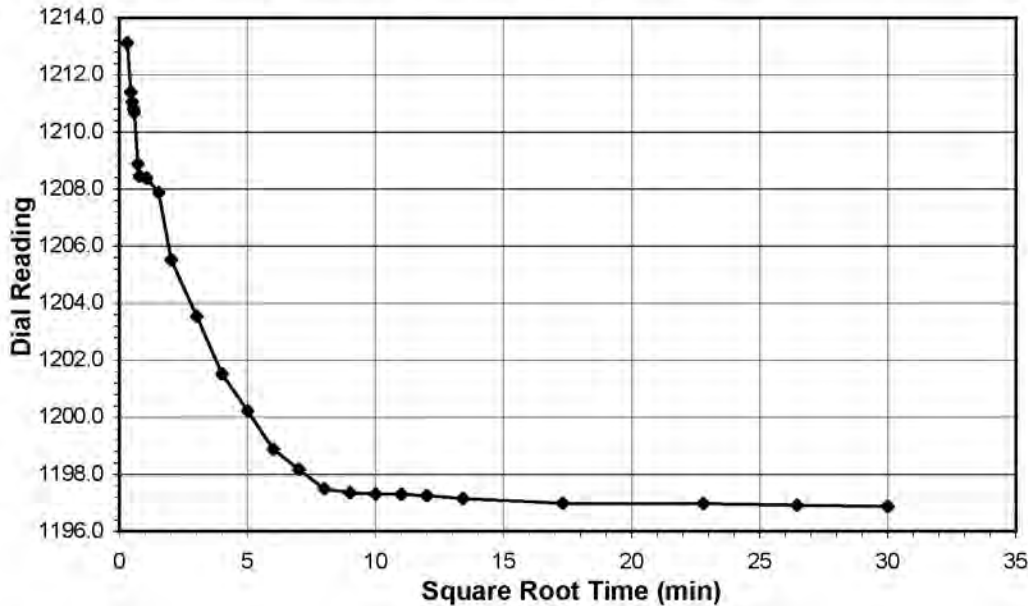
Tested By DB Date 12/10/13 Checked By NM Date 12/16/13

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 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

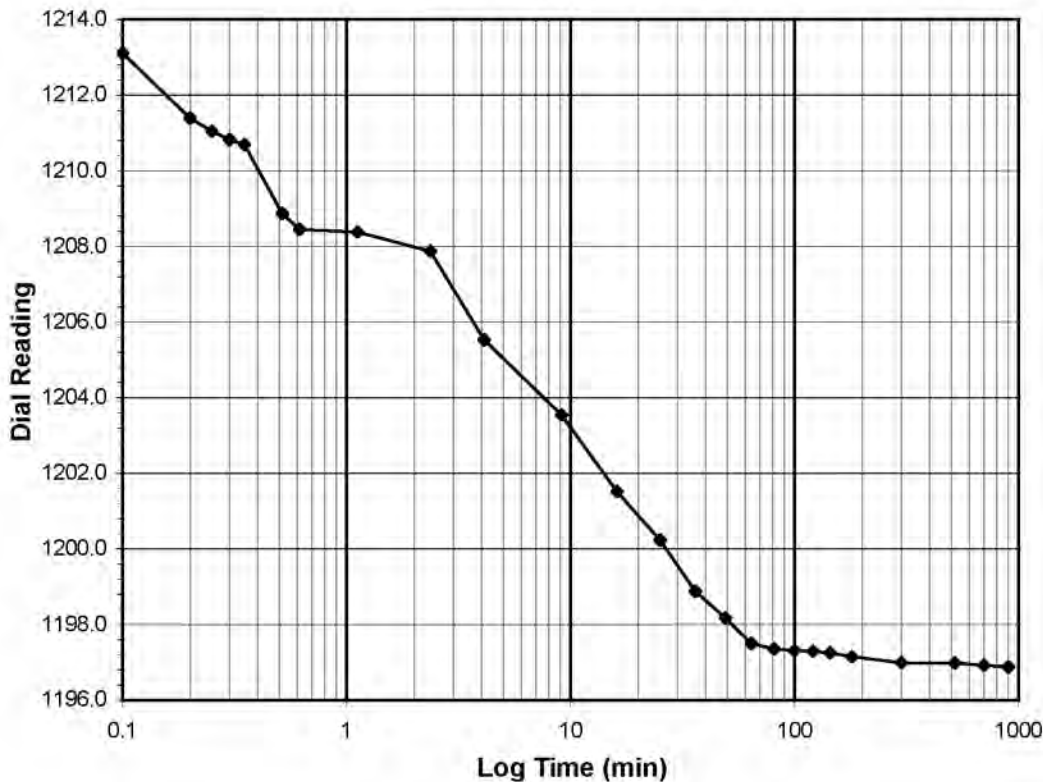
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **32.0-8.0**
 Final Reading (div) **1196.9**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 12/11/13
 Start Time 5:16:12

Elapsed Time (min)	Dial Reading (div)
Initial	1334.9
0.10	1213.1
0.20	1211.4
0.25	1211.0
0.30	1210.8
0.35	1210.7
0.52	1208.9
0.62	1208.4
1.12	1208.4
2.37	1207.9
4.12	1205.5
9.12	1203.5
16.12	1201.5
25.12	1200.2
36.12	1198.9
49.12	1198.2
64.12	1197.5
81.13	1197.4
100.13	1197.3
121.13	1197.3
144.13	1197.3
180.13	1197.2
300.13	1197.0
520.13	1197.0
700.13	1196.9
900.47	1196.9



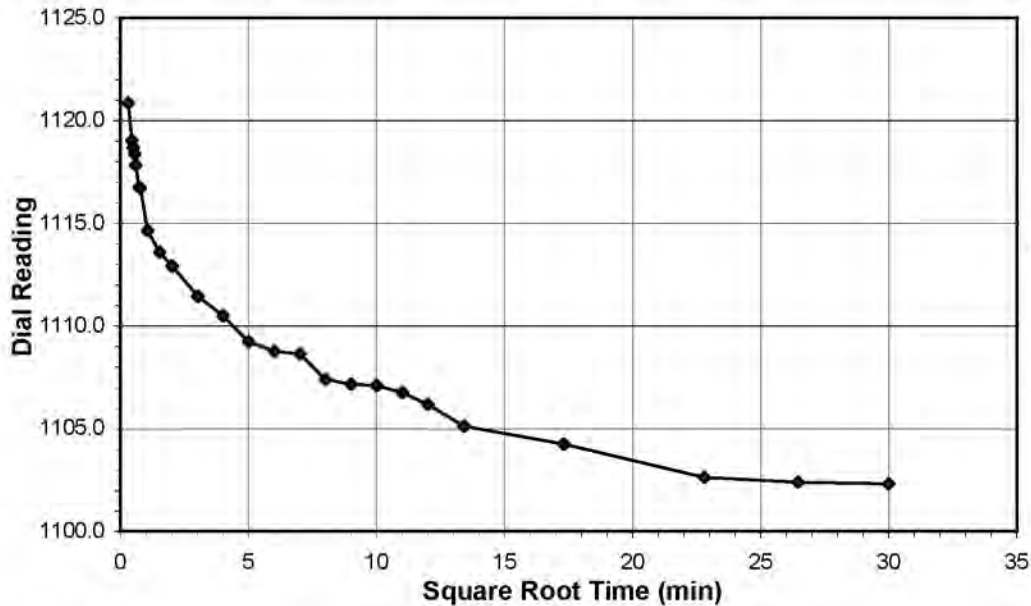
Tested By DB Date 12/11/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

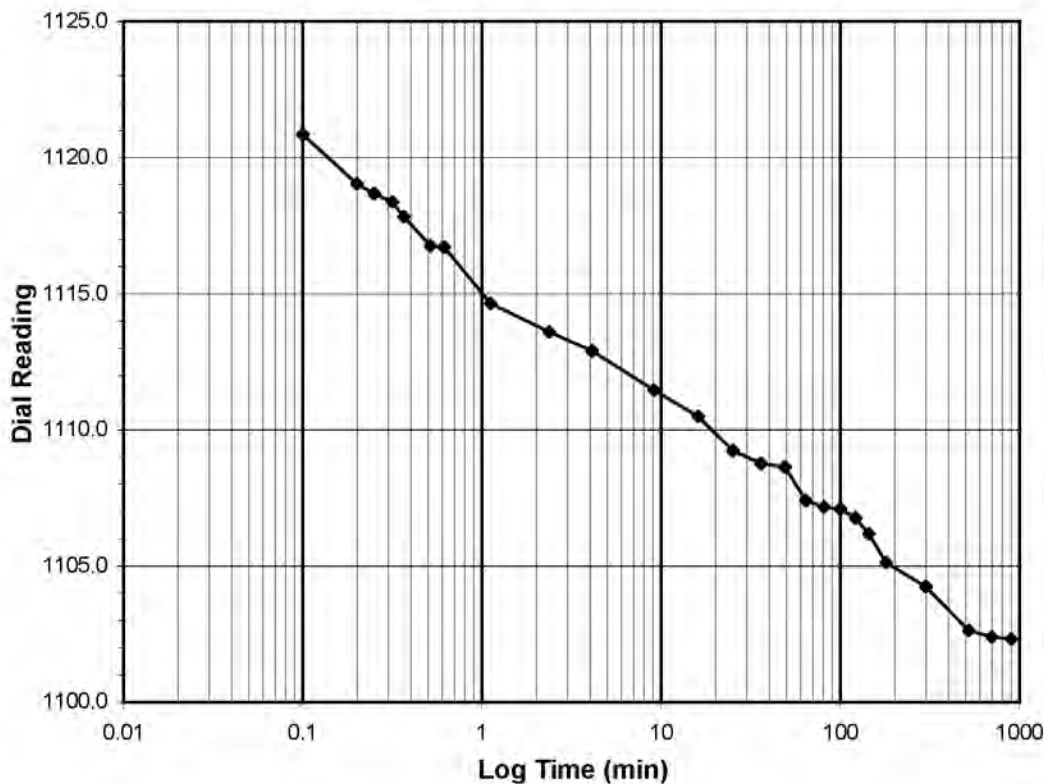
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **8.0-2.0**
 Final Reading (div) **1102.3**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 12/11/13
 Start Time 20:16:40

Elapsed Time (min)	Dial Reading (div)
Initial	1196.9
0.10	1120.9
0.20	1119.0
0.25	1118.7
0.32	1118.4
0.37	1117.8
0.52	1116.8
0.62	1116.7
1.12	1114.6
2.37	1113.6
4.12	1112.9
9.12	1111.5
16.12	1110.5
25.12	1109.2
36.13	1108.8
49.13	1108.6
64.13	1107.4
81.13	1107.2
100.13	1107.1
121.13	1106.8
144.13	1106.2
180.13	1105.1
300.13	1104.2
520.13	1102.6
700.13	1102.4
900.15	1102.3



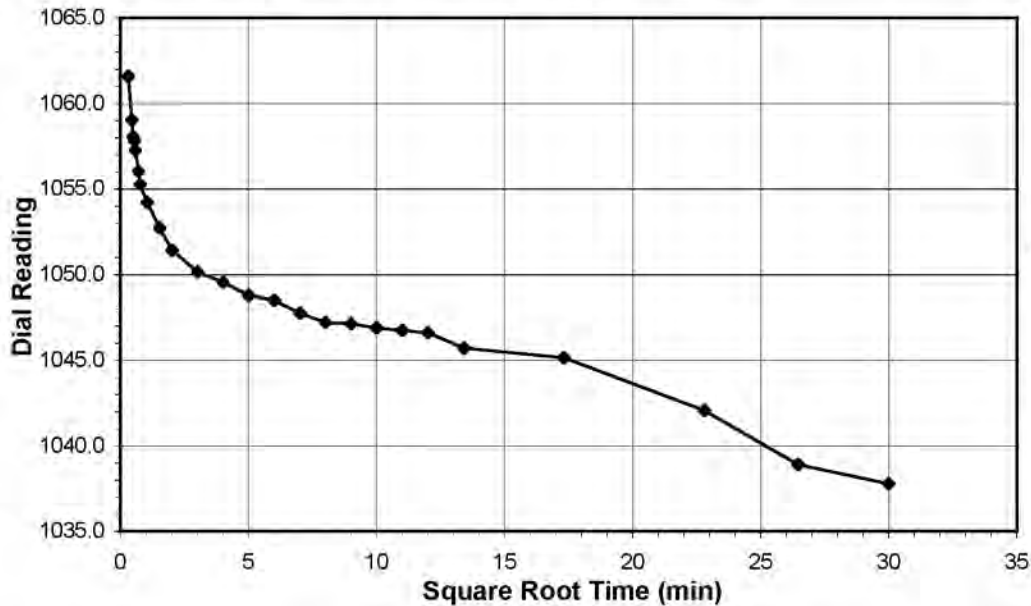
Tested By DB Date 12/11/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

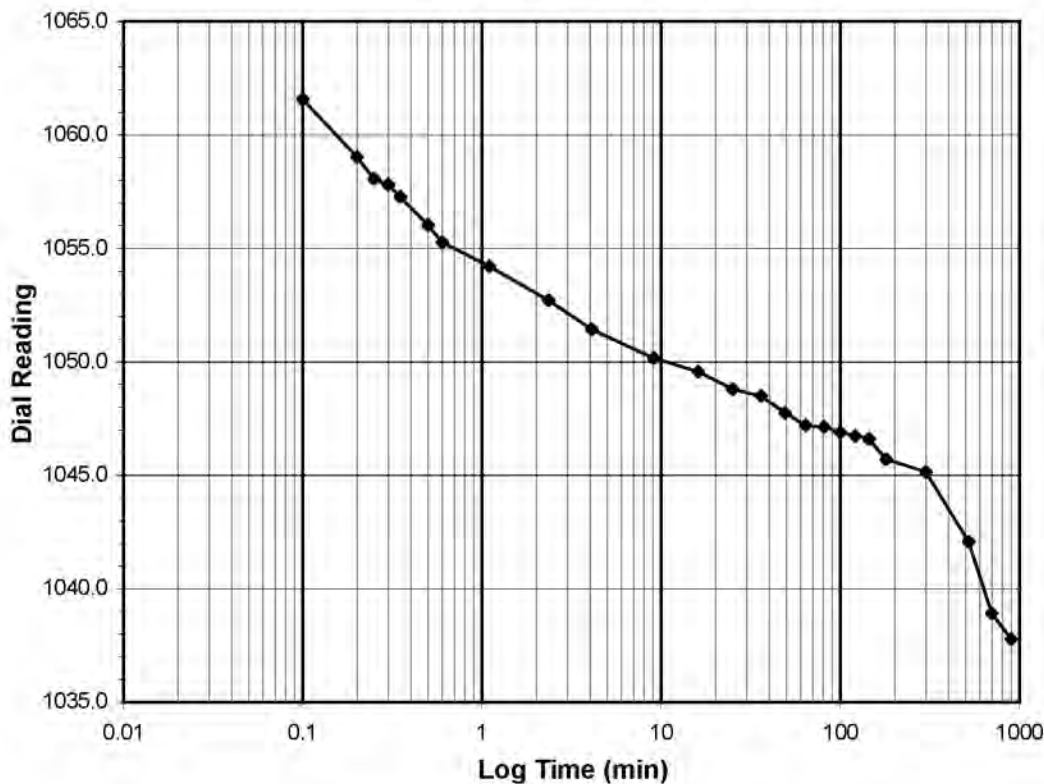
Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **1037.8**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 12/12/13
 Start Time 11:16:49

Elapsed Time (min)	Dial Reading (div)
Initial	1102.3
0.10	1061.6
0.20	1059.0
0.25	1058.1
0.30	1057.8
0.35	1057.3
0.50	1056.0
0.60	1055.3
1.10	1054.2
2.35	1052.7
4.10	1051.4
9.10	1050.2
16.10	1049.6
25.10	1048.8
36.10	1048.5
49.10	1047.8
64.10	1047.2
81.10	1047.1
100.10	1046.9
121.10	1046.7
144.10	1046.6
180.10	1045.7
300.10	1045.2
520.10	1042.1
700.10	1038.9
900.10	1037.8



Tested By DB Date 12/12/13 Checked By NM Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1427

1 Division = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied Pressure	Final Dial Reading	Machine Deflection	Corrected Reading	Height of Sample	Volume	Dry Density	Void Ratio
Tare Number	2730	2713	(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	149.29	150.32								
Wt. Tare & DS (g)	113.59	118.71								
Wt. Water (g)	35.70	31.61	Seating	0	0	0	25.400	80.440	1.39933	0.90091
Wt. Tare (g)	6.71	6.77	0.25	77.2	23.9	53.3	25.265	80.011	1.40683	0.89078
Wt. DS (g)	106.88	111.94	0.5	116.1	40.1	76.0	25.207	79.828	1.41005	0.88646
Water Content (%)	33.40	28.24	1	164.3	62.7	101.6	25.142	79.623	1.41369	0.88160
			2	227.4	95.7	131.7	25.066	79.381	1.41801	0.87587
			4	338.6	128.7	209.9	24.867	78.751	1.42933	0.86101
<u>Sample Parameters</u>			1	284.4	87.7	196.7	24.900	78.857	1.42742	0.86351
Sample Diameter (in)	2.5	2.5	0.25	245.5	53.7	191.7	24.913	78.898	1.42668	0.86446
Sample Height (in)	1.0000	0.9071	0.5	256.4	64.2	192.1	24.912	78.894	1.42675	0.86438
Sample Volume (cm ³)	80.44	72.96	1	272.5	76.5	196.0	24.902	78.863	1.42731	0.86365
Wt. Wet Sample + Ring (g)	364.81	359.00	2	297.1	100.1	197.0	24.900	78.855	1.42745	0.86346
Wt. of Ring (g)	214.65	214.65	4	344.7	126.6	218.1	24.846	78.685	1.43054	0.85944
Wt. of Wet Sample (g)	150.16	144.35	8	501.4	178.9	322.5	24.581	77.846	1.44596	0.83961
Wet Density (pcf)	116.48	123.45	16	833.4	232.8	600.6	23.875	75.609	1.48874	0.78674
Wet Density (g/cm ³)	1.87	1.98	32	1334.9	317.3	1017.5	22.815	72.255	1.55785	0.70748
Water Content (%)	33.40	28.24	8	1196.9	217.5	979.4	22.912	72.562	1.55126	0.71473
Wt. of Dry Sample (g)	112.56	112.56	2	1102.3	157.0	945.3	22.999	72.836	1.54542	0.72121
Dry Density (pcf)	87.32	96.27	0.5	1037.8	108.4	929.4	23.039	72.964	1.54271	0.72424
Dry Density (g/cm ³)	1.40	1.54								
Void Ratio	0.9009	0.7242								
Saturation (%)	98.62	100.00								
Specific Gravity	2.66	Measured								
			Tested By	DB	Date	12/2/13	Input Checked By	NM	Date	12/16/13

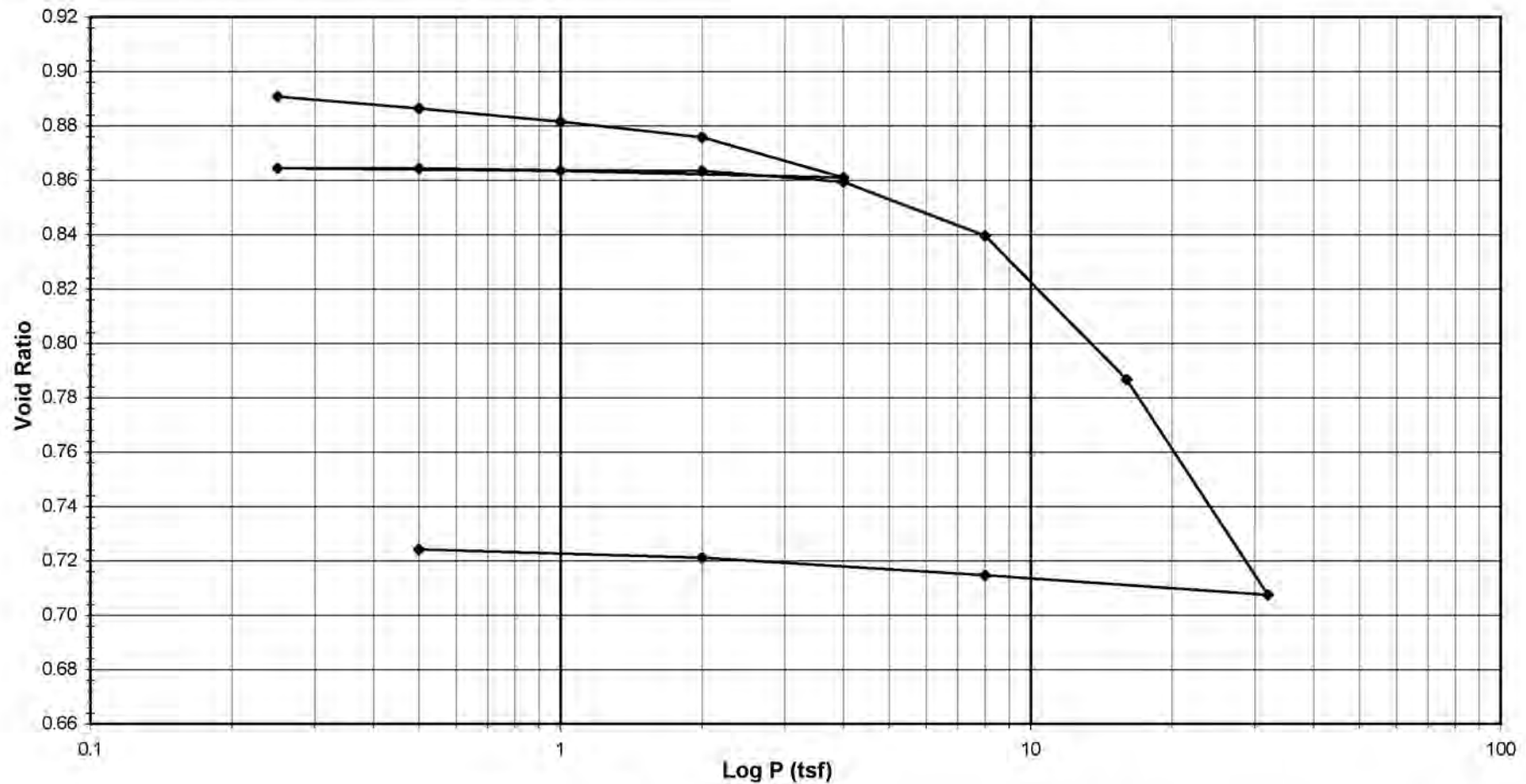
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-022

Boring No. R-6-1b
Depth (ft) 163.4-163.6
Sample No. ST-5
Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 12/2/13

Approved By RJO Date 12/16/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1427

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final						
			Load	Dial	Machine	Corrected	Sample	Time
			Increment	Reading	Deflection	Dial Reading	Height	t₅₀
				@ t₅₀		@ t₅₀	@ t₅₀	
			(tsf)	(div)	(div)	(div)	(mm)	(min)
								C_v
								(cm²/sec)
<i>Water Content</i>								
Tare Number	2730	2713						
Wt. Tare & WS (g)	149.29	150.32						
Wt. Tare & DS (g)	113.59	118.71						
Wt. Water (g)	35.7	31.61						
Wt. Tare (g)	6.71	6.77						
Wt. DS (g)	106.88	111.94						
Water Content (%)	33.40	28.24						
<i>Sample Parameters</i>								
Sample Diameter (in)	2.5	2.5						
Sample Height (in)	1.0000	0.9071						
Sample Volume (cm ³)	80.44	72.96						
Wt. Wet Sample + Ring (g)	364.81	359.00						
Wt. of Ring (g)	214.65	214.65						
Wt. of Wet Sample (g)	150.16	144.35						
Wet Density (pcf)	116.48	123.45						
Wet Density (g/cm ³)	1.87	1.98						
Water Content (%)	33.40	28.24						
Wt. of Dry Sample (g)	112.56	112.56						
Dry Density (pcf)	87.32	96.27						
Dry Density (g/cm ³)	1.40	1.54						
Void Ratio	0.9009	0.7242						
Saturation (%)	98.62	100.00						
Specific Gravity	2.66	Measured						

Tested By DB Date 12/2/13 Input Checked By NM Date 12/16/13

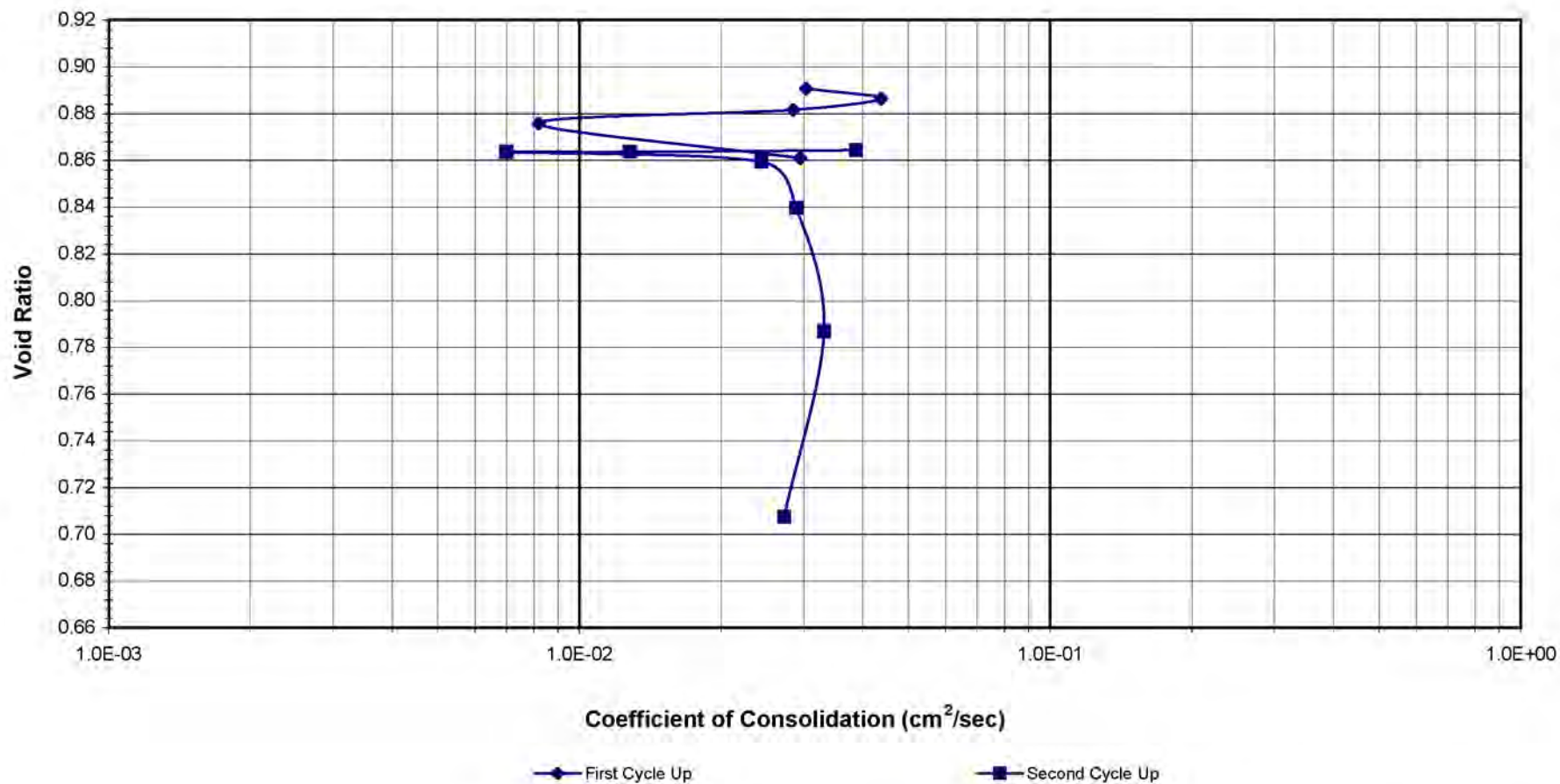
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-022

Boring No. R-6-1b
 Depth (ft) 163.4-163.6
 Sample No. ST-5
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 12/2/13

Approved By RJO Date 12/16/13

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	163.4-163.6
Project No.	2013-465-001	Sample No.	ST-5
Lab ID #	2013-465-001-022		

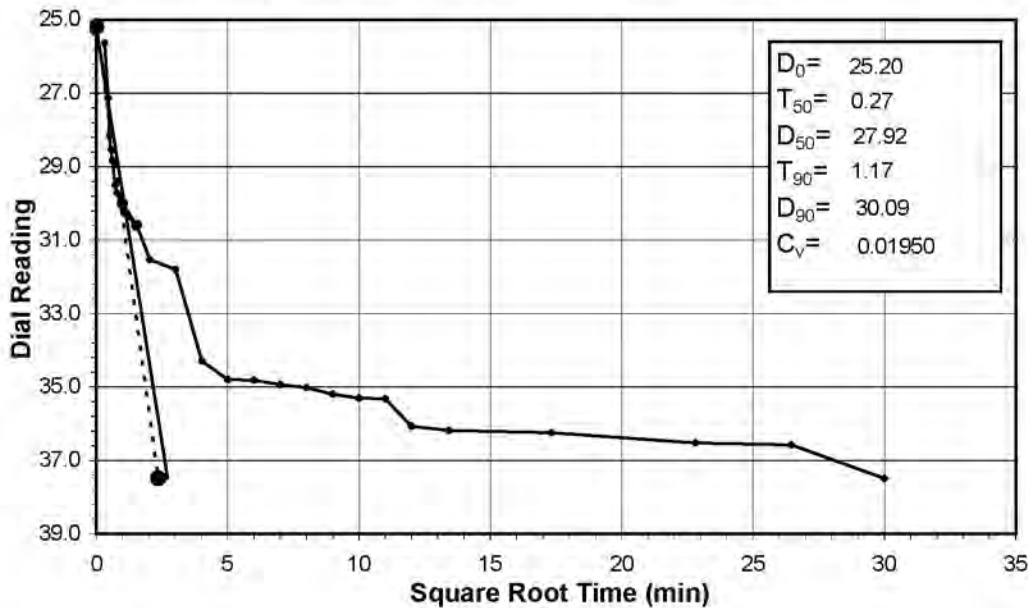
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1427	1/9/14
Load Cell	G1428	1/9/14
LVDT	G1429	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

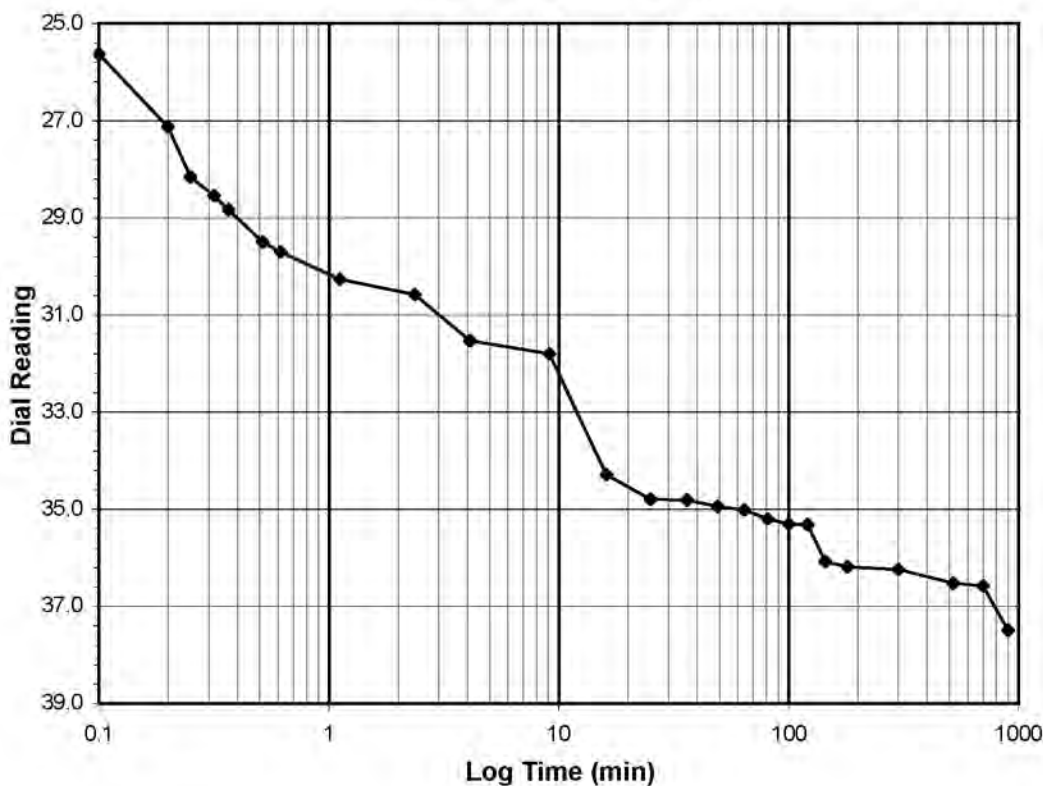
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 37.5
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/7/13
 Start Time 15:03:51

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	25.6
0.20	27.1
0.25	28.2
0.32	28.5
0.37	28.8
0.52	29.5
0.62	29.7
1.12	30.3
2.37	30.6
4.12	31.5
9.12	31.8
16.12	34.3
25.12	34.8
36.12	34.8
49.12	34.9
64.12	35.0
81.12	35.2
100.12	35.3
121.12	35.3
144.12	36.1
180.12	36.2
300.12	36.2
520.12	36.5
700.12	36.6
900.23	37.5



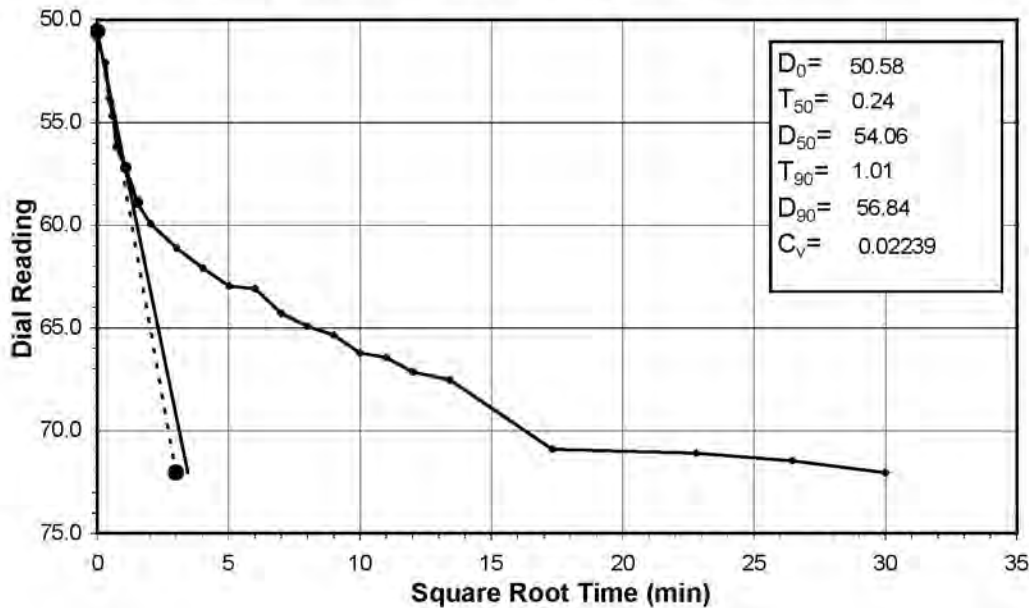
Tested By CLK Date 11/7/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

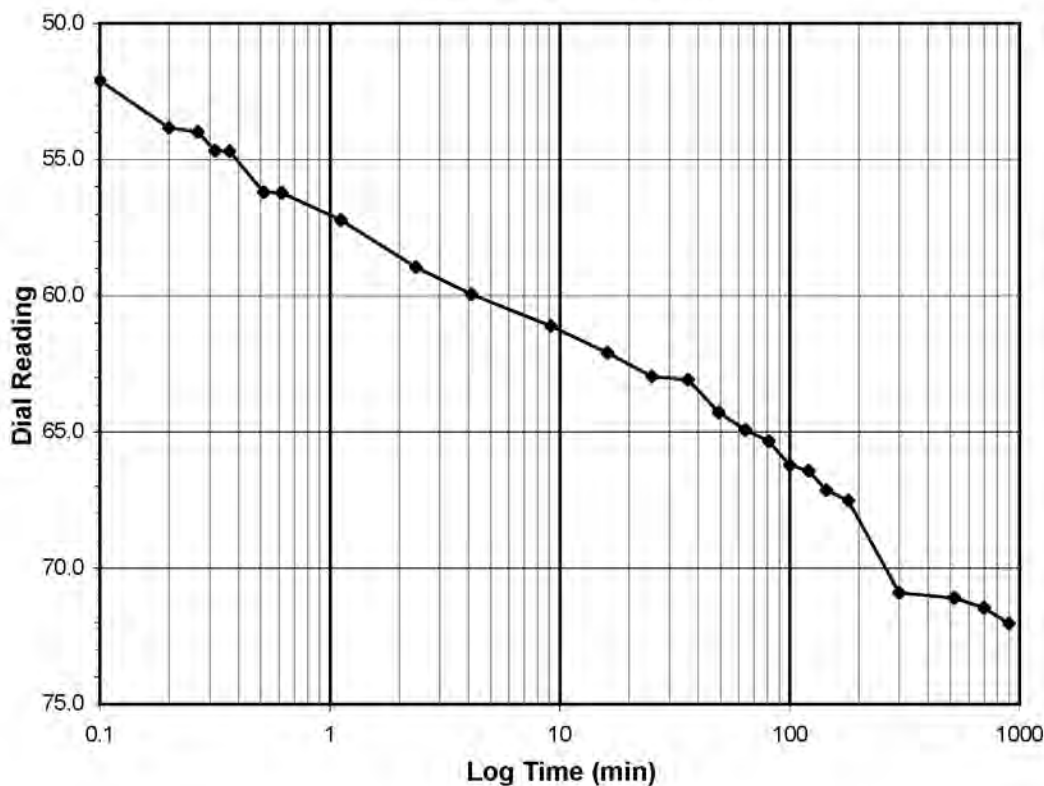
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **72.0**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**
 Start Date **11/8/13**
 Start Time **6:04:05**

Elapsed Time (min)	Dial Reading (div)
Initial	37.5
0.10	52.1
0.20	53.8
0.27	54.0
0.32	54.7
0.37	54.7
0.52	56.2
0.62	56.2
1.12	57.2
2.37	58.9
4.13	59.9
9.13	61.1
16.13	62.1
25.13	63.0
36.13	63.1
49.13	64.3
64.13	64.9
81.13	65.3
100.13	66.2
121.13	66.4
144.13	67.1
180.13	67.5
300.15	70.9
520.15	71.1
700.15	71.5
900.23	72.0



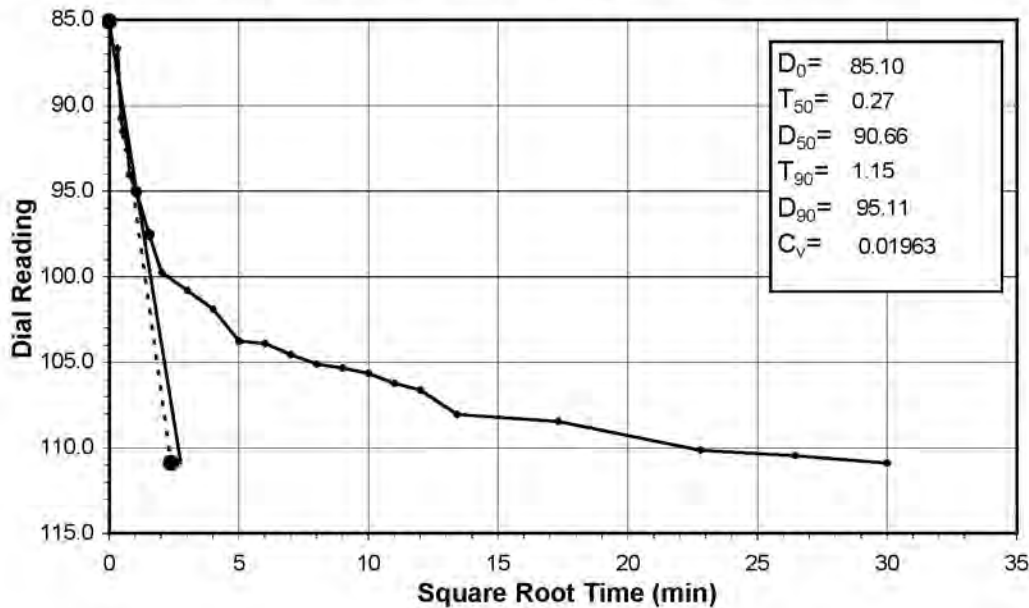
Tested By **CLK** Date **11/8/13** Checked By **TM** Date **12/5/13**

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

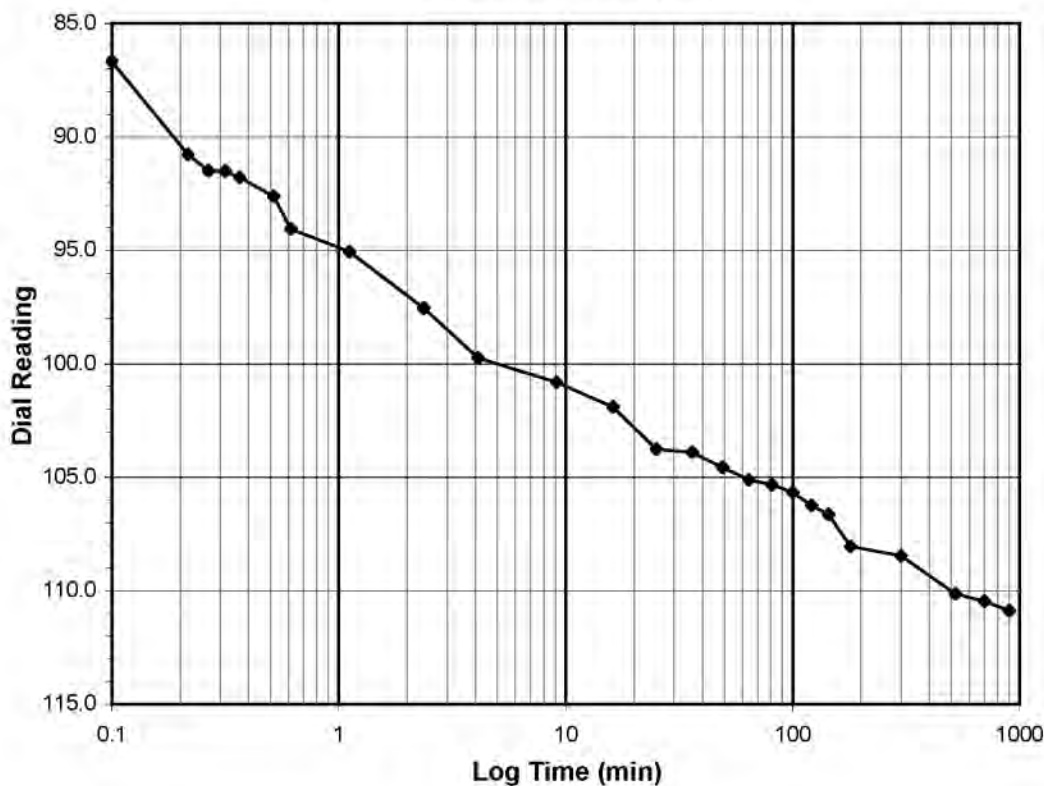
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 110.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/8/13
 Start Time 21:04:19

Elapsed Time (min)	Dial Reading (div)
Initial	72.0
0.10	86.7
0.22	90.8
0.27	91.5
0.32	91.5
0.37	91.8
0.52	92.6
0.62	94.0
1.12	95.1
2.37	97.5
4.12	99.7
9.12	100.8
16.12	101.9
25.12	103.8
36.12	103.9
49.12	104.6
64.12	105.1
81.12	105.3
100.12	105.7
121.12	106.2
144.12	106.6
180.12	108.1
300.12	108.4
520.12	110.1
700.12	110.5
900.08	110.9



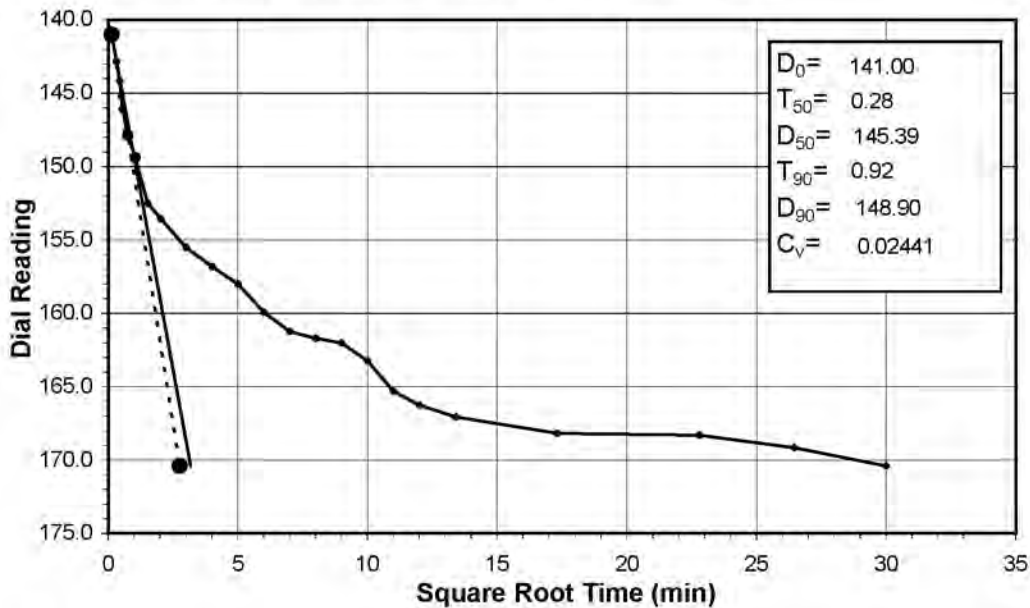
Tested By CLK Date 11/8/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

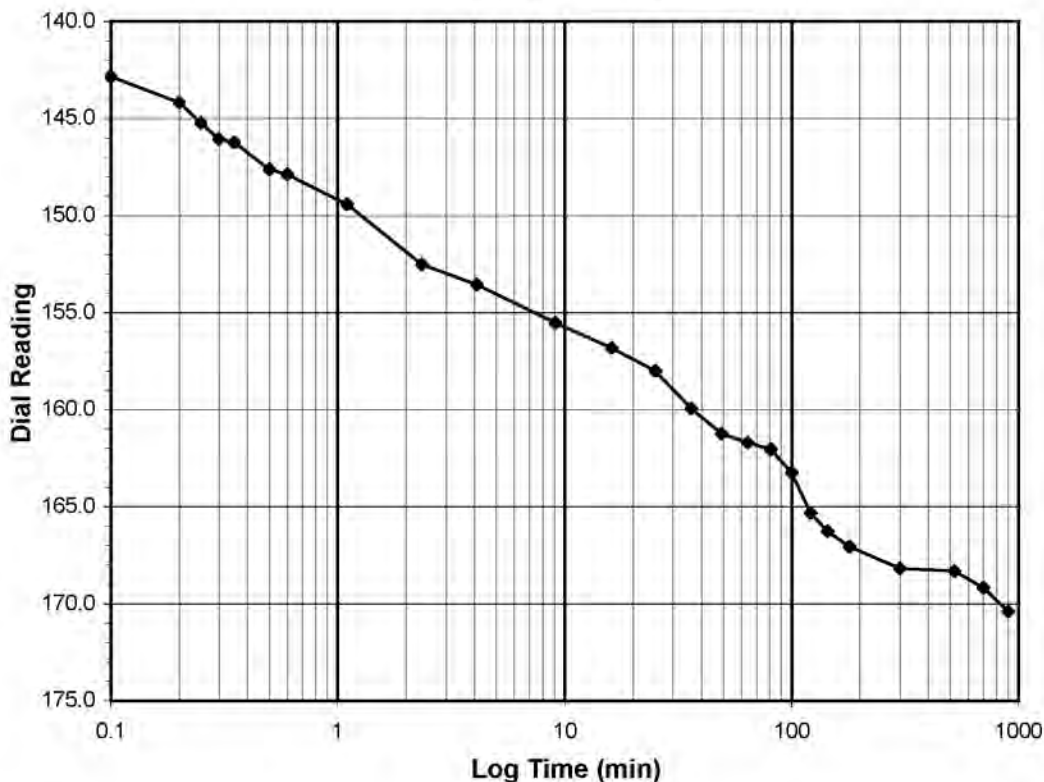
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 170.4
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/9/13
 Start Time 12:04:24

Elapsed Time (min)	Dial Reading (div)
Initial	110.9
0.10	142.8
0.20	144.2
0.25	145.2
0.30	146.1
0.35	146.2
0.50	147.6
0.60	147.9
1.10	149.4
2.35	152.5
4.10	153.6
9.10	155.5
16.10	156.8
25.10	158.0
36.10	159.9
49.10	161.2
64.10	161.7
81.10	162.0
100.12	163.3
121.12	165.3
144.12	166.3
180.12	167.1
300.12	168.2
520.12	168.3
700.12	169.2
900.08	170.4



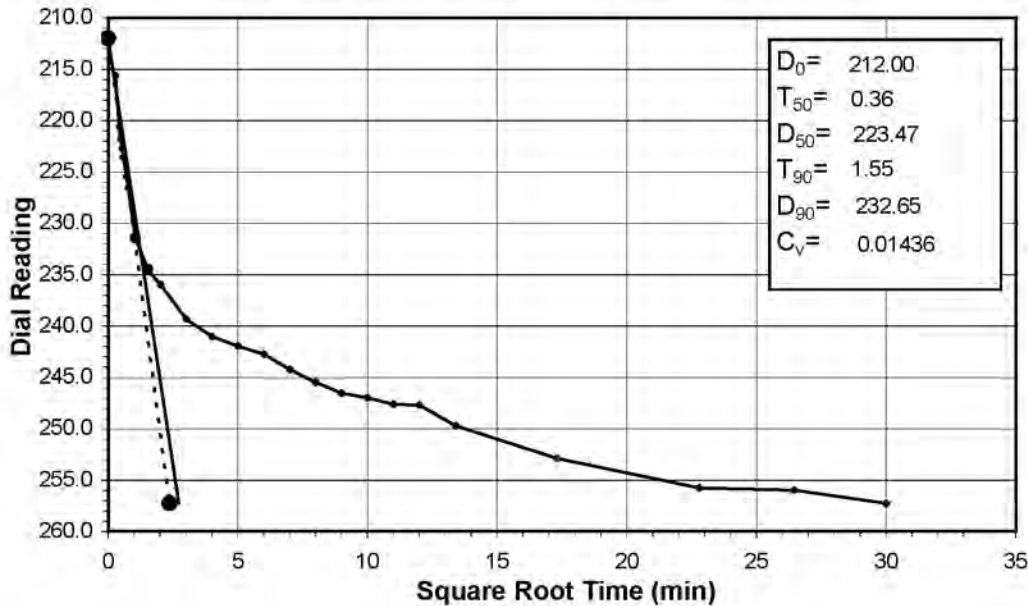
Tested By CLK Date 11/9/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

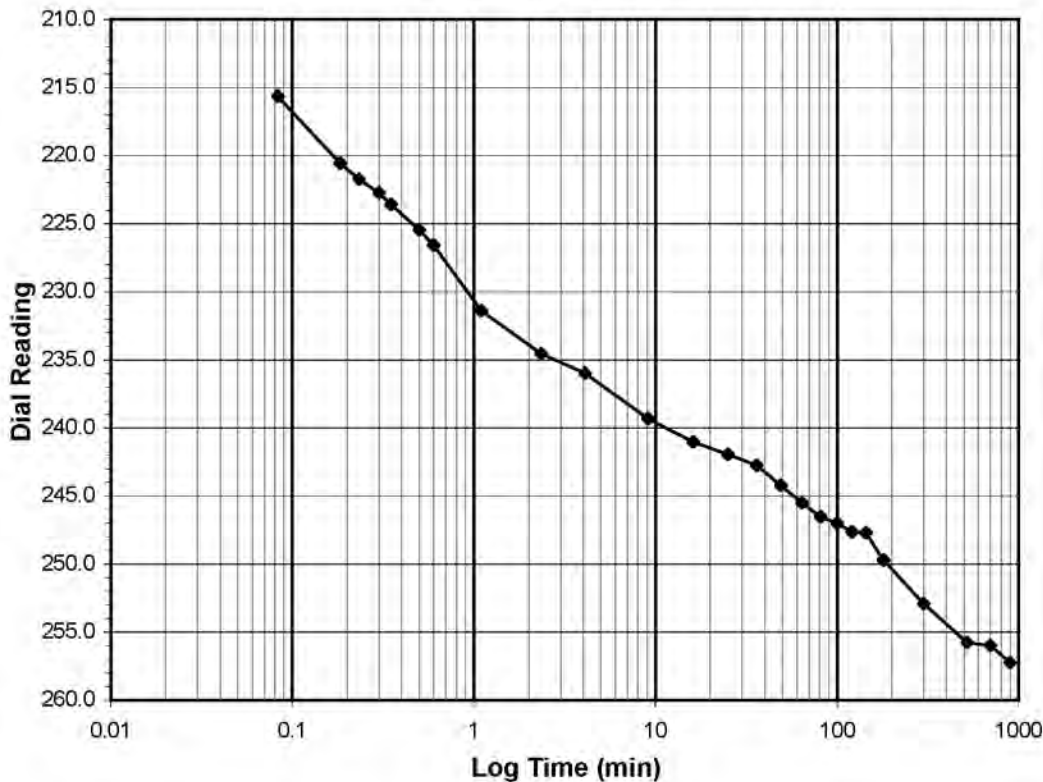
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **257.3**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/10/13
 Start Time 3:04:29

Elapsed Time (min)	Dial Reading (div)
Initial	170.4
0.08	215.6
0.18	220.6
0.23	221.7
0.30	222.7
0.35	223.6
0.50	225.4
0.60	226.6
1.10	231.4
2.35	234.5
4.10	236.0
9.10	239.3
16.10	241.0
25.10	242.0
36.10	242.7
49.10	244.2
64.10	245.5
81.10	246.5
100.10	247.0
121.12	247.6
144.12	247.7
180.12	249.7
300.12	252.9
520.12	255.8
700.12	256.0
900.23	257.3



Tested By CLK Date 11/10/13 Checked By TM Date 12/5/13

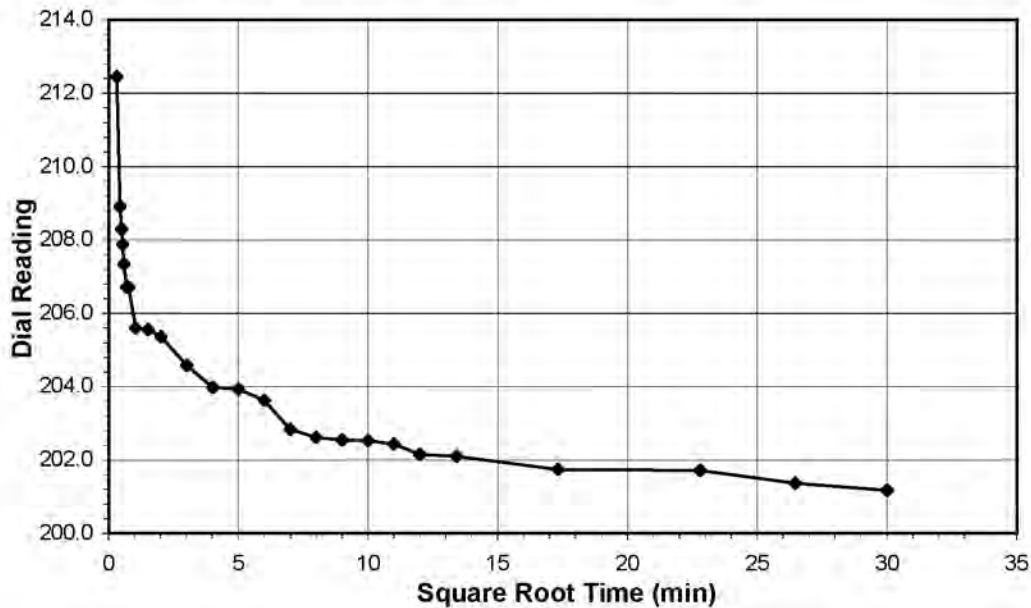
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

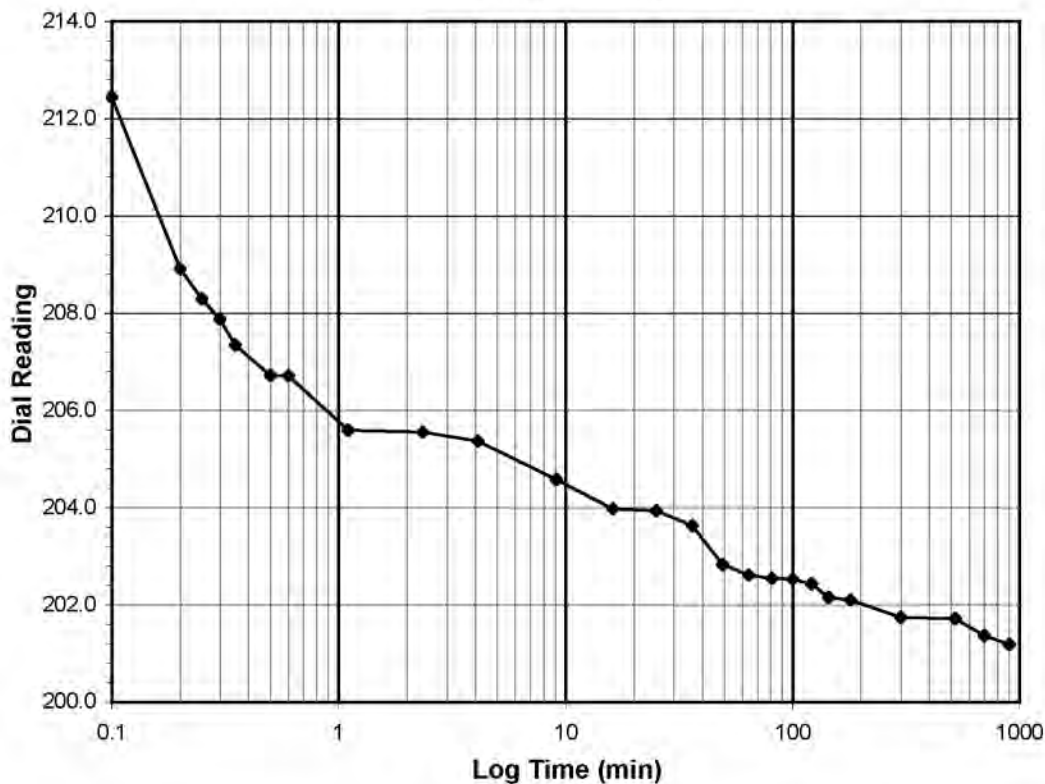
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 201.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/10/13
 Start Time 18:04:45

Elapsed Time (min)	Dial Reading (div)
Initial	257.3
0.10	212.4
0.20	208.9
0.25	208.3
0.30	207.9
0.35	207.3
0.50	206.7
0.60	206.7
1.10	205.6
2.35	205.6
4.10	205.4
9.10	204.6
16.12	204.0
25.12	203.9
36.12	203.6
49.12	202.8
64.12	202.6
81.12	202.5
100.12	202.5
121.12	202.4
144.12	202.2
180.12	202.1
300.12	201.7
520.12	201.7
700.12	201.4
900.28	201.2



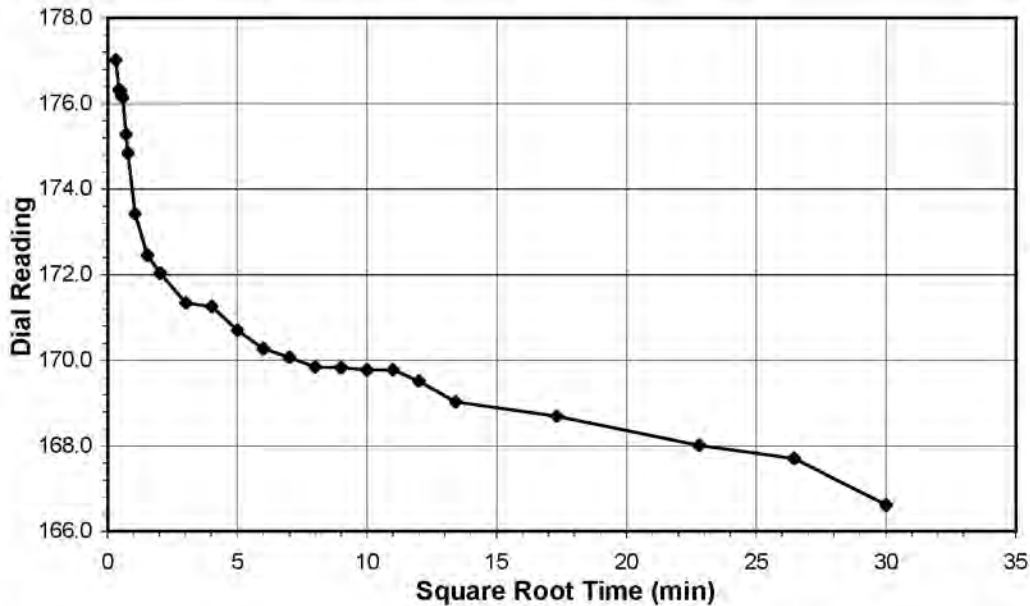
Tested By CLK Date 11/10/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

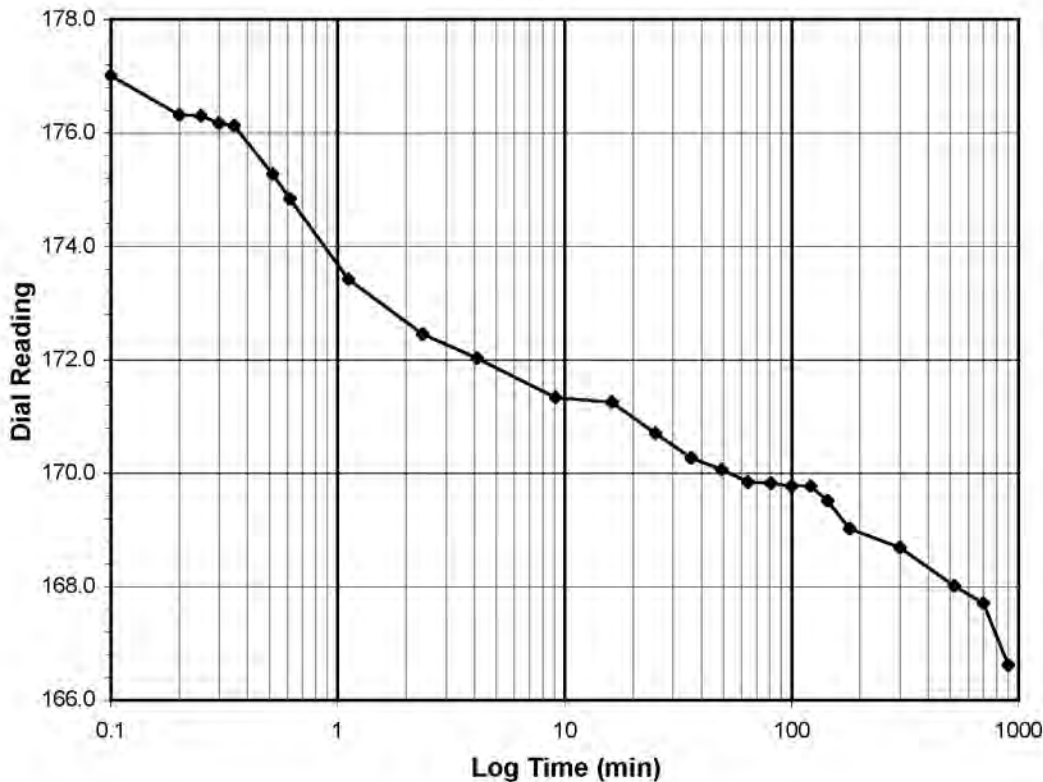
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
Final Reading (div) 166.6
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/11/13
Start Time 9:05:02

Elapsed Time (min)	Dial Reading (div)
Initial	201.2
0.10	177.0
0.20	176.3
0.25	176.3
0.30	176.2
0.35	176.1
0.52	175.3
0.62	174.8
1.12	173.4
2.37	172.5
4.12	172.0
9.12	171.3
16.12	171.3
25.12	170.7
36.12	170.3
49.12	170.1
64.12	169.8
81.12	169.8
100.12	169.8
121.12	169.8
144.12	169.5
180.12	169.0
300.12	168.7
520.12	168.0
700.12	167.7
900.42	166.6



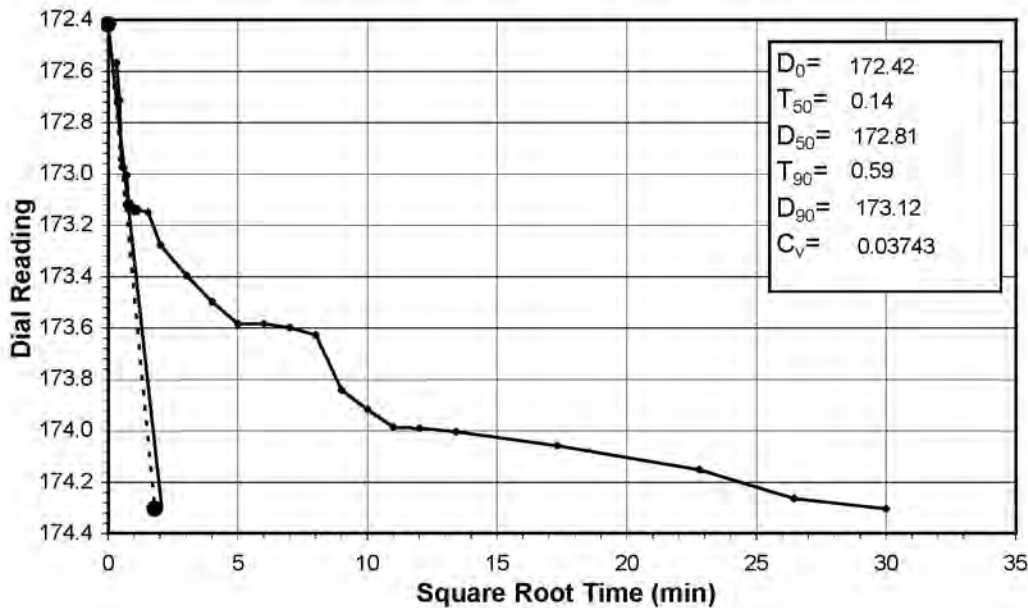
Tested By CLK Date 11/11/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

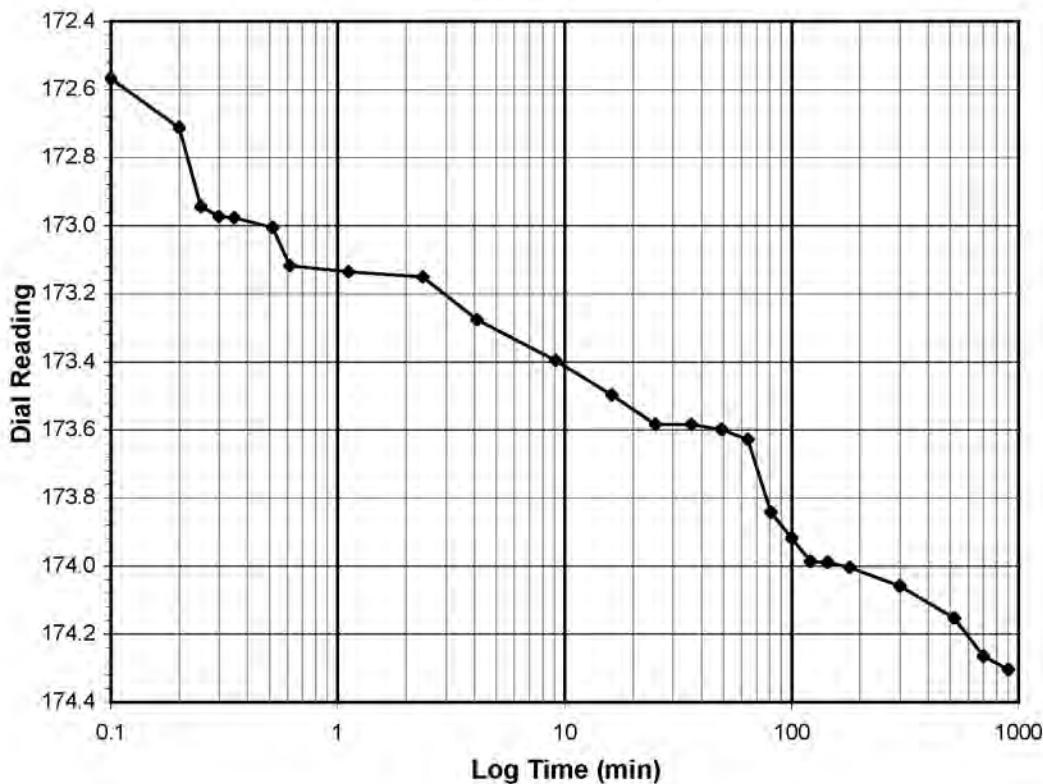
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **174.3**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/12/13
 Start Time 0:05:27

Elapsed Time (min)	Dial Reading (div)
Initial	166.6
0.10	172.6
0.20	172.7
0.25	172.9
0.30	173.0
0.35	173.0
0.52	173.0
0.62	173.1
1.12	173.1
2.37	173.2
4.12	173.3
9.12	173.4
16.12	173.5
25.12	173.6
36.12	173.6
49.12	173.6
64.12	173.6
81.12	173.8
100.12	173.9
121.12	174.0
144.12	174.0
180.12	174.0
300.12	174.1
520.12	174.2
700.13	174.3
900.37	174.3



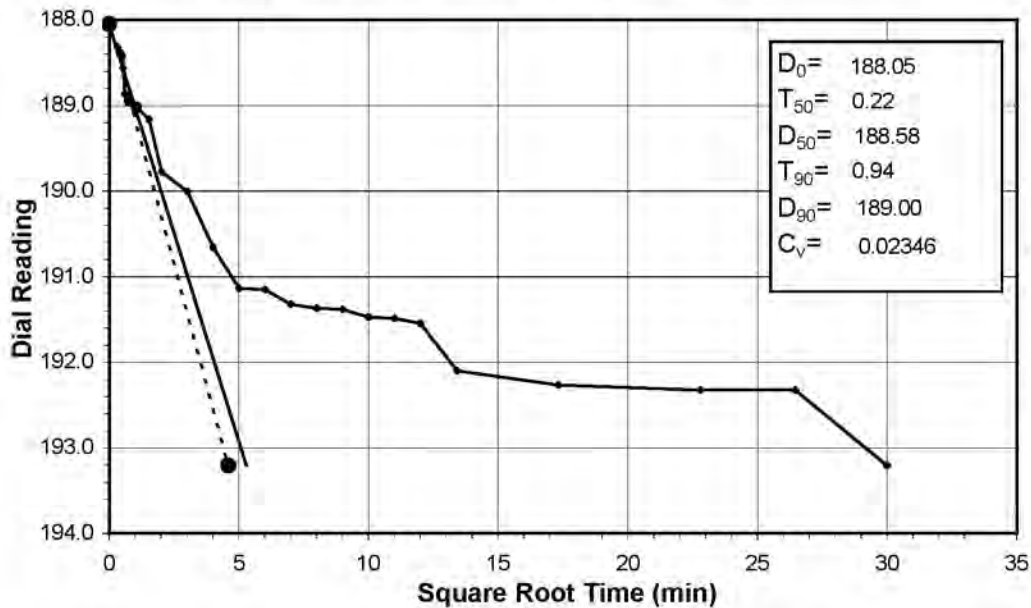
Tested By CLK Date 11/12/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

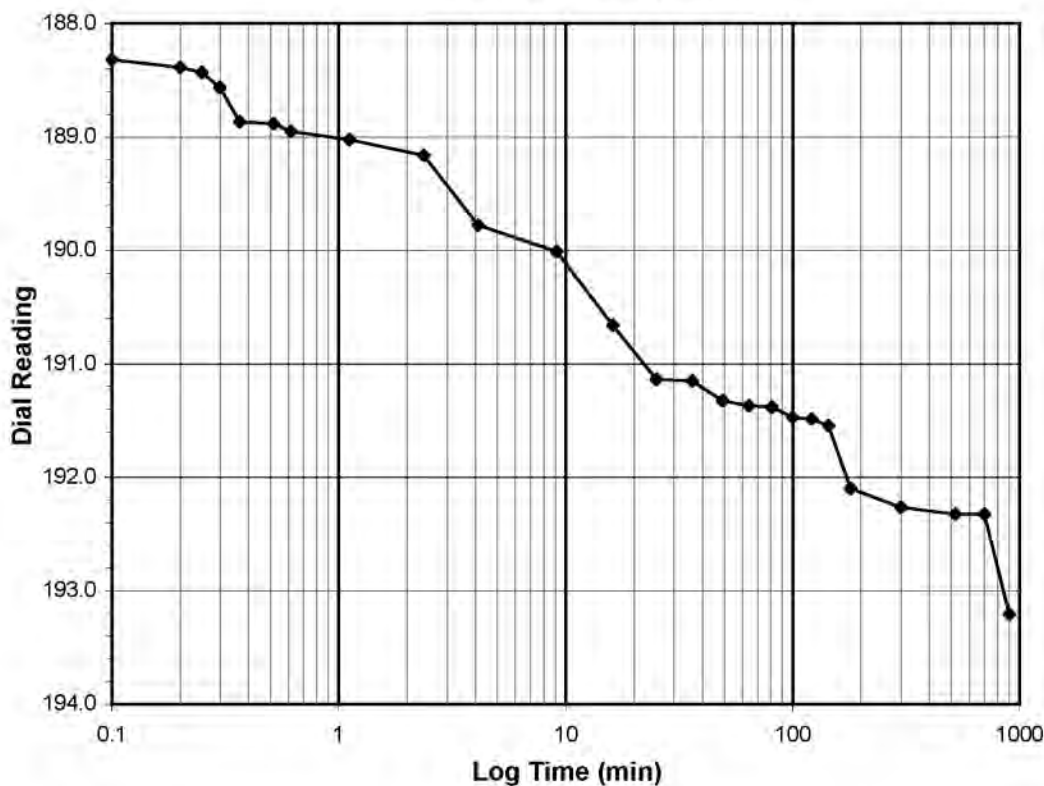
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 193.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/12/13
 Start Time 15:05:49



Elapsed Time (min)	Dial Reading (div)
Initial	174.3
0.10	188.3
0.20	188.4
0.25	188.4
0.30	188.6
0.37	188.9
0.52	188.9
0.62	189.0
1.12	189.0
2.37	189.2
4.12	189.8
9.12	190.0
16.12	190.7
25.12	191.1
36.12	191.2
49.12	191.3
64.12	191.4
81.12	191.4
100.12	191.5
121.12	191.5
144.12	191.5
180.13	192.1
300.13	192.3
520.13	192.3
700.13	192.3
900.03	193.2

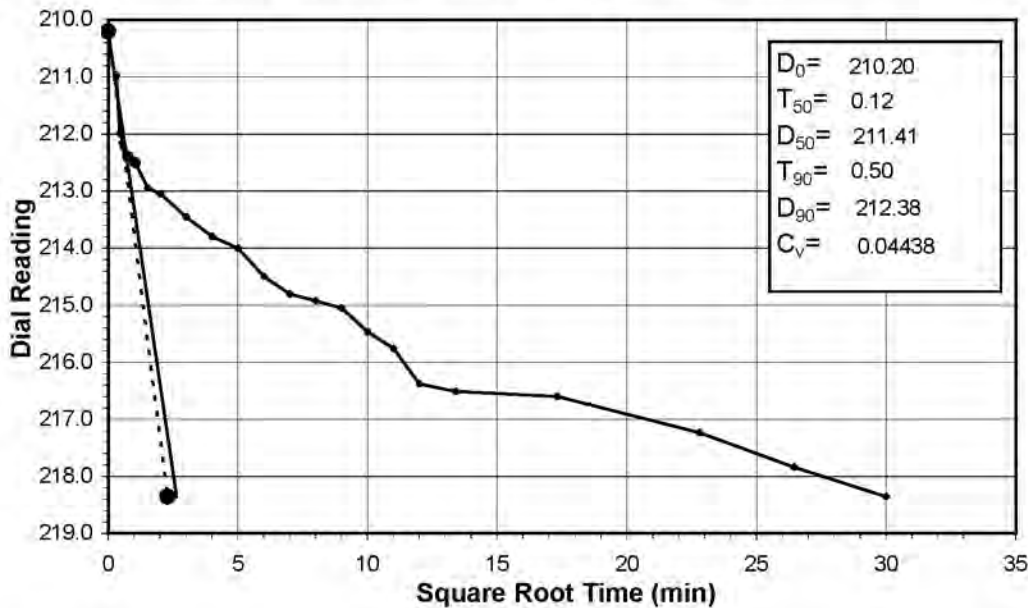
Tested By CLK Date 11/12/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

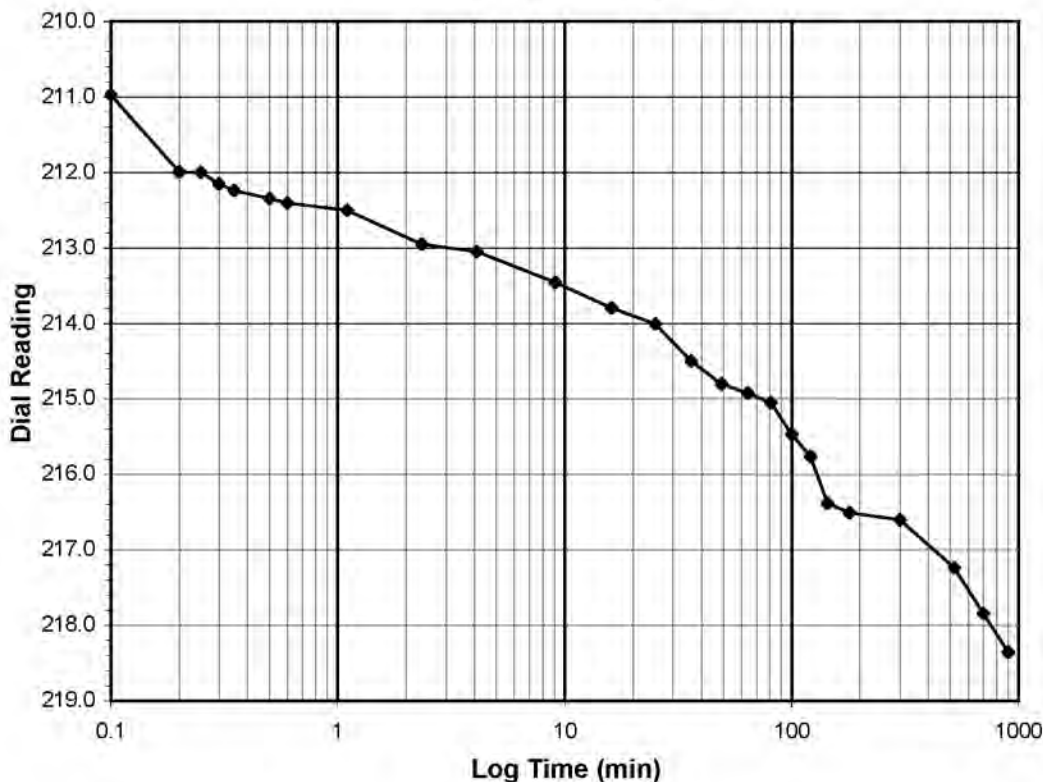
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **1.0-2.0**
 Final Reading (div) **218.4**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/13/13
 Start Time 6:05:51

Elapsed Time (min)	Dial Reading (div)
Initial	193.2
0.10	211.0
0.20	212.0
0.25	212.0
0.30	212.2
0.35	212.2
0.50	212.3
0.60	212.4
1.10	212.5
2.35	212.9
4.10	213.0
9.10	213.5
16.10	213.8
25.10	214.0
36.10	214.5
49.12	214.8
64.12	214.9
81.12	215.1
100.12	215.5
121.12	215.8
144.12	216.4
180.12	216.5
300.12	216.6
520.12	217.2
700.12	217.8
900.38	218.4



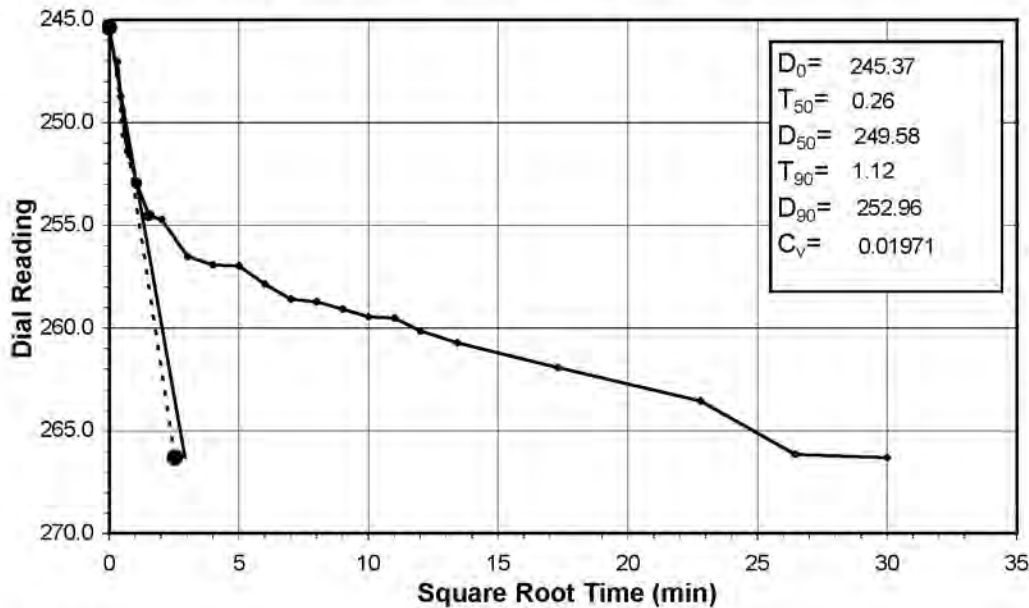
Tested By CLK Date 11/13/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

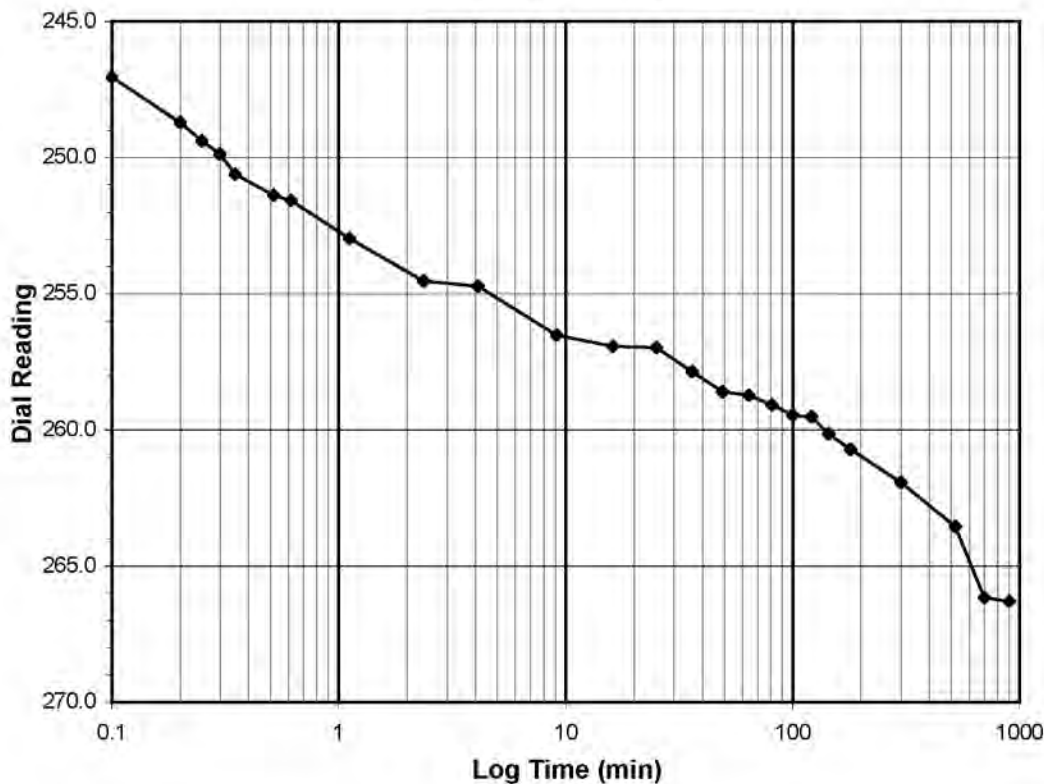
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **266.3**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/13/13
 Start Time 21:06:14

Elapsed Time (min)	Dial Reading (div)
Initial	218.4
0.10	247.0
0.20	248.7
0.25	249.4
0.30	249.9
0.35	250.6
0.52	251.4
0.62	251.6
1.12	253.0
2.37	254.5
4.12	254.7
9.12	256.5
16.12	256.9
25.12	257.0
36.12	257.9
49.12	258.6
64.12	258.7
81.12	259.1
100.12	259.5
121.12	259.5
144.13	260.1
180.13	260.7
300.13	261.9
520.13	263.5
700.13	266.2
900.33	266.3



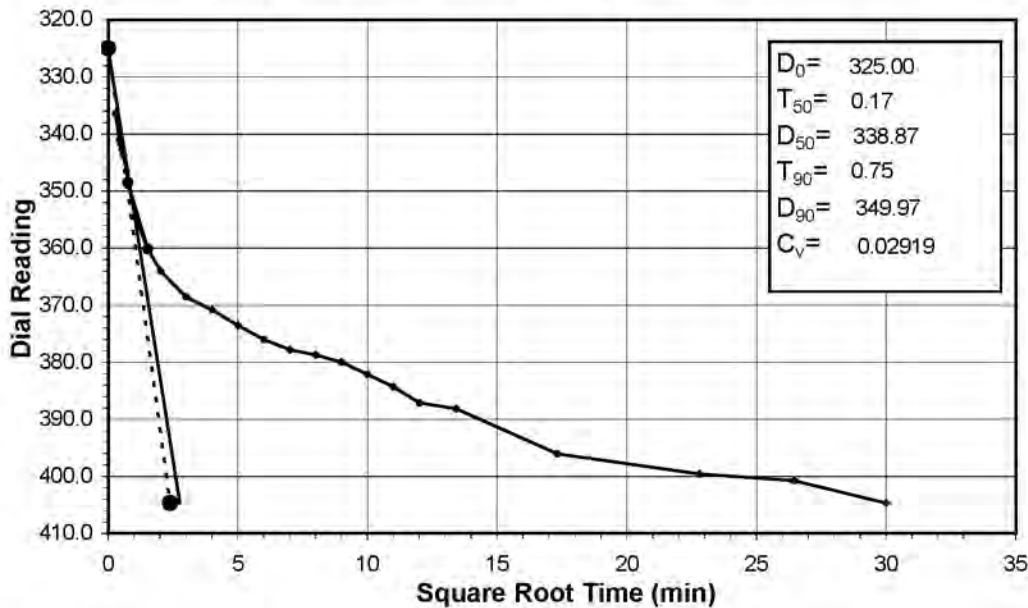
Tested By CLK Date 11/13/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

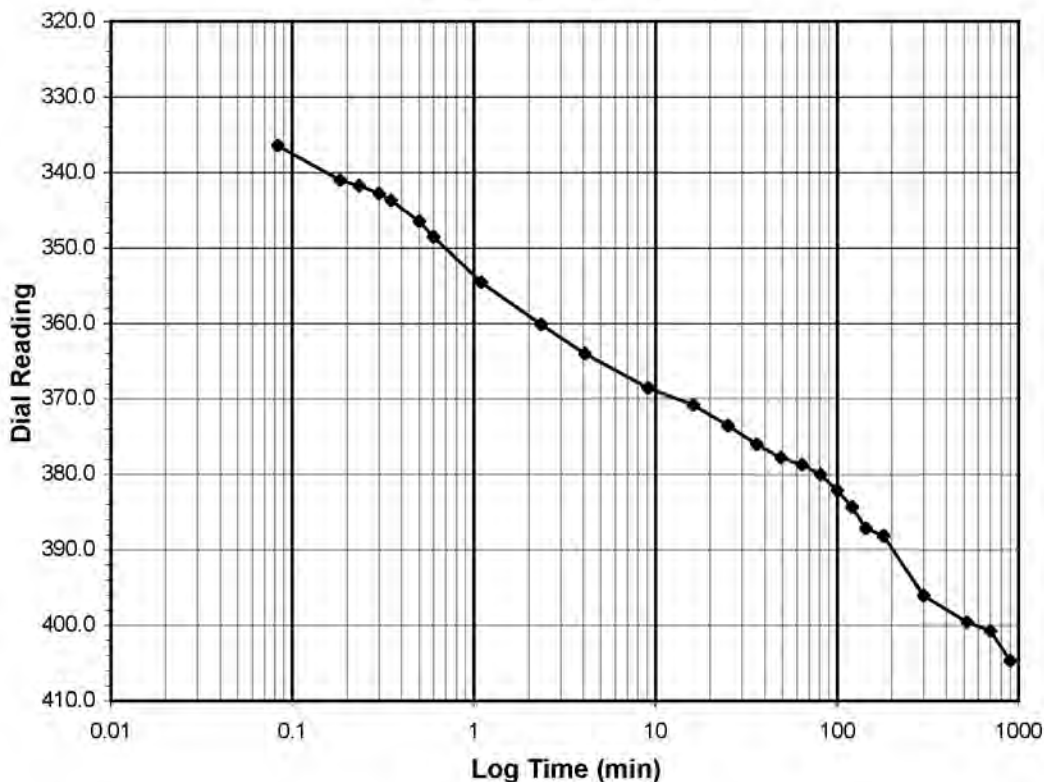
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **404.7**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/14/13
 Start Time 12:06:34

Elapsed Time (min)	Dial Reading (div)
Initial	266.3
0.08	336.5
0.18	341.0
0.23	341.7
0.30	342.7
0.35	343.7
0.50	346.5
0.60	348.5
1.10	354.6
2.35	360.1
4.10	364.0
9.10	368.6
16.12	370.8
25.12	373.6
36.12	376.0
49.12	377.8
64.12	378.7
81.12	380.0
100.12	382.1
121.12	384.3
144.12	387.1
180.12	388.1
300.12	396.0
520.12	399.6
700.12	400.7
900.35	404.7



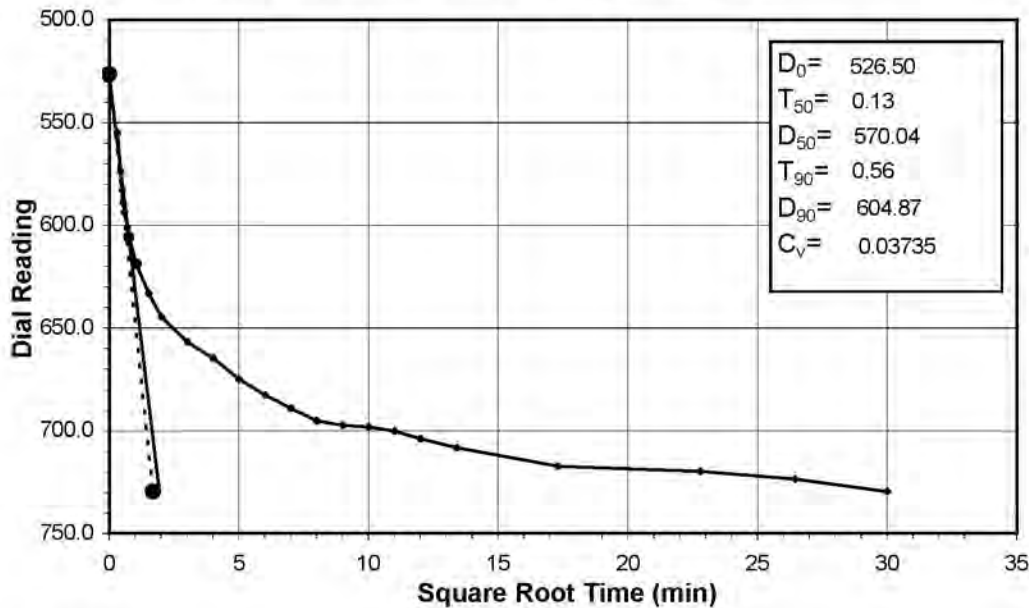
Tested By CLK Date 11/14/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

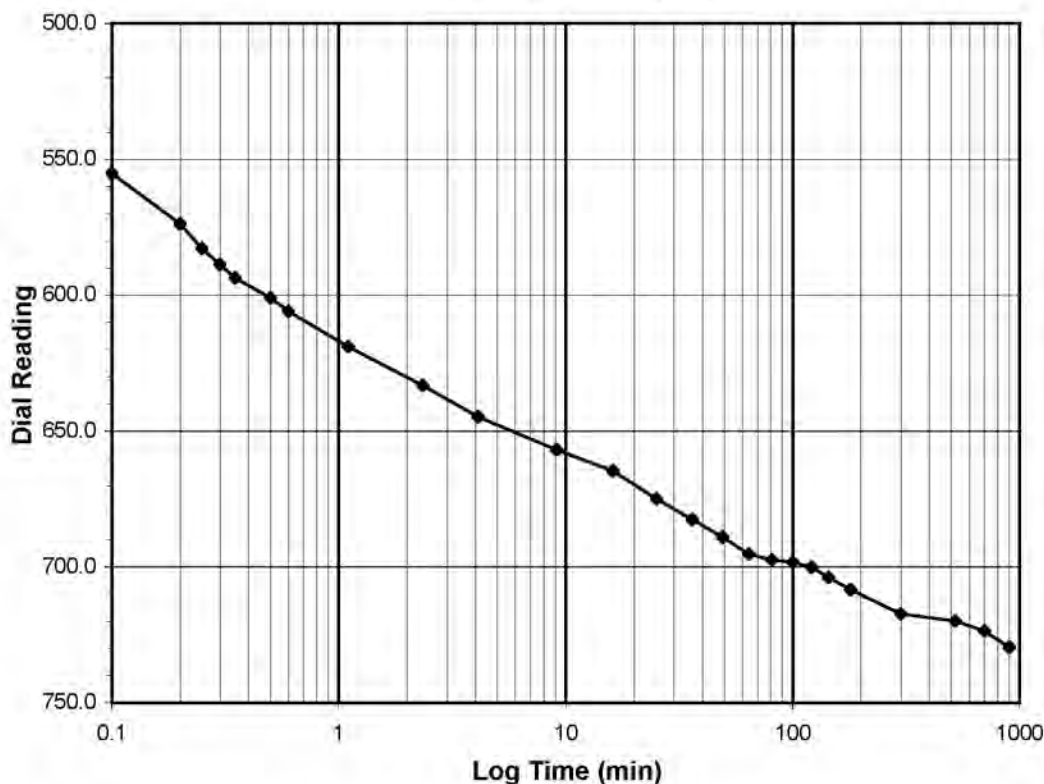
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **8.0-16.0**
 Final Reading (div) **729.6**
 Consolidometer No. **G1421**
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 3:06:56



Elapsed Time (min)	Dial Reading (div)
Initial	404.7
0.10	555.1
0.20	573.7
0.25	582.8
0.30	588.7
0.35	593.6
0.50	600.9
0.60	605.8
1.10	618.9
2.35	633.2
4.12	644.7
9.12	656.9
16.12	664.6
25.12	674.9
36.12	682.6
49.12	689.0
64.12	695.2
81.12	697.3
100.12	698.2
121.12	700.1
144.12	703.9
180.12	708.3
300.12	717.3
520.12	719.8
700.12	723.6
900.32	729.6

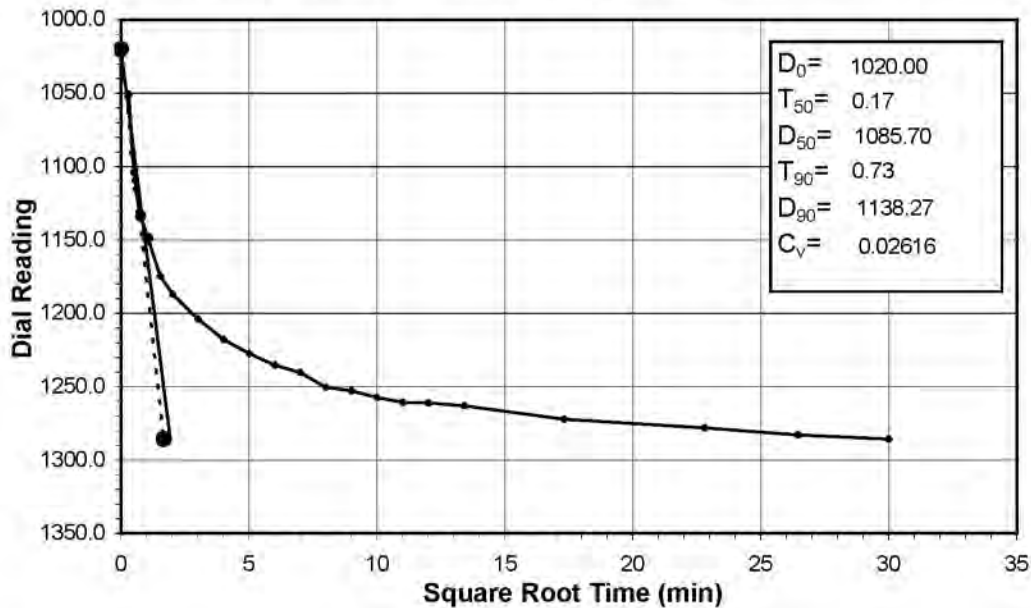
Tested By CLK Date 11/15/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

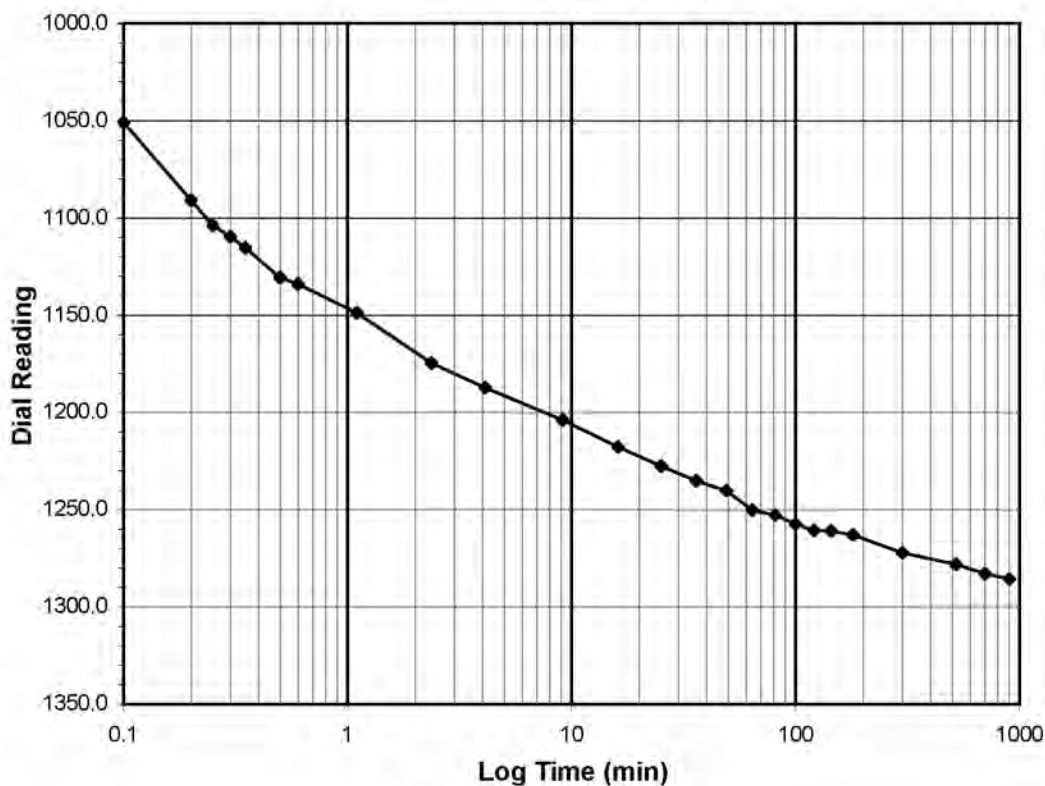
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **1285.7**
 Consolidometer No. **G1421**
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 18:07:15

Elapsed Time (min)	Dial Reading (div)
Initial	729.6
0.10	1050.8
0.20	1090.8
0.25	1103.8
0.30	1109.5
0.35	1115.4
0.50	1130.6
0.60	1133.9
1.10	1148.8
2.37	1174.6
4.12	1187.2
9.12	1203.8
16.12	1217.7
25.12	1227.5
36.12	1235.2
49.12	1240.2
64.12	1250.3
81.12	1252.7
100.12	1257.3
121.12	1260.7
144.12	1261.0
180.12	1262.9
300.12	1272.2
520.12	1278.1
700.12	1282.9
900.05	1285.7



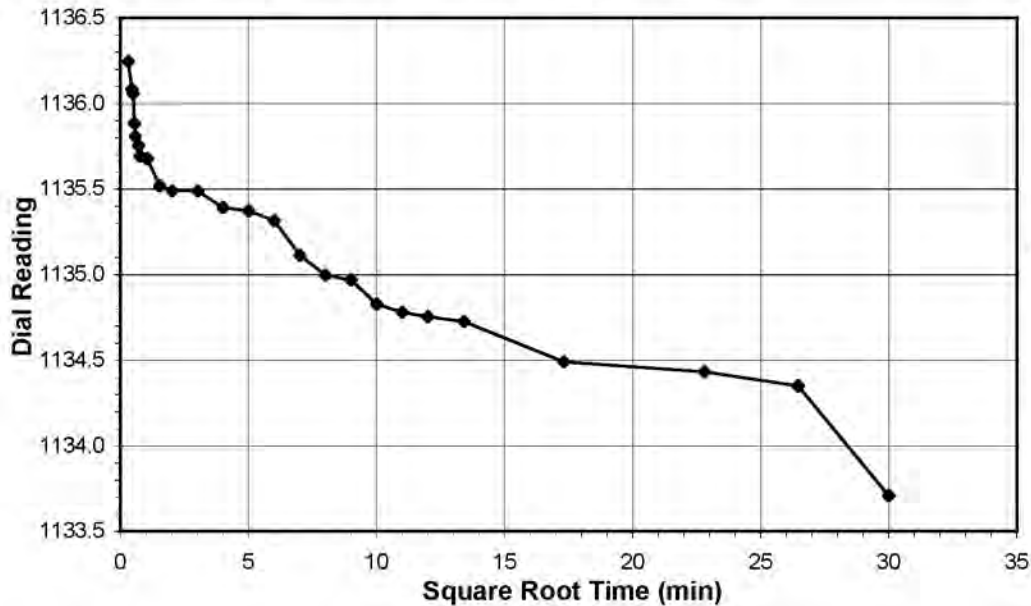
Tested By CLK Date 11/15/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

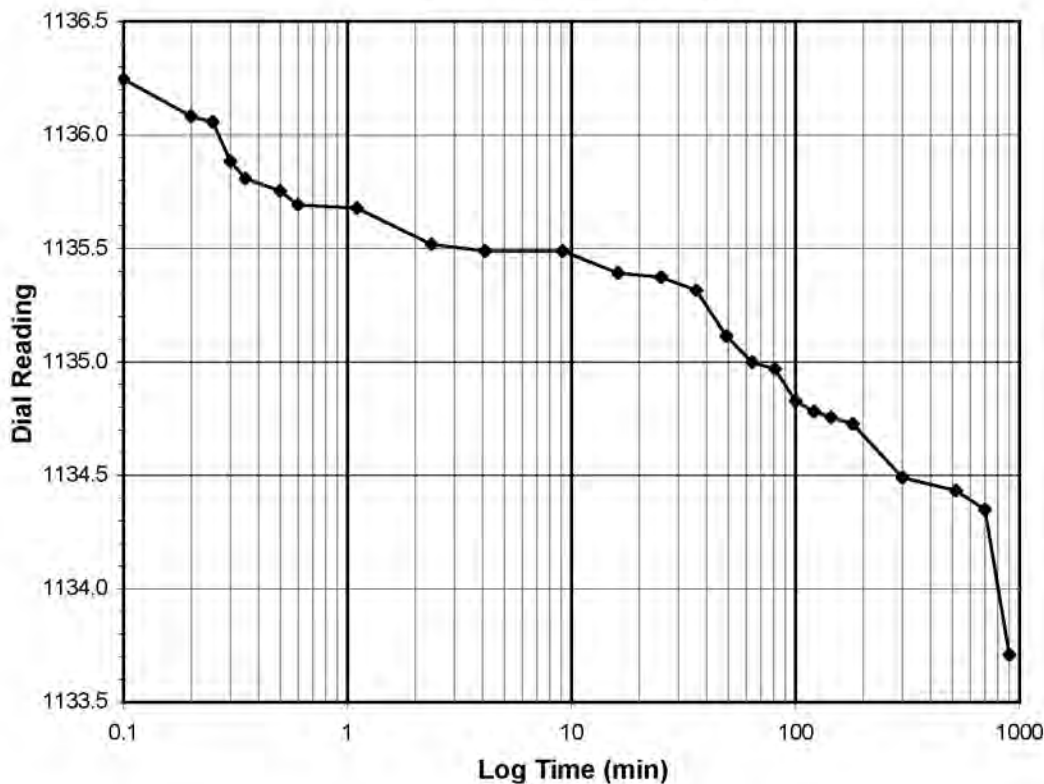
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **32.0-8.0**
 Final Reading (div) **1133.7**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/16/13
 Start Time 9:07:18

Elapsed Time (min)	Dial Reading (div)
Initial	1285.7
0.10	1136.2
0.20	1136.1
0.25	1136.1
0.30	1135.9
0.35	1135.8
0.50	1135.8
0.60	1135.7
1.10	1135.7
2.37	1135.5
4.12	1135.5
9.12	1135.5
16.12	1135.4
25.12	1135.4
36.12	1135.3
49.12	1135.1
64.12	1135.0
81.12	1135.0
100.12	1134.8
121.12	1134.8
144.12	1134.8
180.12	1134.7
300.12	1134.5
520.12	1134.4
700.12	1134.3
900.35	1133.7



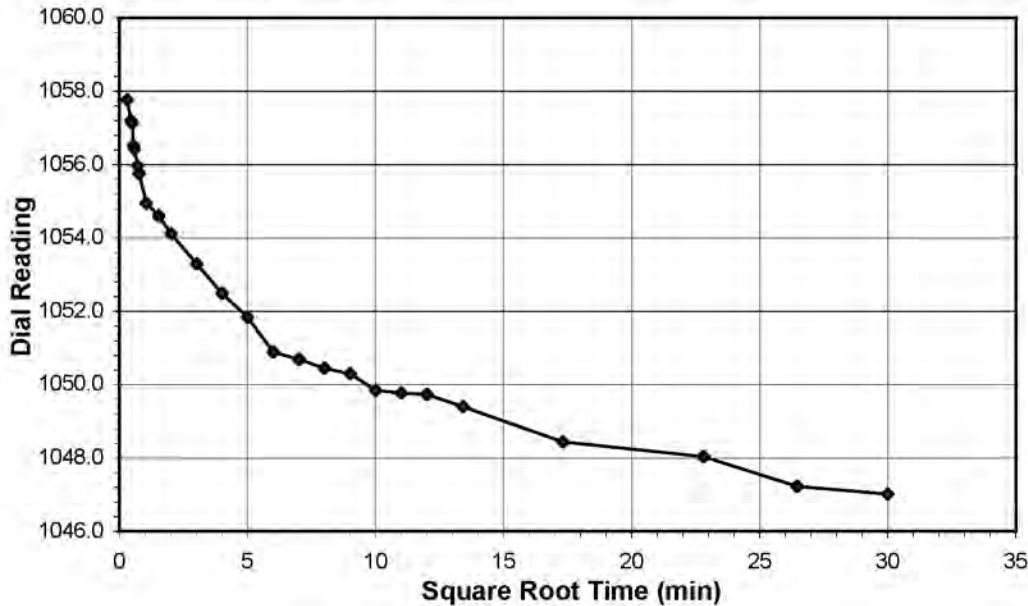
Tested By CLK Date 11/16/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

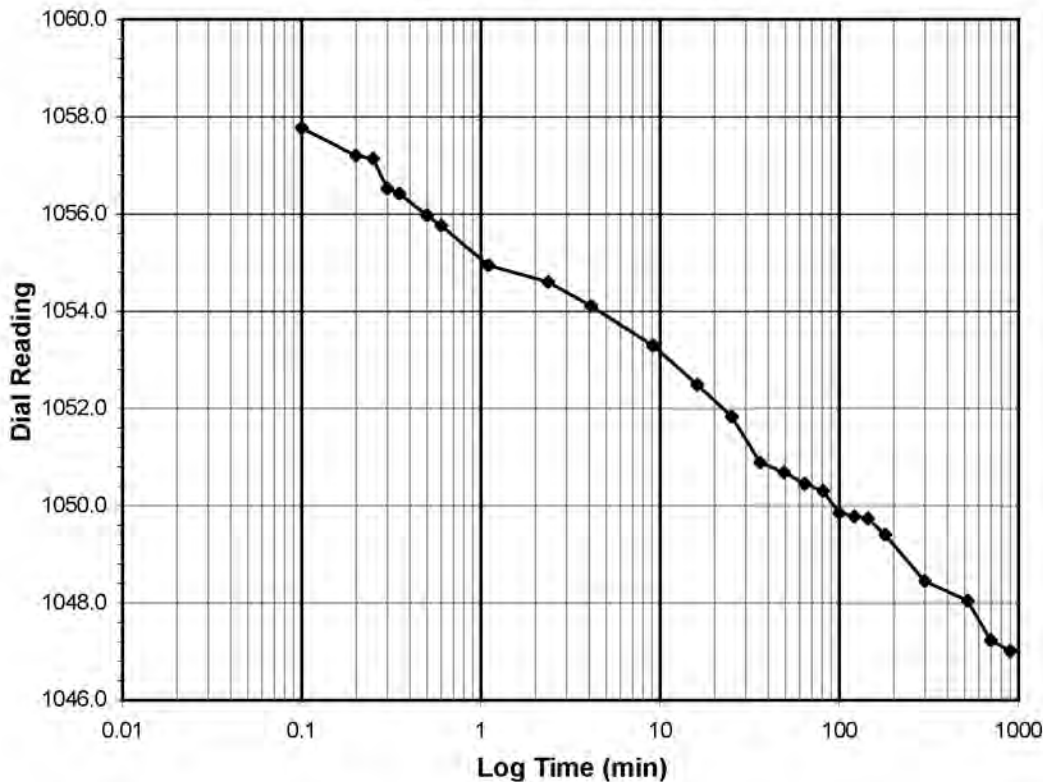
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **8.0-2.0**
 Final Reading (div) **1047.0**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/17/13
 Start Time 0:07:39

Elapsed Time (min)	Dial Reading (div)
Initial	1133.7
0.10	1057.8
0.20	1057.2
0.25	1057.1
0.30	1056.5
0.35	1056.4
0.50	1056.0
0.60	1055.8
1.10	1054.9
2.37	1054.6
4.12	1054.1
9.12	1053.3
16.12	1052.5
25.12	1051.8
36.12	1050.9
49.12	1050.7
64.12	1050.4
81.12	1050.3
100.12	1049.8
121.12	1049.8
144.12	1049.7
180.12	1049.4
300.12	1048.4
520.12	1048.0
700.13	1047.2
900.33	1047.0



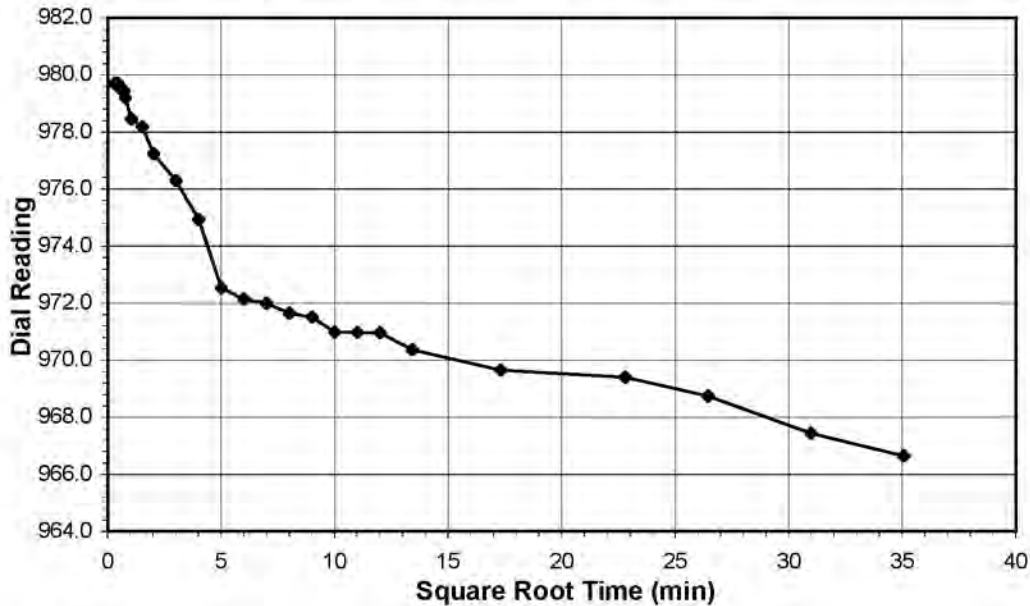
Tested By CLK Date 11/17/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

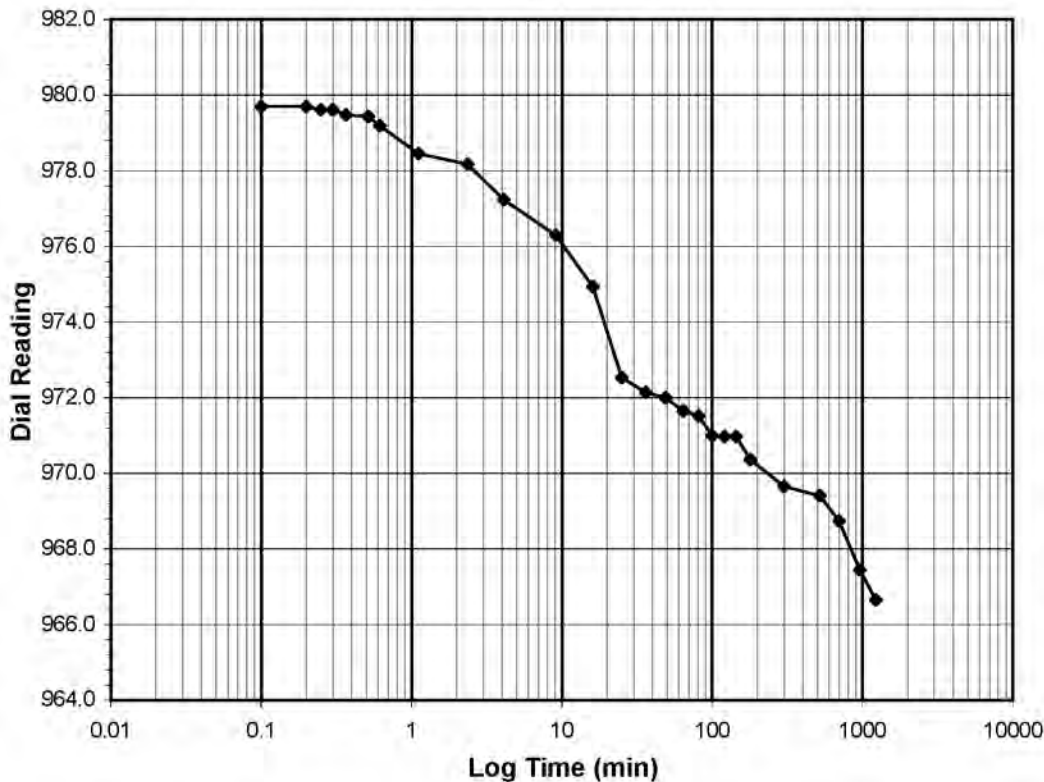
Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **966.6**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/17/13
 Start Time 15:07:59

Elapsed Time (min)	Dial Reading (div)
Initial	1047.0
0.10	979.7
0.20	979.7
0.25	979.6
0.30	979.6
0.37	979.5
0.52	979.4
0.62	979.2
1.12	978.5
2.37	978.2
4.12	977.2
9.12	976.3
16.12	974.9
25.12	972.5
36.12	972.1
49.12	972.0
64.12	971.6
81.12	971.5
100.12	971.0
121.12	971.0
144.12	971.0
180.13	970.4
300.13	969.7
520.13	969.4
700.13	968.7
960.13	967.4
1230.00	966.6



Tested By CLK Date 11/17/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained**Consolidometer No.** G1421**1 Division** = 0.0001 (in)**Sample Properties****Initial** **Final****Water Content**

Tare Number	2653	2730
Wt. Tare & WS (g)	122.78	148.29
Wt. Tare & DS (g)	95.05	116.10
Wt. Water (g)	27.73	32.19
Wt. Tare (g)	6.64	6.71
Wt. DS (g)	88.41	109.39
Water Content (%)	31.37	29.43

Sample Parameters

Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9070
Sample Volume (cm ³)	80.44	72.96
Wt. Wet Sample + Ring (g)	362.58	360.40
Wt. of Ring (g)	215.09	215.09
Wt. of Wet Sample (g)	147.49	145.31
Wet Density (pcf)	114.41	124.28
Wet Density (g/cm ³)	1.83	1.99
Water Content (%)	31.37	29.43
Wt. of Dry Sample (g)	112.27	112.27
Dry Density (pcf)	87.10	96.02
Dry Density (g/cm ³)	1.40	1.54
Void Ratio	0.8986	0.7221
Saturation (%)	92.50	107.99
Specific Gravity	2.65	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.39576	0.89861
0.25	37.5	17.7	19.8	25.350	80.281	1.39853	0.89485
0.5	72.0	26.9	45.1	25.285	80.077	1.40209	0.89004
1	110.9	36.4	74.4	25.211	79.841	1.40623	0.88447
2	170.4	63.4	107.0	25.128	79.579	1.41086	0.87829
4	257.3	93.2	164.1	24.983	79.120	1.41905	0.86745
1	201.2	48.6	152.6	25.012	79.212	1.41739	0.86963
0.25	166.6	26.1	140.5	25.043	79.309	1.41565	0.87193
0.5	174.3	31.3	143.0	25.037	79.289	1.41601	0.87145
1	193.2	45.2	148.0	25.024	79.249	1.41673	0.87051
2	218.4	64.7	153.7	25.010	79.204	1.41755	0.86943
4	266.3	93.4	172.9	24.961	79.049	1.42031	0.86578
8	404.7	126.0	278.7	24.692	78.198	1.43577	0.84570
16	729.6	170.6	558.9	23.980	75.944	1.47840	0.79248
32	1285.7	241.5	1044.3	22.748	72.040	1.55851	0.70034
8	1133.7	140.4	993.3	22.877	72.449	1.54970	0.71001
2	1047.0	80.8	966.2	22.946	72.668	1.54504	0.71516
0.5	966.6	36.9	929.7	23.039	72.961	1.53883	0.72209

Tested By CLK Date 11/7/13 Input Checked By TM Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-CV

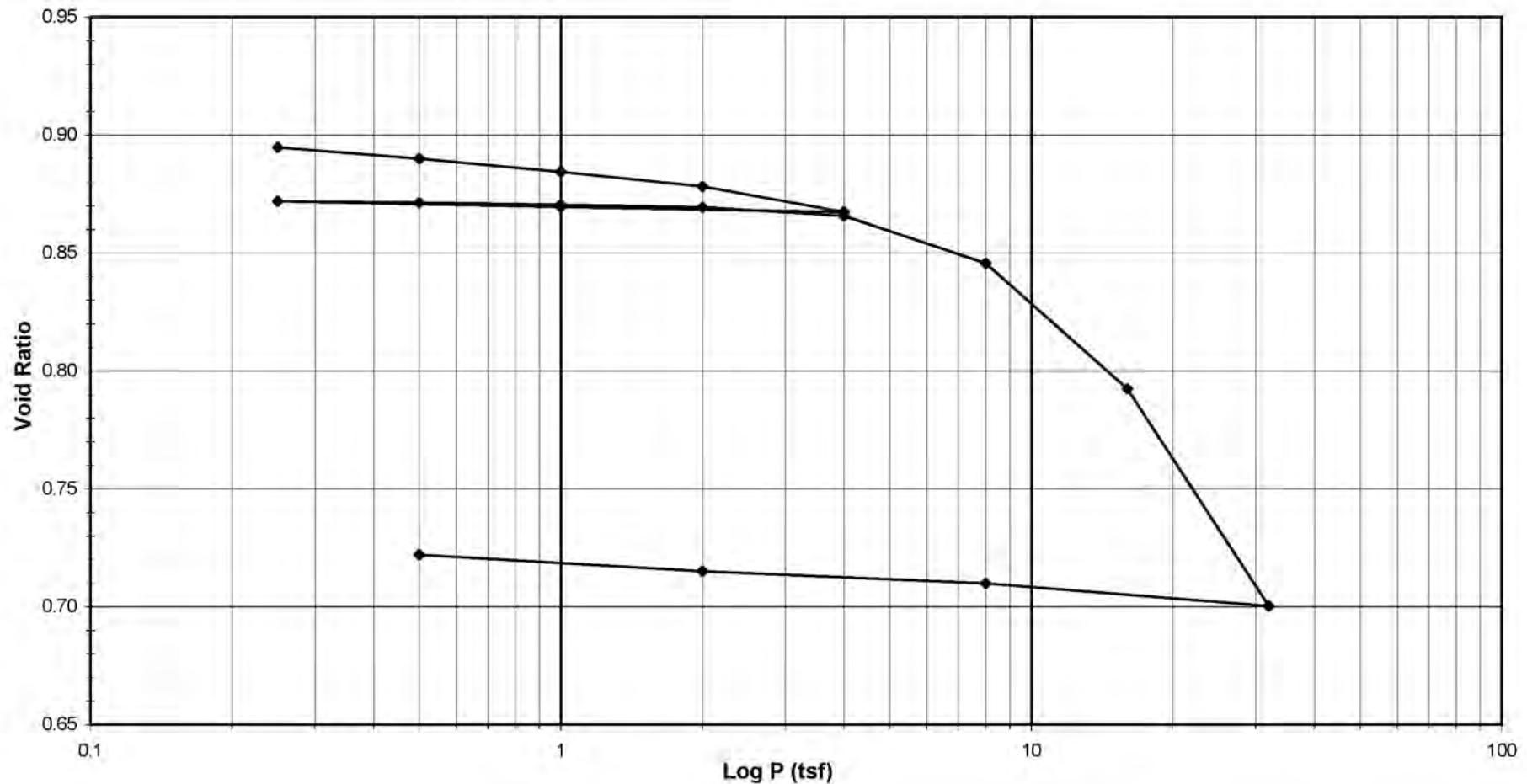
NRC-008K-E
ONE DIMENSIONAL CONSOLIDATION
ASTM D2435 / D2435M-11



Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-023

Boring No. R-6-1b
Depth (ft) 179.7-179.9
Sample No. ST-9
Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By CLK Date 11/7/13 Approved By RJO Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained**Consolidometer No.** G1421**1 Division** = 0.0001 (in)**C_v Test Data Summary**

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>							
			Load Increment	Dial Reading @ <i>t</i> ₅₀	Machine Deflection	Corrected Dial Reading @ <i>t</i> ₅₀	Sample Height @ <i>t</i> ₅₀	Time <i>t</i> ₅₀	C _v
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
<i>Water Content</i>									
Tare Number	2653	2730							
Wt. Tare & WS (g)	122.78	148.29							
Wt. Tare & DS (g)	95.05	116.1							
Wt. Water (g)	27.73	32.19	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare (g)	6.64	6.71	0.25	27.9	17.7	10.2	25.37	0.27	0.01950
Wt. DS (g)	88.41	109.39	0.5	54.1	26.9	27.2	25.33	0.24	0.02239
Water Content (%)	31.37	29.43	1	90.7	36.4	54.2	25.26	0.27	0.01963
			2	145.4	63.4	82.0	25.19	0.28	0.02441
			4	223.5	93.2	130.3	25.07	0.36	0.01436
<i>Sample Parameters</i>			1	NA	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.25	NA	NA	NA	NA	NA	NA
Sample Height (in)	1.0000	0.9070	0.5	172.8	31.3	141.5	25.04	0.14	0.03743
Sample Volume (cm ³)	80.44	72.96	1	188.6	45.2	143.4	25.04	0.22	0.02346
Wt. Wet Sample + Ring (g)	362.58	360.40	2	211.4	64.7	146.7	25.03	0.12	0.04438
Wt. of Ring (g)	215.09	215.09	4	249.6	93.4	156.2	25.00	0.26	0.01971
Wt. of Wet Sample (g)	147.49	145.31	8	338.9	126.0	212.9	24.86	0.17	0.02919
Wet Density (pcf)	114.41	124.28	16	570.0	170.6	399.4	24.39	0.13	0.03735
Wet Density (g/cm ³)	1.83	1.99	32	1085.7	241.5	844.2	23.26	0.17	0.02616
Water Content (%)	31.37	29.43	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	112.27	112.27	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	87.10	96.02	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm ³)	1.40	1.54							
Void Ratio	0.8986	0.7221							
Saturation (%)	92.50	107.99							
Specific Gravity	2.65	Measured							

Tested By CLK Date 11/7/13 Input Checked By TM Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

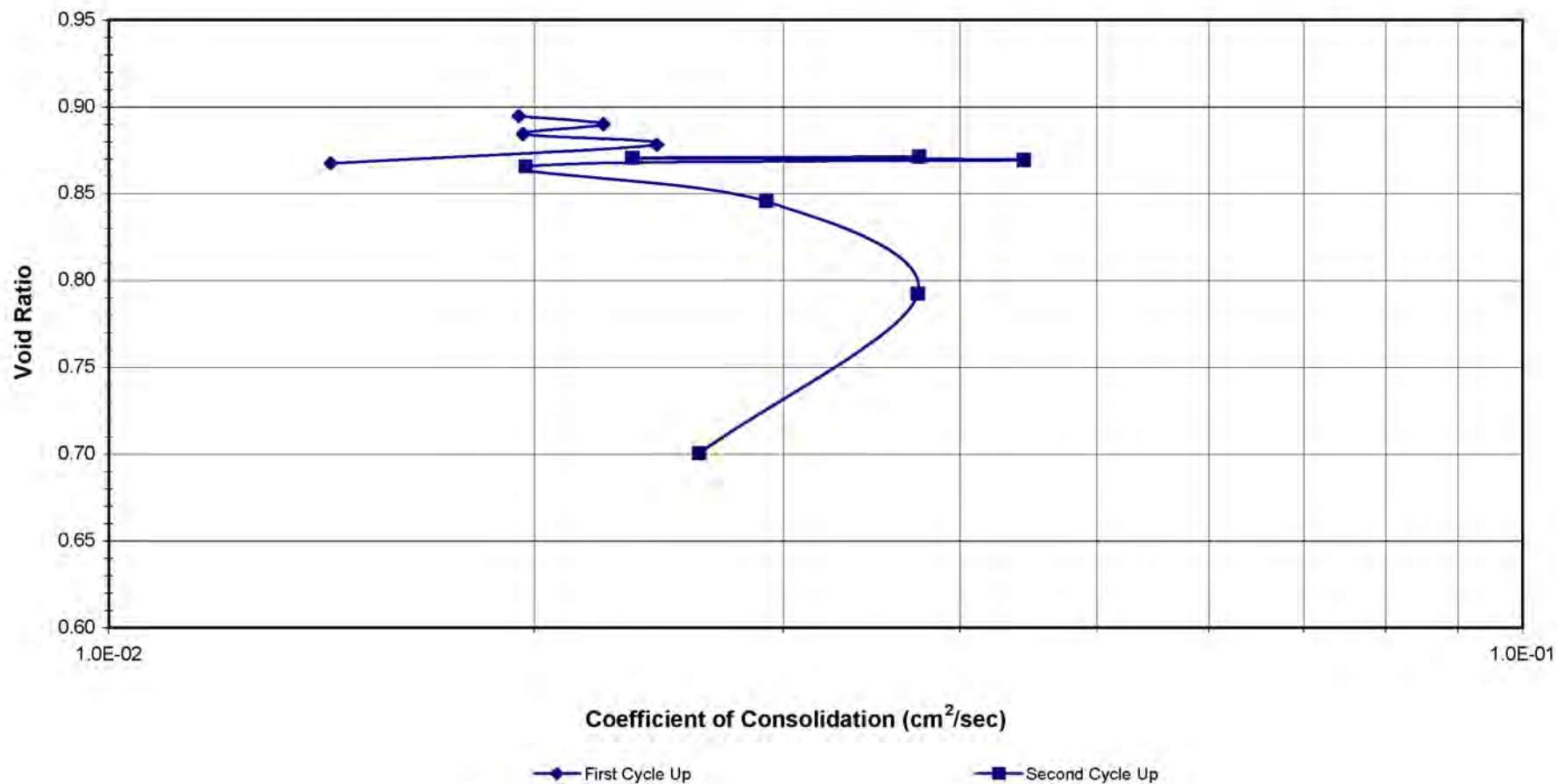
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-023

Boring No. R-6-1b
 Depth (ft) 179.7-179.9
 Sample No. ST-9
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By CLK Date 11/7/13

Approved By RJO Date

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	179.7-179.9
Project No.	2013-465-001	Sample No.	ST-9
Lab ID #	2013-465-001-023		

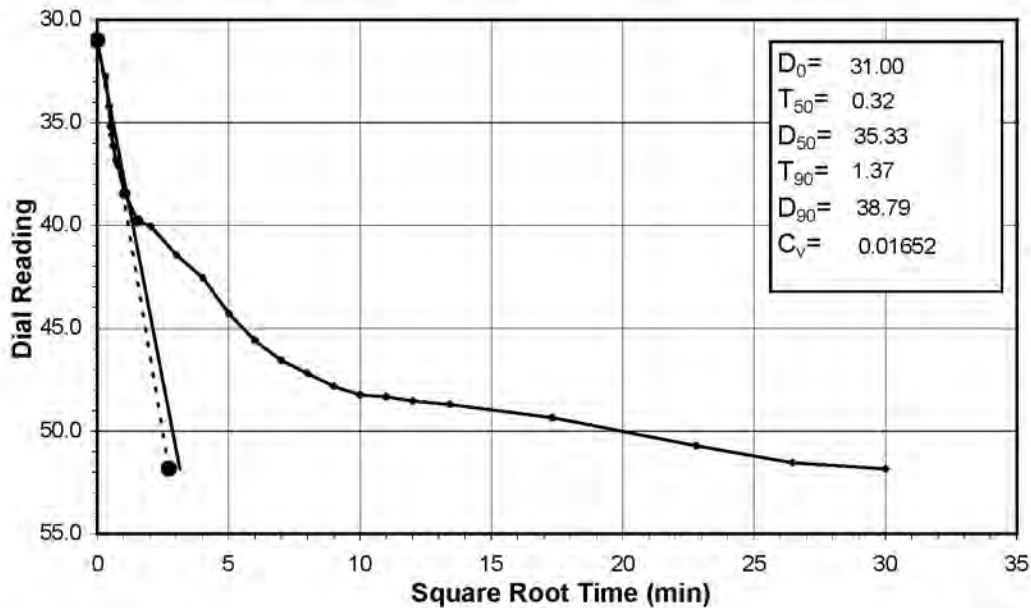
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1421	1/9/14
Load Cell	G1422	1/9/14
LVDT	G1423	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

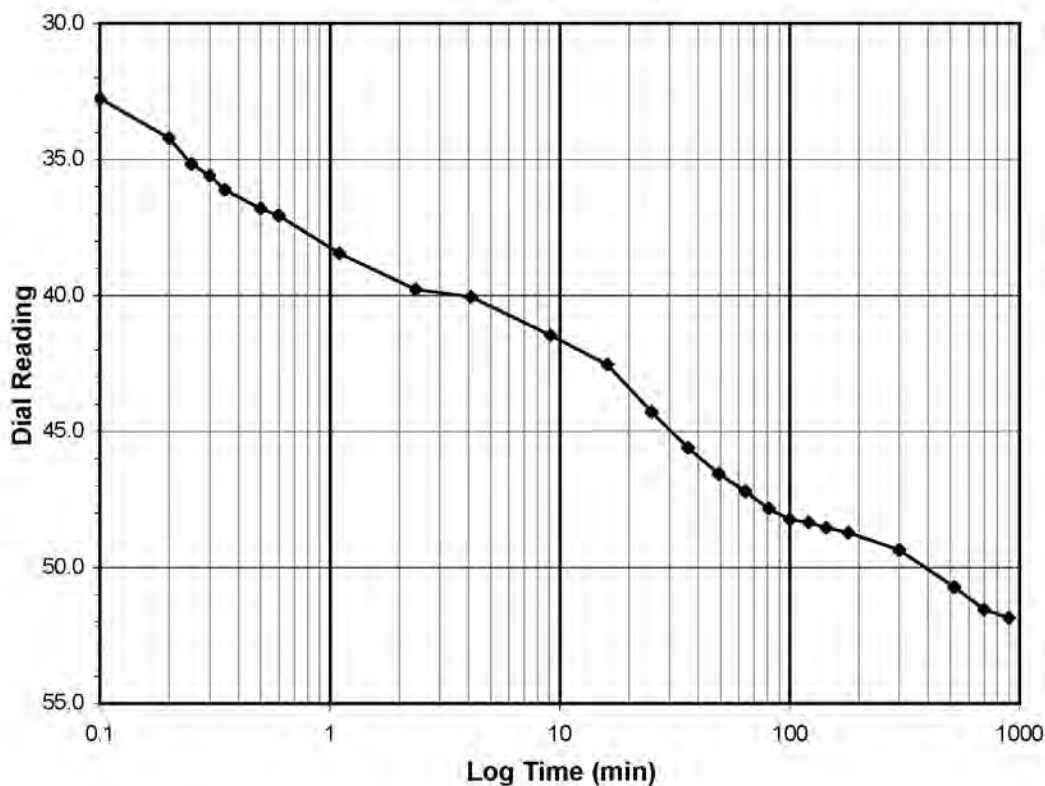
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 51.8
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/7/13
 Start Time 16:12:02

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	32.7
0.20	34.2
0.25	35.2
0.30	35.6
0.35	36.1
0.50	36.8
0.60	37.1
1.10	38.5
2.37	39.8
4.12	40.0
9.12	41.5
16.12	42.5
25.12	44.3
36.12	45.6
49.12	46.6
64.12	47.2
81.12	47.8
100.12	48.2
121.12	48.3
144.12	48.5
180.13	48.7
300.13	49.4
520.13	50.7
700.13	51.5
900.10	51.8



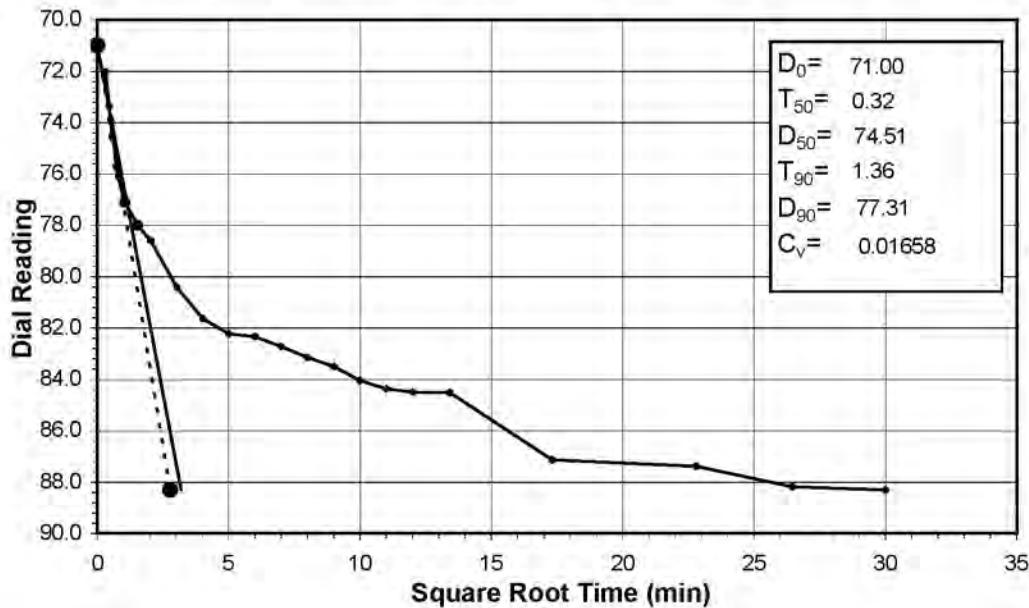
Tested By DB Date 11/7/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

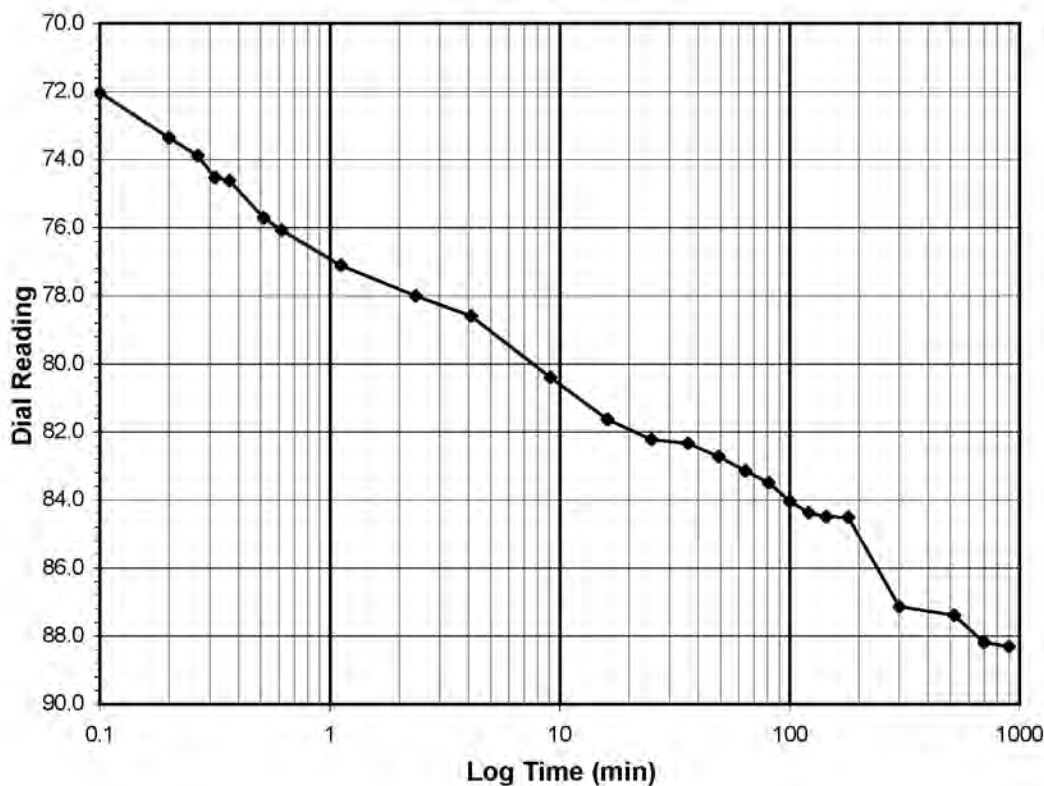
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.25-0.5
Final Reading (div) 88.3
Consolidometer No. G1424
1 Division (in) 0.0001
Start Date 11/8/13
Start Time 7:12:08

Elapsed Time (min)	Dial Reading (div)
Initial	51.8
0.10	72.0
0.20	73.4
0.27	73.9
0.32	74.5
0.37	74.6
0.52	75.7
0.62	76.1
1.12	77.1
2.37	78.0
4.12	78.6
9.12	80.4
16.12	81.6
25.12	82.2
36.12	82.3
49.12	82.7
64.13	83.1
81.13	83.5
100.13	84.0
121.13	84.4
144.13	84.5
180.13	84.5
300.13	87.1
520.13	87.4
700.13	88.2
900.08	88.3



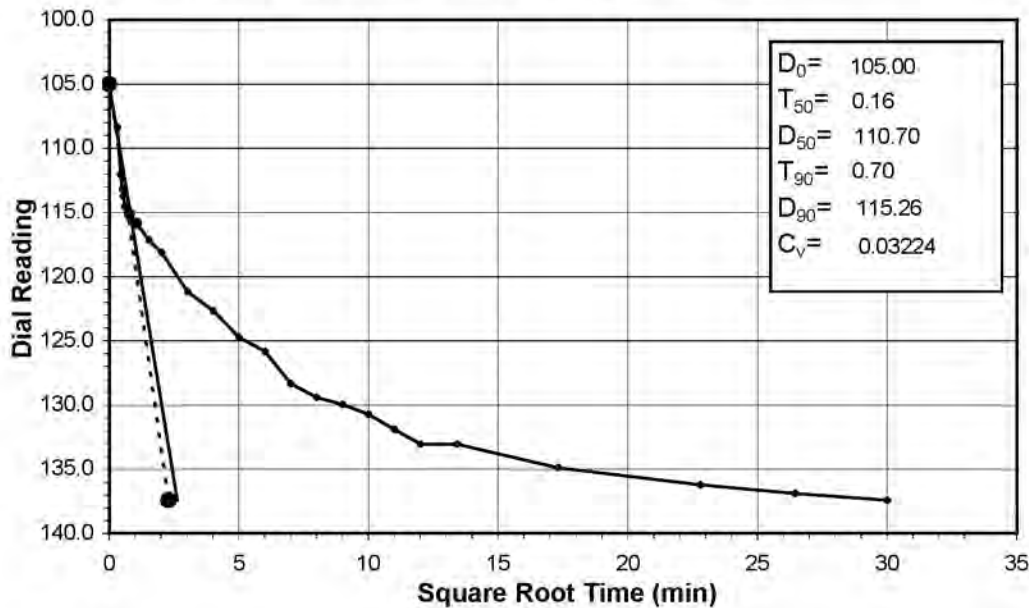
Tested By DB Date 11/8/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

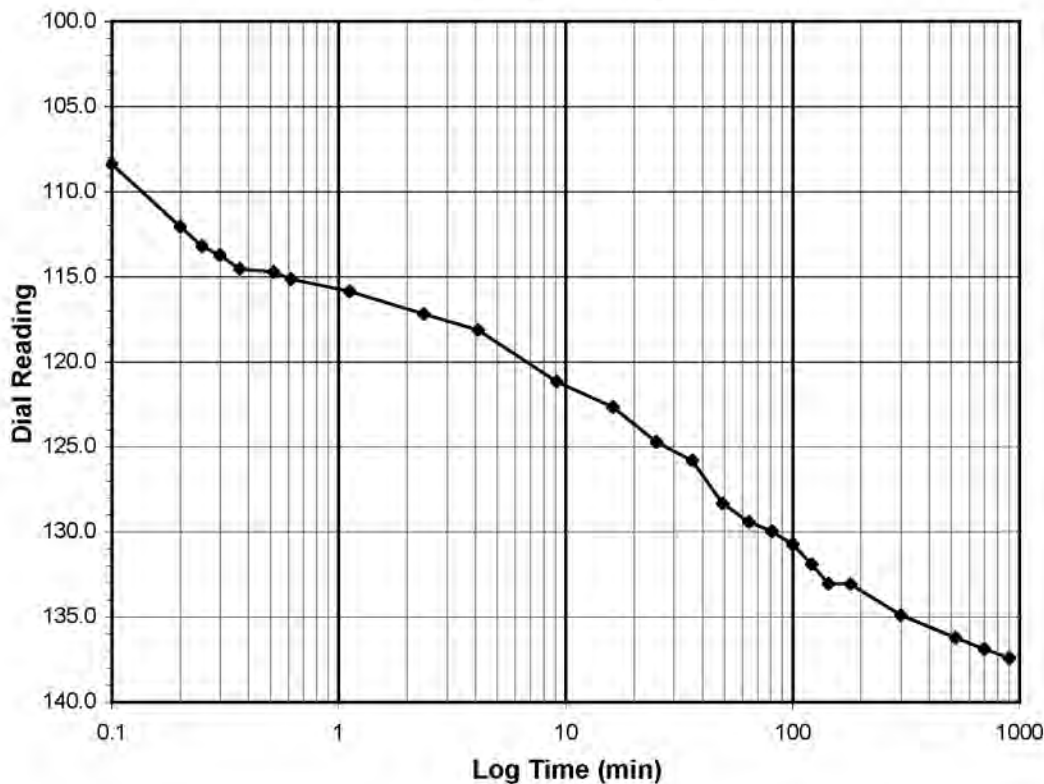
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.5-1.0**
 Final Reading (div) **137.4**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 11/8/13
 Start Time 22:12:13

Elapsed Time (min)	Dial Reading (div)
Initial	88.3
0.10	108.4
0.20	112.1
0.25	113.2
0.30	113.7
0.37	114.5
0.52	114.7
0.62	115.1
1.12	115.8
2.37	117.2
4.12	118.1
9.12	121.1
16.12	122.7
25.12	124.7
36.12	125.8
49.12	128.3
64.13	129.4
81.13	130.0
100.13	130.7
121.13	131.9
144.13	133.0
180.13	133.1
300.13	134.9
520.13	136.2
700.13	136.9
900.03	137.4



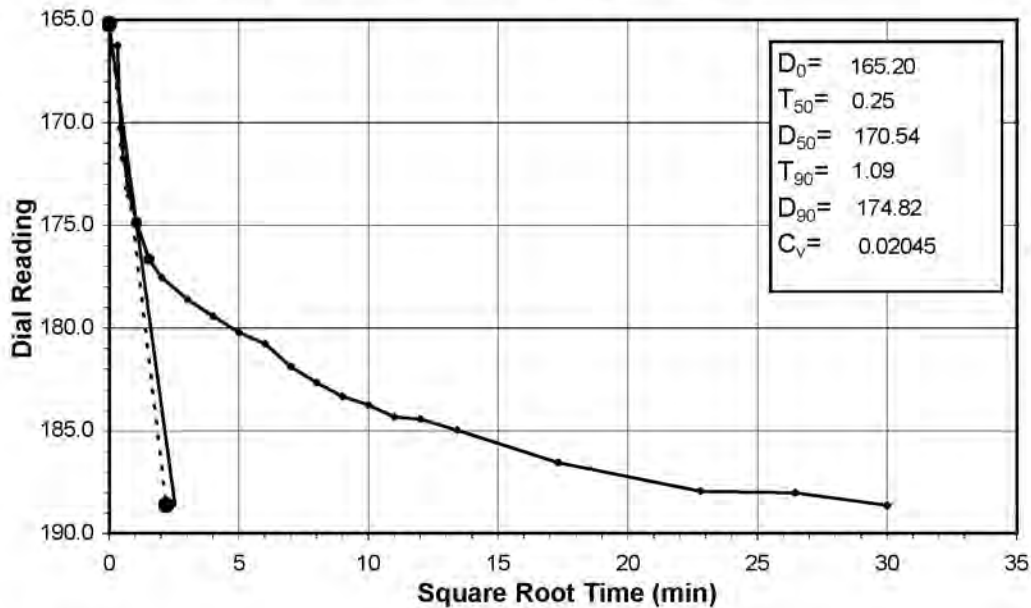
Tested By DB Date 11/8/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

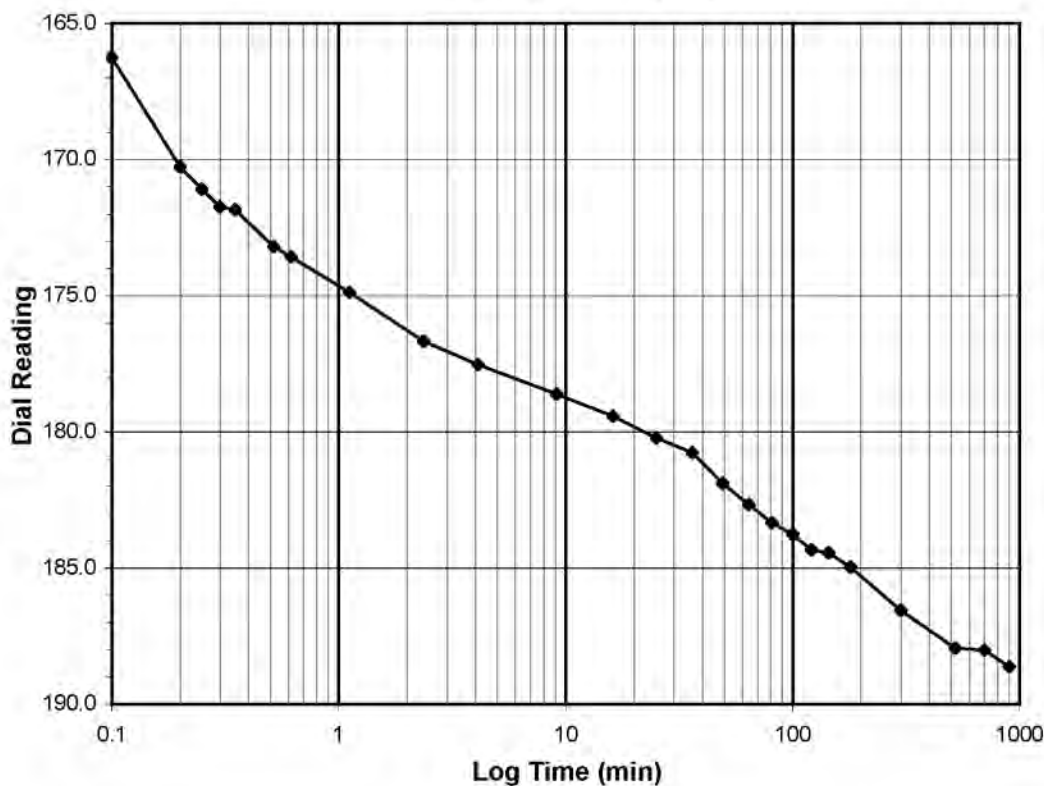
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 188.6
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/9/13
 Start Time 13:12:15

Elapsed Time (min)	Dial Reading (div)
Initial	137.4
0.10	166.2
0.20	170.3
0.25	171.1
0.30	171.7
0.35	171.8
0.52	173.2
0.62	173.6
1.12	174.9
2.37	176.7
4.12	177.5
9.12	178.6
16.12	179.4
25.12	180.2
36.12	180.8
49.12	181.9
64.12	182.7
81.12	183.3
100.12	183.8
121.12	184.3
144.12	184.4
180.12	185.0
300.12	186.6
520.12	187.9
700.12	188.0
900.25	188.6



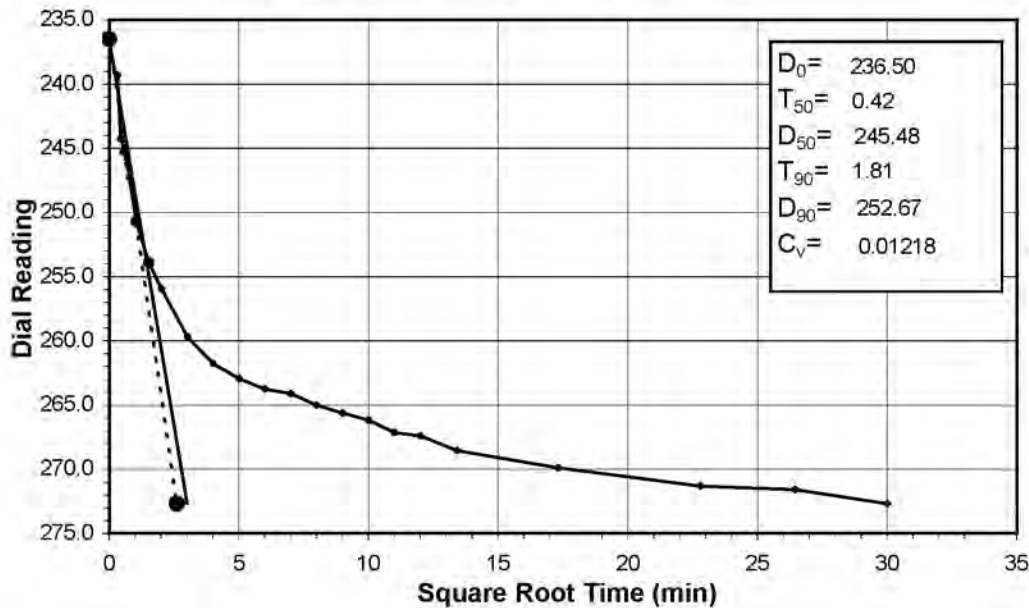
Tested By DB Date 11/9/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

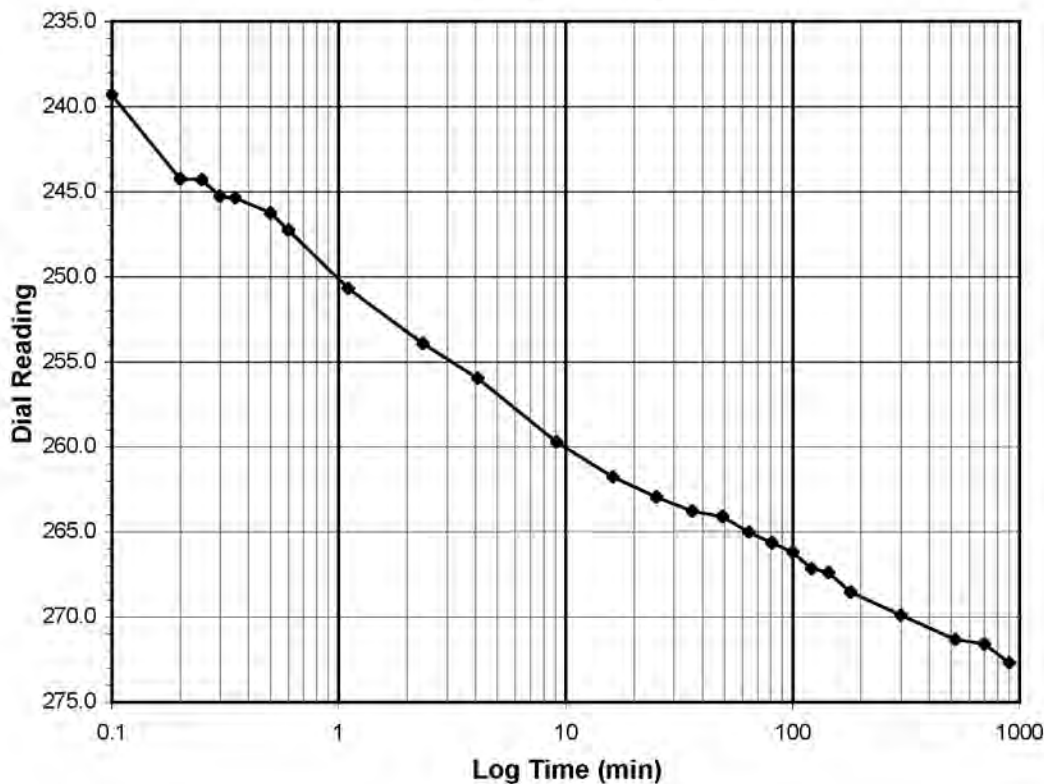
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **272.7**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 11/10/13
 Start Time 4:12:30

Elapsed Time (min)	Dial Reading (div)
Initial	188.6
0.10	239.3
0.20	244.3
0.25	244.3
0.30	245.3
0.35	245.4
0.50	246.2
0.60	247.3
1.10	250.7
2.35	253.9
4.10	256.0
9.12	259.7
16.12	261.8
25.12	262.9
36.12	263.8
49.12	264.1
64.12	265.0
81.12	265.6
100.12	266.2
121.12	267.2
144.12	267.4
180.12	268.5
300.12	269.9
520.13	271.3
700.13	271.6
900.07	272.7



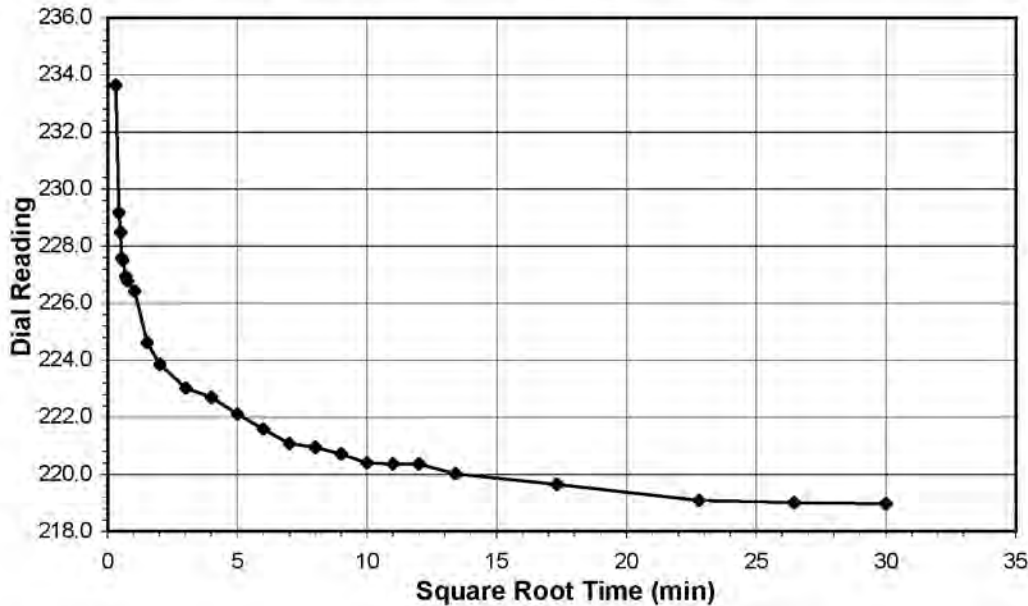
Tested By DB Date 11/10/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

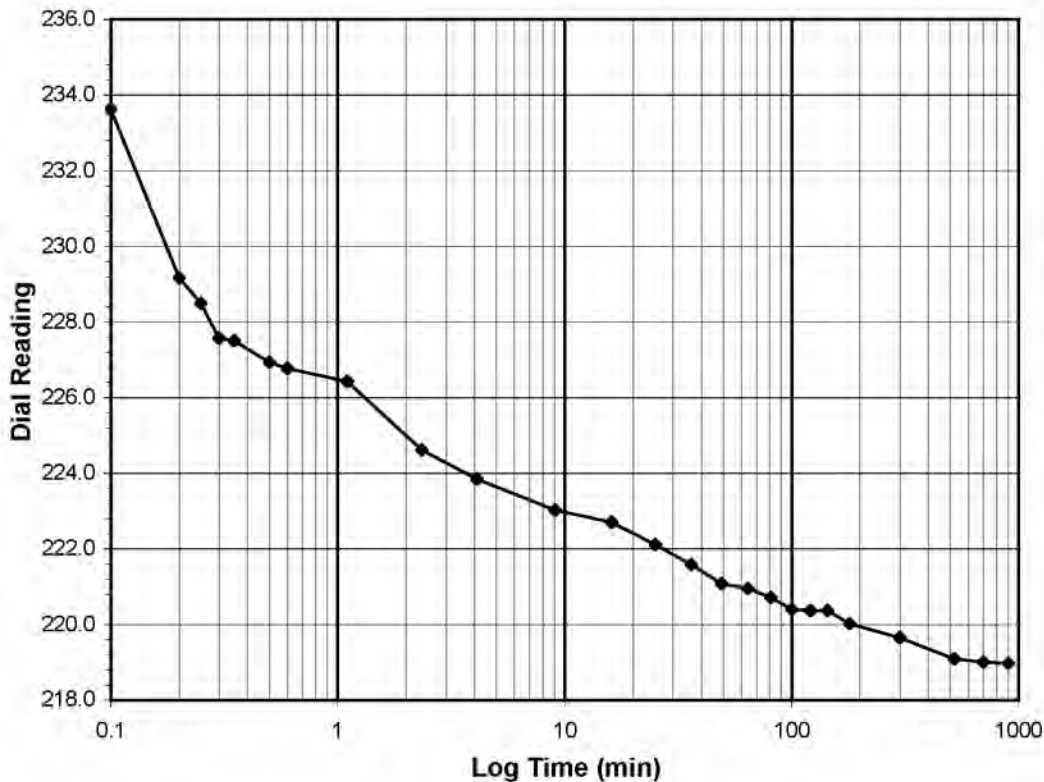
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
 Final Reading (div) 219.0
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/10/13
 Start Time 19:12:35

Elapsed Time (min)	Dial Reading (div)
Initial	272.7
0.10	233.6
0.20	229.2
0.25	228.5
0.30	227.6
0.35	227.5
0.50	226.9
0.60	226.8
1.10	226.4
2.35	224.6
4.10	223.9
9.10	223.0
16.10	222.7
25.10	222.1
36.10	221.6
49.10	221.1
64.10	221.0
81.10	220.7
100.10	220.4
121.10	220.4
144.12	220.4
180.12	220.0
300.12	219.6
520.12	219.1
700.12	219.0
900.47	219.0



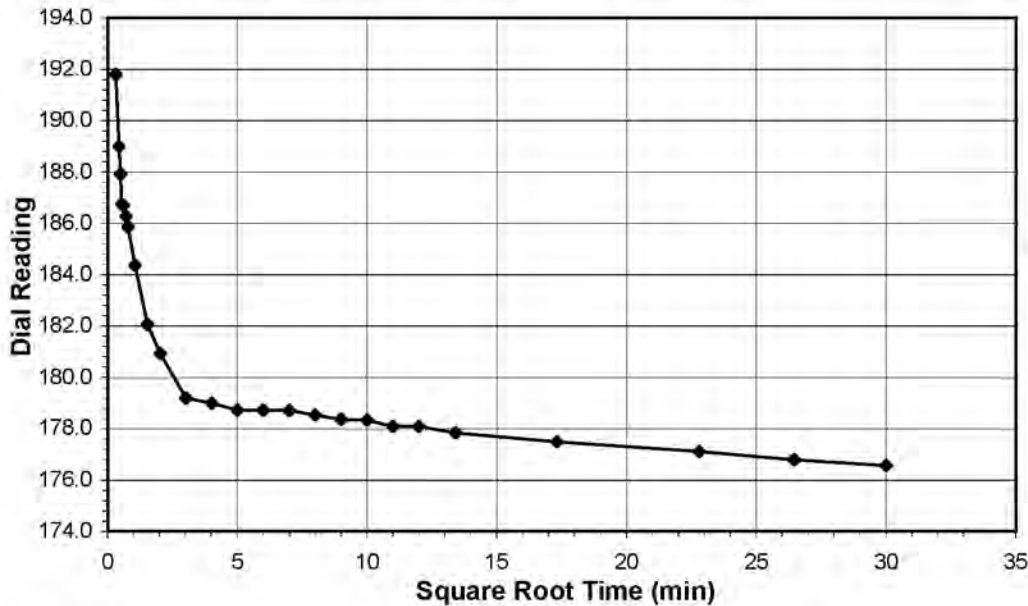
Tested By DB Date 11/10/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

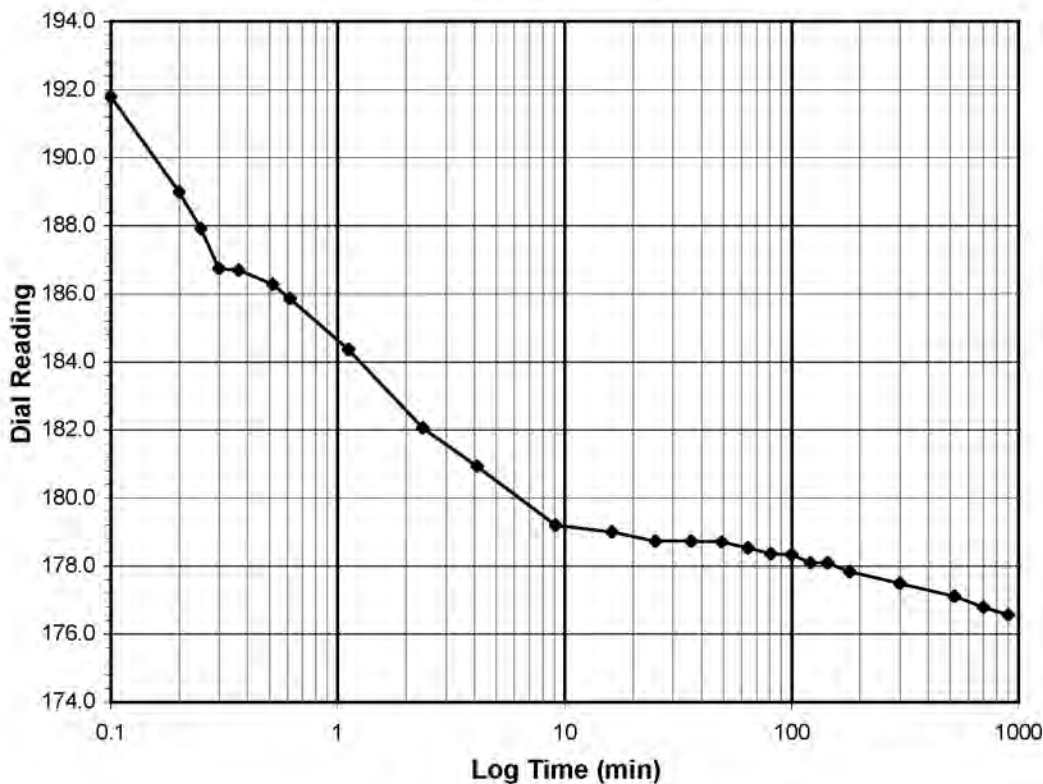
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 176.6
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/11/13
 Start Time 10:13:03

Elapsed Time (min)	Dial Reading (div)
Initial	219.0
0.10	191.8
0.20	189.0
0.25	187.9
0.30	186.7
0.37	186.7
0.52	186.3
0.62	185.9
1.12	184.4
2.37	182.1
4.12	180.9
9.12	179.2
16.12	179.0
25.12	178.7
36.12	178.7
49.12	178.7
64.12	178.5
81.12	178.4
100.13	178.3
121.13	178.1
144.13	178.1
180.13	177.8
300.13	177.5
520.13	177.1
700.13	176.8
900.27	176.6



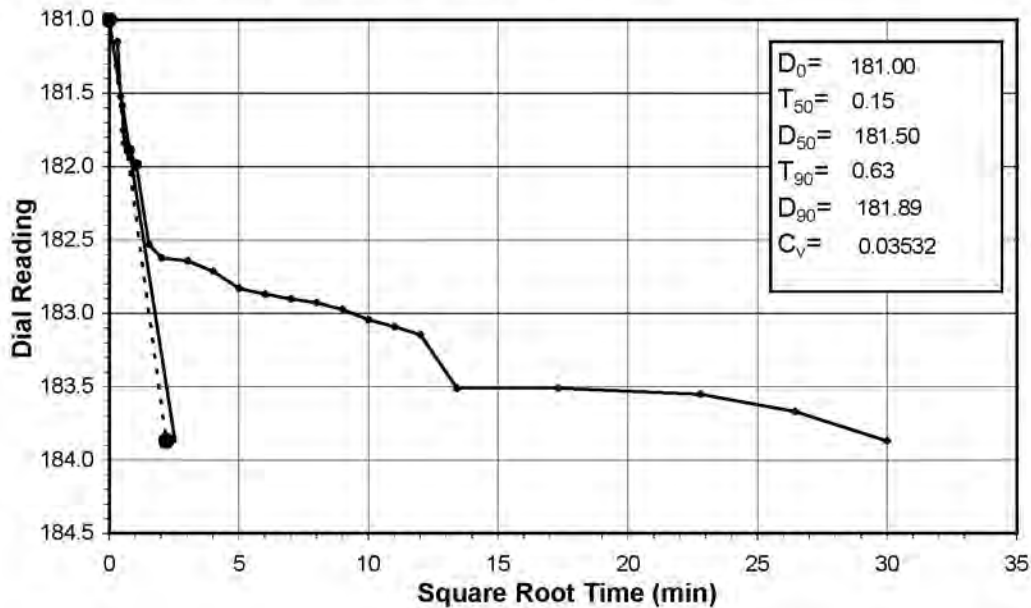
Tested By DB Date 11/11/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

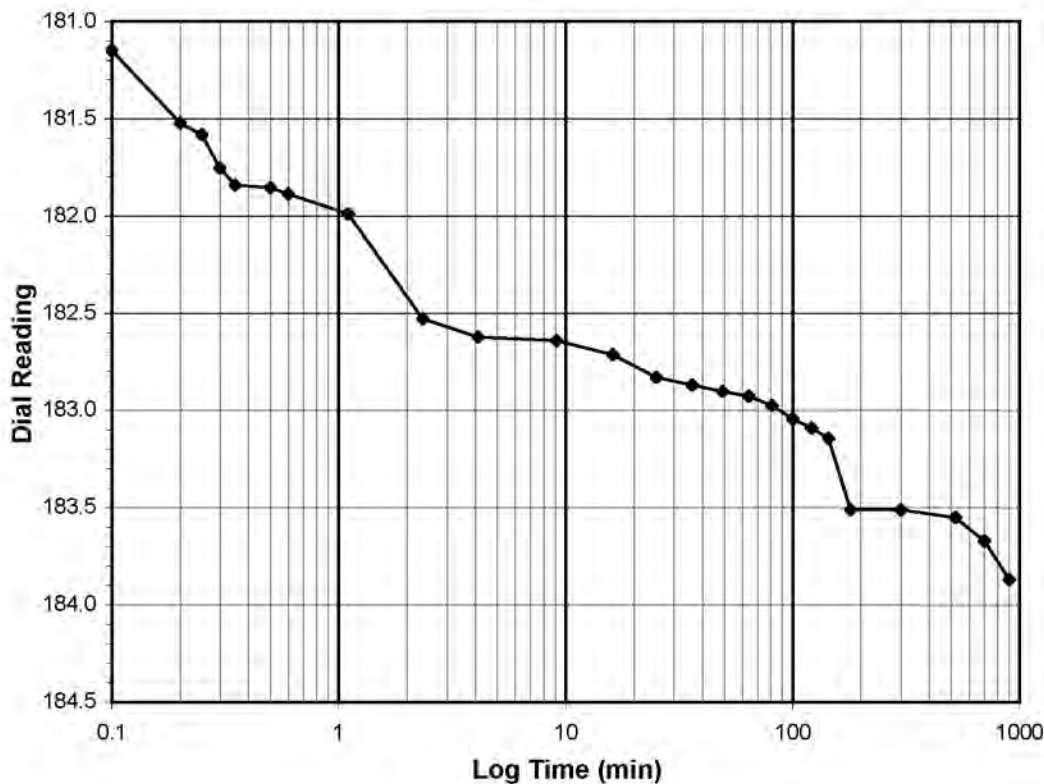
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **183.9**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 11/12/13
 Start Time 1:13:19

Elapsed Time (min)	Dial Reading (div)
Initial	176.6
0.10	181.1
0.20	181.5
0.25	181.6
0.30	181.8
0.35	181.8
0.50	181.9
0.60	181.9
1.10	182.0
2.35	182.5
4.12	182.6
9.12	182.6
16.12	182.7
25.12	182.8
36.12	182.9
49.12	182.9
64.12	182.9
81.12	183.0
100.12	183.0
121.12	183.1
144.12	183.1
180.12	183.5
300.12	183.5
520.13	183.6
700.13	183.7
900.18	183.9



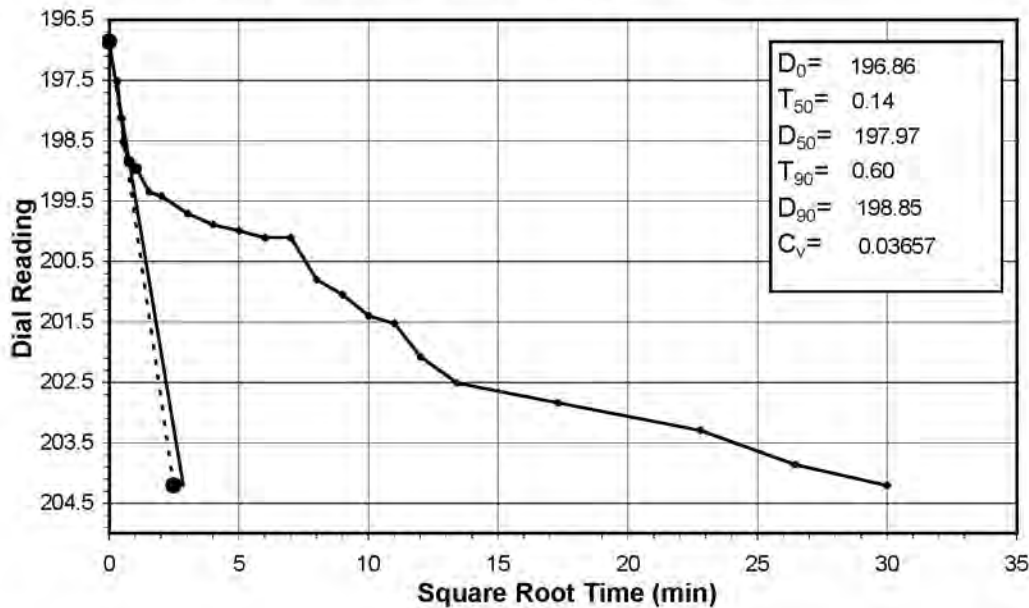
Tested By DB Date 11/12/13 Checked By TM Date 12/5/13

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 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

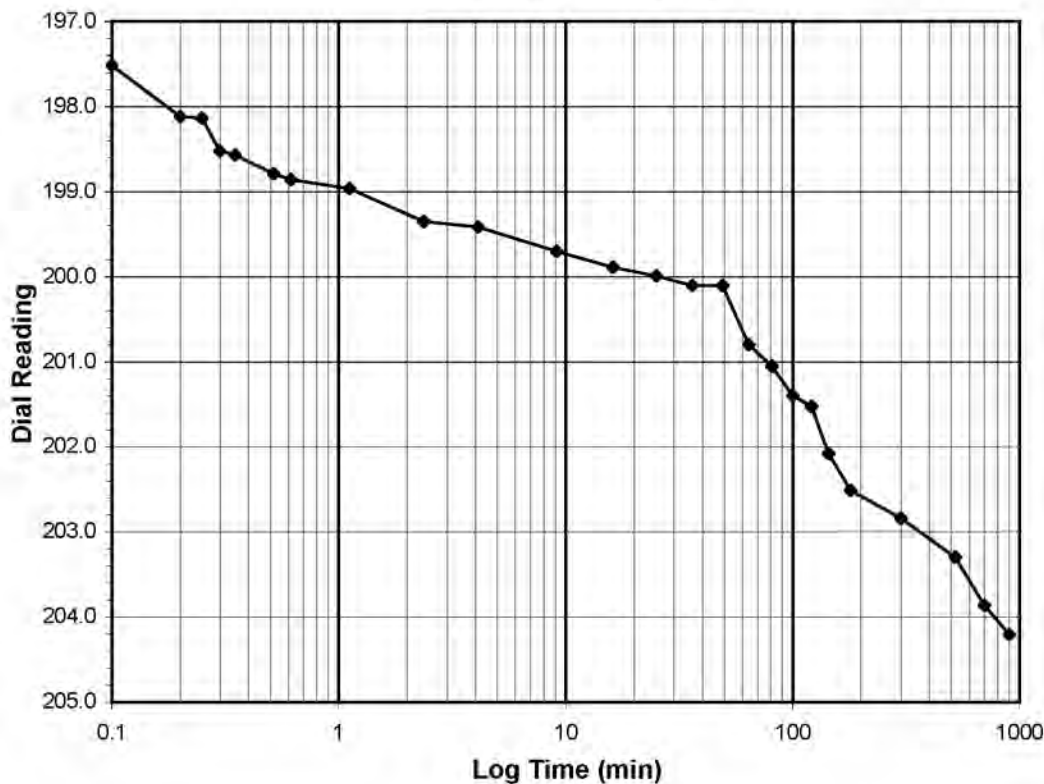
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.5-1.0**
 Final Reading (div) **204.2**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 11/12/13
 Start Time 16:13:30

Elapsed Time (min)	Dial Reading (div)
Initial	183.9
0.10	197.5
0.20	198.1
0.25	198.1
0.30	198.5
0.35	198.6
0.52	198.8
0.62	198.9
1.12	199.0
2.37	199.4
4.12	199.4
9.12	199.7
16.12	199.9
25.12	200.0
36.12	200.1
49.12	200.1
64.12	200.8
81.13	201.1
100.13	201.4
121.13	201.5
144.13	202.1
180.13	202.5
300.13	202.8
520.13	203.3
700.13	203.9
900.12	204.2



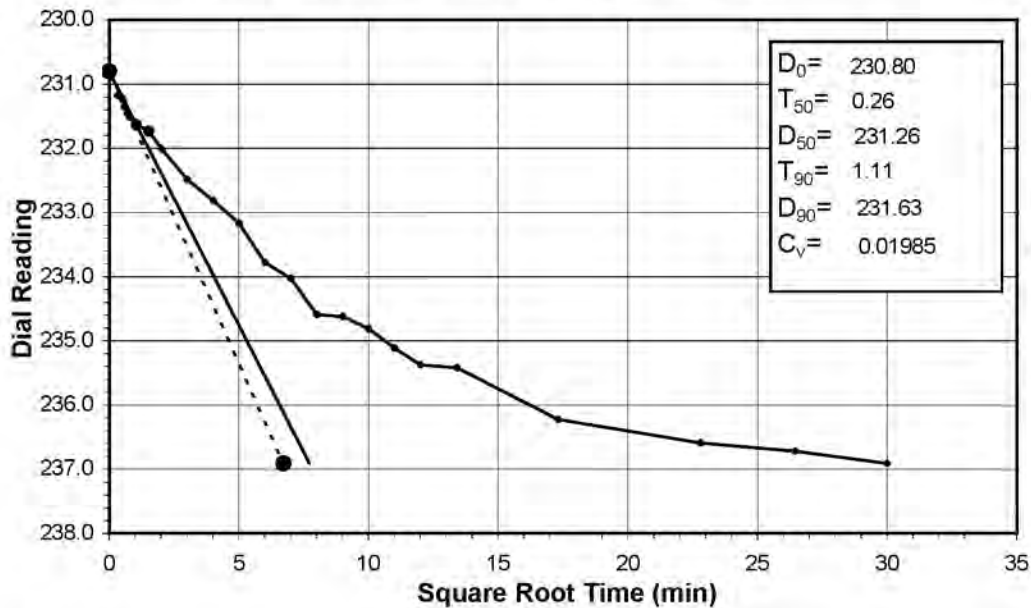
Tested By DB Date 11/12/13 Checked By TM Date 12/5/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

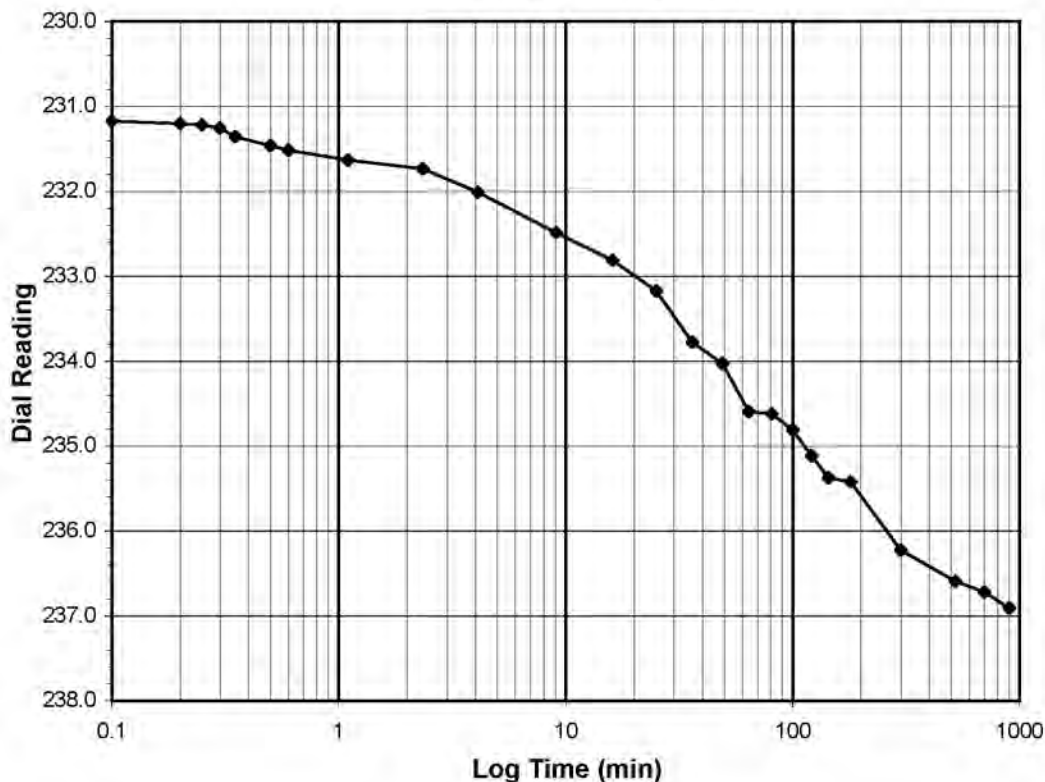
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 236.9
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/13/13
 Start Time 7:13:38

Elapsed Time (min)	Dial Reading (div)
Initial	204.2
0.10	231.2
0.20	231.2
0.25	231.2
0.30	231.3
0.35	231.4
0.50	231.5
0.60	231.5
1.10	231.6
2.35	231.7
4.10	232.0
9.10	232.5
16.10	232.8
25.10	233.2
36.12	233.8
49.12	234.0
64.12	234.6
81.12	234.6
100.12	234.8
121.12	235.1
144.12	235.4
180.12	235.4
300.12	236.2
520.12	236.6
700.13	236.7
900.10	236.9



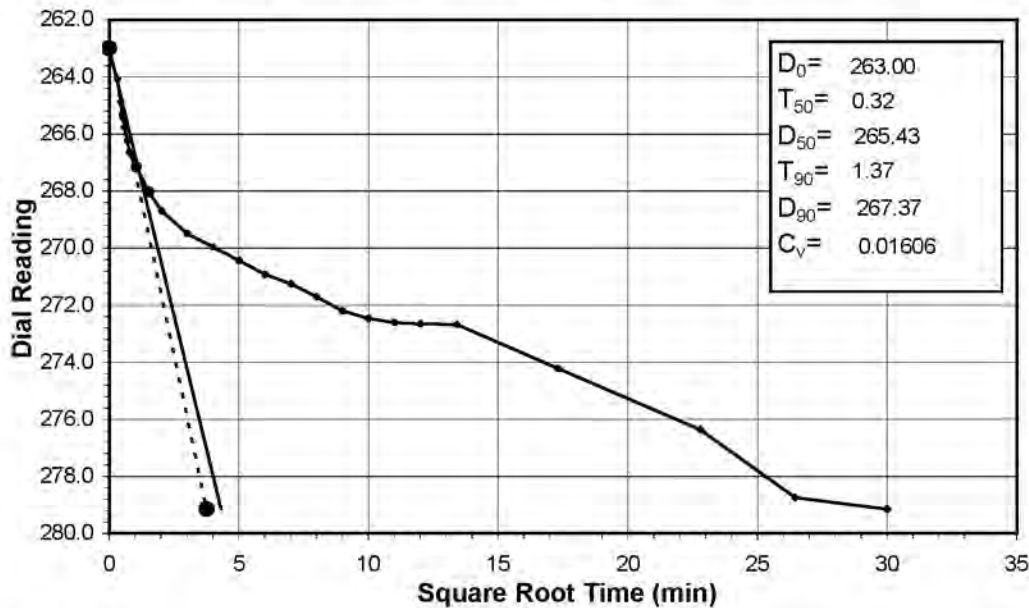
Tested By DB Date 11/13/13 Checked By TM Date 12/5/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

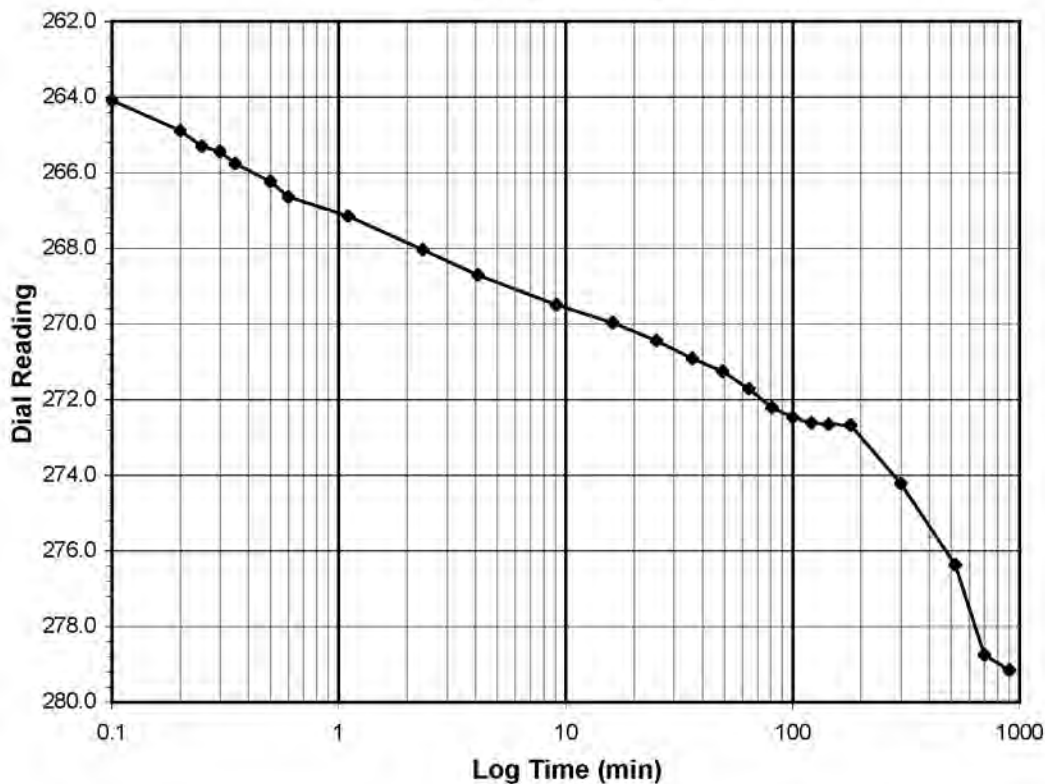
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-4.0
 Final Reading (div) 279.2
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/13/13
 Start Time 22:13:45

Elapsed Time (min)	Dial Reading (div)
Initial	236.9
0.10	264.1
0.20	264.9
0.25	265.3
0.30	265.4
0.35	265.8
0.50	266.2
0.60	266.6
1.10	267.1
2.35	268.0
4.10	268.7
9.10	269.5
16.10	270.0
25.10	270.4
36.10	270.9
49.10	271.2
64.10	271.7
81.10	272.2
100.10	272.5
121.10	272.6
144.10	272.7
180.10	272.7
300.10	274.2
520.10	276.4
700.12	278.7
900.12	279.2



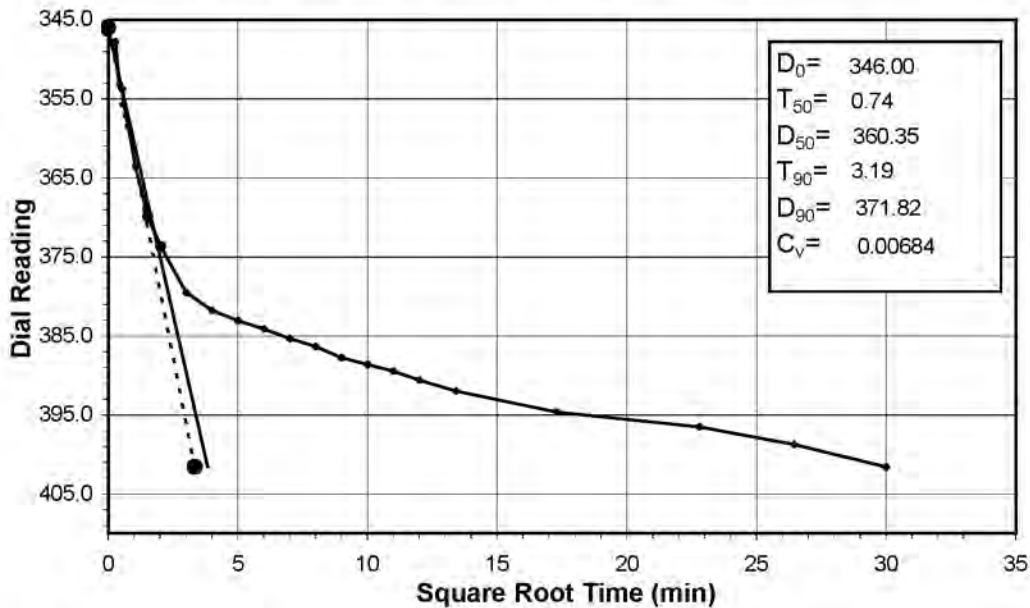
Tested By DB Date 11/13/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

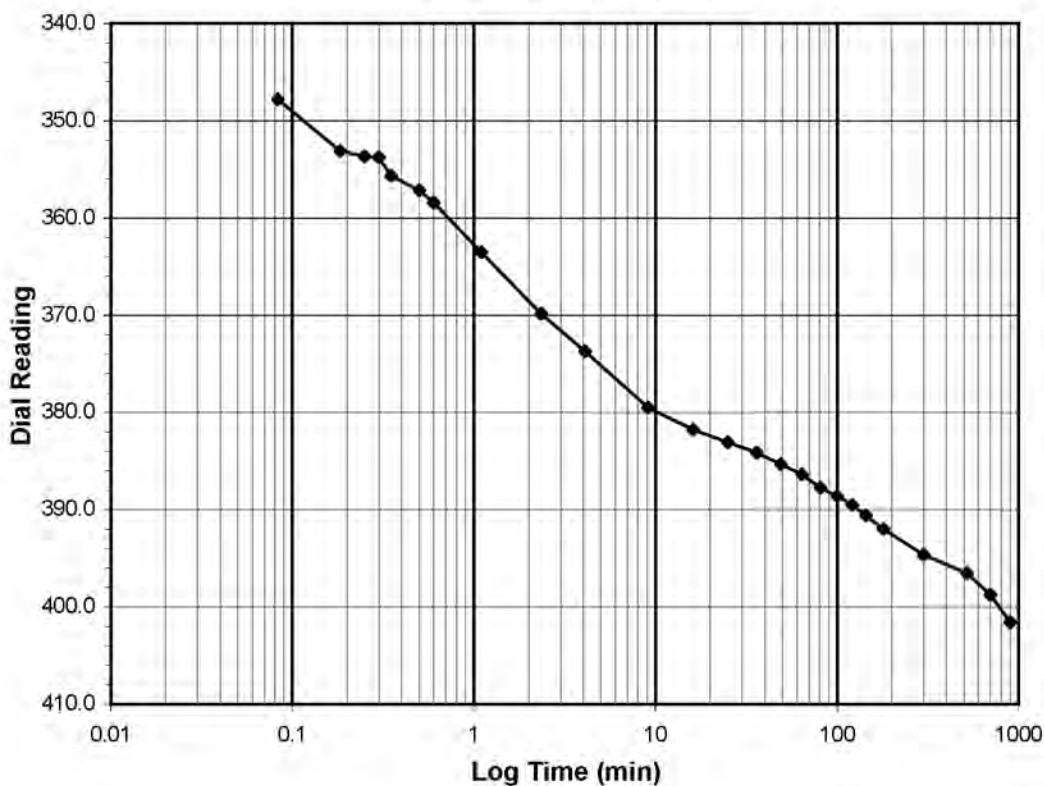
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-8.0
 Final Reading (div) 401.6
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/14/13
 Start Time 13:13:52

Elapsed Time (min)	Dial Reading (div)
Initial	279.2
0.08	347.8
0.18	353.1
0.25	353.7
0.30	353.8
0.35	355.7
0.50	357.1
0.60	358.4
1.10	363.5
2.35	369.9
4.10	373.7
9.10	379.5
16.10	381.8
25.10	383.1
36.12	384.1
49.12	385.3
64.12	386.4
81.12	387.7
100.12	388.6
121.12	389.5
144.12	390.6
180.12	392.0
300.12	394.6
520.12	396.5
700.12	398.7
900.20	401.6



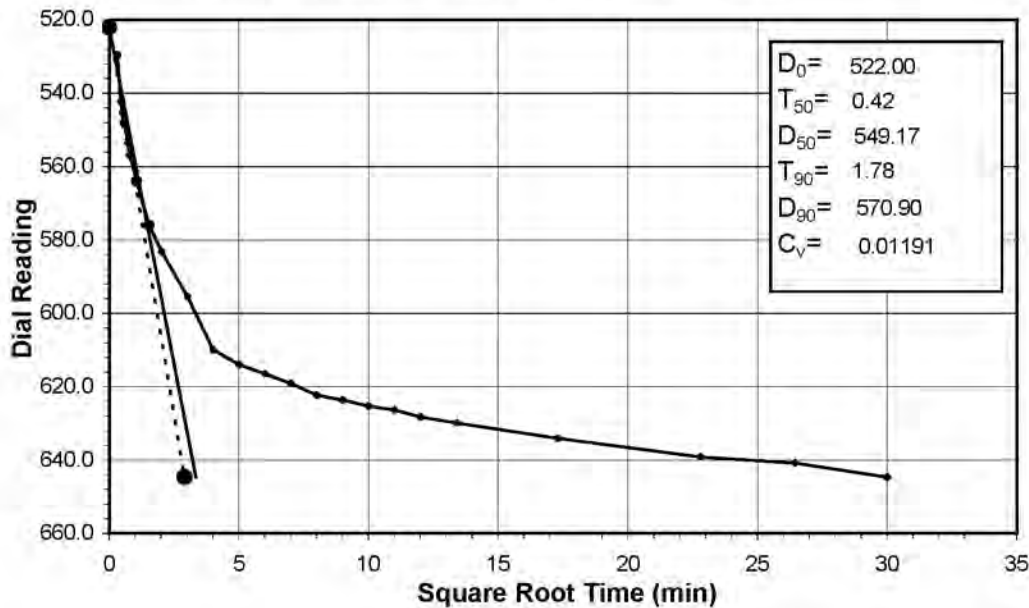
Tested By DB Date 11/14/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

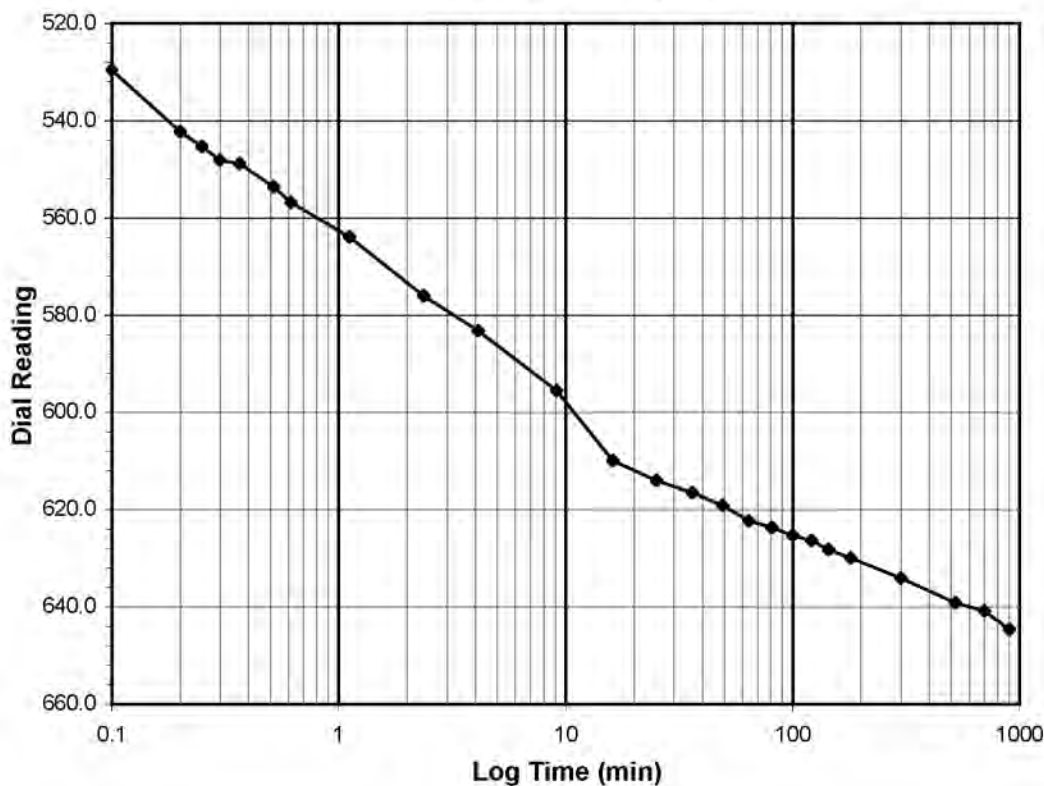
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 644.6
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 4:14:05

Elapsed Time (min)	Dial Reading (div)
Initial	401.6
0.10	529.6
0.20	542.2
0.25	545.3
0.30	548.1
0.37	548.8
0.52	553.6
0.62	556.8
1.12	563.9
2.37	576.0
4.12	583.2
9.12	595.5
16.12	609.9
25.12	614.0
36.12	616.5
49.12	619.1
64.12	622.3
81.12	623.7
100.12	625.3
121.12	626.3
144.12	628.2
180.12	629.9
300.13	634.1
520.13	639.1
700.13	640.8
900.23	644.6



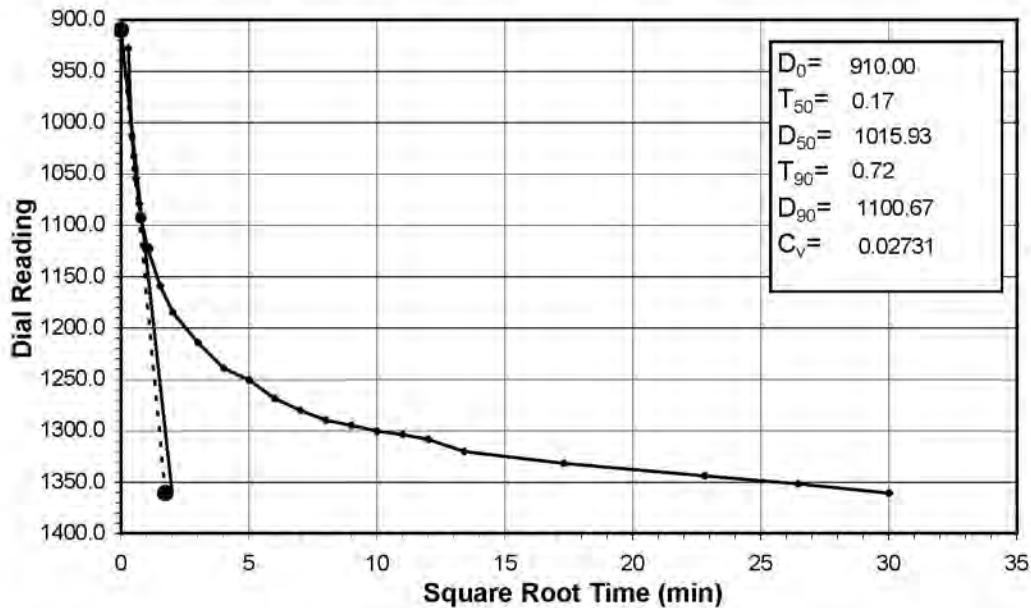
Tested By DB Date 11/15/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

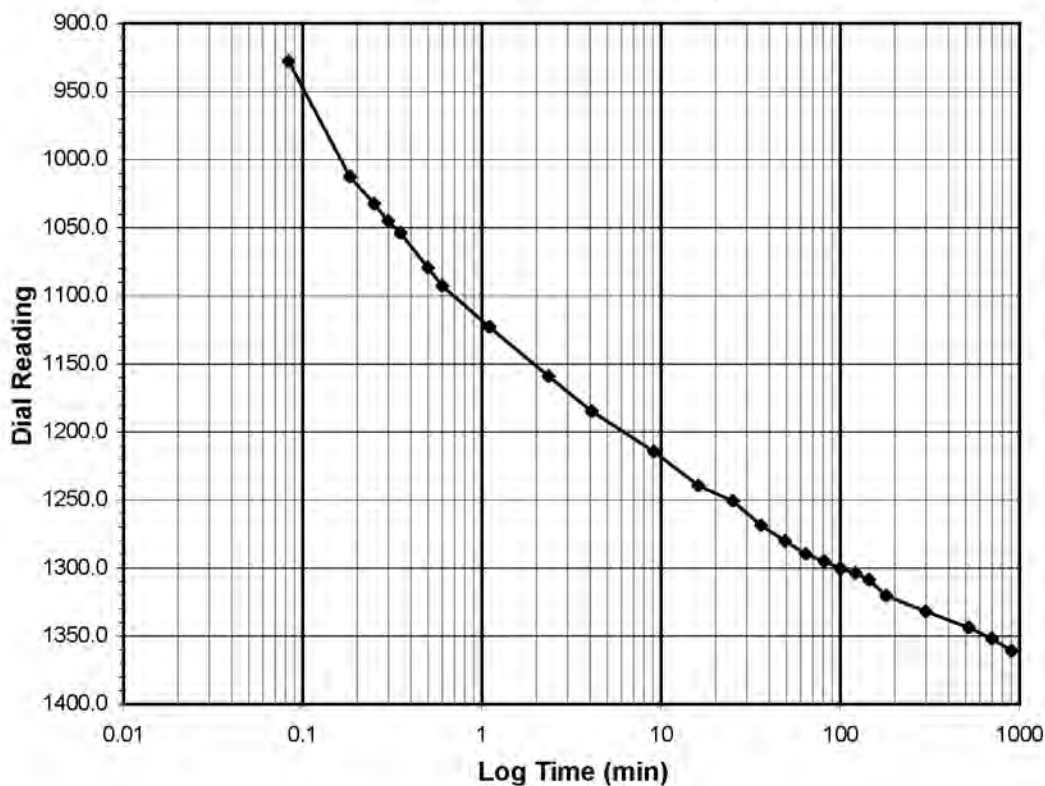
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **1360.6**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 19:14:19

Elapsed Time (min)	Dial Reading (div)
Initial	644.6
0.08	927.6
0.18	1012.4
0.25	1032.4
0.30	1045.0
0.35	1053.8
0.50	1079.2
0.60	1092.7
1.10	1122.9
2.35	1159.0
4.10	1184.9
9.10	1214.3
16.10	1239.3
25.10	1250.7
36.10	1268.5
49.10	1280.1
64.10	1289.7
81.12	1294.8
100.12	1300.3
121.12	1303.6
144.12	1308.4
180.12	1320.2
300.12	1331.8
520.12	1343.8
700.12	1351.7
900.48	1360.6



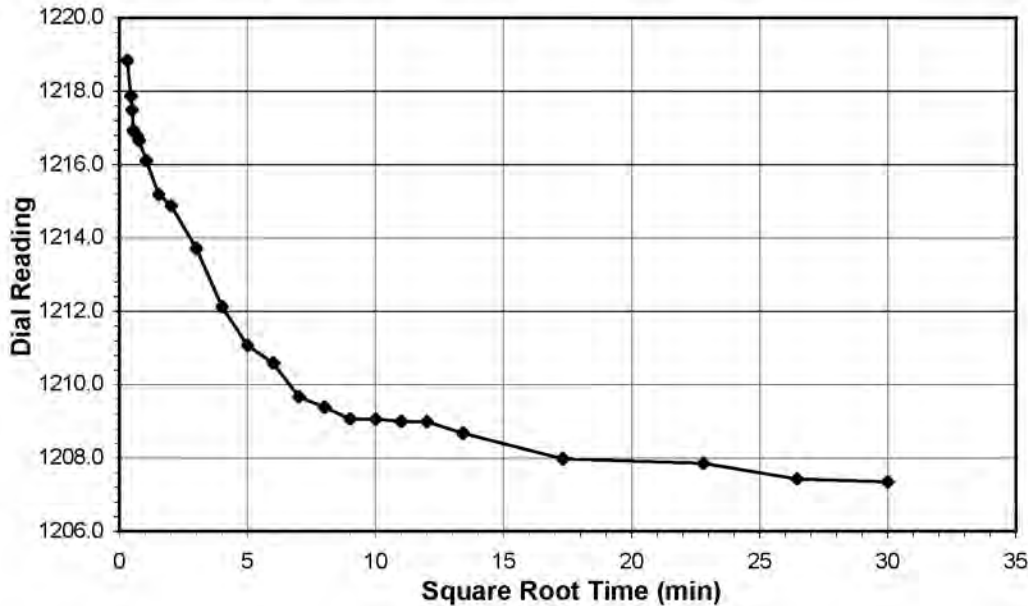
Tested By DB Date 11/15/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

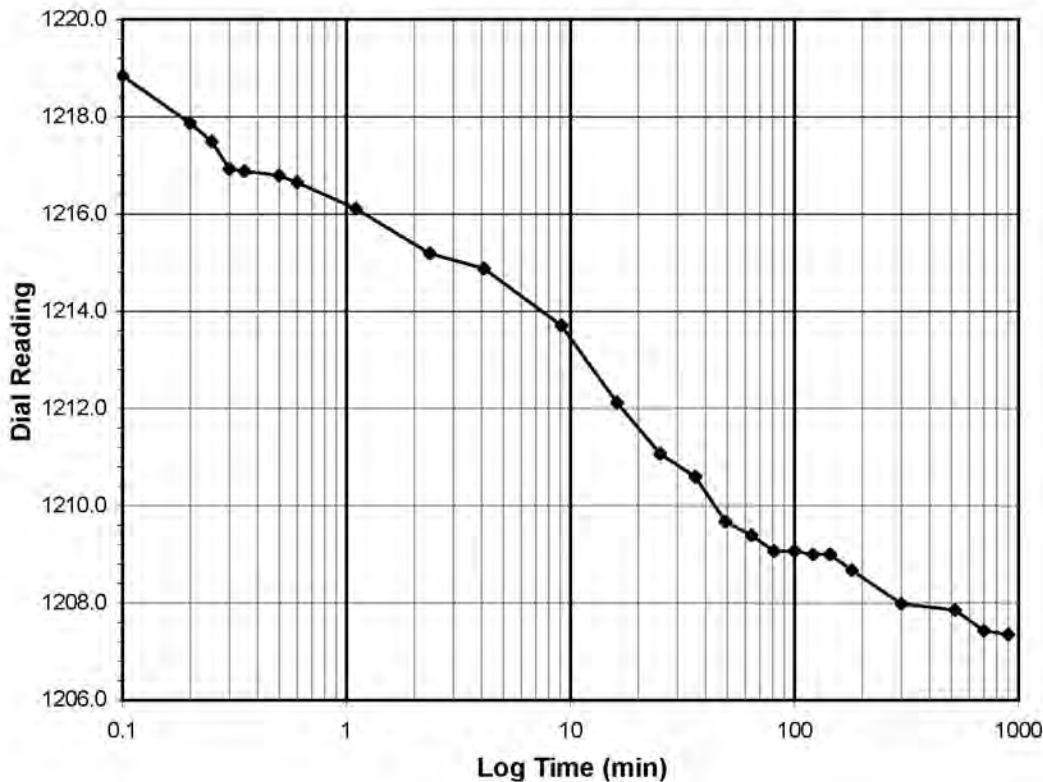
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **32.0-8.0**
 Final Reading (div) **1207.3**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001

Start Date 11/16/13
 Start Time 10:14:49

Elapsed Time (min)	Dial Reading (div)
Initial	1360.6
0.10	1218.8
0.20	1217.9
0.25	1217.5
0.30	1216.9
0.35	1216.9
0.50	1216.8
0.60	1216.6
1.10	1216.1
2.35	1215.2
4.10	1214.9
9.10	1213.7
16.10	1212.1
25.10	1211.1
36.12	1210.6
49.12	1209.7
64.12	1209.4
81.12	1209.1
100.12	1209.1
121.12	1209.0
144.12	1209.0
180.12	1208.7
300.12	1208.0
520.12	1207.9
700.12	1207.4
900.33	1207.3



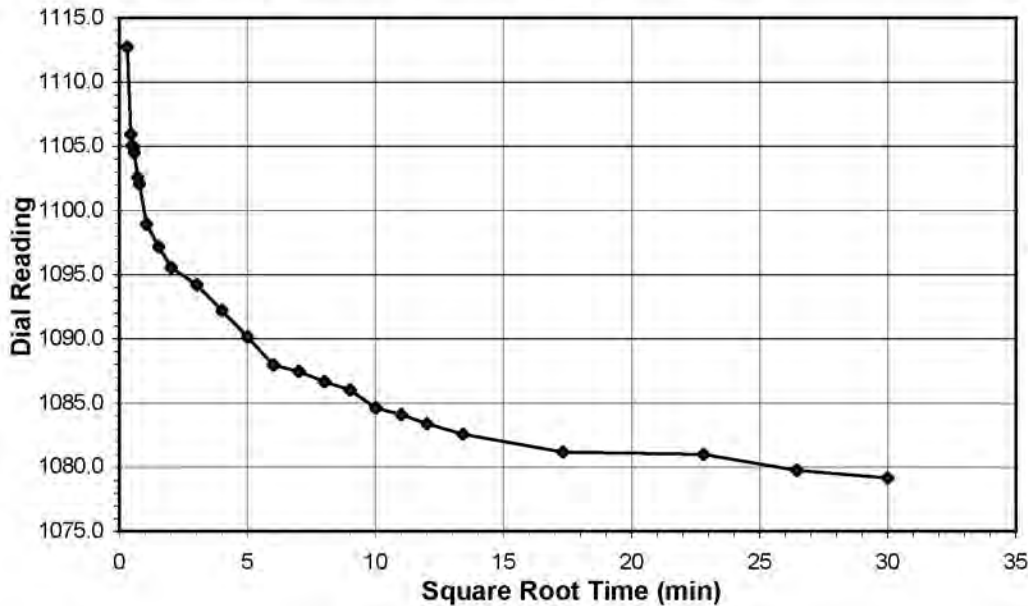
Tested By DB Date 11/16/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

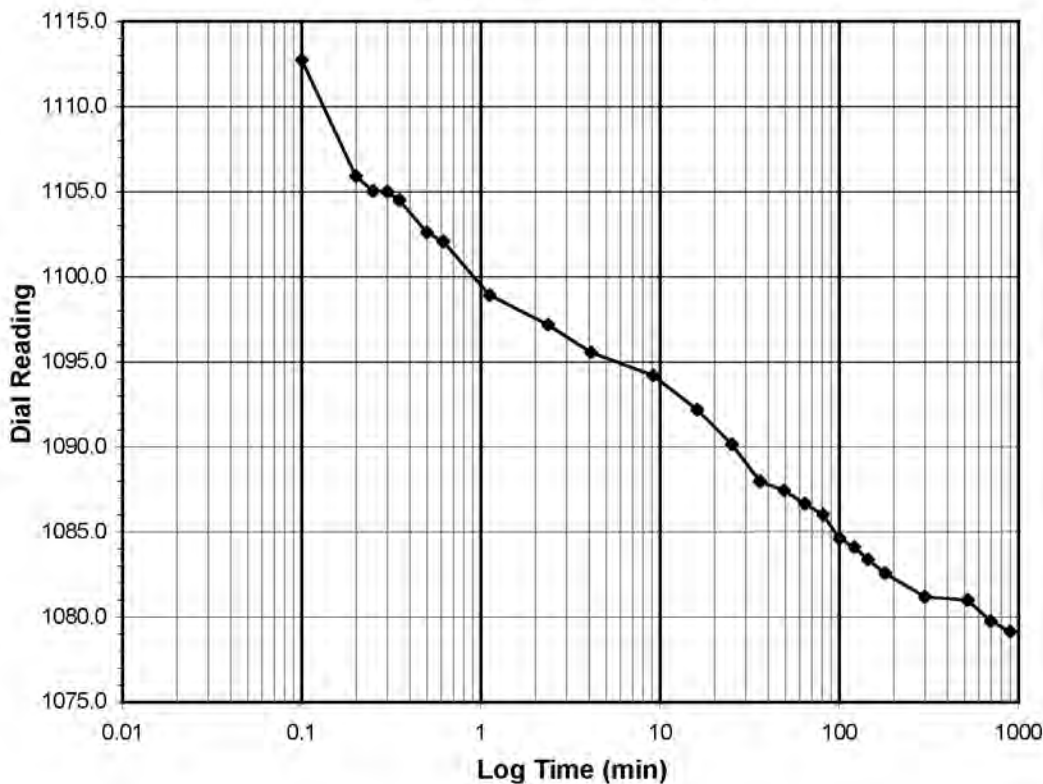
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-2.0
 Final Reading (div) 1079.2
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/17/13
 Start Time 1:15:09

Elapsed Time (min)	Dial Reading (div)
Initial	1207.3
0.10	1112.7
0.20	1105.9
0.25	1105.0
0.30	1105.0
0.35	1104.5
0.50	1102.6
0.62	1102.1
1.12	1098.9
2.37	1097.2
4.12	1095.6
9.12	1094.2
16.12	1092.2
25.12	1090.2
36.12	1088.0
49.12	1087.5
64.12	1086.7
81.12	1086.0
100.12	1084.6
121.12	1084.1
144.12	1083.4
180.12	1082.6
300.12	1081.2
520.13	1081.0
700.13	1079.8
900.13	1079.2



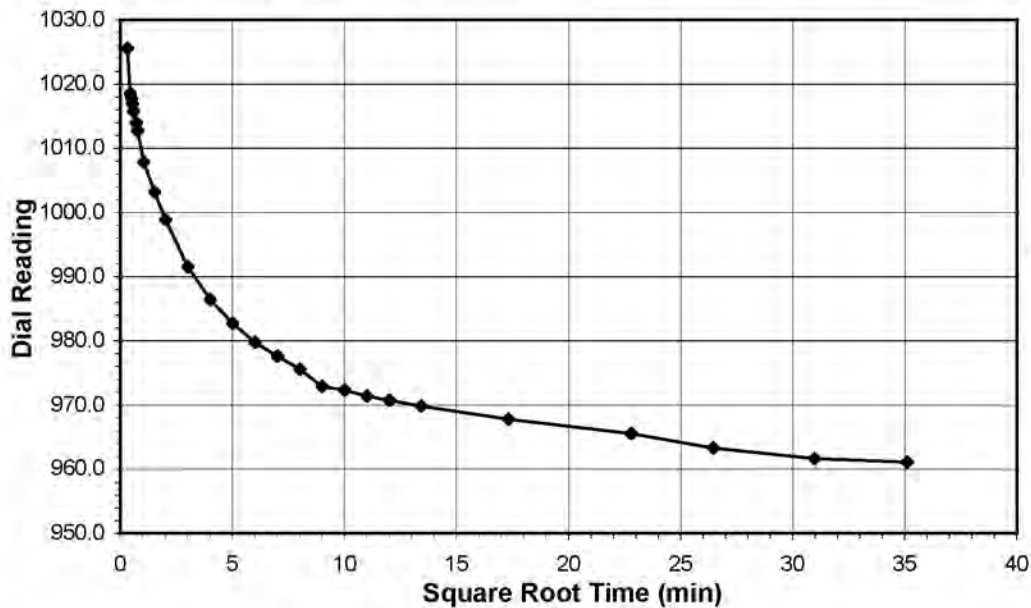
Tested By DB Date 11/17/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

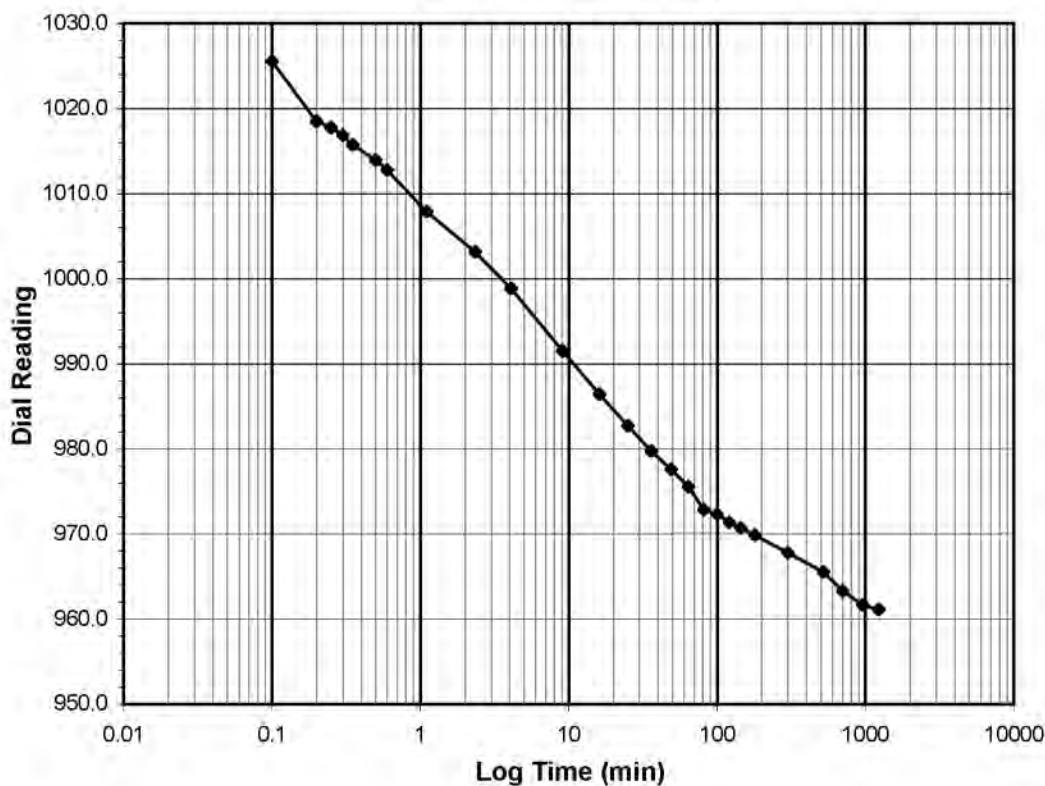
Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-0.5
 Final Reading (div) 961.1
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/17/13
 Start Time 16:15:17

Elapsed Time (min)	Dial Reading (div)
Initial	1079.2
0.10	1025.6
0.20	1018.5
0.25	1017.8
0.30	1016.9
0.35	1015.7
0.50	1013.9
0.60	1012.8
1.10	1007.9
2.35	1003.2
4.10	998.8
9.10	991.5
16.10	986.4
25.10	982.7
36.10	979.8
49.10	977.6
64.10	975.6
81.12	972.9
100.12	972.3
121.12	971.4
144.12	970.7
180.12	969.9
300.12	967.8
520.12	965.5
700.12	963.3
960.12	961.6
1232.67	961.1



Tested By DB Date 11/17/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained**Consolidometer No.** G1424**1 Division** = 0.0001 (in)**Sample Properties****Initial Final****Test Data Summary****Water Content**

	Initial	Final
Tare Number	2668	2702
Wt. Tare & WS (g)	111.65	150.26
Wt. Tare & DS (g)	85.91	117.64
Wt. Water (g)	25.74	32.62
Wt. Tare (g)	6.92	6.60
Wt. DS (g)	78.99	111.04
Water Content (%)	32.59	29.38

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.38966	0.89975
0.25	51.8	17.0	34.9	25.311	80.159	1.39452	0.89312
0.5	88.3	22.5	65.8	25.233	79.910	1.39887	0.88724
1	137.4	31.8	105.6	25.132	79.590	1.40449	0.87968
2	188.6	56.2	132.4	25.064	79.375	1.40830	0.87460
4	272.7	87.6	185.1	24.930	78.951	1.41586	0.86459
1	219.0	52.8	166.2	24.978	79.103	1.41314	0.86818
0.25	176.6	24.8	151.8	25.014	79.219	1.41108	0.87091
0.5	183.9	31.4	152.4	25.013	79.214	1.41117	0.87079
1	204.2	45.6	158.6	24.997	79.164	1.41205	0.86962
2	236.9	60.3	176.7	24.951	79.019	1.41465	0.86619
4	279.2	86.5	192.7	24.911	78.890	1.41696	0.86315
8	401.6	137.0	264.5	24.728	78.312	1.42741	0.84950
16	644.6	196.5	448.1	24.262	76.835	1.45485	0.81462
32	1360.6	283.7	1076.9	22.665	71.777	1.55737	0.69516
8	1207.3	174.5	1032.9	22.776	72.131	1.54973	0.70353
2	1079.2	104.7	974.5	22.925	72.601	1.53970	0.71462
0.5	961.1	68.4	892.8	23.132	73.258	1.52588	0.73015

Sample Parameters

	Initial	Final
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9107
Sample Volume (cm ³)	80.44	73.26
Wt. Wet Sample + Ring (g)	362.52	358.93
Wt. of Ring (g)	214.31	214.31
Wt. of Wet Sample (g)	148.21	144.62
Wet Density (pcf)	114.97	123.19
Wet Density (g/cm ³)	1.84	1.97
Water Content (%)	32.59	29.38
Wt. of Dry Sample (g)	111.78	111.78
Dry Density (pcf)	86.71	95.22
Dry Density (g/cm ³)	1.39	1.53
Void Ratio	0.8998	0.7301
Saturation (%)	95.61	106.22
Specific Gravity	2.64	Measured

Tested By DB Date 11/7/13 Input Checked By TM Date 12/5/13

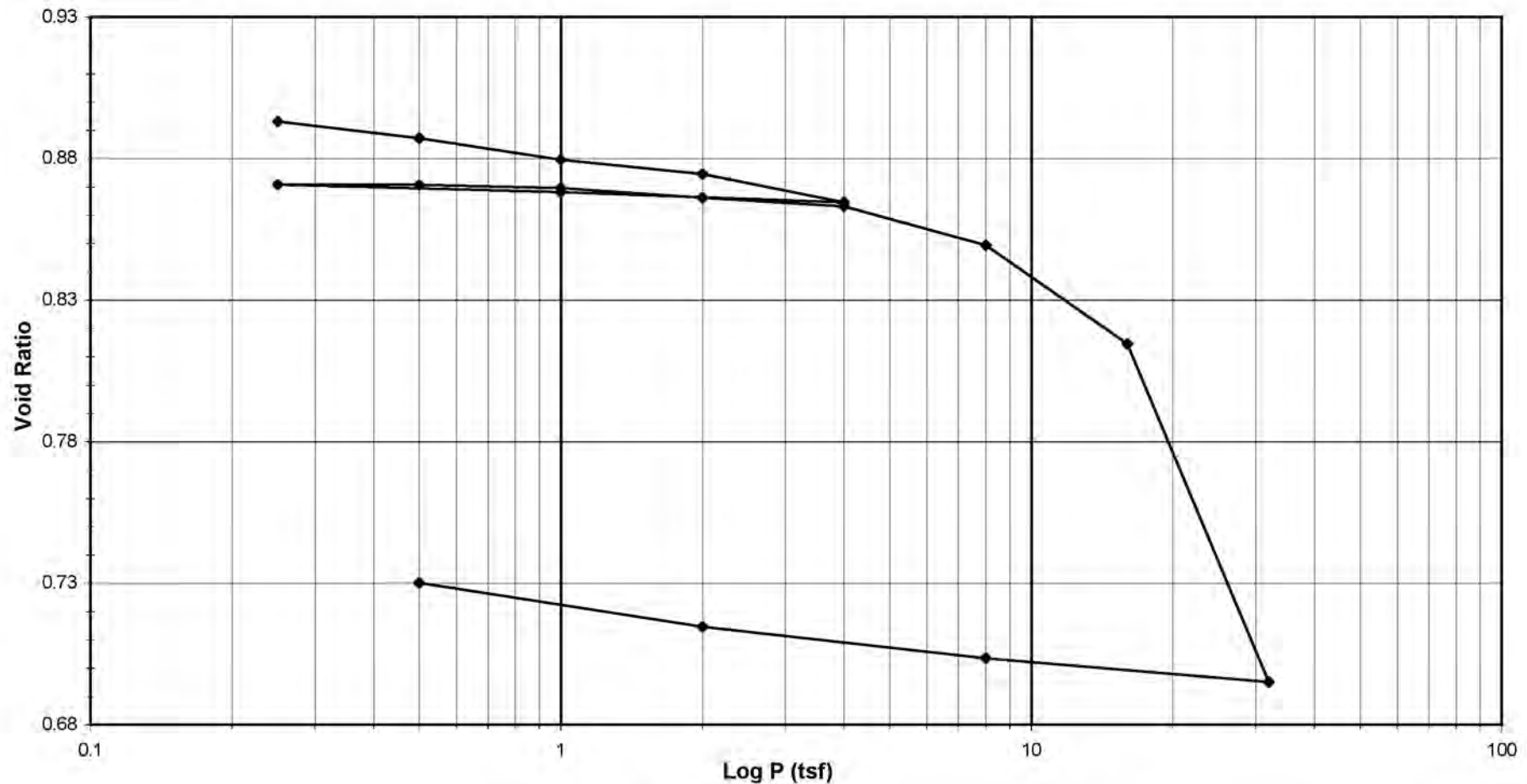
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ONE DIMENSIONAL CONSOLIDATION
ASTM D2435 / D2435M-11



Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-027

Boring No. R-6-1b
Depth (ft) 209.2-209.4
Sample No. ST-17
Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/7/13 Approved By RJO Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1424

1 Division = 0.0001 (in)

C_v Test Data Summary

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>						
<i>Water Content</i>			Load	Dial	Machine	Corrected	Sample	Time
Tare Number	2668	2702	Increment	Reading	Deflection	Dial Reading	Height	t₅₀
				@ t₅₀		@ t₅₀	@ t₅₀	
			(tsf)	(div)	(div)	(div)	(mm)	(min)
								C_v
								(cm ² /sec)
Wt. Tare & WS (g)	111.65	150.26	Seating	NA	NA	NA	NA	NA
Wt. Tare & DS (g)	85.91	117.64	0.25	35.3	17.0	18.4	25.35	0.32
Wt. Water (g)	25.74	32.62	0.5	74.5	22.5	52.1	25.27	0.32
Wt. Tare (g)	6.92	6.6	1	110.7	31.8	78.9	25.20	0.16
Wt. DS (g)	78.99	111.04	2	170.5	56.2	114.3	25.11	0.25
Water Content (%)	32.59	29.38	4	245.5	87.6	157.9	25.00	0.42
			1	NA	NA	NA	NA	NA
<i>Sample Parameters</i>			0.25	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.5	181.5	31.4	150.1	25.02	0.15
Sample Height (in)	1.0000	0.9107	1	198.0	45.6	152.3	25.01	0.14
Sample Volume (cm ³)	80.44	73.26	2	231.3	60.3	171.0	24.97	0.26
Wt. Wet Sample + Ring (g)	362.52	358.93	4	265.4	86.5	178.9	24.95	0.32
Wt. of Ring (g)	214.31	214.31	8	360.3	137.0	223.3	24.83	0.74
Wt. of Wet Sample (g)	148.21	144.62	16	549.2	196.5	352.7	24.50	0.42
Wet Density (pcf)	114.97	123.19	32	1015.9	283.7	732.2	23.54	0.17
Wet Density (g/cm ³)	1.84	1.97	8	NA	NA	NA	NA	NA
Water Content (%)	32.59	29.38	2	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	111.78	111.78	0.5	NA	NA	NA	NA	NA
Dry Density (pcf)	86.71	95.22						
Dry Density (g/cm ³)	1.39	1.53						
Void Ratio	0.8998	0.7301						
Saturation (%)	95.61	106.22						
Specific Gravity	2.64	Measured						

Tested By DB Date 11/7/13 Input Checked By TM Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

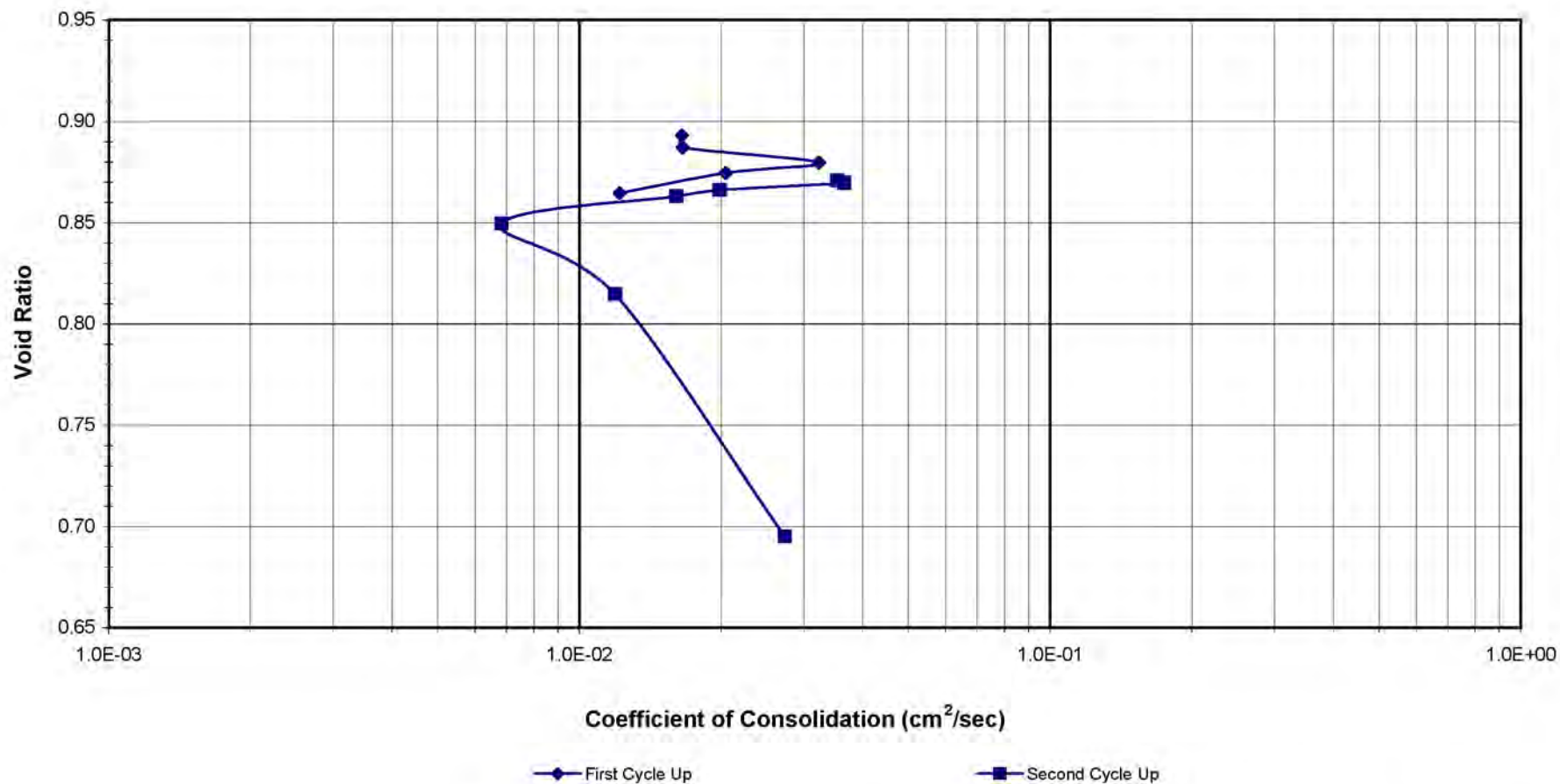
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-027

Boring No. R-6-1b
 Depth (ft) 209.2-209.4
 Sample No. ST-17
 Visual Description Gray Sandy Silt

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/7/13

Approved By RJO Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	209.2-209.4
Project No.	2013-465-001	Sample No.	ST-17
Lab ID #	2013-465-001-027		

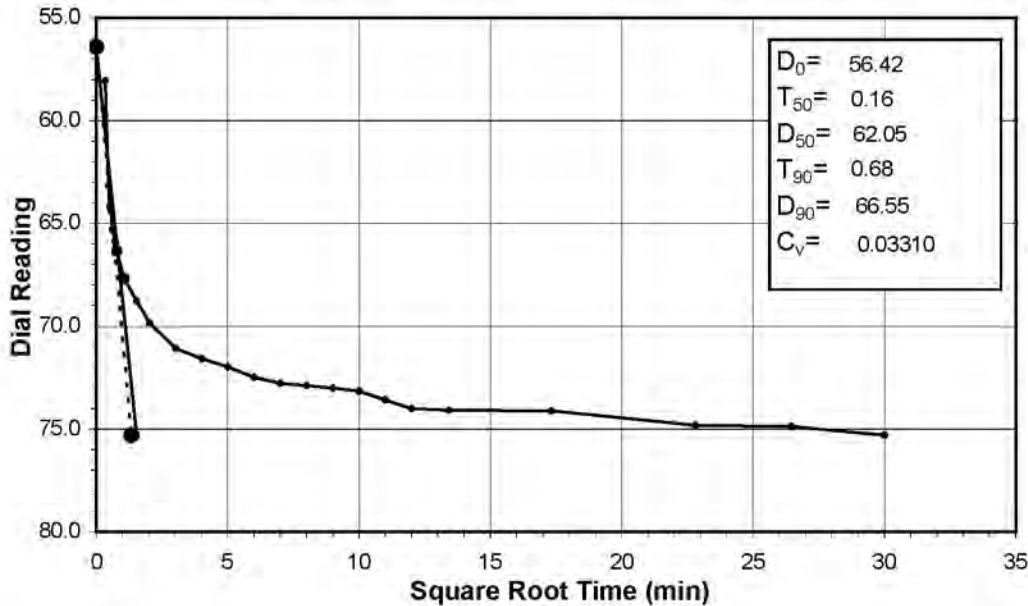
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1424	1/9/14
Load Cell	G1425	1/9/14
LVDT	G1426	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

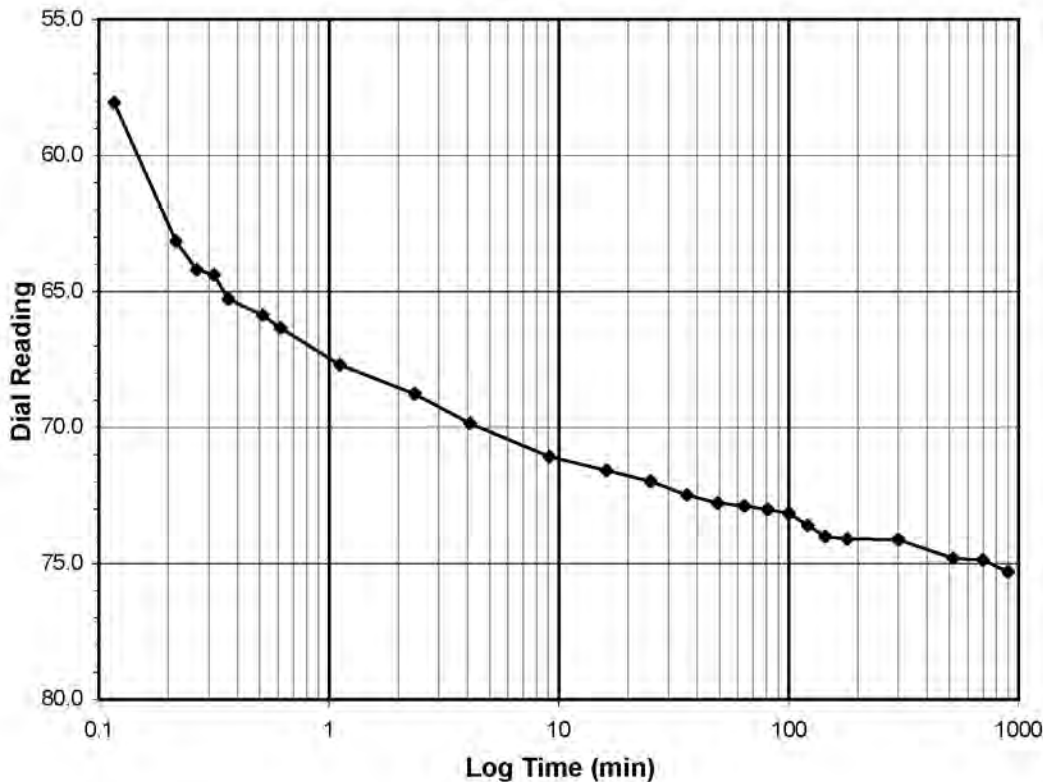
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 75.3
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/29/13
 Start Time 9:16:48

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.12	58.1
0.22	63.2
0.27	64.2
0.32	64.4
0.37	65.3
0.52	65.9
0.62	66.3
1.12	67.7
2.37	68.8
4.12	69.8
9.12	71.1
16.12	71.6
25.12	72.0
36.12	72.5
49.12	72.8
64.12	72.9
81.12	73.0
100.12	73.1
121.12	73.6
144.12	74.0
180.12	74.1
300.12	74.1
520.12	74.8
700.12	74.9
900.08	75.3



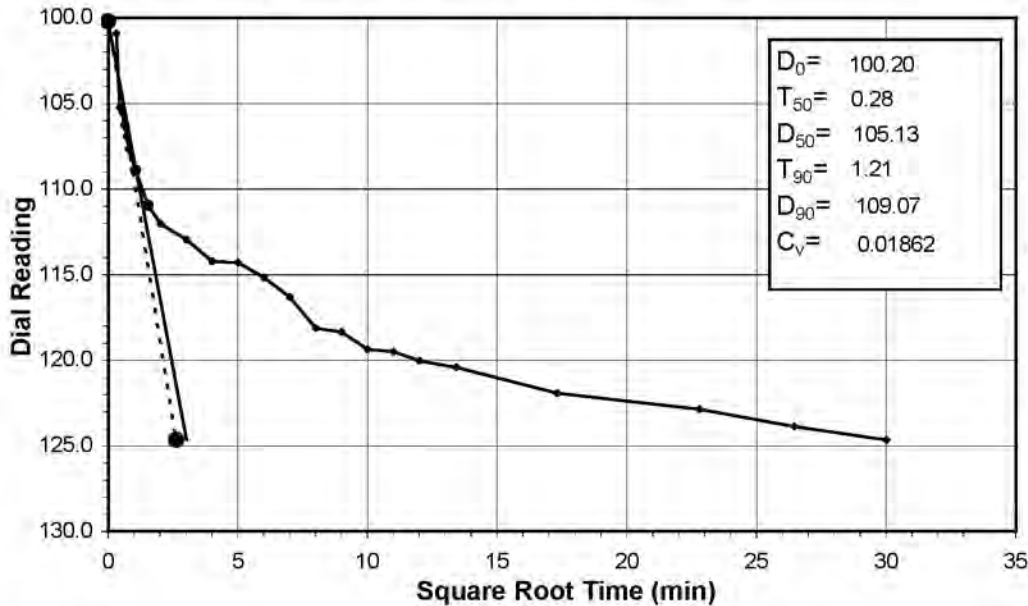
Tested By DB Date 11/29/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

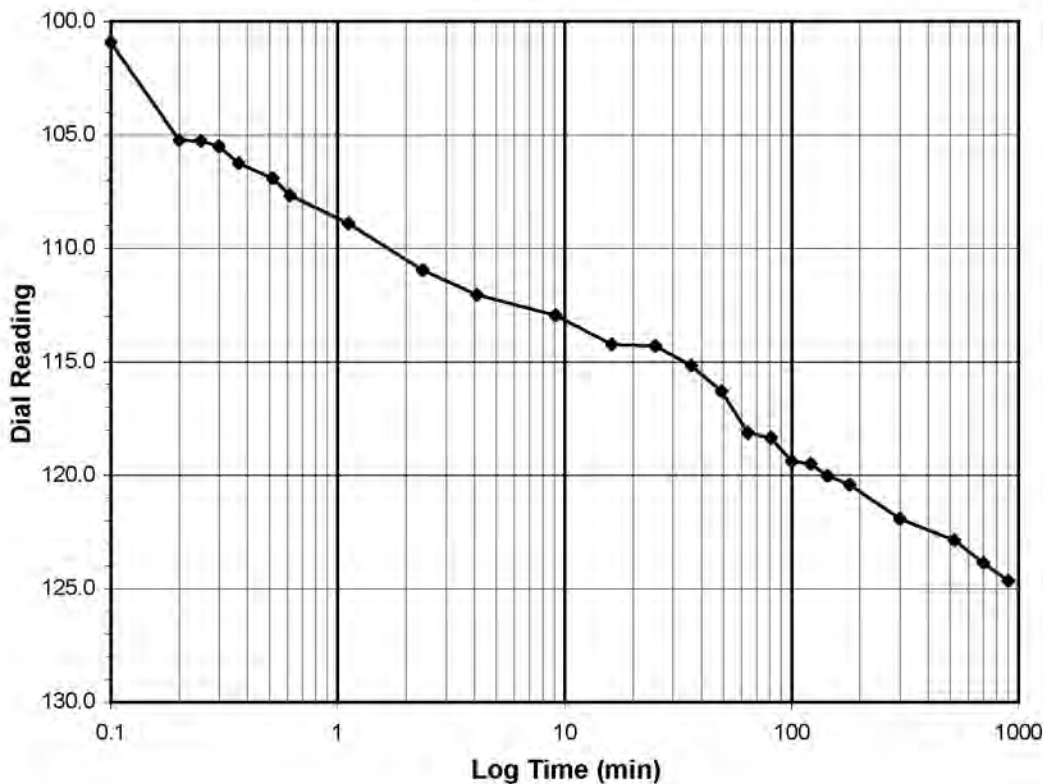
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **124.6**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/30/13
 Start Time 0:16:52

Elapsed Time (min)	Dial Reading (div)
Initial	75.3
0.10	100.9
0.20	105.2
0.25	105.3
0.30	105.5
0.37	106.3
0.52	106.9
0.62	107.7
1.12	108.9
2.37	111.0
4.12	112.0
9.12	113.0
16.12	114.2
25.12	114.3
36.12	115.2
49.13	116.3
64.13	118.1
81.13	118.3
100.13	119.4
121.13	119.5
144.13	120.0
180.13	120.4
300.13	121.9
520.13	122.9
700.13	123.9
900.48	124.6



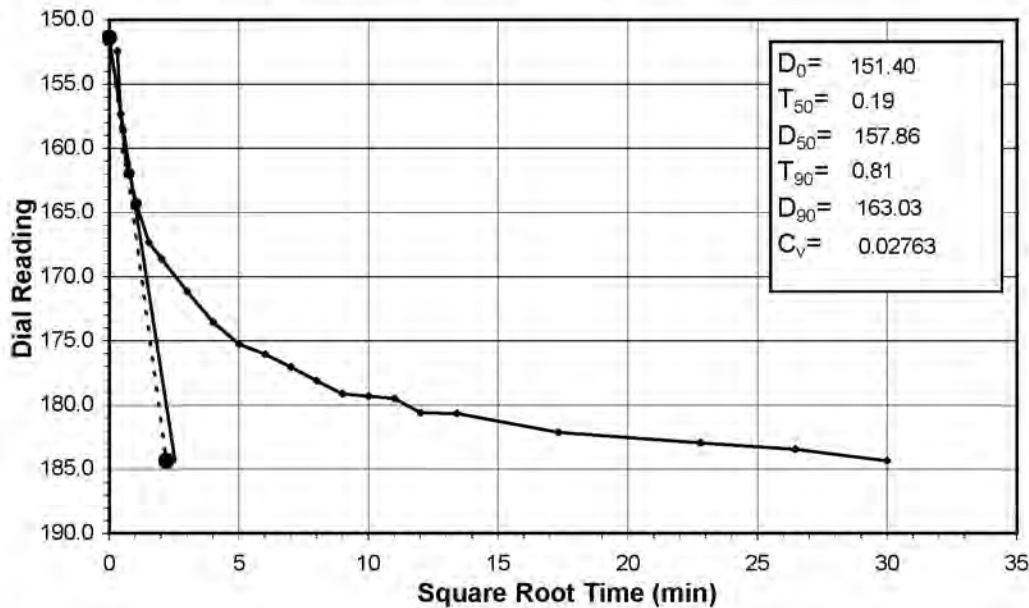
Tested By DB Date 11/30/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

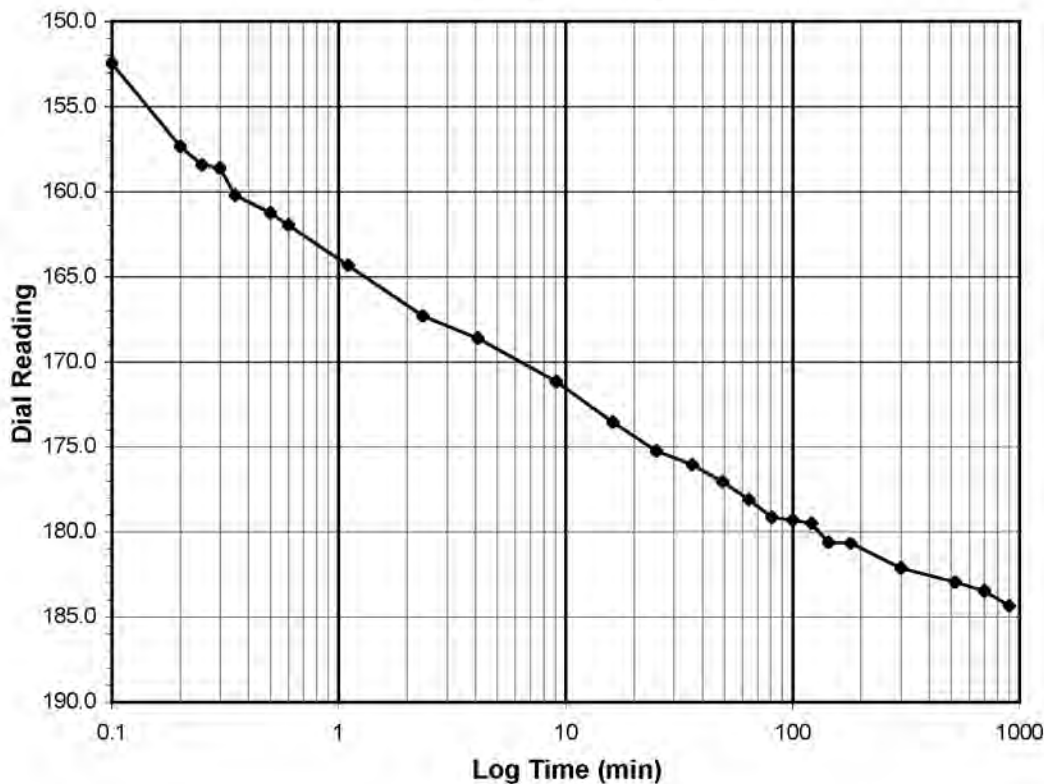
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 184.3
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/30/13
 Start Time 15:17:21

Elapsed Time (min)	Dial Reading (div)
Initial	124.6
0.10	152.4
0.20	157.3
0.25	158.4
0.30	158.6
0.35	160.2
0.50	161.2
0.60	162.0
1.10	164.3
2.35	167.3
4.10	168.6
9.10	171.2
16.12	173.5
25.12	175.2
36.12	176.0
49.12	177.0
64.12	178.1
81.12	179.1
100.12	179.3
121.12	179.5
144.12	180.6
180.12	180.7
300.12	182.1
520.12	182.9
700.12	183.5
900.27	184.3



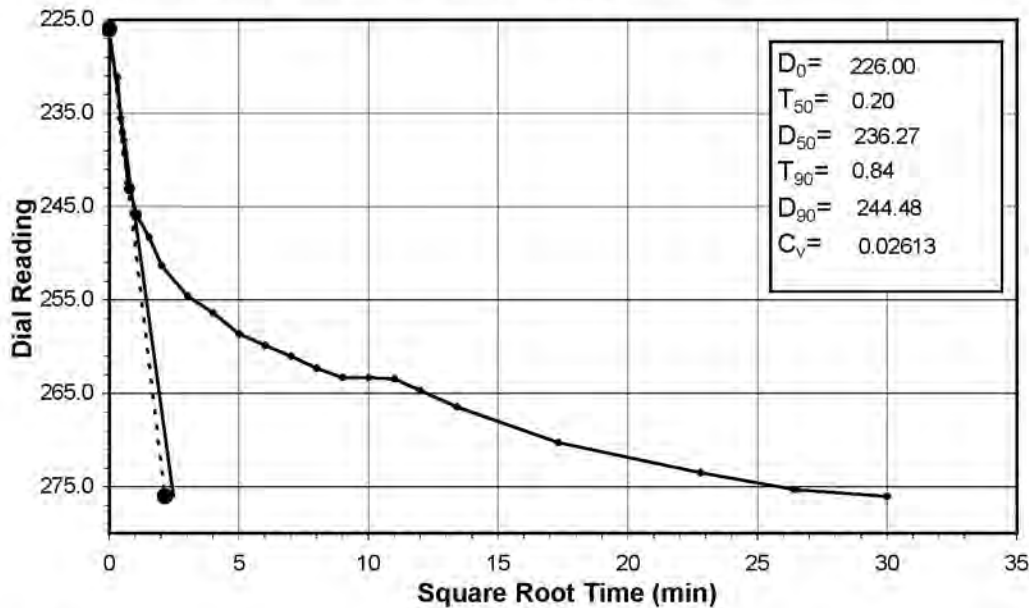
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

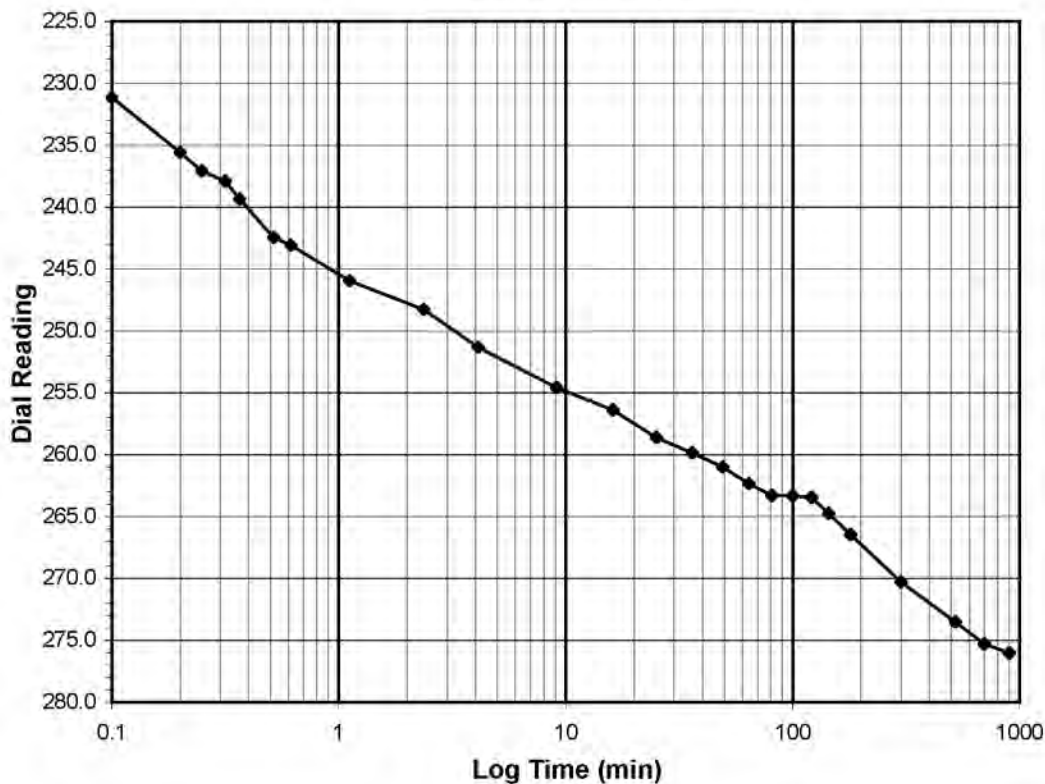
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 276.0
 Consolidometer No. G1421
 1 Division (in) 0.0001
 Start Date 12/1/13
 Start Time 6:17:37

Elapsed Time (min)	Dial Reading (div)
Initial	184.3
0.10	231.1
0.20	235.6
0.25	237.1
0.32	237.9
0.37	239.4
0.52	242.4
0.62	243.1
1.12	246.0
2.37	248.3
4.12	251.3
9.12	254.6
16.12	256.4
25.12	258.6
36.12	259.9
49.12	261.0
64.12	262.3
81.12	263.3
100.12	263.3
121.13	263.5
144.13	264.7
180.13	266.5
300.13	270.3
520.13	273.5
700.13	275.3
900.07	276.0



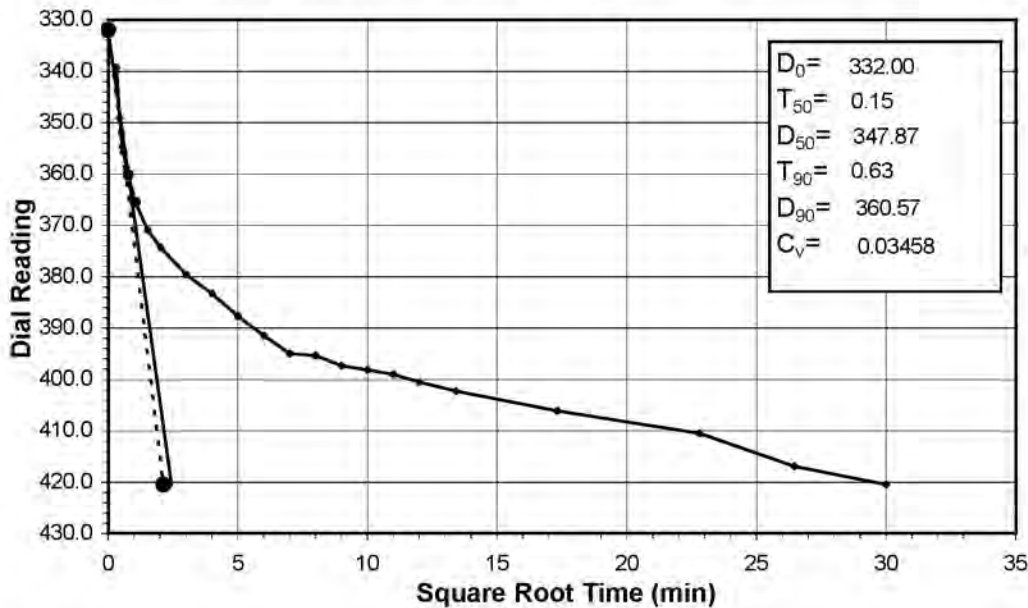
Tested By DB Date 12/1/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

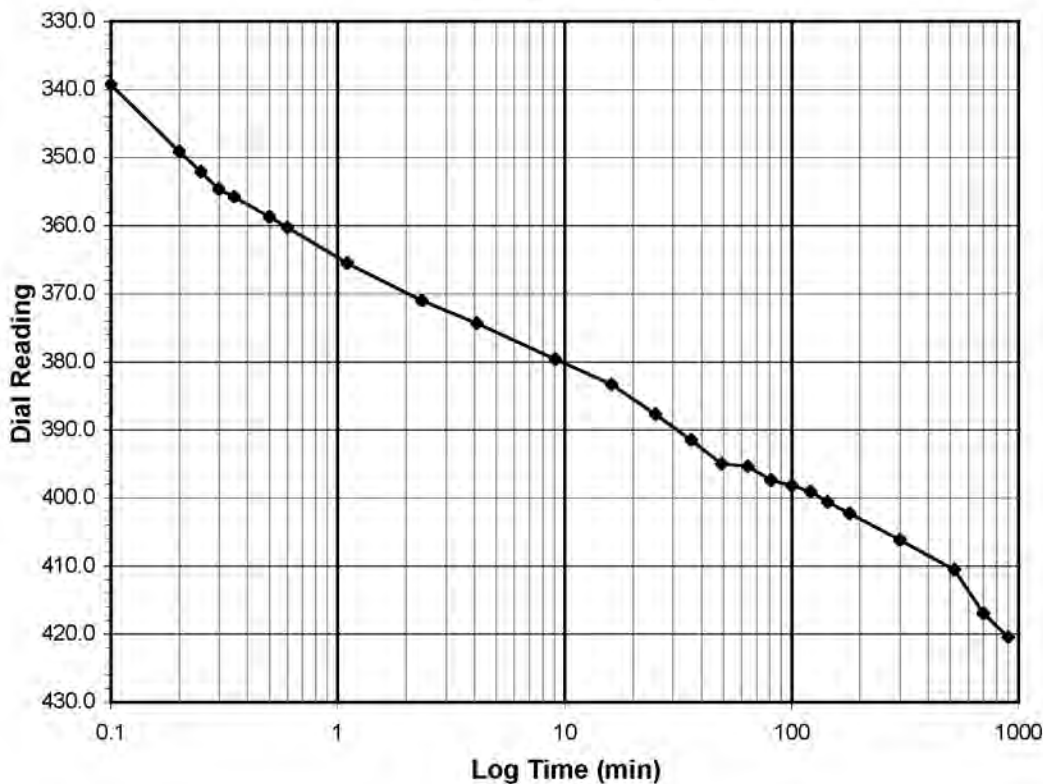
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **420.4**
 Consolidometer No. **G1421**
 1 Division (in) 0.0001

Start Date 12/1/13
 Start Time 21:17:41

Elapsed Time (min)	Dial Reading (div)
Initial	276.0
0.10	339.3
0.20	349.1
0.25	352.0
0.30	354.6
0.35	355.8
0.50	358.7
0.60	360.2
1.10	365.5
2.35	371.0
4.10	374.3
9.10	379.6
16.10	383.3
25.10	387.7
36.10	391.5
49.10	395.0
64.12	395.3
81.12	397.4
100.12	398.2
121.12	399.0
144.12	400.6
180.12	402.2
300.12	406.2
520.12	410.5
700.12	416.9
900.32	420.4



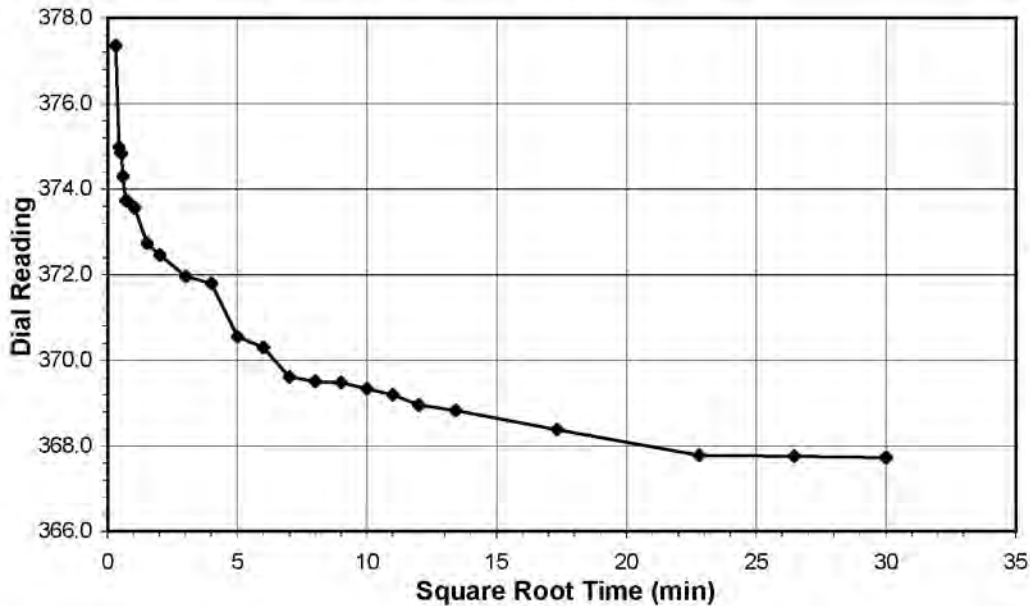
Tested By DB Date 12/1/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

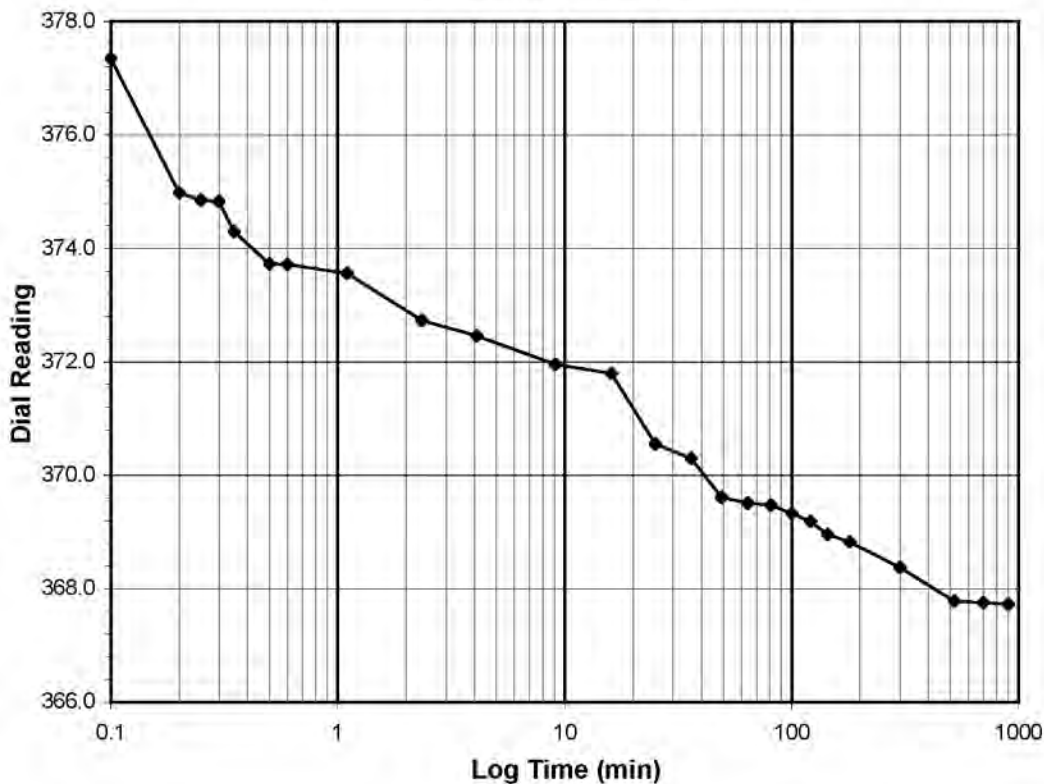
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
Final Reading (div) 367.7
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/2/13
Start Time 12:18:00

Elapsed Time (min)	Dial Reading (div)
Initial	420.4
0.10	377.4
0.20	375.0
0.25	374.8
0.30	374.8
0.35	374.3
0.50	373.7
0.60	373.7
1.10	373.6
2.35	372.7
4.10	372.5
9.10	372.0
16.10	371.8
25.10	370.6
36.10	370.3
49.10	369.6
64.10	369.5
81.12	369.5
100.12	369.3
121.12	369.2
144.12	369.0
180.12	368.8
300.12	368.4
520.12	367.8
700.12	367.8
900.32	367.7



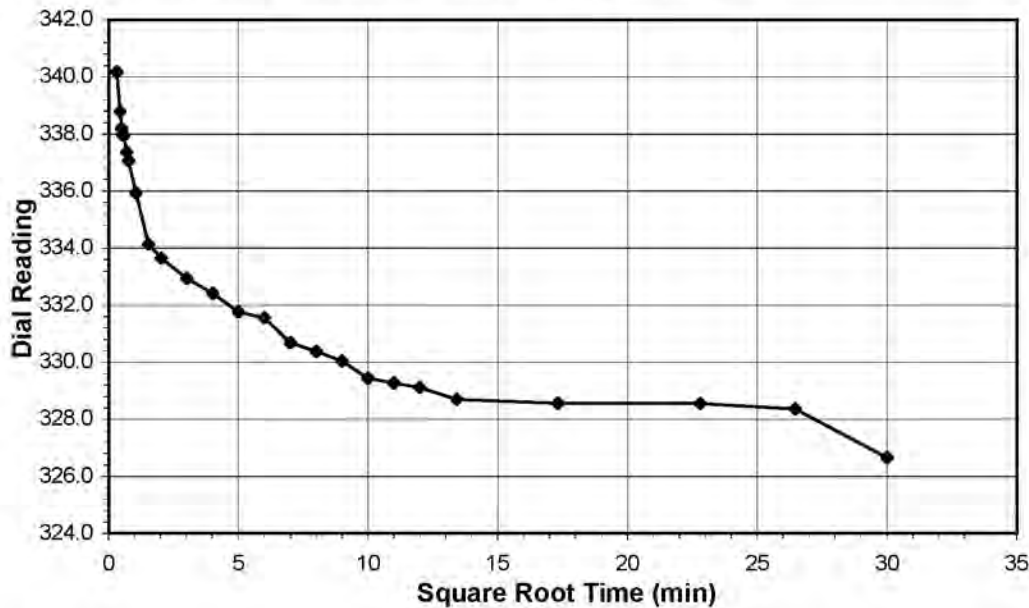
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

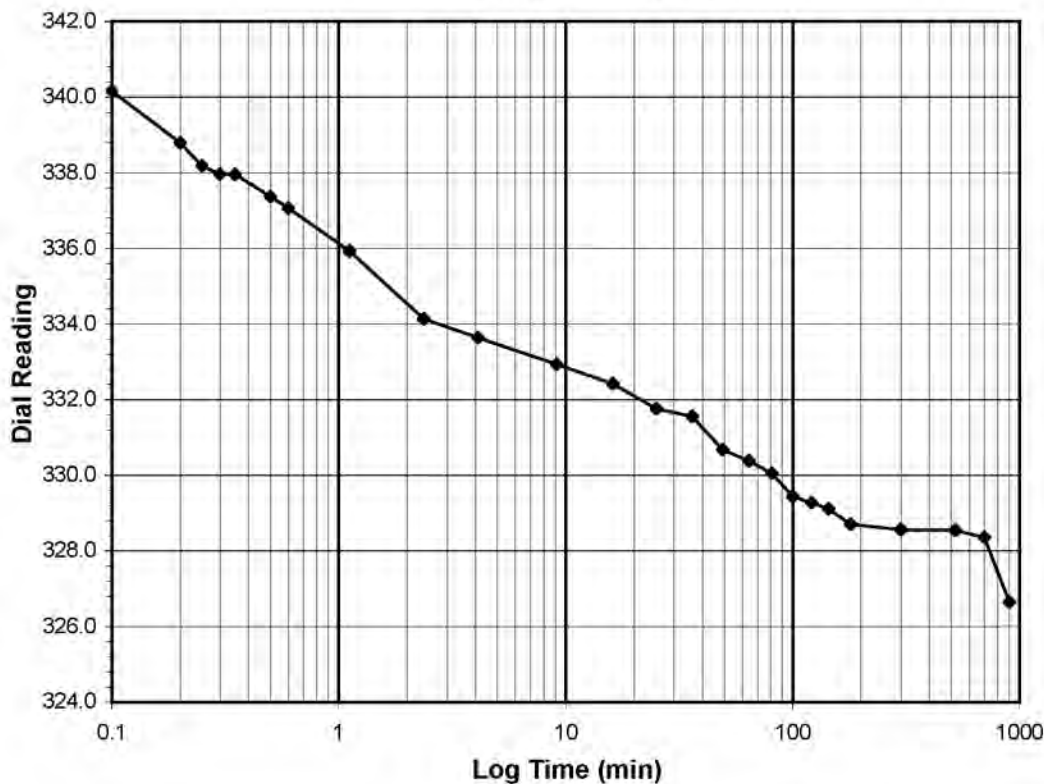
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 326.7
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/3/13
 Start Time 3:18:19



Elapsed Time (min)	Dial Reading (div)
Initial	367.7
0.10	340.2
0.20	338.8
0.25	338.2
0.30	338.0
0.35	338.0
0.50	337.4
0.60	337.1
1.12	335.9
2.37	334.1
4.12	333.6
9.12	332.9
16.12	332.4
25.12	331.8
36.12	331.6
49.12	330.7
64.12	330.4
81.13	330.1
100.13	329.4
121.13	329.3
144.13	329.1
180.13	328.7
300.13	328.6
520.13	328.5
700.13	328.4
900.08	326.7

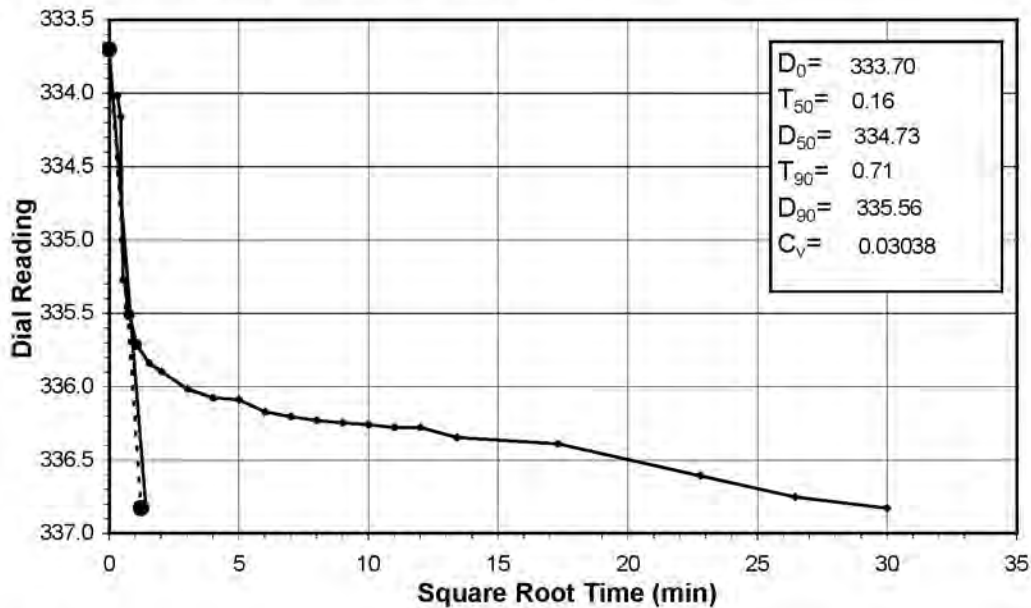
Tested By DB Date 12/3/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

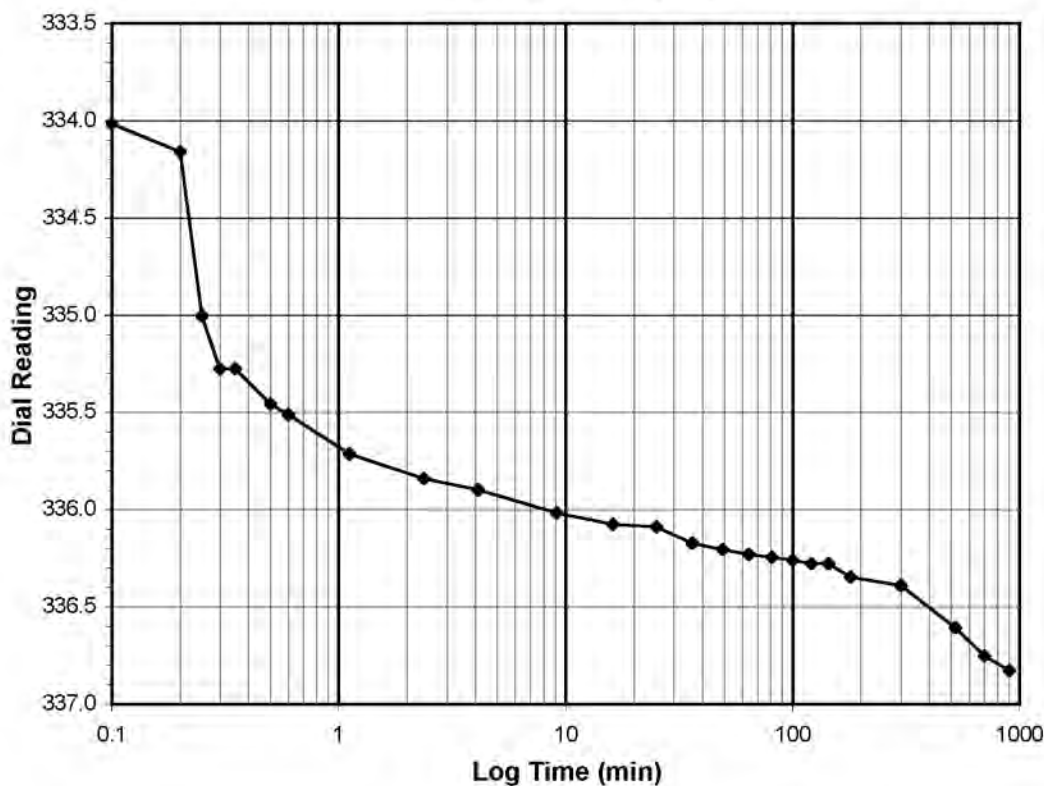
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.25-0.5
 Final Reading (div) 336.8
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/3/13
 Start Time 18:18:24

Elapsed Time (min)	Dial Reading (div)
Initial	326.7
0.10	334.0
0.20	334.2
0.25	335.0
0.30	335.3
0.35	335.3
0.50	335.5
0.60	335.5
1.12	335.7
2.37	335.8
4.12	335.9
9.12	336.0
16.12	336.1
25.12	336.1
36.12	336.2
49.12	336.2
64.12	336.2
81.12	336.2
100.12	336.3
121.12	336.3
144.12	336.3
180.12	336.3
300.12	336.4
520.12	336.6
700.12	336.8
900.17	336.8



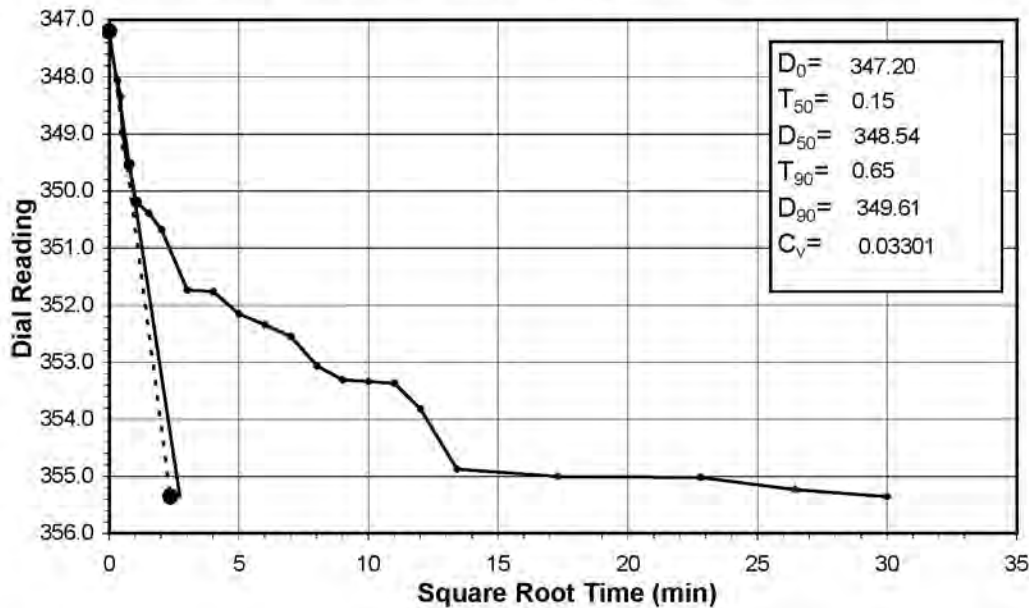
Tested By DB Date 12/3/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

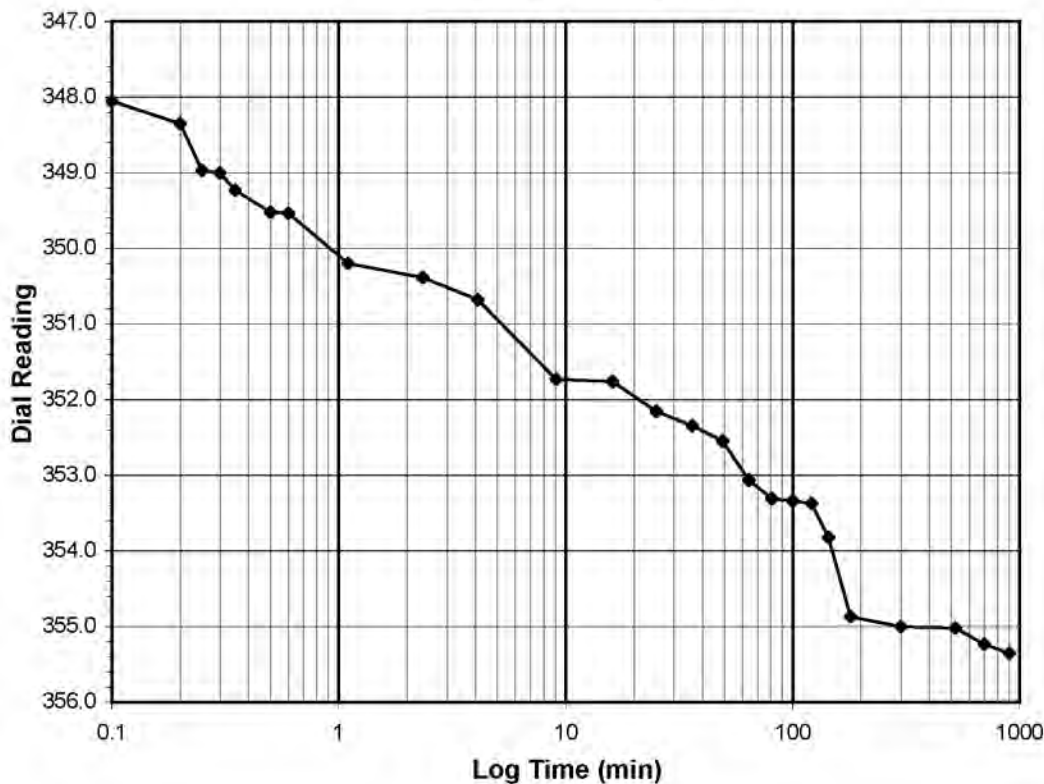
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 355.4
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/4/13
 Start Time 9:18:34

Elapsed Time (min)	Dial Reading (div)
Initial	336.8
0.10	348.1
0.20	348.4
0.25	349.0
0.30	349.0
0.35	349.2
0.50	349.5
0.60	349.5
1.10	350.2
2.35	350.4
4.10	350.7
9.10	351.7
16.10	351.8
25.12	352.2
36.12	352.3
49.12	352.5
64.12	353.1
81.12	353.3
100.12	353.3
121.12	353.4
144.12	353.8
180.12	354.9
300.12	355.0
520.12	355.0
700.12	355.2
900.05	355.4



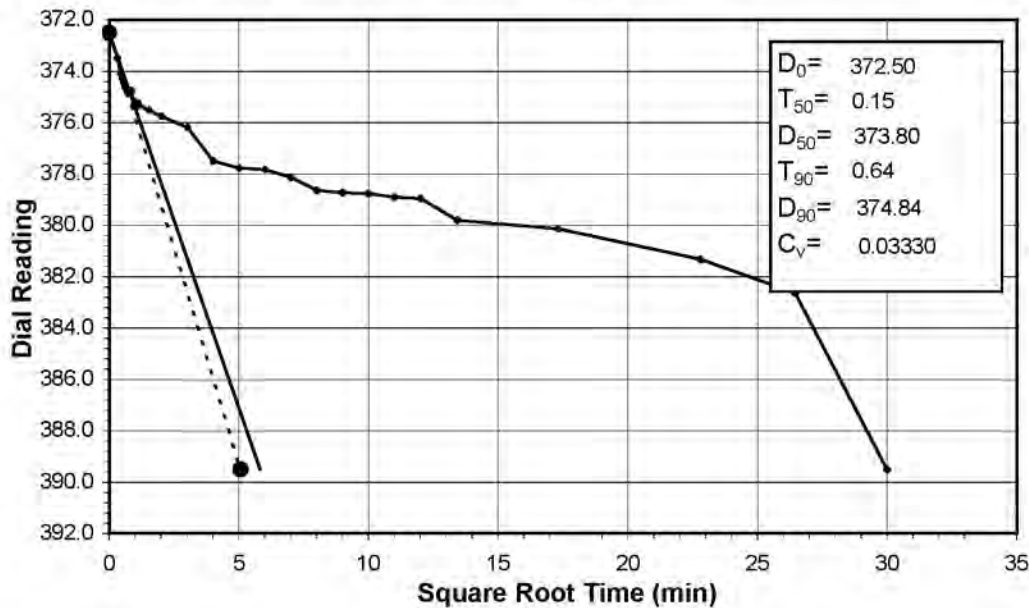
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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

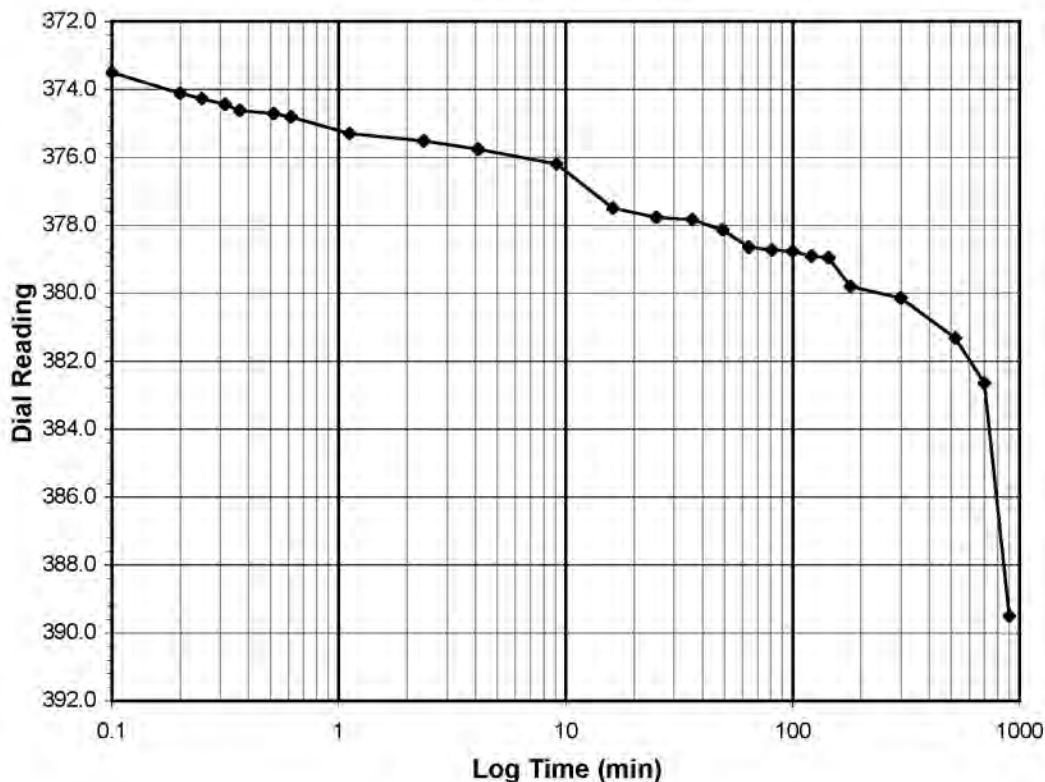
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 389.5
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/5/13
 Start Time 0:18:37

Elapsed Time (min)	Dial Reading (div)
Initial	355.4
0.10	373.5
0.20	374.1
0.25	374.3
0.32	374.4
0.37	374.6
0.52	374.7
0.62	374.8
1.12	375.3
2.37	375.5
4.12	375.8
9.12	376.2
16.12	377.5
25.12	377.8
36.13	377.8
49.13	378.1
64.13	378.6
81.13	378.7
100.13	378.8
121.13	378.9
144.13	379.0
180.13	379.8
300.13	380.1
520.13	381.3
700.13	382.6
900.02	389.5



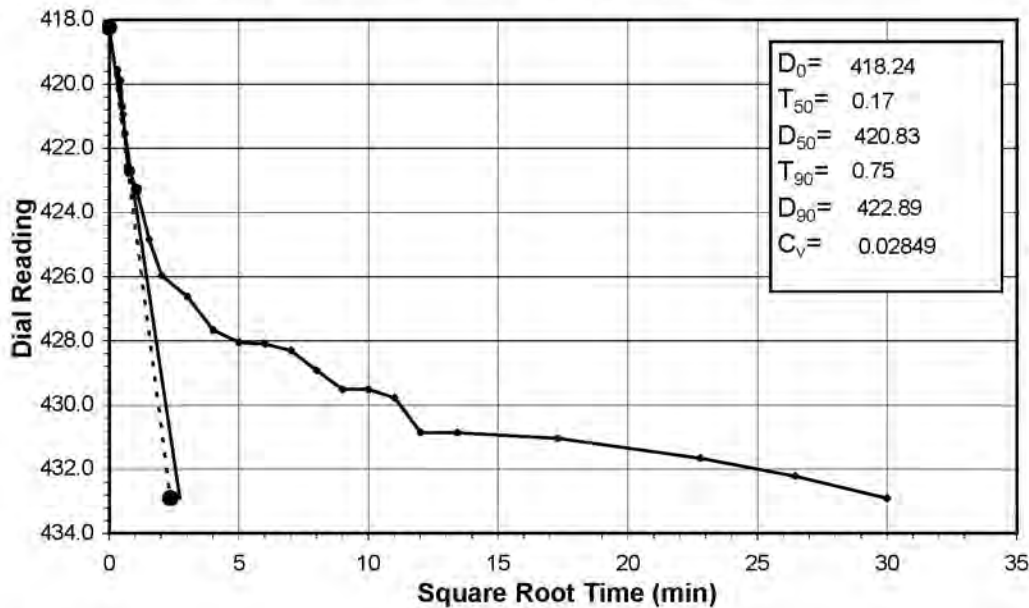
Tested By DB Date 12/5/13 Checked By TM Date 12/12/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

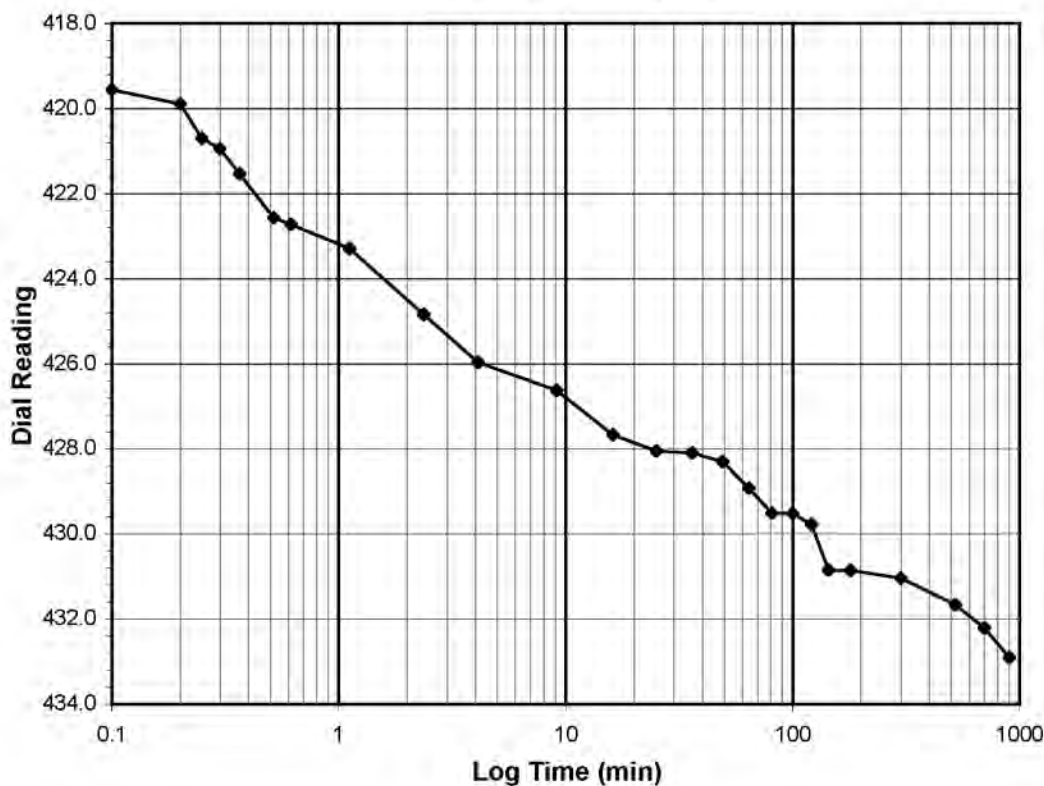
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-4.0
 Final Reading (div) 432.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/5/13
 Start Time 15:18:38

Elapsed Time (min)	Dial Reading (div)
Initial	389.5
0.10	419.6
0.20	419.9
0.25	420.7
0.30	420.9
0.37	421.5
0.52	422.6
0.62	422.7
1.12	423.3
2.37	424.8
4.12	426.0
9.12	426.6
16.12	427.7
25.12	428.1
36.12	428.1
49.13	428.3
64.13	428.9
81.13	429.5
100.13	429.5
121.13	429.8
144.13	430.8
180.13	430.9
300.13	431.0
520.13	431.7
700.13	432.2
900.32	432.9



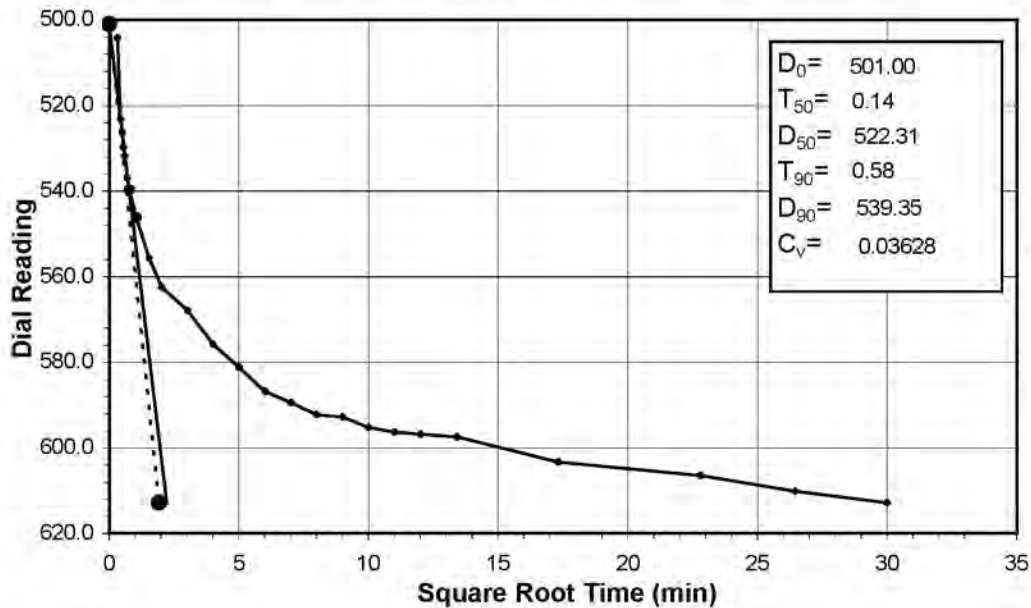
Tested By DB Date 12/5/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

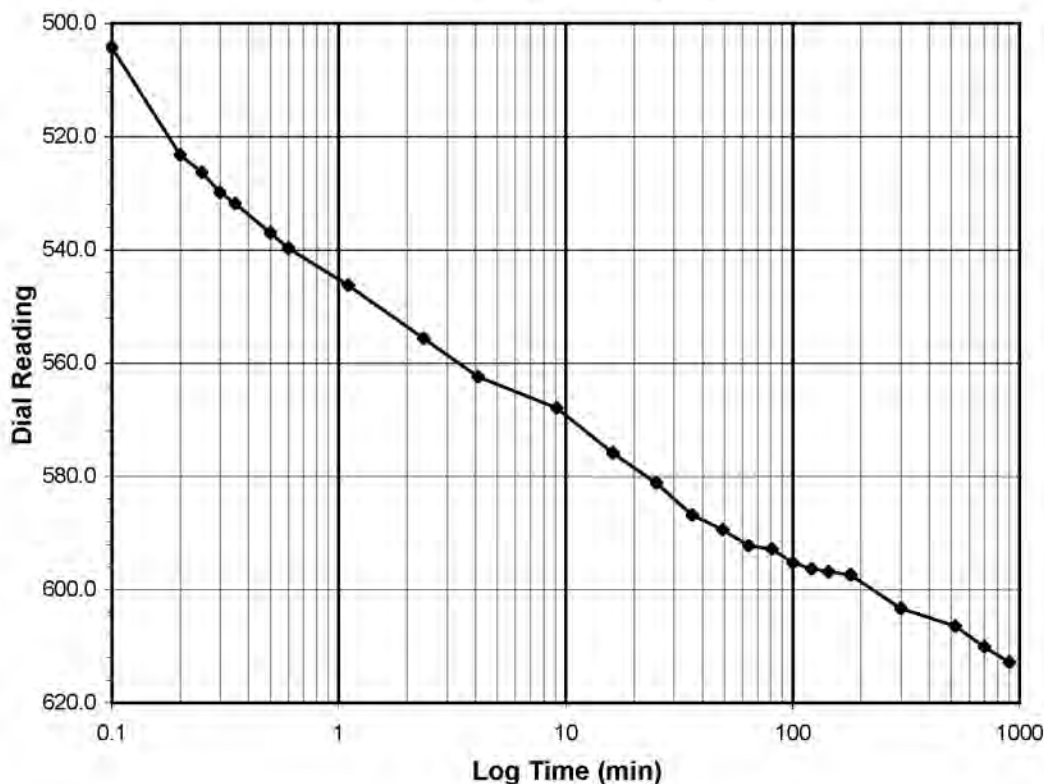
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **612.8**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 12/6/13
 Start Time 6:18:57

Elapsed Time (min)	Dial Reading (div)
Initial	432.9
0.10	504.2
0.20	523.3
0.25	526.3
0.30	529.8
0.35	531.8
0.50	537.0
0.60	539.7
1.10	546.2
2.37	555.6
4.12	562.4
9.12	567.9
16.12	575.8
25.12	581.2
36.12	586.8
49.12	589.4
64.12	592.2
81.12	592.8
100.12	595.2
121.12	596.3
144.12	596.8
180.12	597.4
300.12	603.3
520.12	606.5
700.12	610.1
900.42	612.8



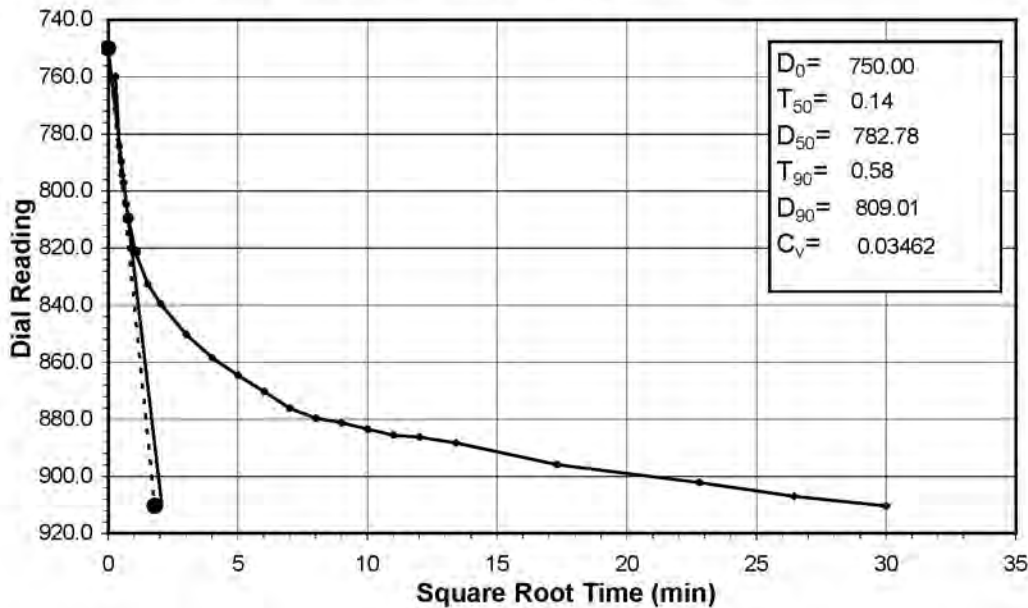
Tested By DB Date 12/6/13 Checked By TM Date 12/12/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

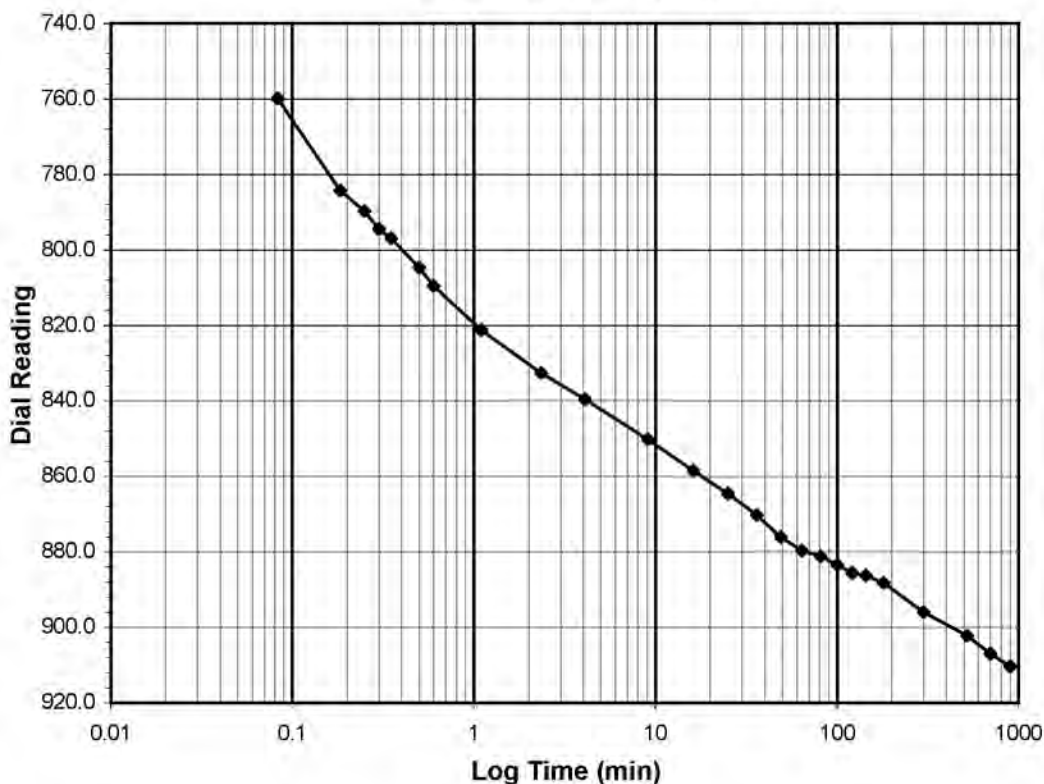
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 910.4
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/6/13
 Start Time 21:19:22

Elapsed Time (min)	Dial Reading (div)
Initial	612.8
0.08	759.9
0.18	784.3
0.25	789.7
0.30	794.4
0.35	796.9
0.50	804.7
0.60	809.6
1.10	821.3
2.35	832.6
4.10	839.6
9.10	850.2
16.10	858.5
25.10	864.6
36.10	870.2
49.12	876.1
64.12	879.6
81.12	881.2
100.12	883.4
121.12	885.6
144.12	886.2
180.12	888.2
300.12	895.9
520.12	902.2
700.12	907.0
900.37	910.4



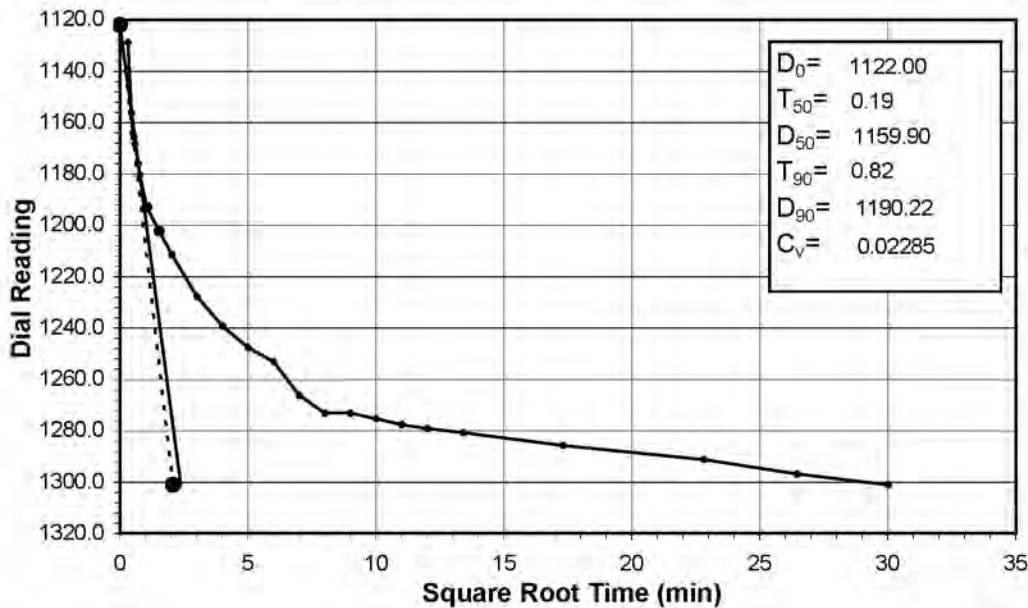
Tested By DB Date 12/6/13 Checked By TM Date 12/12/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

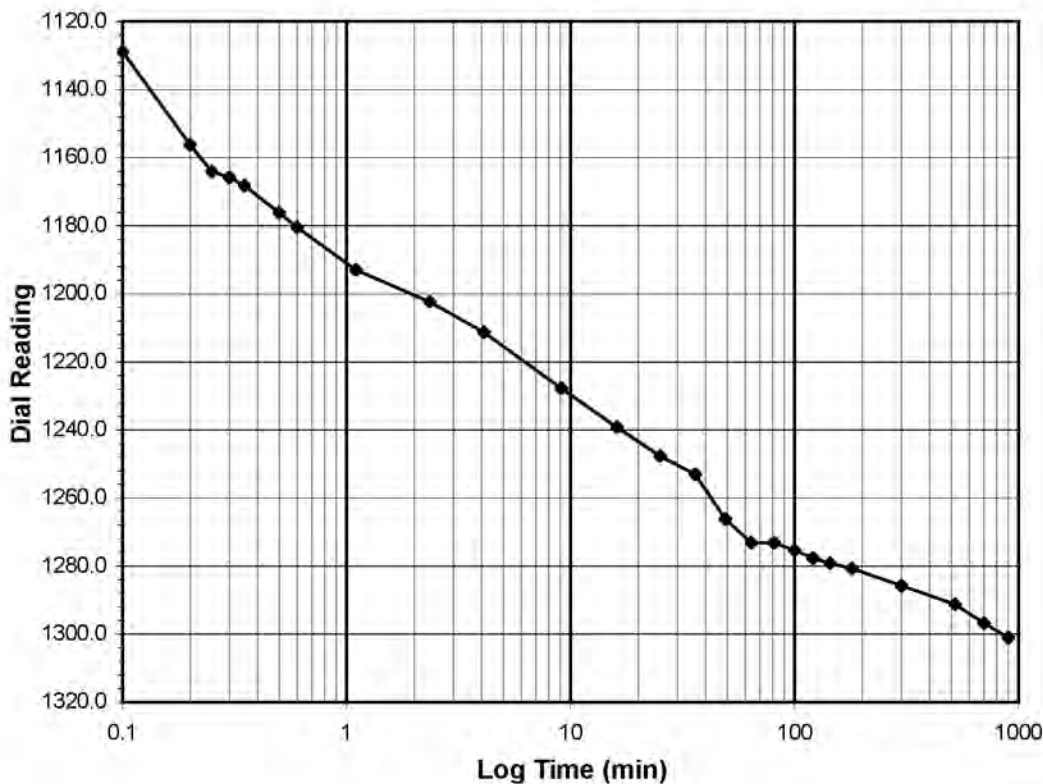
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **1301.1**
 Consolidometer No. **G1421**
 1 Division (in) 0.0001

Start Date 12/7/13
 Start Time 12:19:46

Elapsed Time (min)	Dial Reading (div)
Initial	910.4
0.10	1128.9
0.20	1156.2
0.25	1164.1
0.30	1165.8
0.35	1168.2
0.50	1176.1
0.60	1180.5
1.10	1193.0
2.35	1202.4
4.10	1211.3
9.10	1227.8
16.10	1239.2
25.10	1247.7
36.10	1253.1
49.10	1266.2
64.10	1273.2
81.10	1273.2
100.12	1275.3
121.12	1277.7
144.12	1279.2
180.12	1280.7
300.12	1285.8
520.12	1291.2
700.12	1296.8
900.33	1301.1



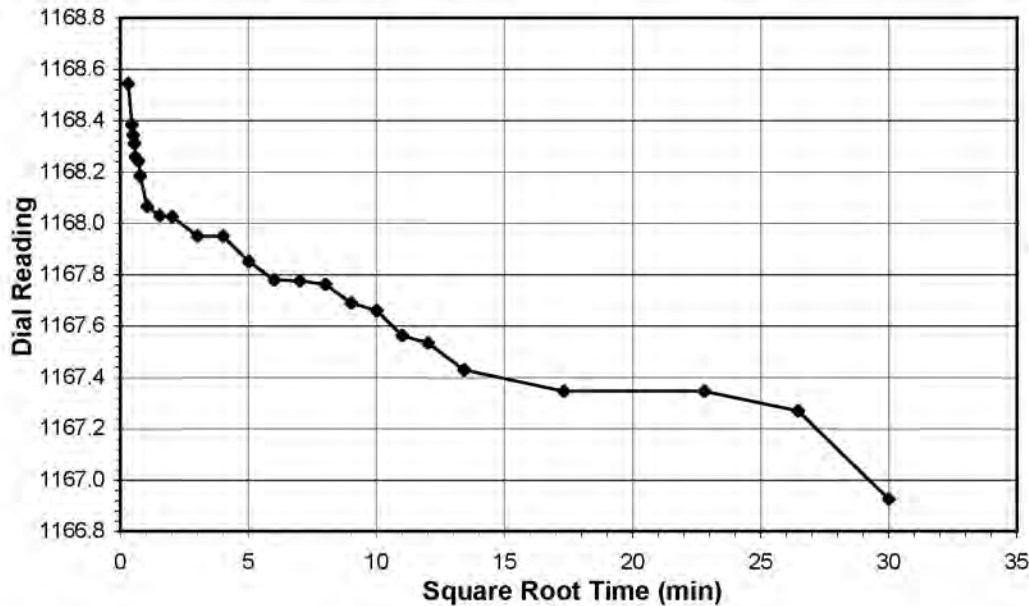
Tested By DB Date 12/7/13 Checked By TM Date 12/12/13

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ASTM D2435 / D2435M-11

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 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

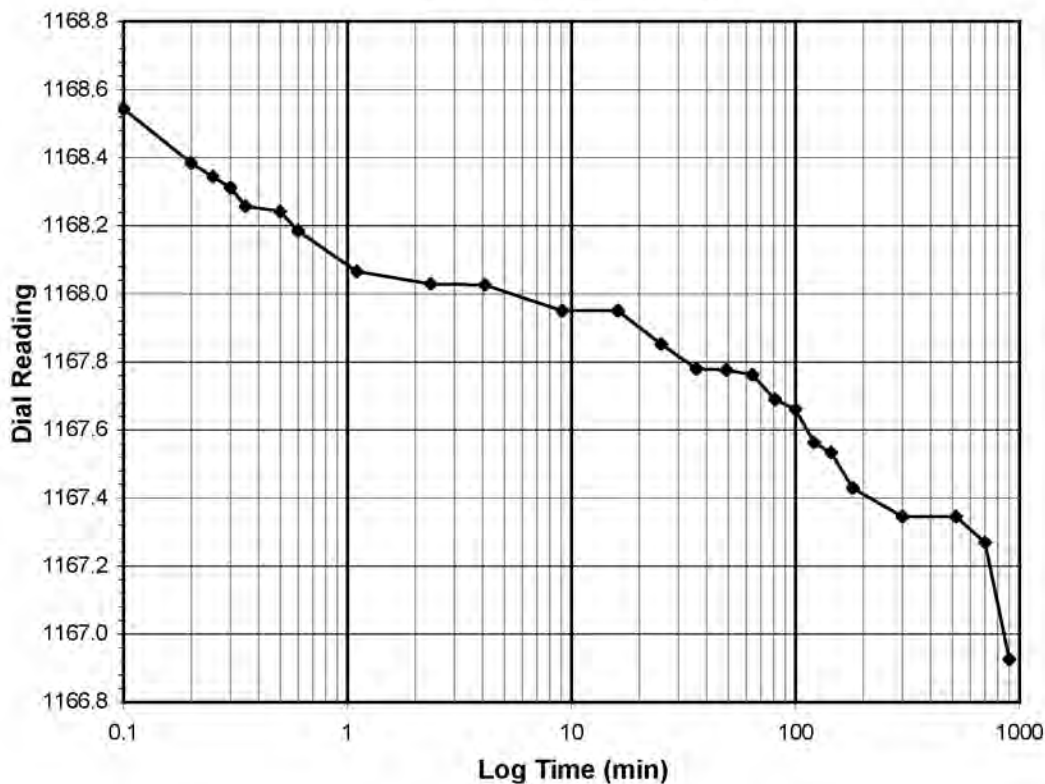
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 32.0-8.0
 Final Reading (div) 1166.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 12/8/13
 Start Time 3:20:06

Elapsed Time (min)	Dial Reading (div)
Initial	1301.1
0.10	1168.5
0.20	1168.4
0.25	1168.3
0.30	1168.3
0.35	1168.3
0.50	1168.2
0.60	1168.2
1.10	1168.1
2.35	1168.0
4.10	1168.0
9.10	1167.9
16.10	1167.9
25.10	1167.9
36.12	1167.8
49.12	1167.8
64.12	1167.8
81.12	1167.7
100.12	1167.7
121.12	1167.6
144.12	1167.5
180.12	1167.4
300.12	1167.3
520.12	1167.3
700.12	1167.3
900.15	1166.9



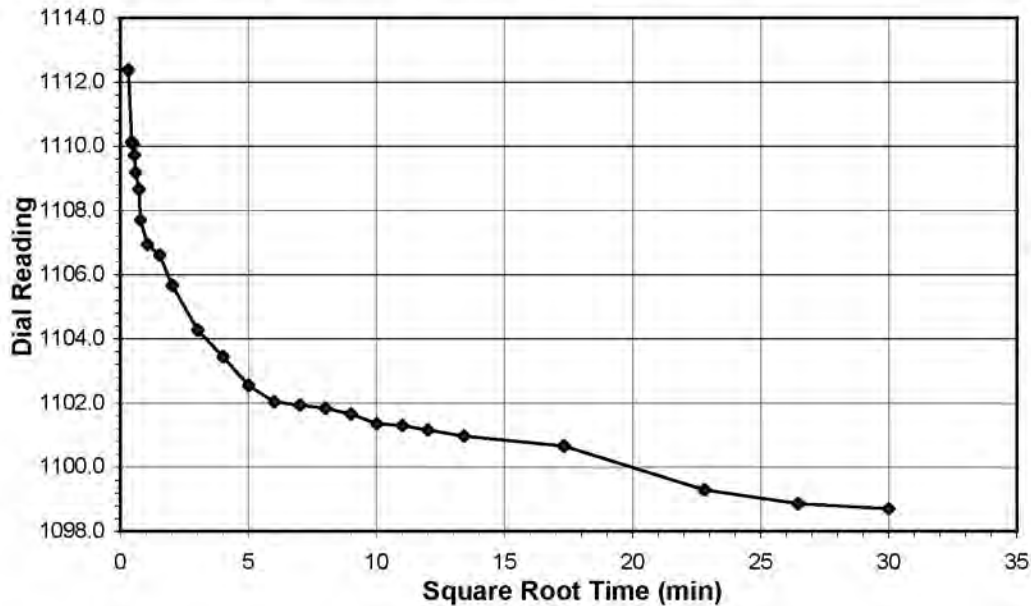
Tested By DB Date 12/8/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

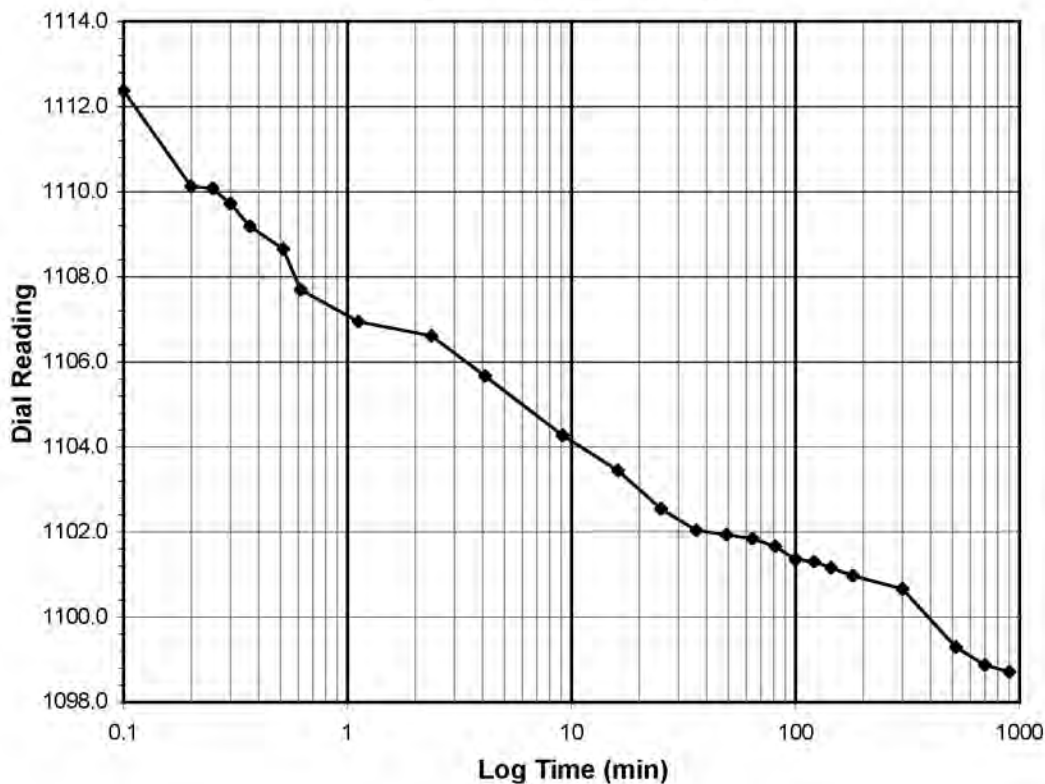
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **8.0-2.0**
 Final Reading (div) **1098.7**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 12/8/13
 Start Time 18:20:15

Elapsed Time (min)	Dial Reading (div)
Initial	1166.9
0.10	1112.4
0.20	1110.1
0.25	1110.1
0.30	1109.7
0.37	1109.2
0.52	1108.7
0.62	1107.7
1.12	1106.9
2.37	1106.6
4.12	1105.7
9.12	1104.3
16.12	1103.4
25.12	1102.5
36.12	1102.0
49.12	1101.9
64.12	1101.8
81.12	1101.7
100.12	1101.4
121.13	1101.3
144.13	1101.2
180.13	1101.0
300.13	1100.7
520.13	1099.3
700.13	1098.9
900.25	1098.7



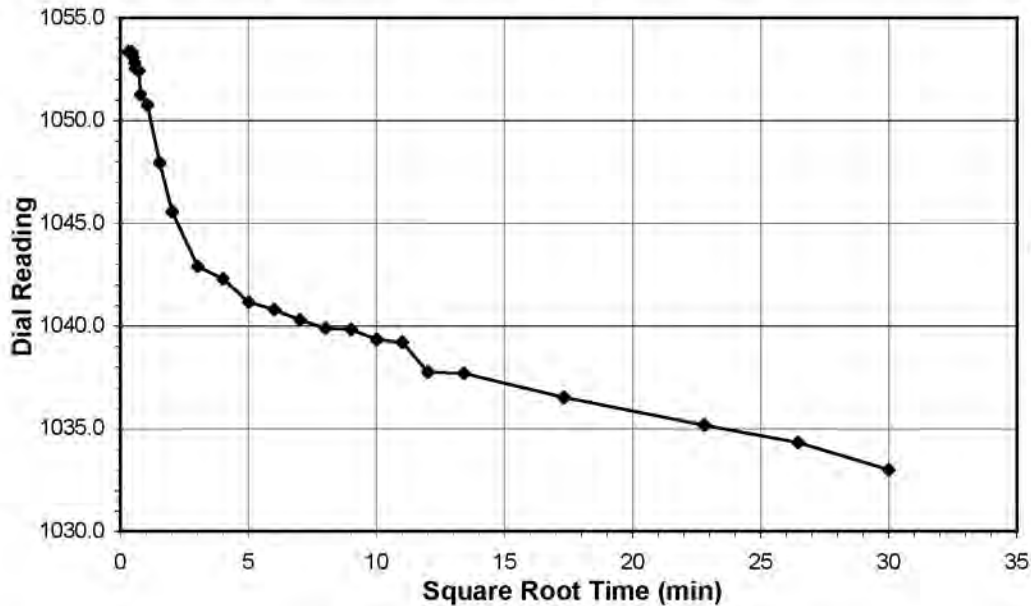
Tested By DB Date 12/8/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

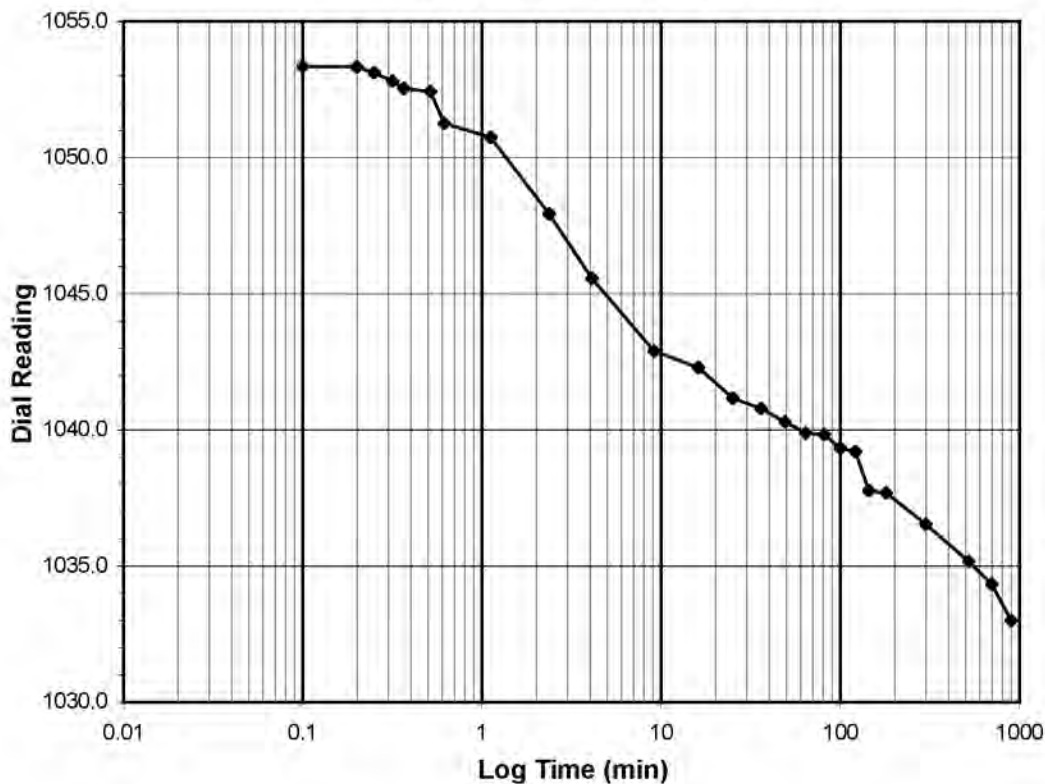
Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some
 Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **1033.0**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 12/9/13
 Start Time 9:20:30

Elapsed Time (min)	Dial Reading (div)
Initial	1098.7
0.10	1053.4
0.20	1053.3
0.25	1053.1
0.32	1052.8
0.37	1052.5
0.52	1052.4
0.62	1051.3
1.12	1050.8
2.37	1047.9
4.12	1045.6
9.12	1042.9
16.12	1042.3
25.12	1041.2
36.13	1040.8
49.13	1040.3
64.13	1039.9
81.13	1039.8
100.13	1039.3
121.13	1039.2
144.13	1037.8
180.13	1037.7
300.13	1036.5
520.13	1035.2
700.13	1034.3
900.37	1033.0



Tested By DB Date 12/9/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some
 Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1421

1 Division = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied	Final Dial	Machine	Corrected	Height of	Volume	Dry	Void
Tare Number	2683	2650	Pressure	Reading	Deflection	Reading	Sample	Volume	Density	Ratio
			(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	230.35	163.22	Seating	0	0	0	25.400	80.440	1.66416	0.58638
Wt. Tare & DS (g)	194.10	140.27	0.25	75.3	17.7	57.6	25.254	79.976	1.67381	0.57724
Wt. Water (g)	36.25	22.95	0.5	124.6	26.9	97.8	25.152	79.653	1.68059	0.57088
Wt. Tare (g)	6.56	6.65	1	184.3	36.4	147.9	25.024	79.250	1.68914	0.56292
Wt. DS (g)	187.54	133.62	2	276.0	63.4	212.6	24.860	78.729	1.70032	0.55265
Water Content (%)	19.33	17.18	4	420.4	93.2	327.3	24.569	77.807	1.72047	0.53446
<u>Sample Parameters</u>			1	367.7	48.6	319.2	24.589	77.872	1.71903	0.53575
Sample Diameter (in)	2.5	2.5	0.25	326.7	26.1	300.6	24.637	78.022	1.71573	0.53870
Sample Height (in)	1.0000	0.9004	0.5	336.8	31.3	305.6	24.624	77.982	1.71661	0.53791
Sample Volume (cm ³)	80.44	72.43	1	355.4	41.0	314.3	24.602	77.912	1.71817	0.53652
Wt. Wet Sample + Ring (g)	374.71	371.83	2	389.5	64.7	324.8	24.575	77.827	1.72004	0.53485
Wt. of Ring (g)	214.97	214.97	4	432.9	93.4	339.5	24.538	77.709	1.72264	0.53253
Wt. of Wet Sample (g)	159.74	156.86	8	612.8	126.0	486.8	24.164	76.524	1.74932	0.50916
Wet Density (pcf)	123.92	135.14	16	910.4	170.6	739.7	23.521	74.489	1.79710	0.46903
Wet Density (g/cm ³)	1.99	2.17	32	1301.1	241.5	1059.6	22.709	71.916	1.86139	0.41829
Water Content (%)	19.33	17.18	8	1166.9	140.4	1026.6	22.793	72.182	1.85454	0.42353
Wt. of Dry Sample (g)	133.86	133.86	2	1098.7	80.8	1017.9	22.815	72.252	1.85276	0.42490
Dry Density (pcf)	103.84	115.33	0.5	1033.0	36.9	996.1	22.870	72.427	1.84827	0.42836
Dry Density (g/cm ³)	1.66	1.85								
Void Ratio	0.5864	0.4284								
Saturation (%)	87.02	105.85								
Specific Gravity	2.64	Measured								

Tested By DB Date 11/29/13 Input Checked By TM Date 12/12/13

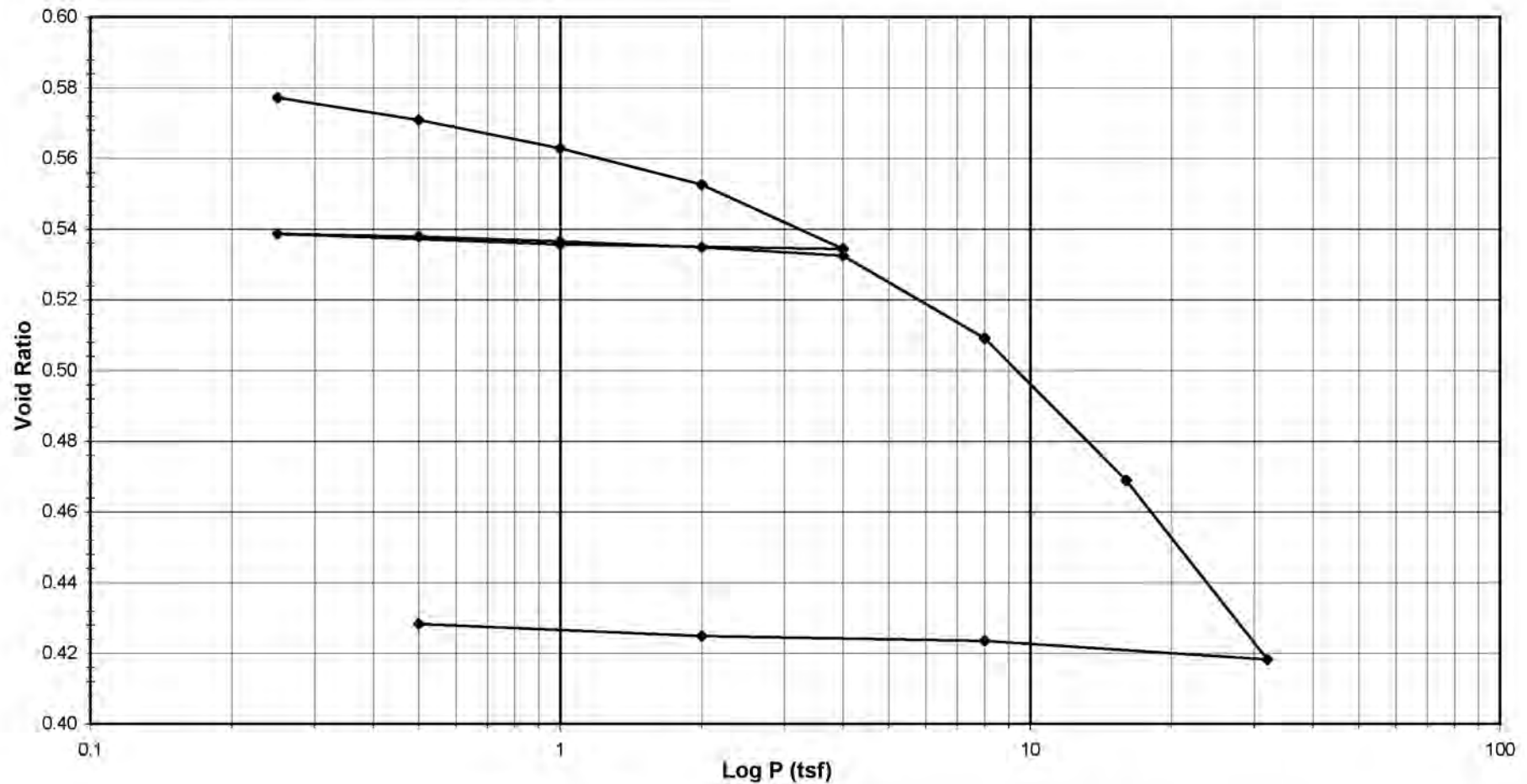
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some
 Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/29/13

Approved By RJO

Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some
 Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1421

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final							
<i>Water Content</i>			Load	Dial	Machine	Corrected	Sample	Time	C_v
Tare Number	2683	2650	Increment	Reading	Deflection	Dial Reading	Height	t₅₀	
				@ t₅₀		@ t₅₀	@ t₅₀		
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
Wt. Tare & WS (g)	230.35	163.22							
Wt. Tare & DS (g)	194.1	140.27							
Wt. Water (g)	36.25	22.95	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare (g)	6.56	6.65	0.25	62.0	17.7	44.4	25.29	0.16	0.03310
Wt. DS (g)	187.54	133.62	0.5	105.1	26.9	78.2	25.20	0.28	0.01862
Water Content (%)	19.33	17.18	1	157.9	36.4	121.4	25.09	0.19	0.02763
			2	236.3	63.4	172.9	24.96	0.20	0.02613
			4	347.9	93.2	254.7	24.75	0.15	0.03458
<i>Sample Parameters</i>			1	NA	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.25	NA	NA	NA	NA	NA	NA
Sample Height (in)	1.0000	0.9004	0.5	334.7	31.3	303.5	24.63	0.16	0.03038
Sample Volume (cm ³)	80.44	72.43	1	348.5	41.0	307.5	24.62	0.15	0.03301
Wt. Wet Sample + Ring (g)	374.71	371.83	2	373.8	64.7	309.1	24.61	0.15	0.03330
Wt. of Ring (g)	214.97	214.97	4	420.8	93.4	327.4	24.57	0.17	0.02849
Wt. of Wet Sample (g)	159.74	156.86	8	522.3	126.0	396.3	24.39	0.14	0.03628
Wet Density (pcf)	123.92	135.14	16	782.8	170.6	612.2	23.85	0.14	0.03462
Wet Density (g/cm ³)	1.99	2.17	32	1159.9	241.5	918.4	23.07	0.19	0.02285
Water Content (%)	19.33	17.18	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	133.86	133.86	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	103.84	115.33	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm ³)	1.66	1.85							
Void Ratio	0.5864	0.4284							
Saturation (%)	87.02	105.85							
Specific Gravity	2.64	Measured							

Tested By DB Date 11/29/13 Input Checked By TM Date 12/12/13

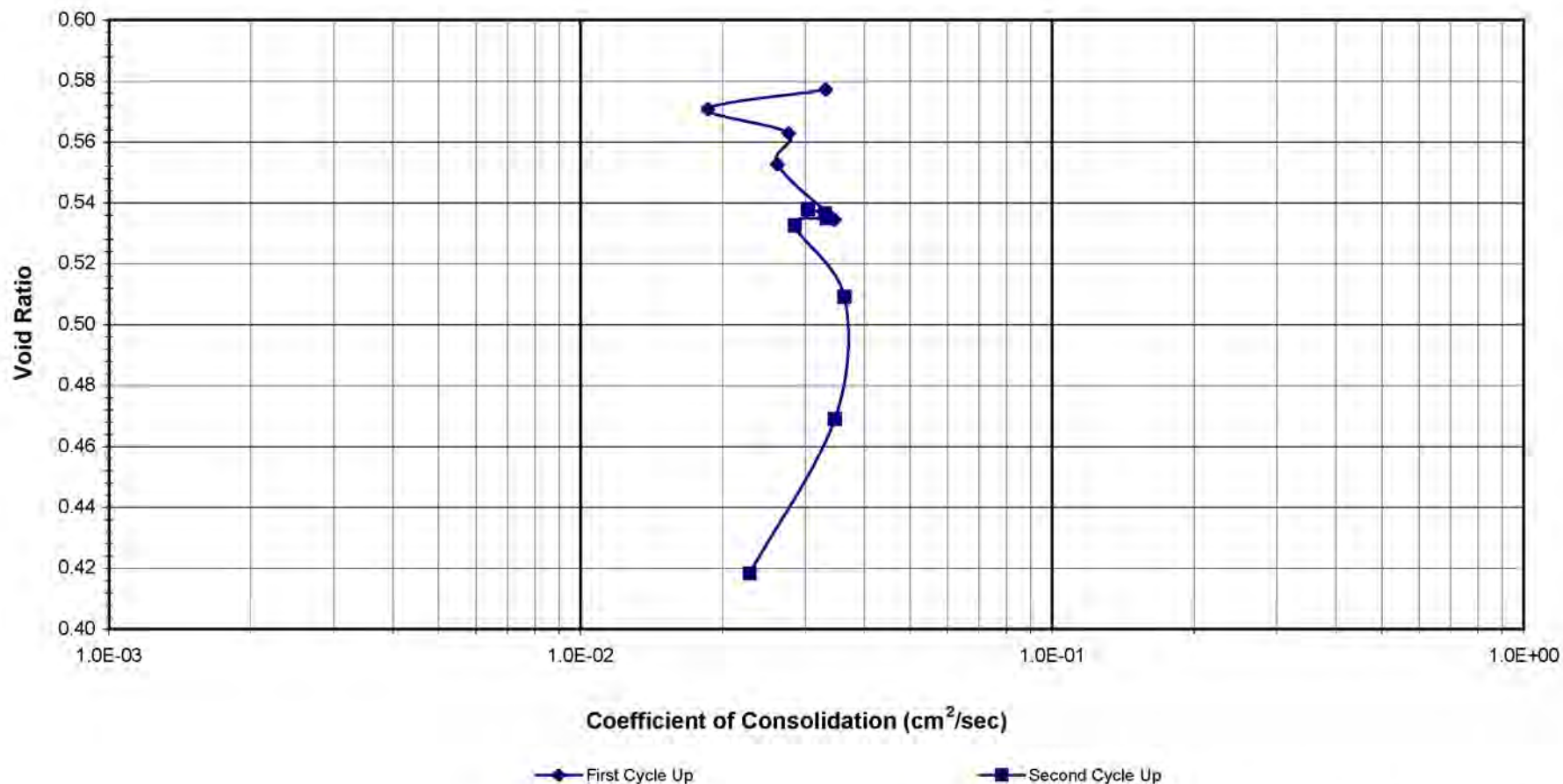
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-028

Boring No. R-6-1b
 Depth (ft) 225.0-225.2
 Sample No. ST-22
 Visual Description Gray Sand w/Some
 Cemented Pieces

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/29/13

Approved By RJO Date 12/12/13

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	225.0-225.2
Project No.	2013-465-001	Sample No.	ST-22
Lab ID #	2013-465-001-028		

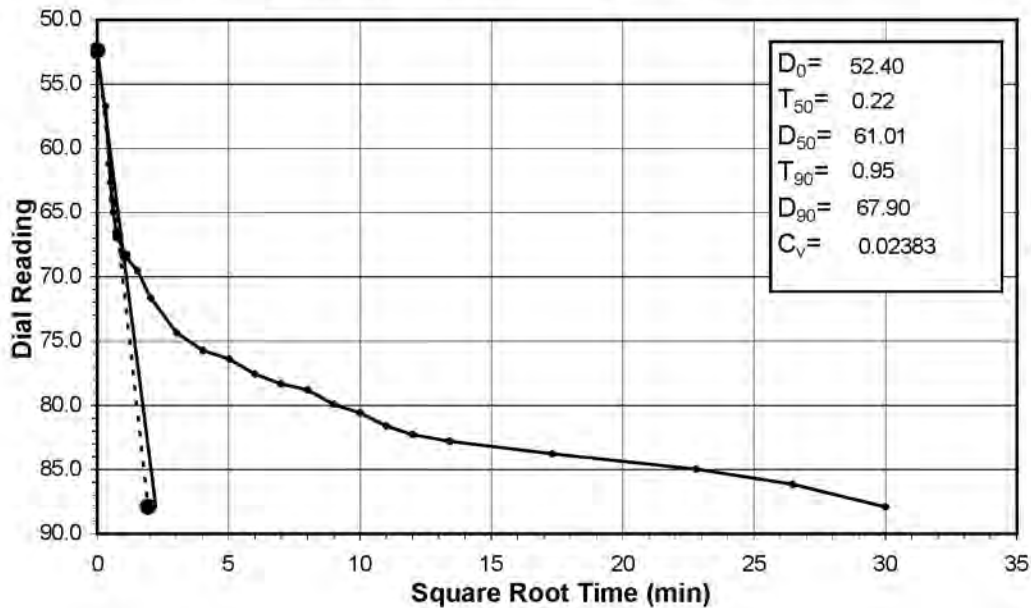
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1421	1/9/14
Load Cell	G1422	1/9/14
LVDT	G1423	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

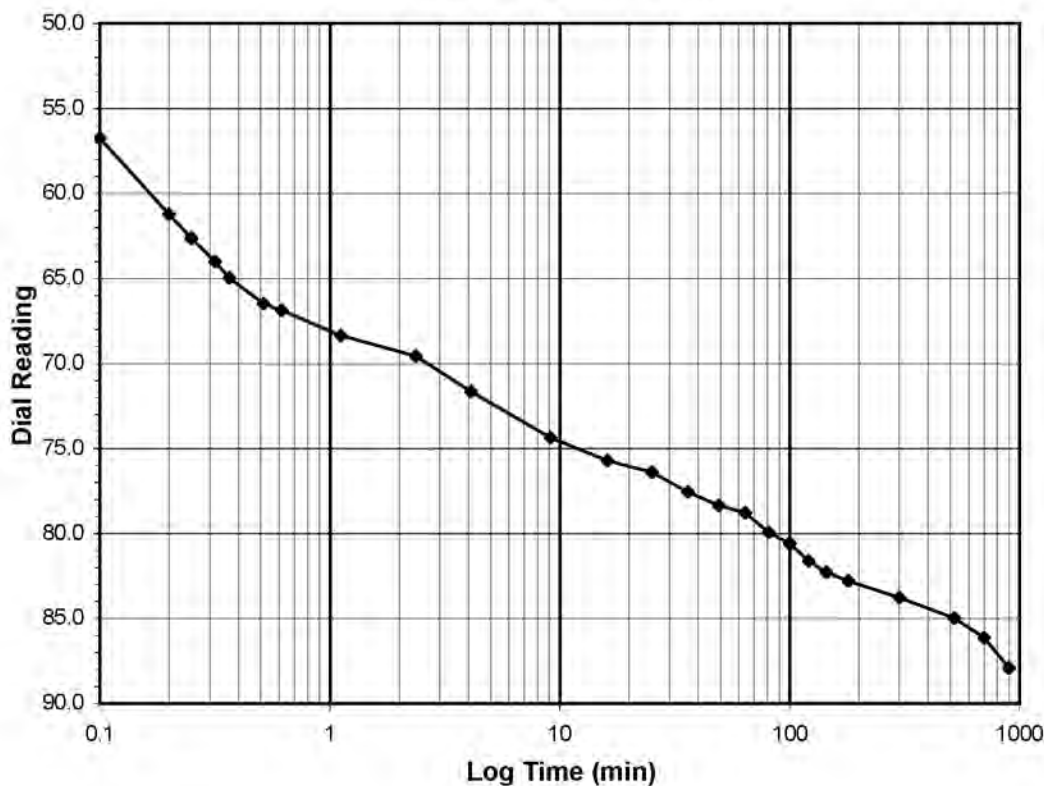
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
Final Reading (div) 87.9
Consolidometer No. G1424
1 Division (in) 0.0001
Start Date 11/29/13
Start Time 9:33:18

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	56.7
0.20	61.2
0.25	62.6
0.32	64.0
0.37	65.0
0.52	66.5
0.62	66.9
1.12	68.4
2.37	69.6
4.12	71.7
9.12	74.4
16.13	75.7
25.13	76.4
36.13	77.6
49.13	78.3
64.13	78.8
81.13	79.9
100.13	80.6
121.13	81.6
144.13	82.3
180.13	82.8
300.13	83.8
520.13	85.0
700.13	86.1
900.32	87.9



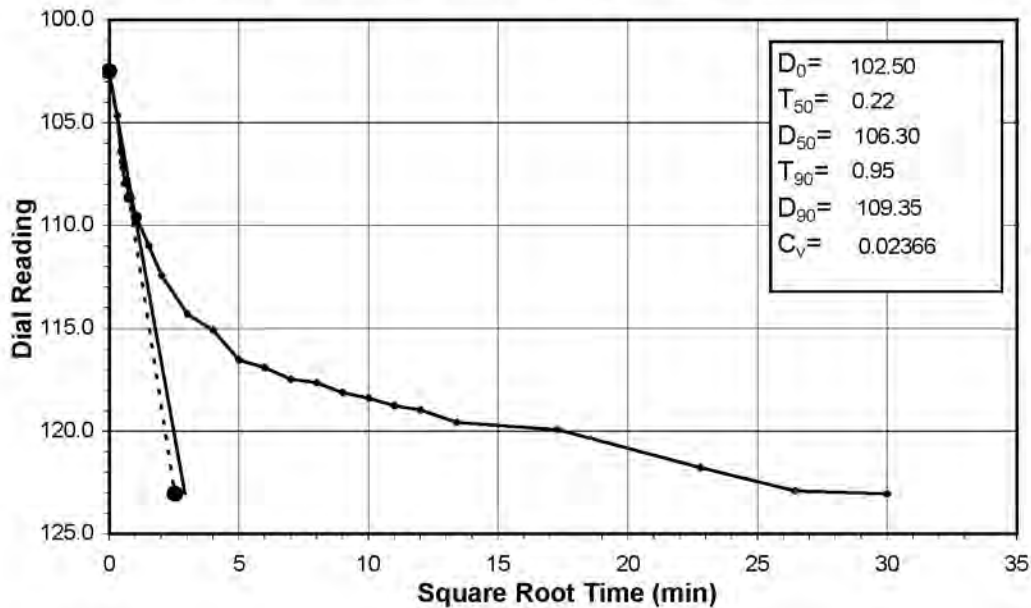
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

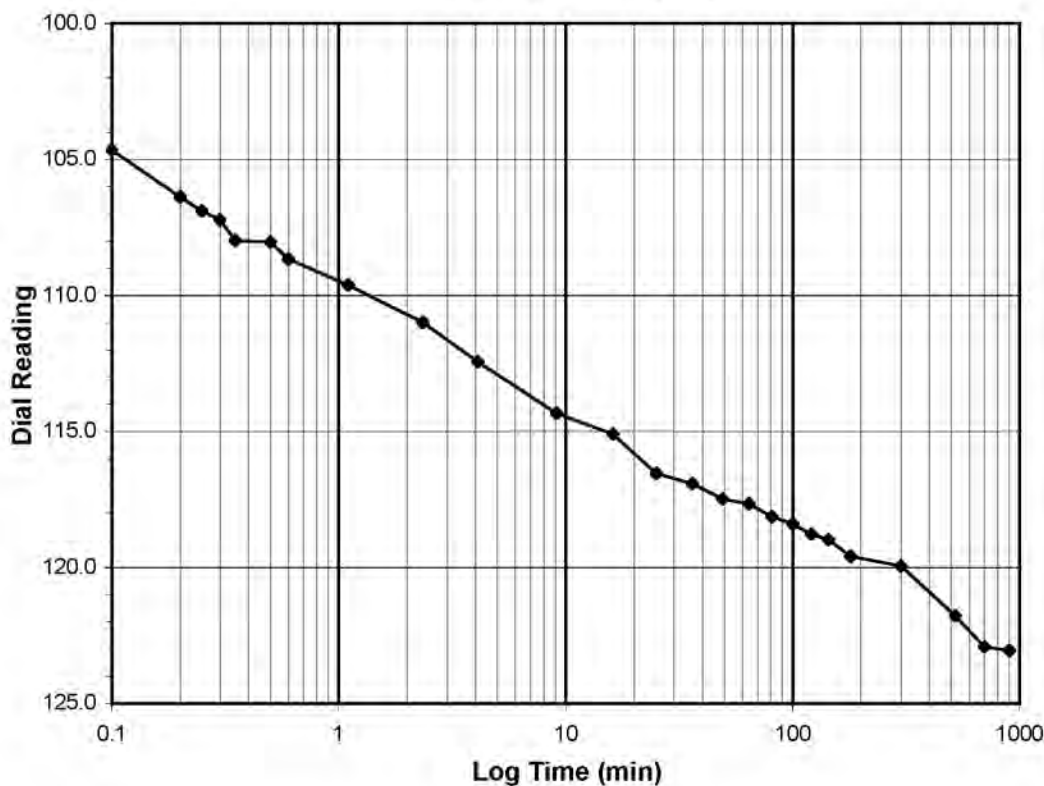
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **123.1**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**
 Start Date **11/30/13**
 Start Time **0:33:37**

Elapsed Time (min)	Dial Reading (div)
Initial	87.9
0.10	104.7
0.20	106.4
0.25	106.9
0.30	107.2
0.35	108.0
0.50	108.0
0.60	108.7
1.10	109.6
2.35	111.0
4.10	112.4
9.12	114.3
16.12	115.1
25.12	116.5
36.12	116.9
49.12	117.5
64.12	117.7
81.12	118.1
100.12	118.4
121.12	118.8
144.12	119.0
180.12	119.6
300.12	119.9
520.12	121.8
700.12	122.9
900.33	123.1



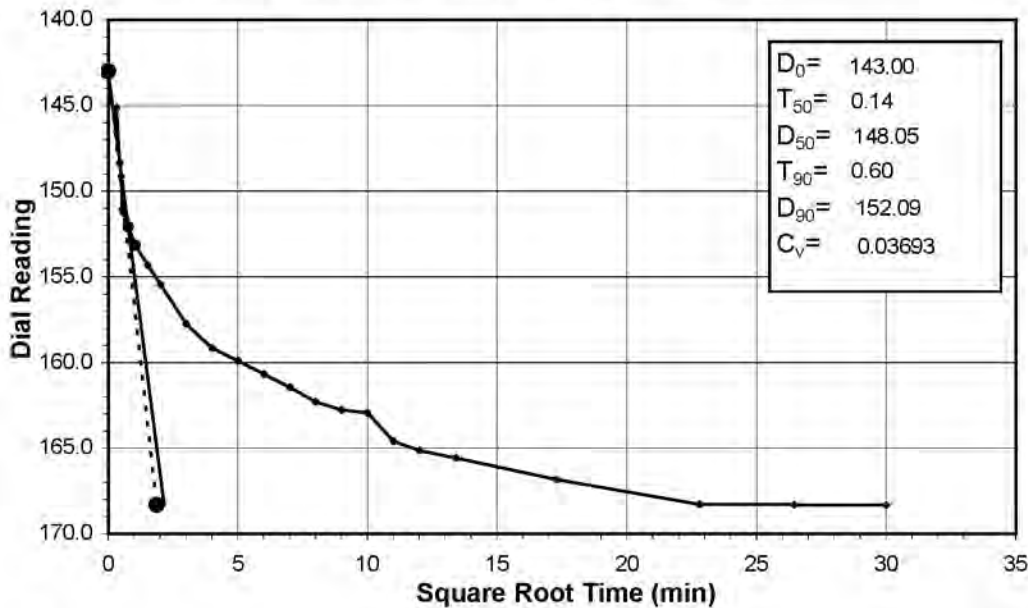
Tested By **DB** Date **11/30/13** Checked By **TM** Date **12/12/13**

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

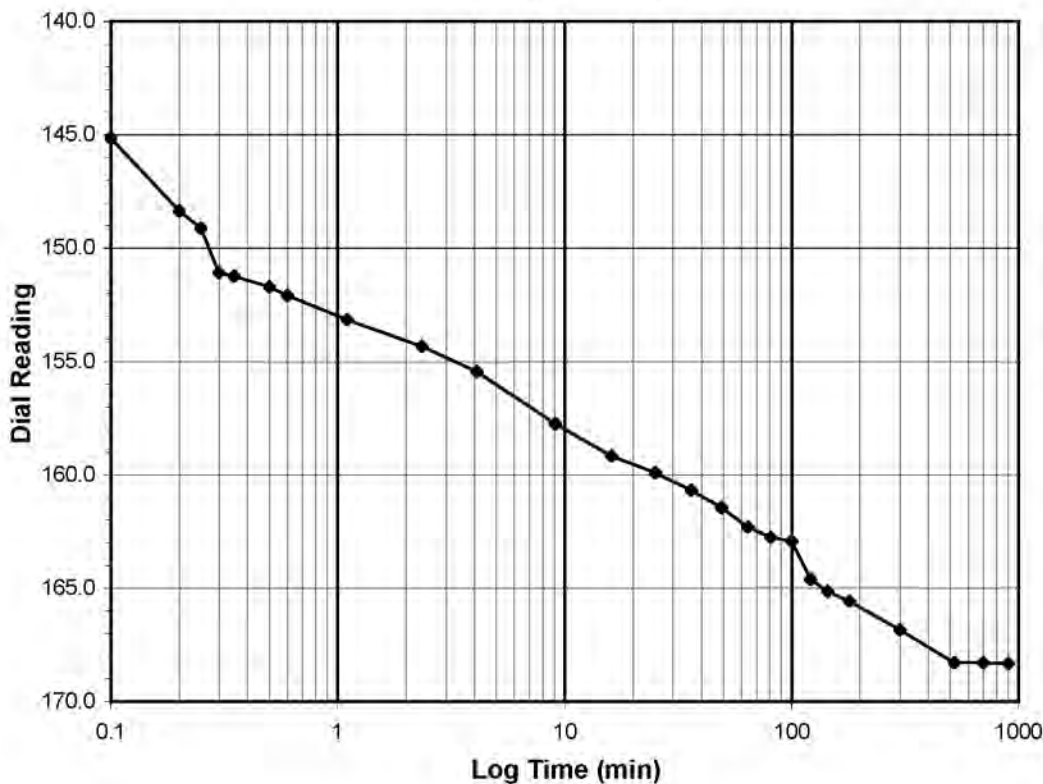
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.5-1.0**
 Final Reading (div) **168.3**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 11/30/13
 Start Time 15:33:57

Elapsed Time (min)	Dial Reading (div)
Initial	123.1
0.10	145.1
0.20	148.4
0.25	149.1
0.30	151.1
0.35	151.2
0.50	151.7
0.60	152.1
1.10	153.2
2.35	154.3
4.10	155.4
9.10	157.8
16.10	159.2
25.10	159.9
36.10	160.7
49.12	161.4
64.12	162.3
81.12	162.8
100.12	162.9
121.12	164.6
144.12	165.1
180.12	165.6
300.12	166.8
520.12	168.3
700.12	168.3
900.12	168.3



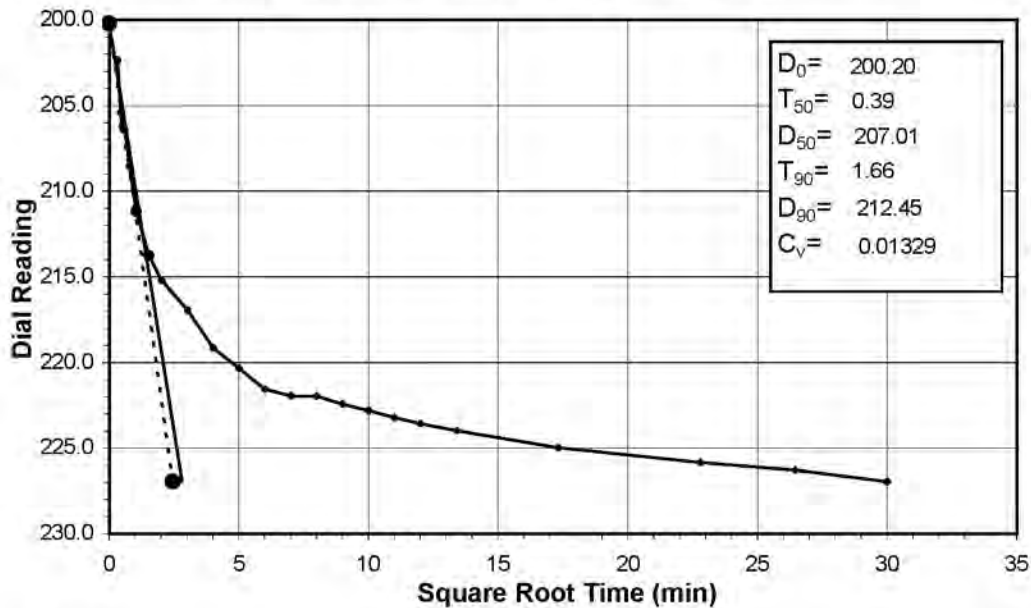
Tested By DB Date 11/30/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

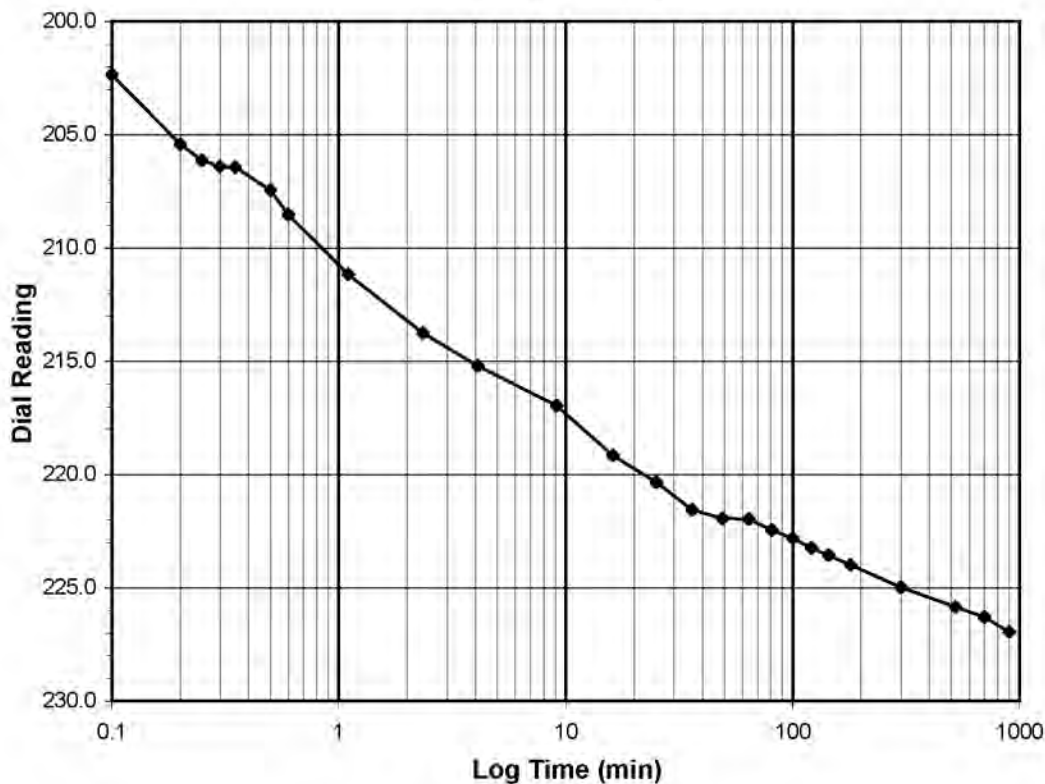
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 227.0
 Consolidometer No. G1424
 1 Division (in) 0.0001
 Start Date 12/1/13
 Start Time 6:34:04

Elapsed Time (min)	Dial Reading (div)
Initial	168.3
0.10	202.4
0.20	205.4
0.25	206.1
0.30	206.4
0.35	206.4
0.50	207.4
0.60	208.5
1.10	211.2
2.35	213.7
4.10	215.2
9.12	216.9
16.12	219.2
25.12	220.3
36.12	221.6
49.12	221.9
64.12	222.0
81.12	222.4
100.12	222.8
121.12	223.2
144.12	223.6
180.12	224.0
300.12	225.0
520.12	225.8
700.13	226.3
900.17	227.0



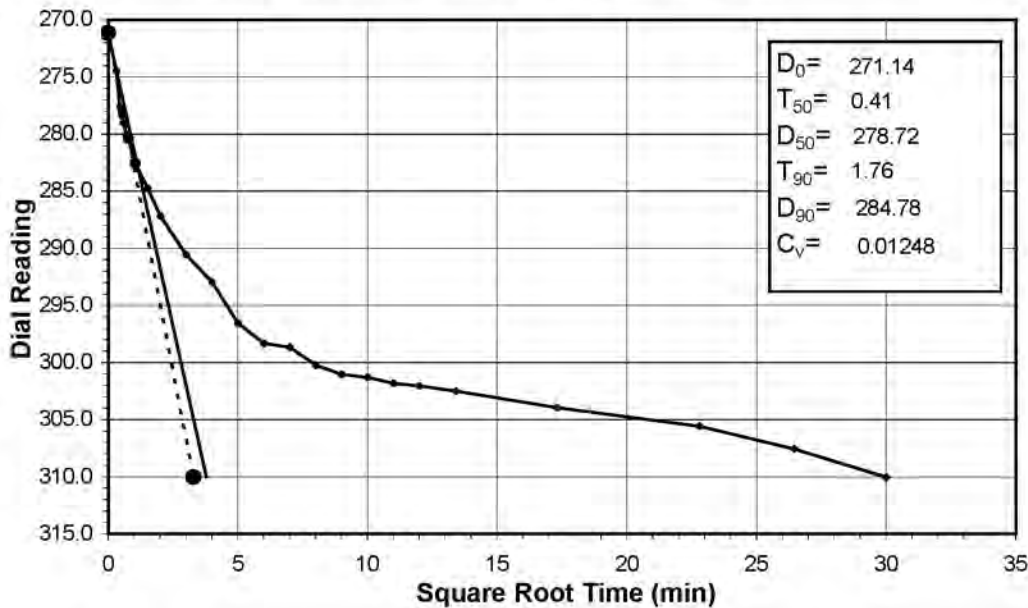
Tested By DB Date 12/1/13 Checked By TM Date 12/12/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

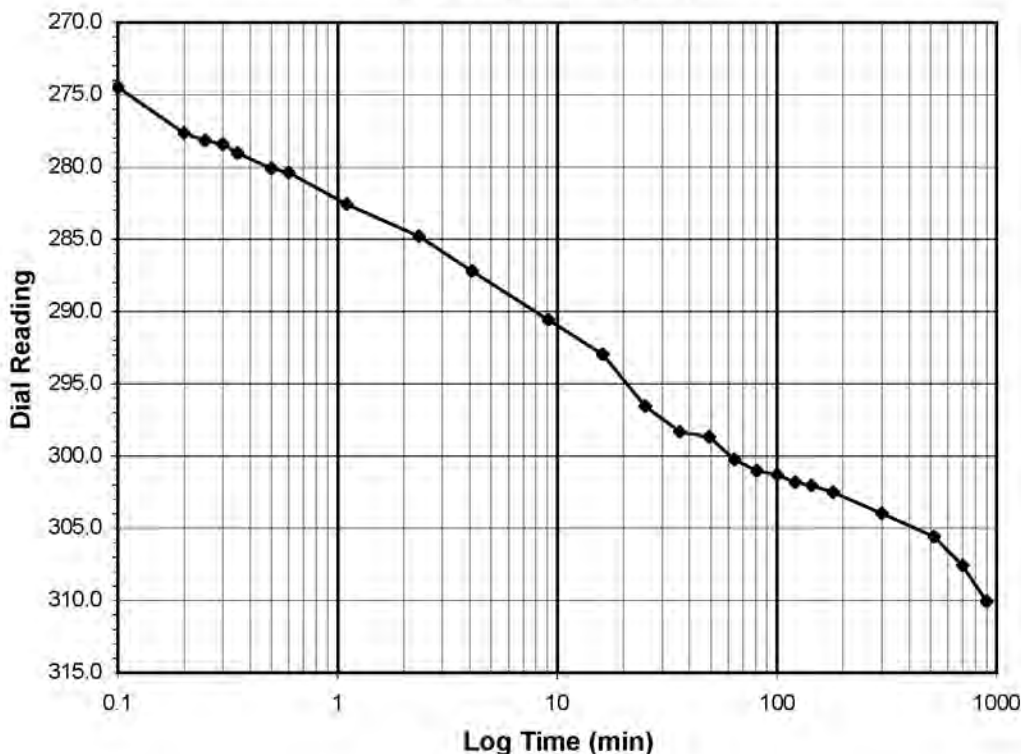
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **310.1**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 12/1/13
 Start Time 21:34:14

Elapsed Time (min)	Dial Reading (div)
Initial	227.0
0.10	274.5
0.20	277.7
0.25	278.2
0.30	278.4
0.35	279.0
0.50	280.1
0.60	280.4
1.10	282.6
2.35	284.8
4.10	287.2
9.10	290.6
16.12	293.0
25.12	296.6
36.12	298.3
49.12	298.7
64.12	300.2
81.12	301.0
100.12	301.3
121.12	301.8
144.12	302.0
180.12	302.5
300.13	304.0
520.13	305.6
700.13	307.6
900.27	310.1



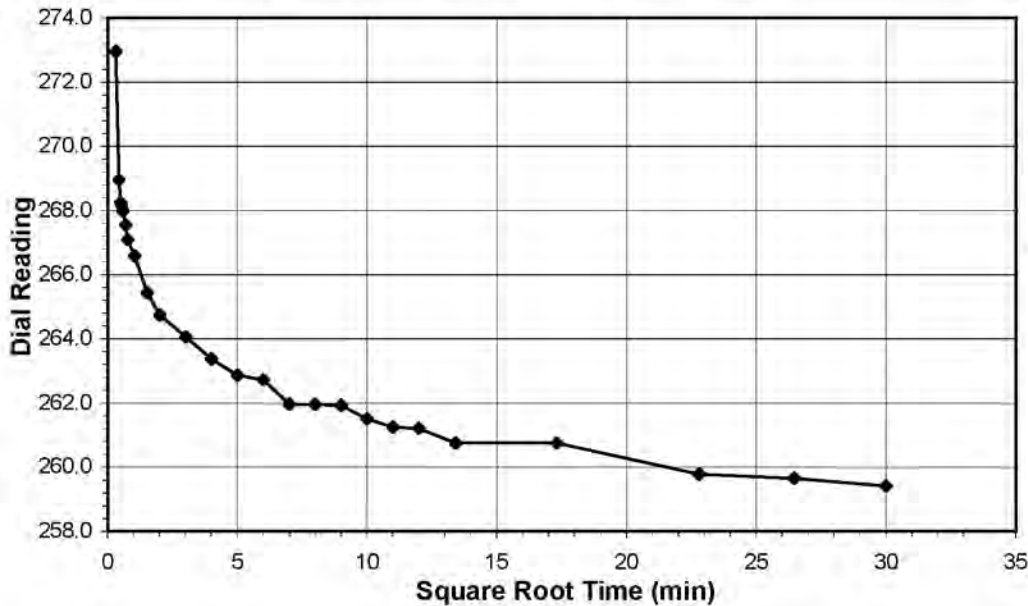
Tested By DB Date 12/1/13 Checked By TM Date 12/12/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

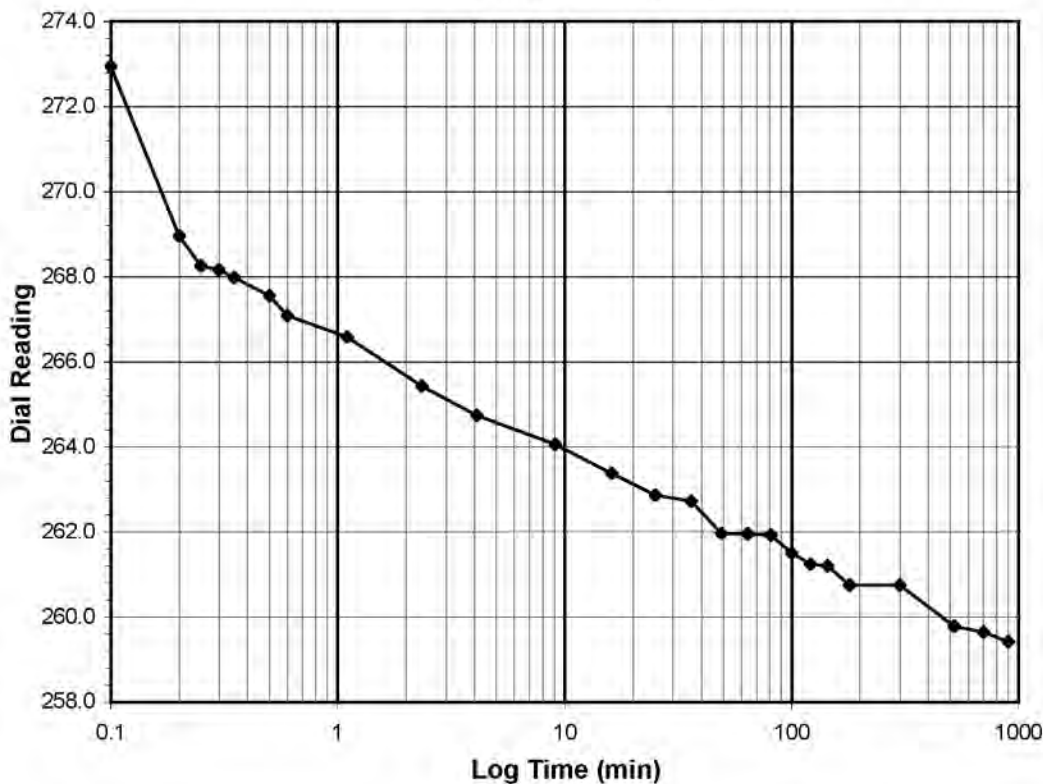
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
Final Reading (div) 259.4
Consolidometer No. G1424
1 Division (in) 0.0001

Start Date 12/2/13
Start Time 12:34:30

Elapsed Time (min)	Dial Reading (div)
Initial	310.1
0.10	273.0
0.20	269.0
0.25	268.3
0.30	268.2
0.35	268.0
0.50	267.6
0.60	267.1
1.10	266.6
2.35	265.4
4.10	264.7
9.10	264.1
16.10	263.4
25.10	262.9
36.10	262.7
49.12	262.0
64.12	262.0
81.12	261.9
100.12	261.5
121.12	261.2
144.12	261.2
180.12	260.8
300.12	260.8
520.12	259.8
700.12	259.7
900.08	259.4



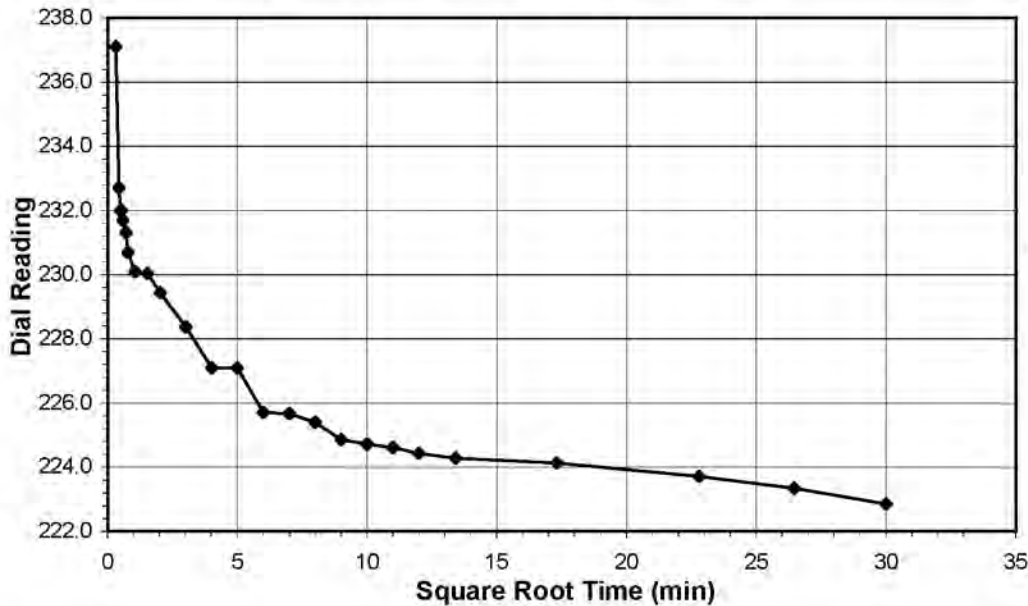
Tested By DB Date 12/2/13 Checked By TM Date 12/12/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

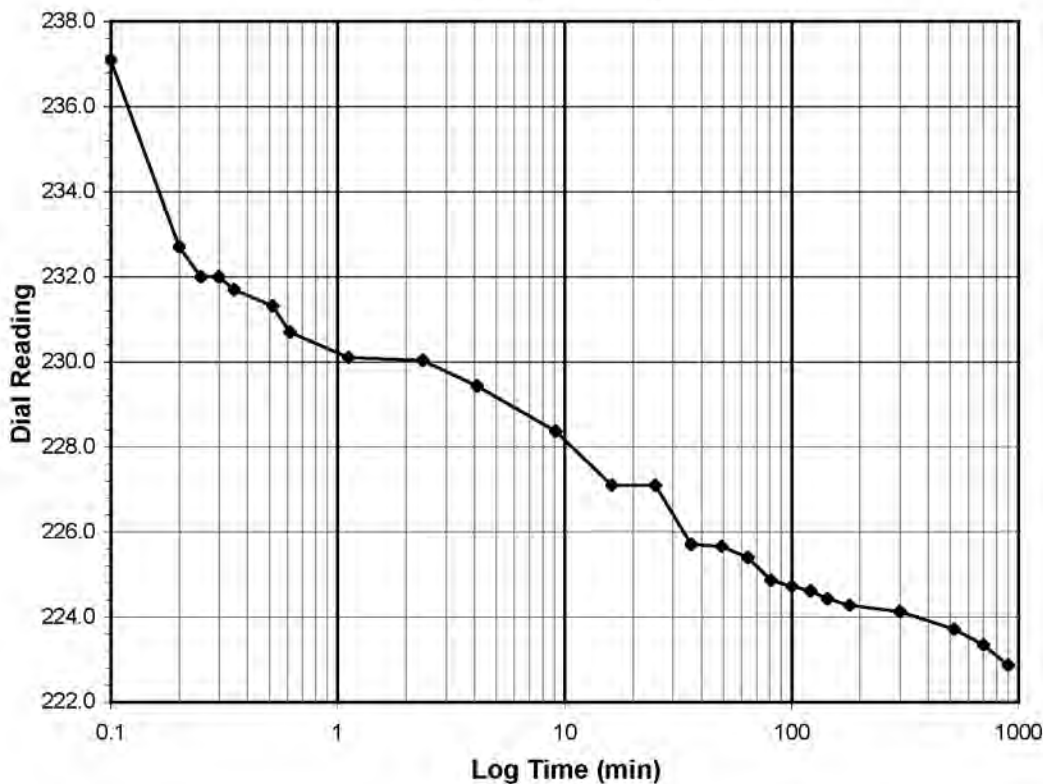
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 222.9
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 12/3/13
 Start Time 3:34:35

Elapsed Time (min)	Dial Reading (div)
Initial	259.4
0.10	237.1
0.20	232.7
0.25	232.0
0.30	232.0
0.35	231.7
0.52	231.3
0.62	230.7
1.12	230.1
2.37	230.0
4.12	229.4
9.12	228.4
16.12	227.1
25.12	227.1
36.12	225.7
49.12	225.7
64.12	225.4
81.12	224.9
100.12	224.7
121.13	224.6
144.13	224.4
180.13	224.3
300.13	224.1
520.13	223.7
700.13	223.3
900.23	222.9



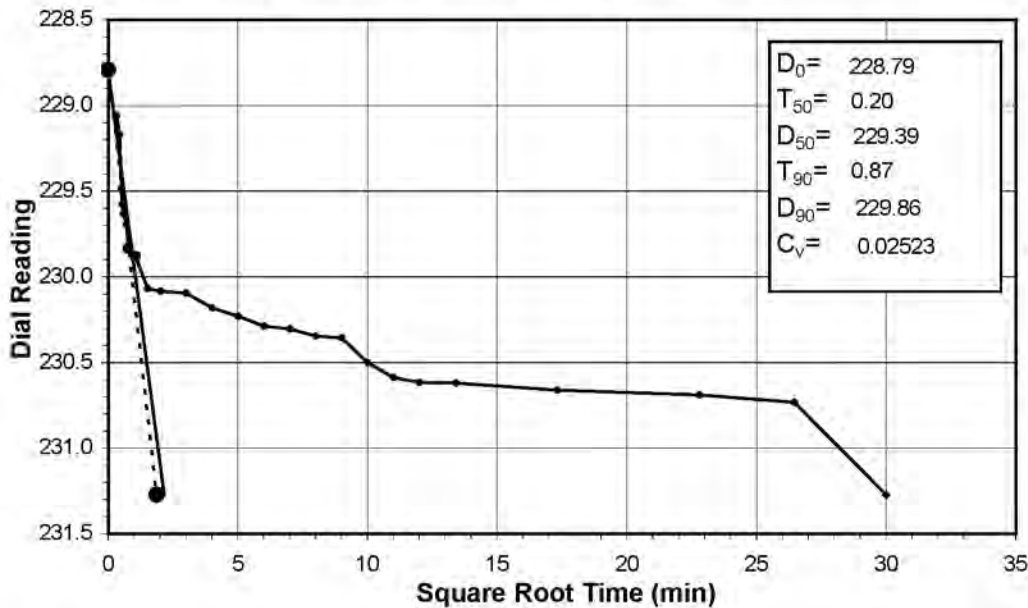
Tested By DB Date 12/3/13 Checked By TM Date 12/12/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

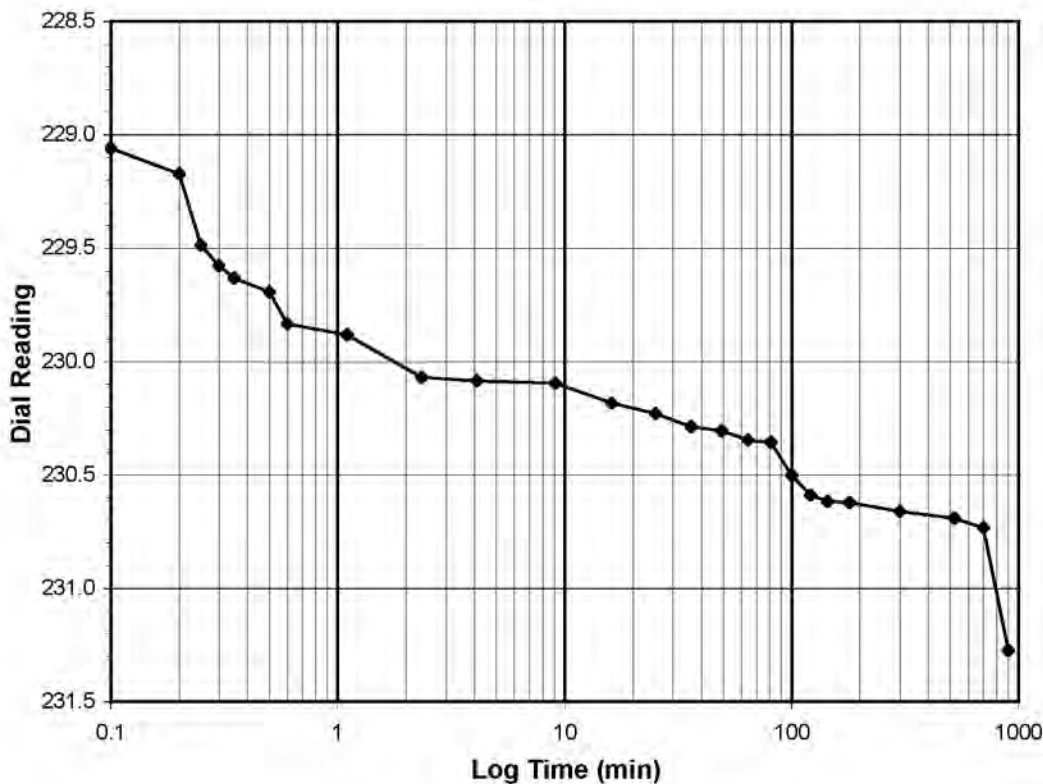
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **231.3**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 12/3/13
 Start Time 18:34:49

Elapsed Time (min)	Dial Reading (div)
Initial	222.9
0.10	229.1
0.20	229.2
0.25	229.5
0.30	229.6
0.35	229.6
0.50	229.7
0.60	229.8
1.10	229.9
2.35	230.1
4.10	230.1
9.10	230.1
16.10	230.2
25.10	230.2
36.10	230.3
49.10	230.3
64.12	230.3
81.12	230.4
100.12	230.5
121.12	230.6
144.12	230.6
180.12	230.6
300.12	230.7
520.12	230.7
700.12	230.7
900.28	231.3



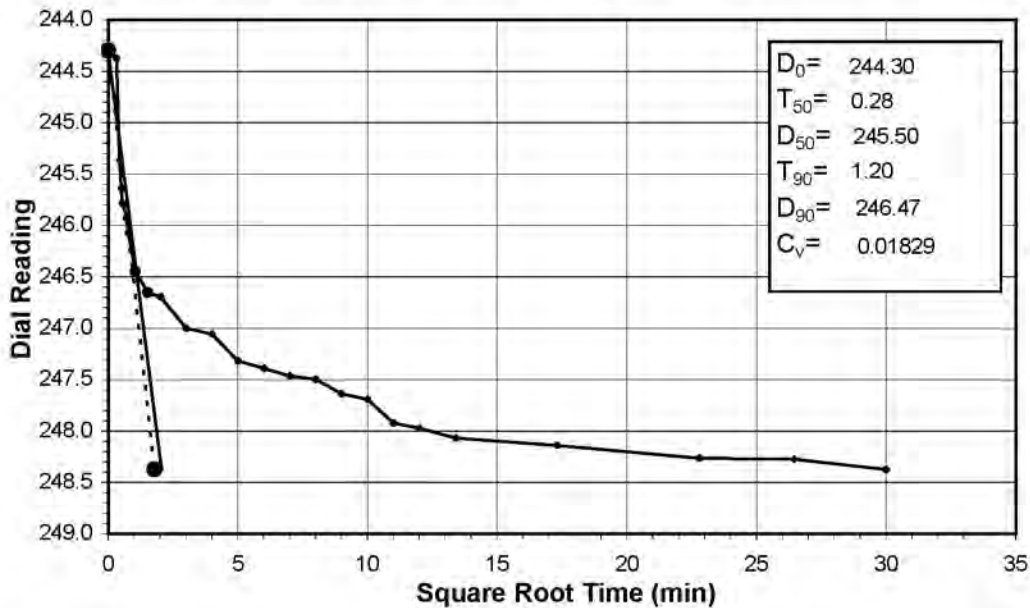
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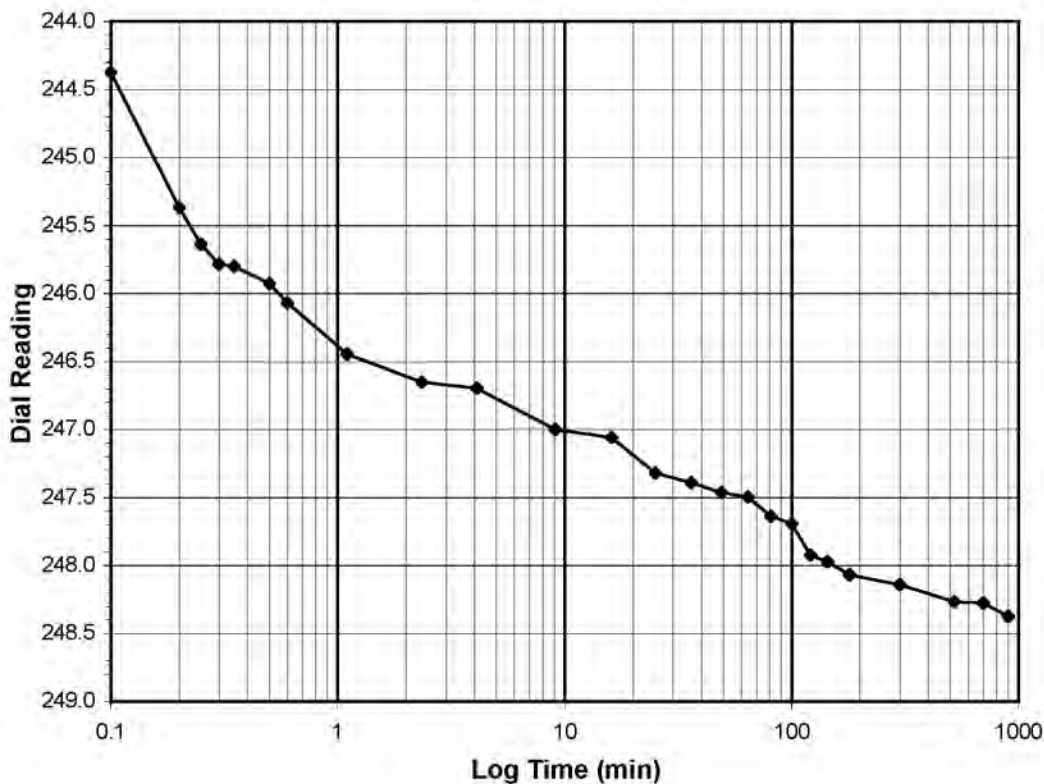
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.5-1.0**
 Final Reading (div) **248.4**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001
 Start Date 12/4/13
 Start Time 9:35:06

Elapsed Time (min)	Dial Reading (div)
Initial	231.3
0.10	244.4
0.20	245.4
0.25	245.6
0.30	245.8
0.35	245.8
0.50	245.9
0.60	246.1
1.10	246.4
2.35	246.7
4.10	246.7
9.10	247.0
16.10	247.1
25.10	247.3
36.10	247.4
49.10	247.5
64.12	247.5
81.12	247.6
100.12	247.7
121.12	247.9
144.12	248.0
180.12	248.1
300.12	248.1
520.12	248.3
700.12	248.3
900.25	248.4



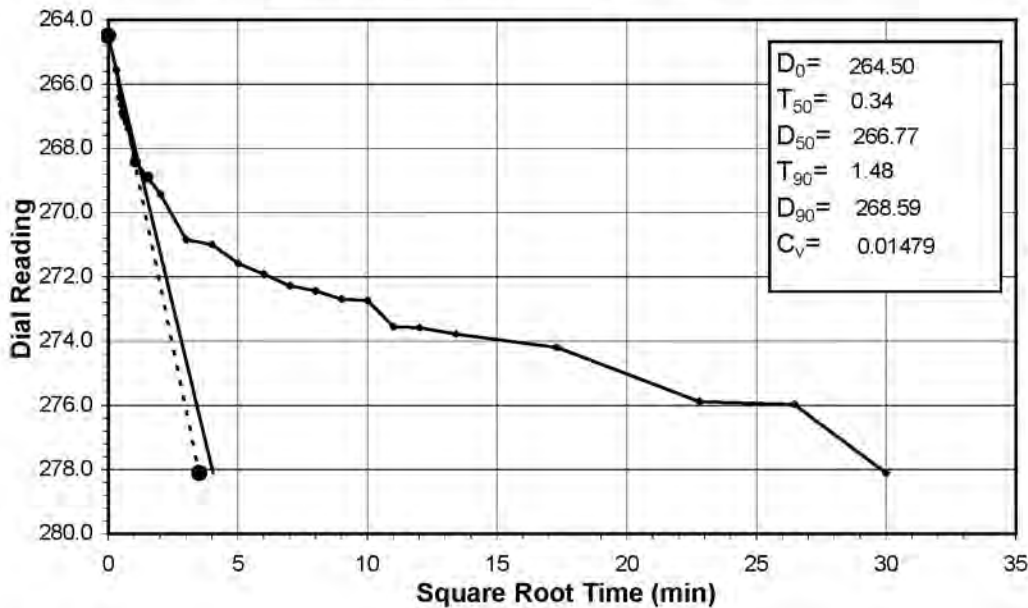
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

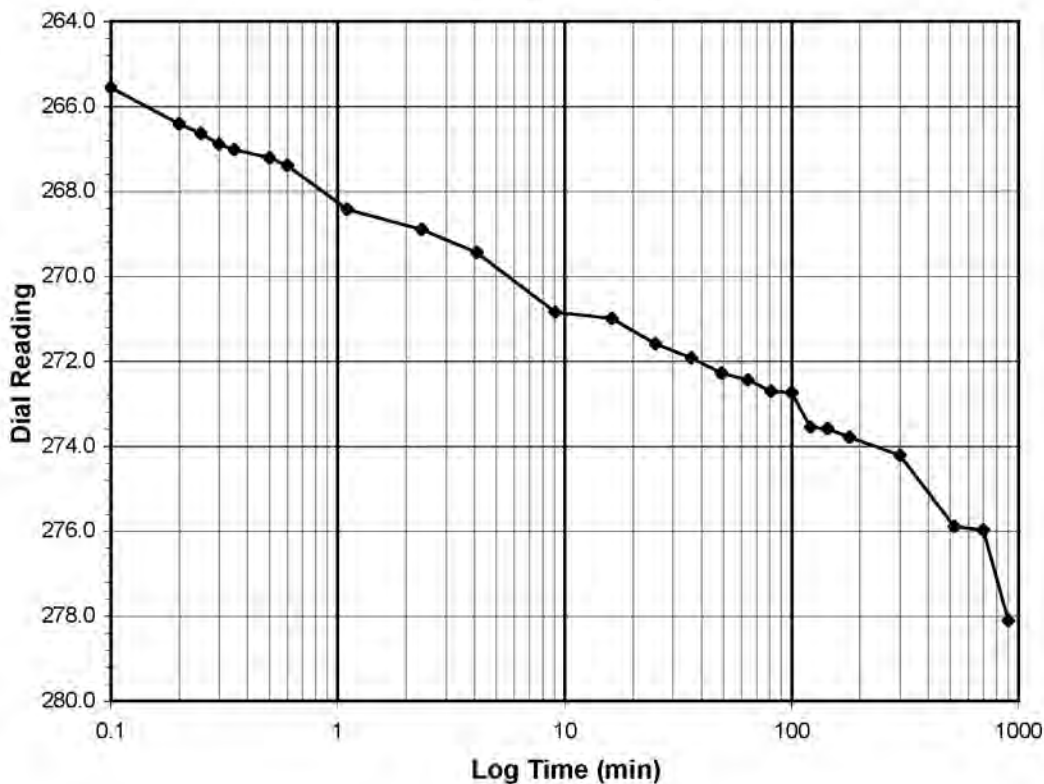
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 278.1
 Consolidometer No. G1424
 1 Division (in) 0.0001
 Start Date 12/5/13
 Start Time 0:35:21

Elapsed Time (min)	Dial Reading (div)
Initial	248.4
0.10	265.6
0.20	266.4
0.25	266.6
0.30	266.9
0.35	267.0
0.50	267.2
0.60	267.4
1.10	268.4
2.35	268.9
4.10	269.4
9.10	270.8
16.12	271.0
25.12	271.6
36.12	271.9
49.12	272.3
64.12	272.4
81.12	272.7
100.12	272.7
121.12	273.6
144.12	273.6
180.12	273.8
300.12	274.2
520.12	275.9
700.12	276.0
900.27	278.1



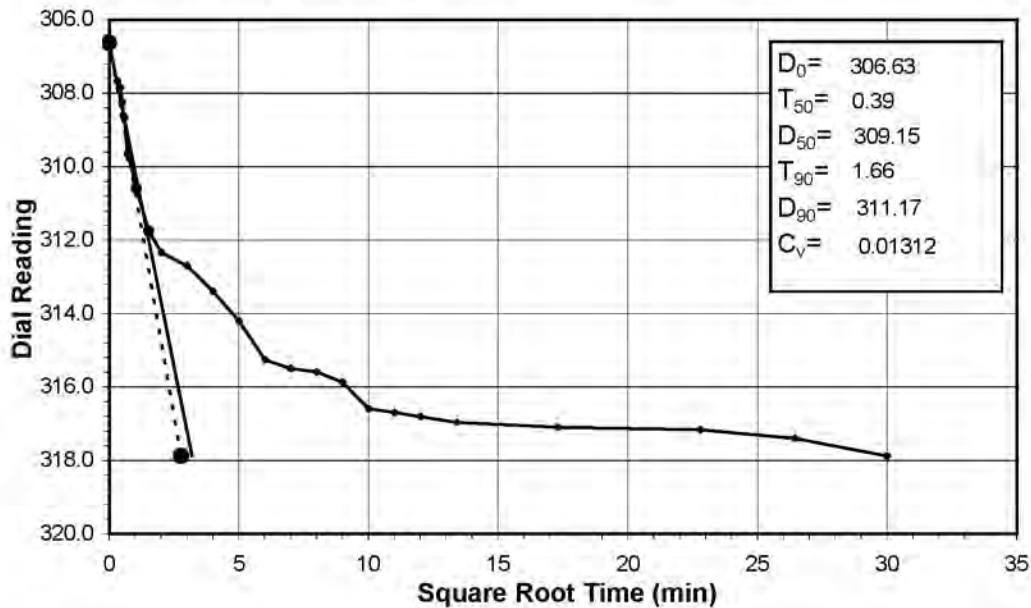
Tested By DB Date 12/5/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

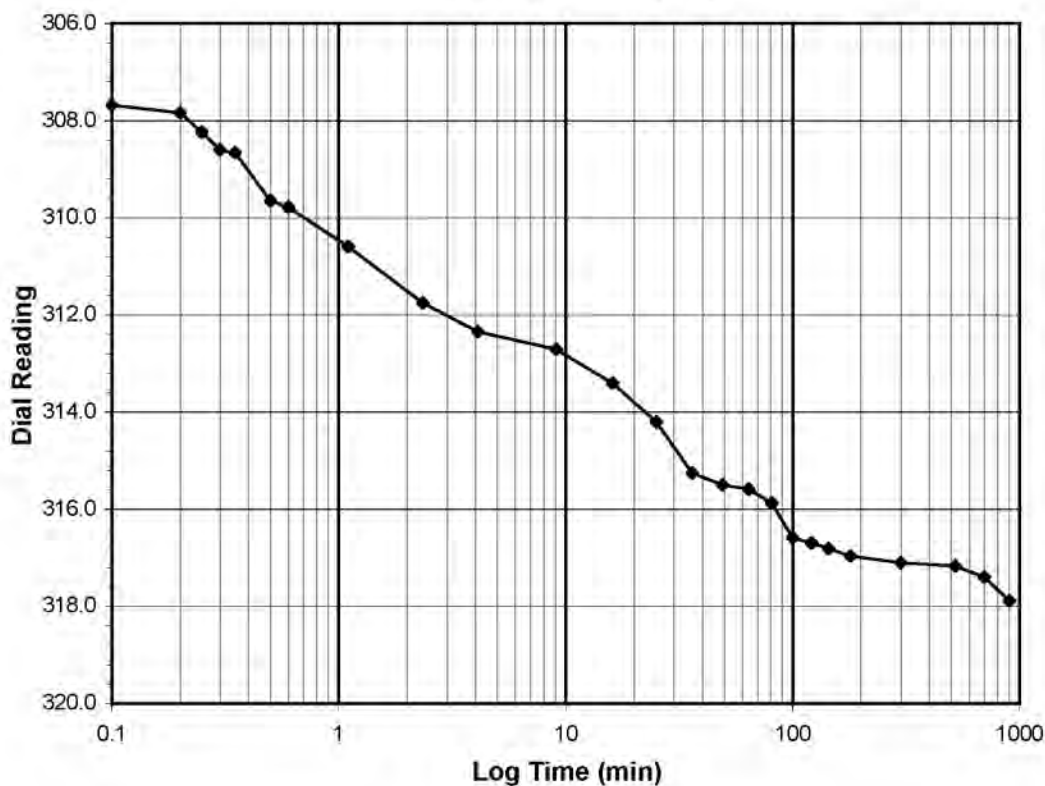
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **317.9**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 12/5/13
 Start Time 15:35:37

Elapsed Time (min)	Dial Reading (div)
Initial	278.1
0.10	307.7
0.20	307.8
0.25	308.2
0.30	308.6
0.35	308.7
0.50	309.7
0.60	309.8
1.10	310.6
2.35	311.8
4.10	312.3
9.10	312.7
16.10	313.4
25.10	314.2
36.10	315.3
49.12	315.5
64.12	315.6
81.12	315.9
100.12	316.6
121.12	316.7
144.12	316.8
180.12	317.0
300.12	317.1
520.12	317.2
700.12	317.4
900.20	317.9



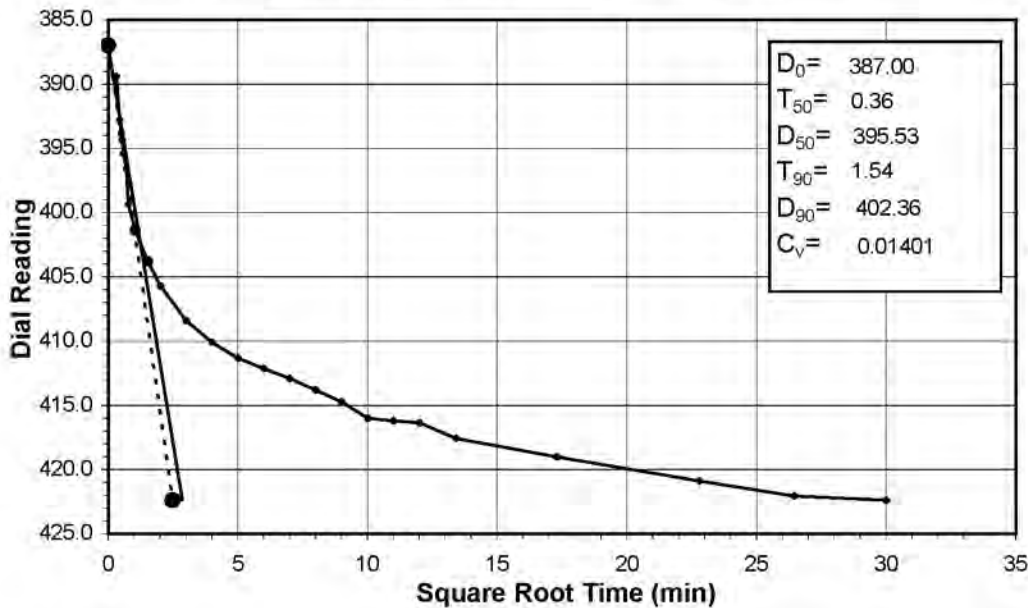
Tested By DB Date 12/5/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

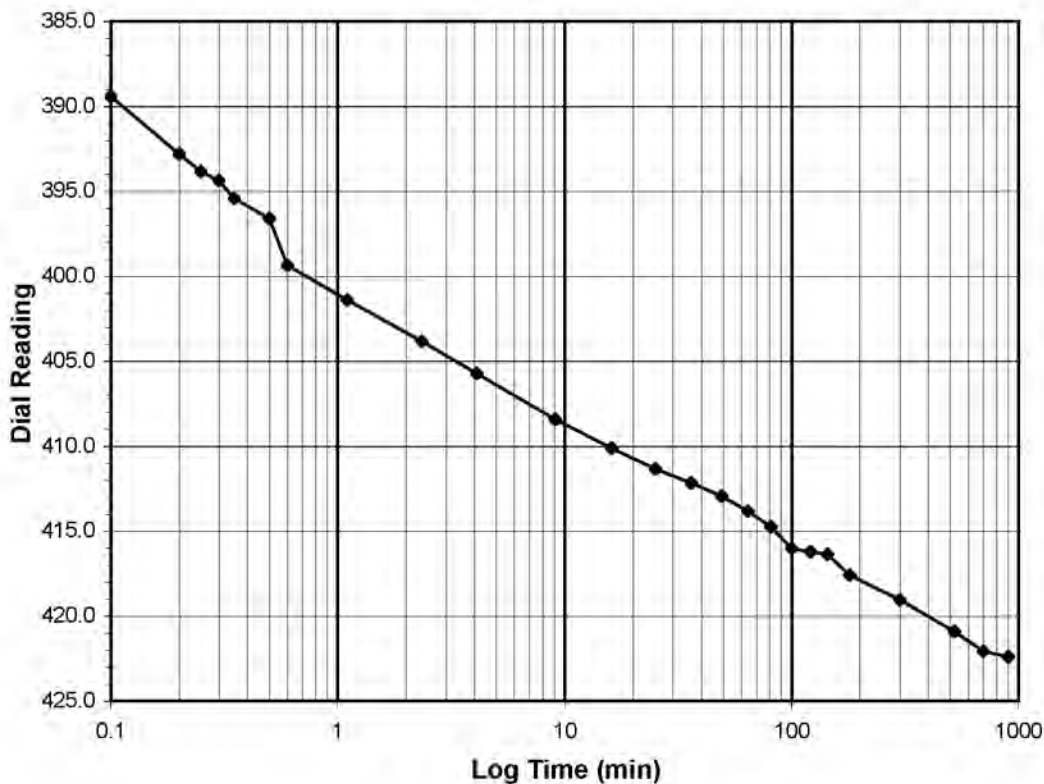
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **422.4**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001
 Start Date 12/6/13
 Start Time 6:35:50

Elapsed Time (min)	Dial Reading (div)
Initial	317.9
0.10	389.4
0.20	392.8
0.25	393.8
0.30	394.4
0.35	395.4
0.50	396.6
0.60	399.3
1.10	401.4
2.35	403.8
4.10	405.7
9.10	408.4
16.10	410.1
25.10	411.3
36.10	412.1
49.12	412.9
64.12	413.8
81.12	414.7
100.12	416.0
121.12	416.2
144.12	416.4
180.12	417.6
300.12	419.0
520.12	420.9
700.12	422.1
900.22	422.4



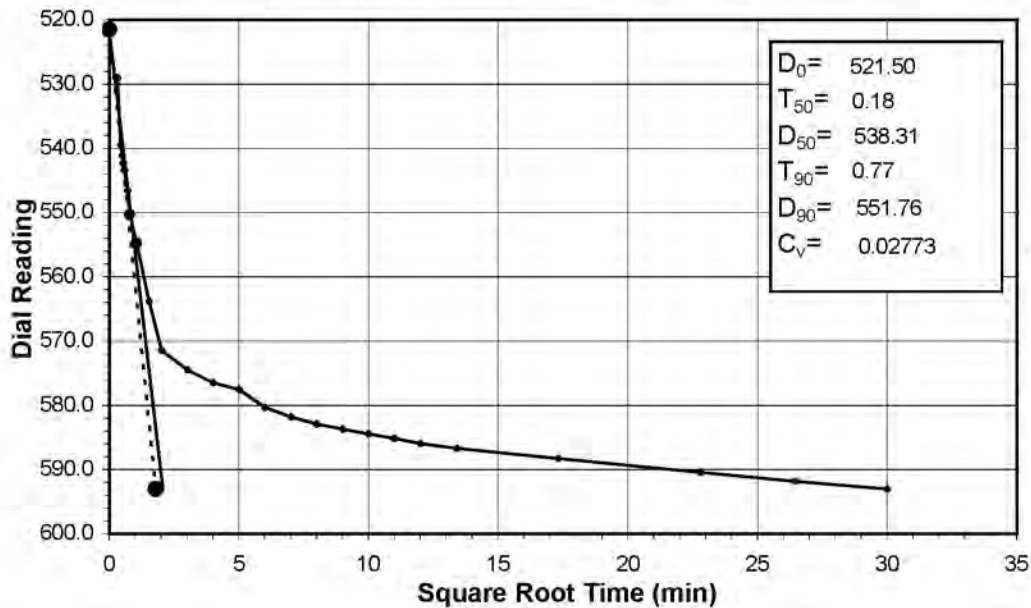
Tested By DB Date 12/6/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

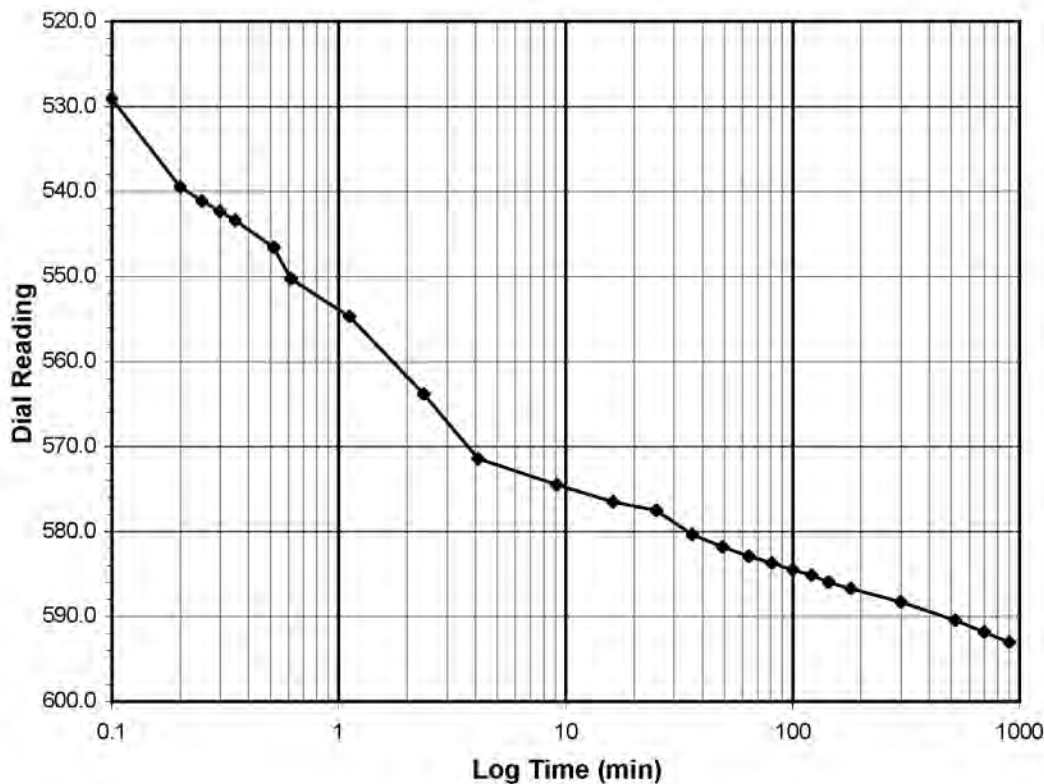
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 593.0
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 12/6/13
 Start Time 21:36:03

Elapsed Time (min)	Dial Reading (div)
Initial	422.4
0.10	529.1
0.20	539.5
0.25	541.1
0.30	542.3
0.35	543.4
0.52	546.6
0.62	550.3
1.12	554.7
2.37	563.8
4.12	571.4
9.12	574.5
16.12	576.5
25.12	577.5
36.12	580.3
49.12	581.8
64.12	582.9
81.12	583.7
100.12	584.5
121.12	585.1
144.12	586.0
180.12	586.7
300.12	588.3
520.12	590.4
700.12	591.8
900.22	593.0



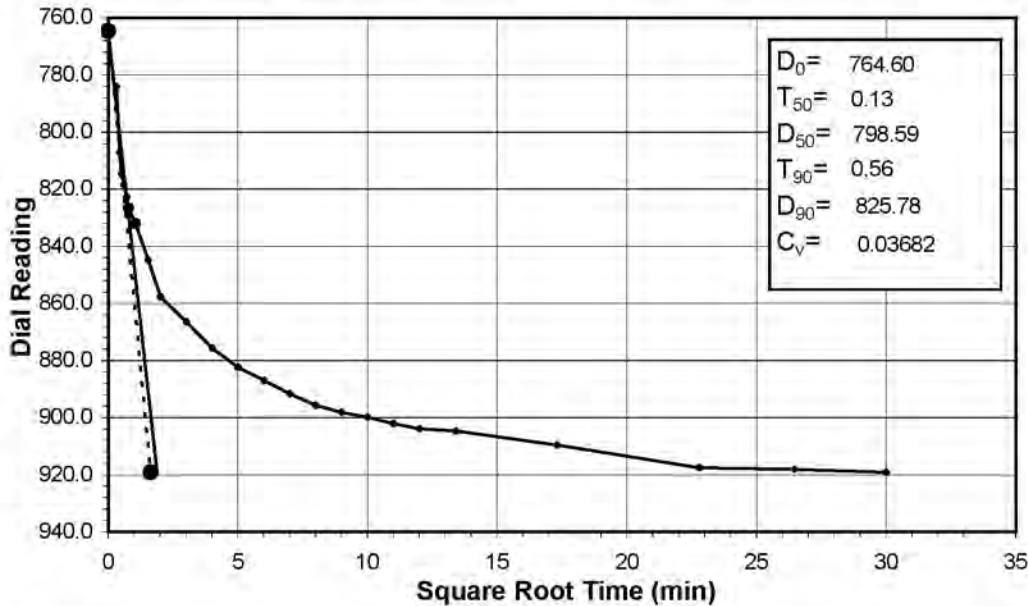
Tested By DB Date 12/6/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

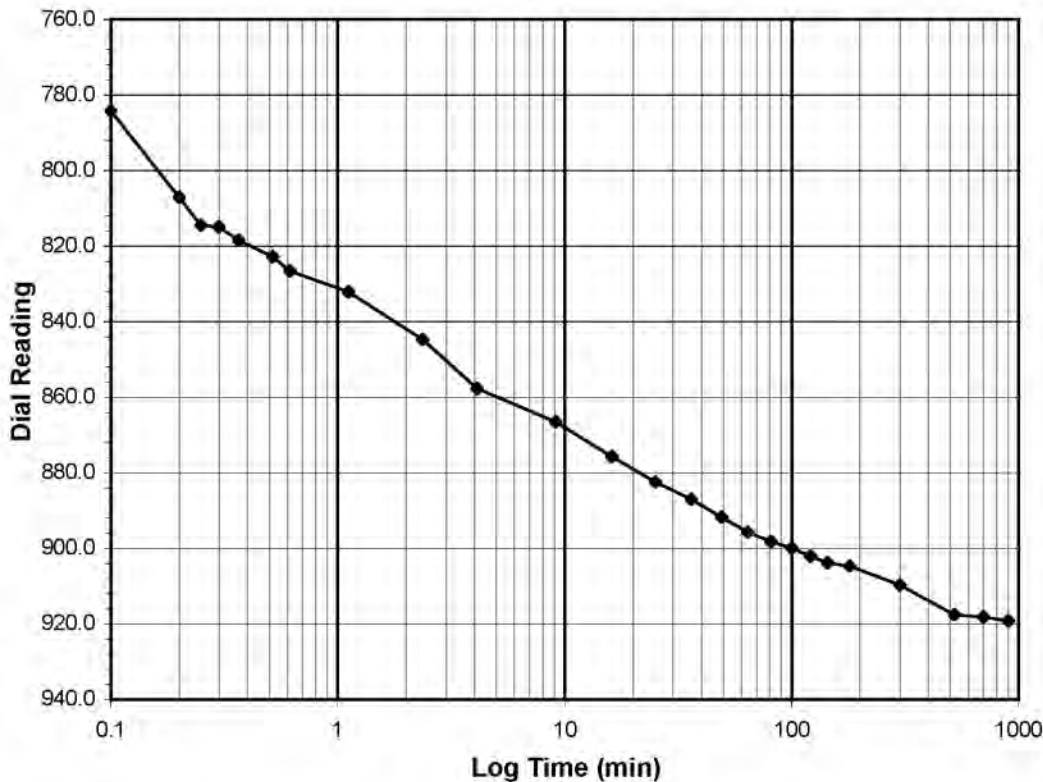
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 16.0-32.0
 Final Reading (div) 919.2
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 12/7/13
 Start Time 12:36:16

Elapsed Time (min)	Dial Reading (div)
Initial	593.0
0.10	784.1
0.20	807.1
0.25	814.5
0.30	814.9
0.37	818.5
0.52	822.7
0.62	826.6
1.12	832.1
2.37	844.7
4.12	857.7
9.12	866.5
16.12	875.7
25.12	882.4
36.12	886.9
49.12	891.7
64.12	895.7
81.12	898.2
100.12	899.9
121.12	902.1
144.12	903.9
180.12	904.7
300.13	909.7
520.13	917.6
700.13	918.1
900.07	919.2



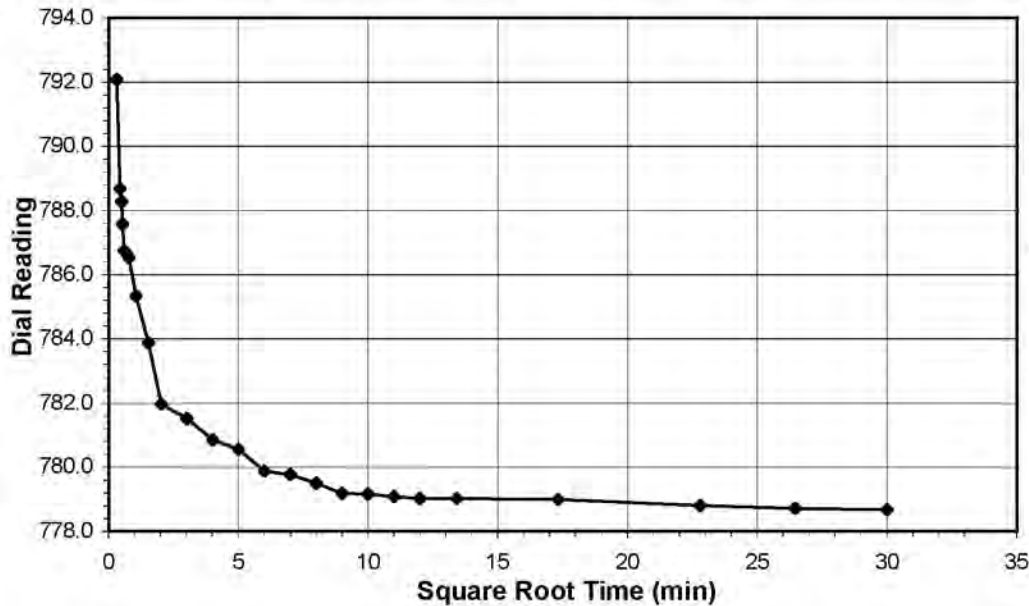
Tested By DB Date 12/7/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

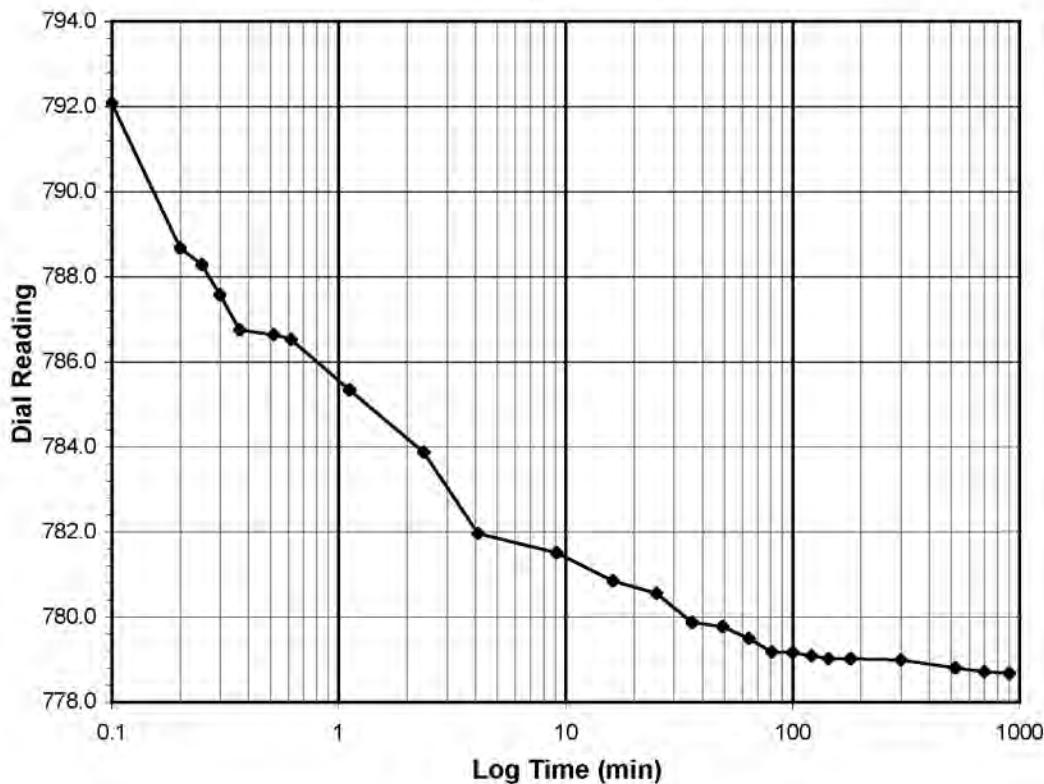
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **32.0-8.0**
 Final Reading (div) **778.7**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001

Start Date 12/8/13
 Start Time 3:36:20

Elapsed Time (min)	Dial Reading (div)
Initial	919.2
0.10	792.1
0.20	788.7
0.25	788.3
0.30	787.6
0.37	786.7
0.52	786.6
0.62	786.5
1.12	785.3
2.37	783.9
4.12	782.0
9.12	781.5
16.12	780.9
25.12	780.6
36.12	779.9
49.13	779.8
64.13	779.5
81.13	779.2
100.13	779.2
121.13	779.1
144.13	779.0
180.13	779.0
300.13	779.0
520.13	778.8
700.13	778.7
900.17	778.7



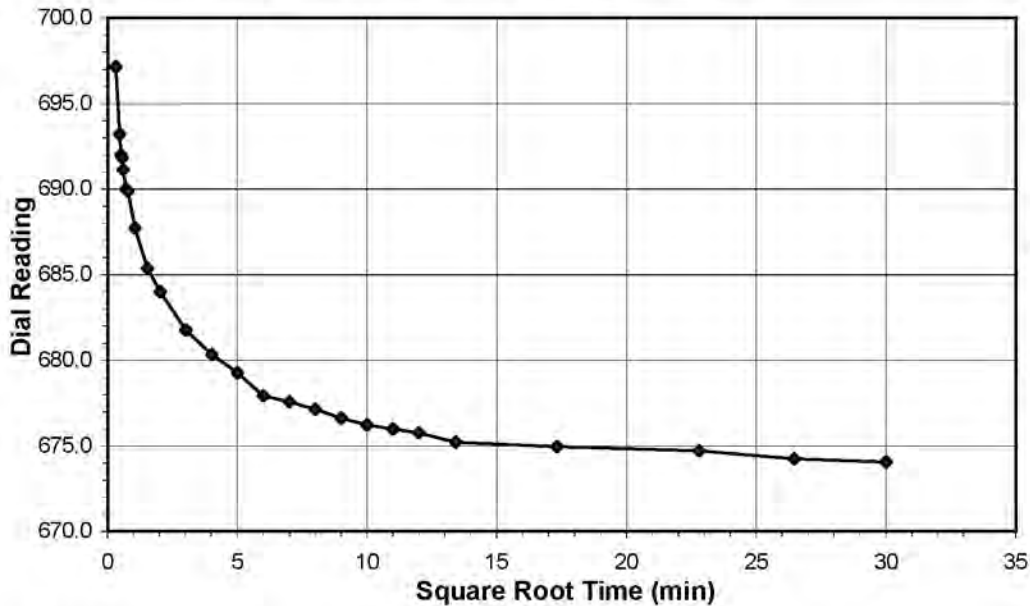
Tested By DB Date 12/8/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

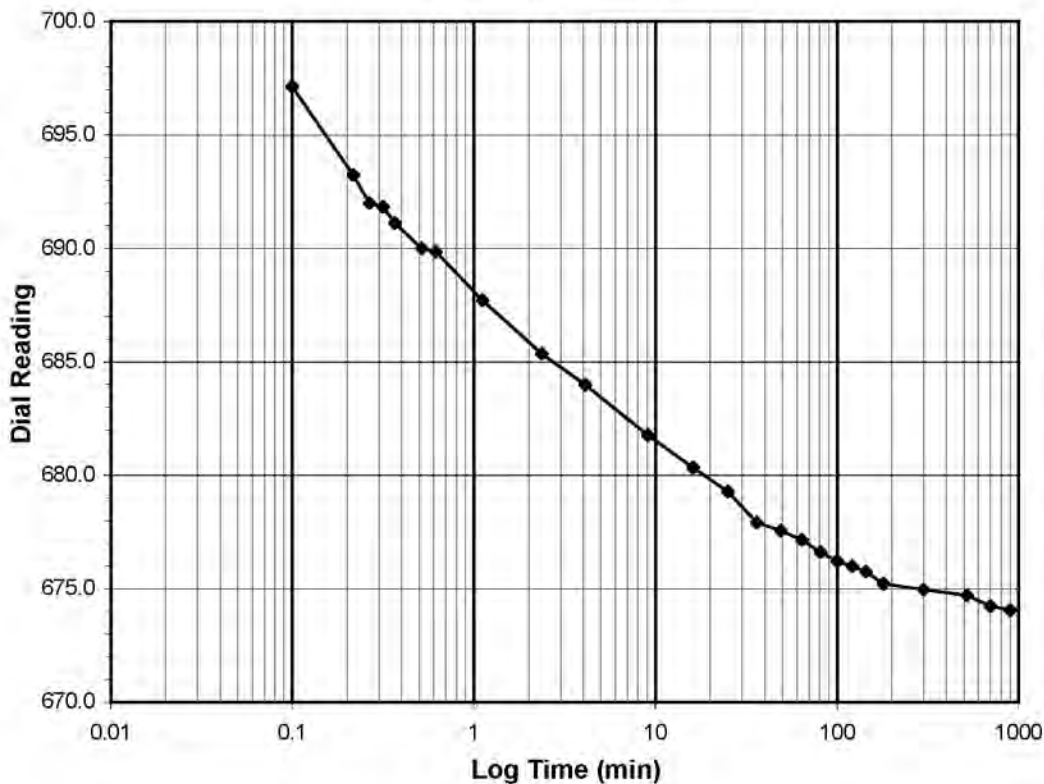
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-2.0
 Final Reading (div) 674.1
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 12/8/13
 Start Time 18:36:30

Elapsed Time (min)	Dial Reading (div)
Initial	778.7
0.10	697.1
0.22	693.2
0.27	692.0
0.32	691.8
0.37	691.1
0.52	690.0
0.62	689.9
1.12	687.7
2.37	685.4
4.12	684.0
9.12	681.8
16.12	680.3
25.12	679.3
36.12	677.9
49.12	677.6
64.12	677.1
81.13	676.6
100.13	676.2
121.13	676.0
144.13	675.8
180.13	675.2
300.13	675.0
520.13	674.7
700.13	674.2
900.08	674.1



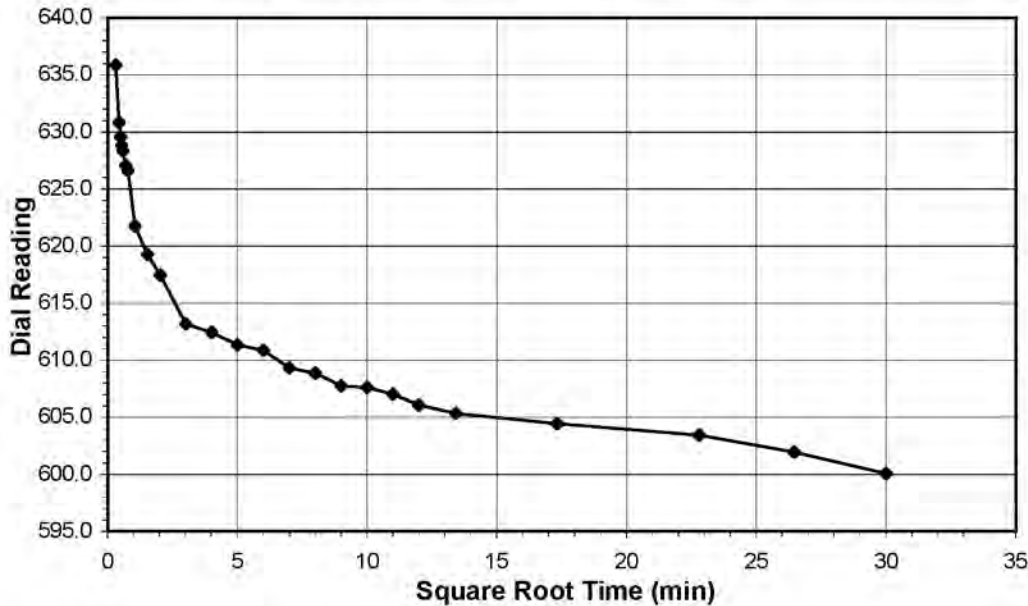
Tested By DB Date 12/8/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

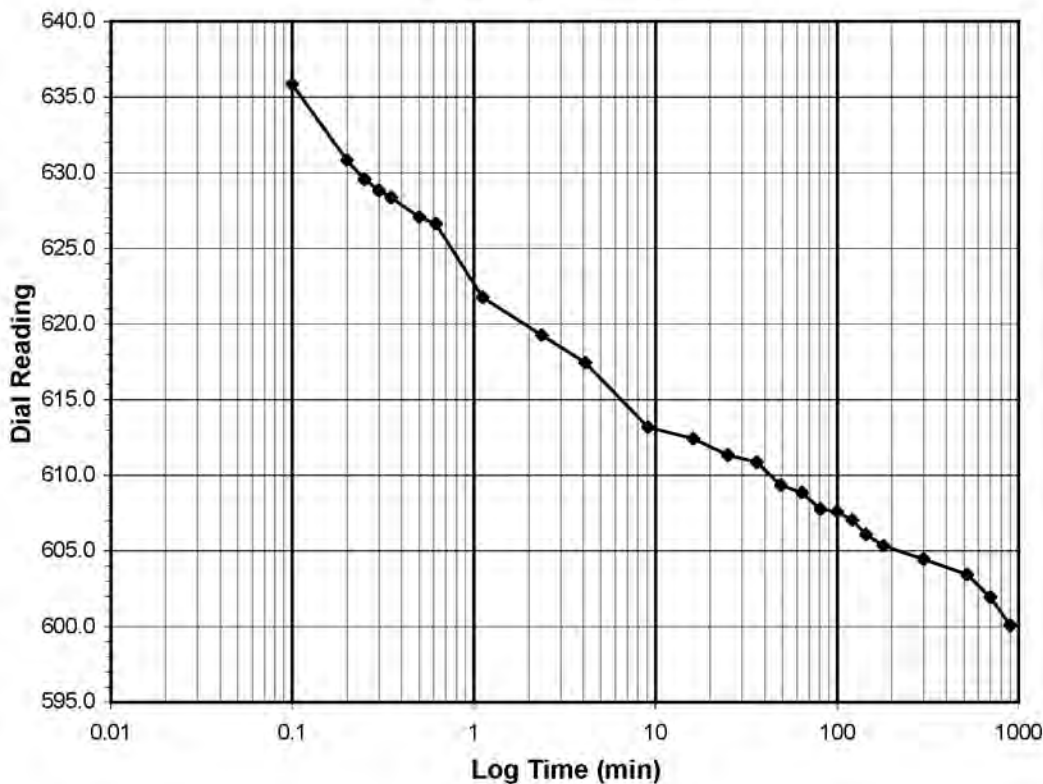
Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **600.1**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 12/9/13
 Start Time 9:36:35

Elapsed Time (min)	Dial Reading (div)
Initial	674.1
0.10	635.9
0.20	630.8
0.25	629.6
0.30	628.8
0.35	628.4
0.50	627.1
0.62	626.6
1.12	621.8
2.37	619.3
4.12	617.5
9.12	613.2
16.12	612.4
25.12	611.3
36.12	610.9
49.12	609.3
64.12	608.9
81.12	607.8
100.12	607.6
121.12	607.0
144.13	606.1
180.13	605.3
300.13	604.5
520.13	603.4
700.13	601.9
900.10	600.1



Tested By DB Date 12/9/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1424

1 Division = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied Pressure	Final Dial Reading	Machine Deflection	Corrected Reading	Height of Sample	Volume	Dry Density	Void Ratio
Tare Number	2773	2762	(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	181.61	159.50								
Wt. Tare & DS (g)	146.32	128.53								
Wt. Water (g)	35.29	30.97	Seating	0	0	0	25.400	80.440	1.52770	0.72809
Wt. Tare (g)	6.93	6.67	0.25	87.9	17.0	71.0	25.220	79.869	1.53862	0.71583
Wt. DS (g)	139.39	121.86	0.5	123.1	22.5	100.6	25.144	79.631	1.54322	0.71070
Water Content (%)	25.32	25.41	1	168.3	31.8	136.5	25.053	79.341	1.54885	0.70449
			2	227.0	56.2	170.7	24.966	79.067	1.55423	0.69859
			4	310.1	87.6	222.4	24.835	78.650	1.56246	0.68965
<u>Sample Parameters</u>			1	259.4	52.8	206.6	24.875	78.778	1.55993	0.69238
Sample Diameter (in)	2.5	2.5	0.25	222.9	24.8	198.1	24.897	78.846	1.55857	0.69386
Sample Height (in)	1.0000	0.9468	0.5	231.3	31.4	199.8	24.892	78.832	1.55885	0.69355
Sample Volume (cm ³)	80.44	76.16	1	248.4	45.6	202.8	24.885	78.809	1.55932	0.69305
Wt. Wet Sample + Ring (g)	368.83	368.95	2	278.1	60.3	217.8	24.847	78.687	1.56172	0.69044
Wt. of Ring (g)	214.83	214.83	4	317.9	86.5	231.4	24.812	78.579	1.56389	0.68810
Wt. of Wet Sample (g)	154.00	154.12	8	422.4	137.0	285.3	24.675	78.144	1.57257	0.67878
Wet Density (pcf)	119.46	126.27	16	593.0	196.5	396.5	24.393	77.250	1.59078	0.65956
Wet Density (g/cm ³)	1.91	2.02	32	919.2	283.7	635.5	23.786	75.328	1.63137	0.61827
Water Content (%)	25.32	25.41	8	778.7	174.5	604.2	23.865	75.579	1.62594	0.62367
Wt. of Dry Sample (g)	122.89	122.89	2	674.1	104.7	569.4	23.954	75.860	1.61994	0.62969
Dry Density (pcf)	95.33	100.68	0.5	600.1	68.4	531.7	24.049	76.163	1.61349	0.63620
Dry Density (g/cm ³)	1.53	1.61								
Void Ratio	0.7281	0.6362								
Saturation (%)	91.80	105.46								
Specific Gravity	2.64	Measured								
			<i>Tested By</i>	<i>DB</i>	<i>Date</i>	<i>11/29/13</i>	<i>Input Checked By</i>	<i>TM</i>	<i>Date</i>	<i>12/12/13</i>

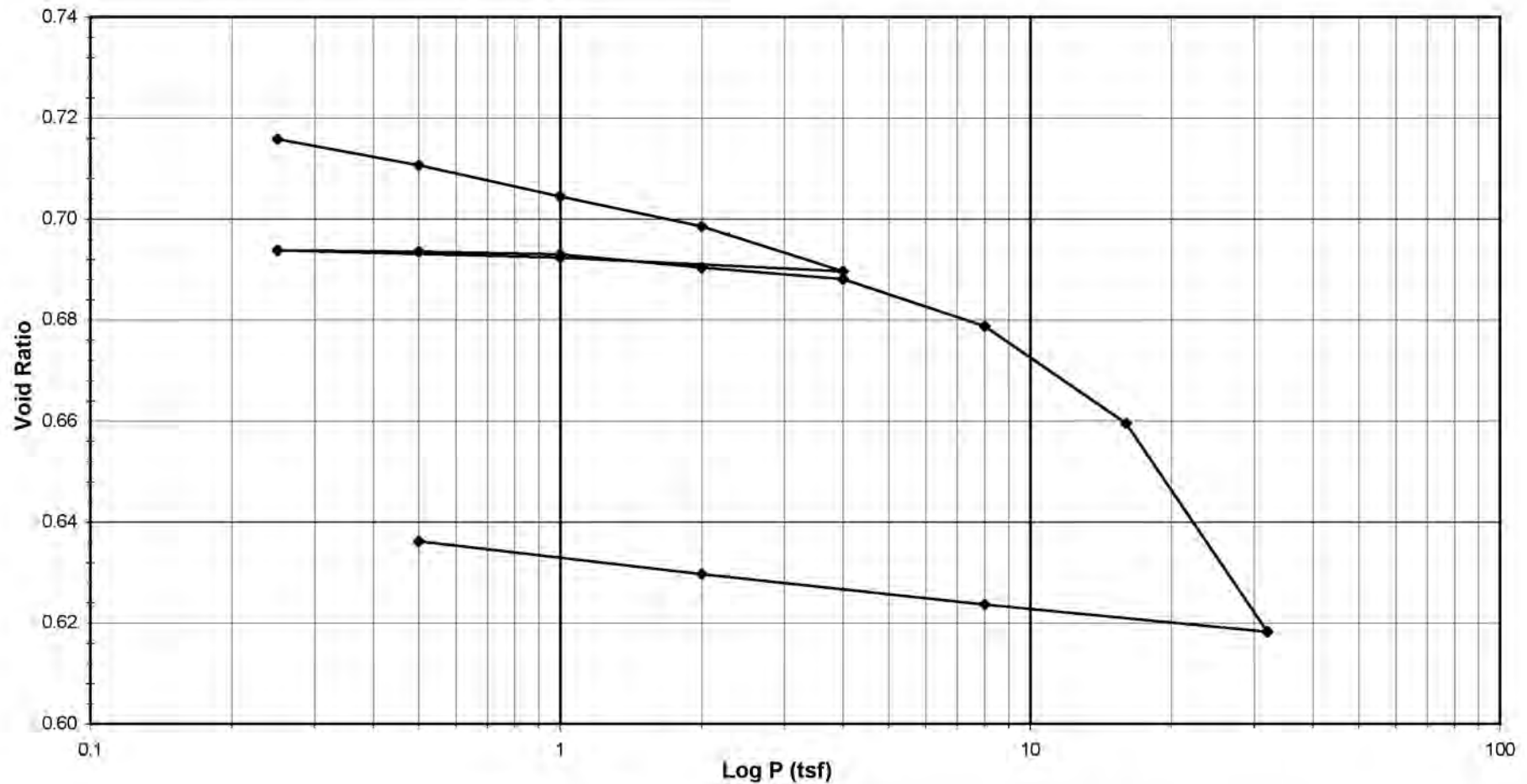
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-003
Lab ID 2013-465-003-001

Boring No. R-6-1b
Depth (ft) 260.1-260.3
Sample No. ST-33
Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/29/13

Approved By RJO

Date 12/12/13

ASTM D2435 / D2435M-11

Boring No.	R-6-1b
Depth (ft)	260.1-260.3
Sample No.	ST-33
Visual Description	Gray Fine Sand

Consolidometer No. G1424

Sample Properties	Initial	Final	Load Increment	Dial Reading @ t_{50}	Machine Deflection	Corrected Dial Reading @ t_{50}	Sample Height @ t_{50}	Time t_{50}	C_v
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
<i>Water Content</i>									
Tare Number	2773	2762							
Wt. Tare & WS (g)	181.61	159.5							
Wt. Tare & DS (g)	146.32	128.53							
Wt. Water (g)	35.29	30.97	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare (g)	6.93	6.67	0.25	61.0	17.0	44.0	25.29	0.22	0.02383
Wt. DS (g)	139.39	121.86	0.5	106.3	22.5	83.8	25.19	0.22	0.02366
Water Content (%)	25.32	25.41	1	148.1	31.8	116.3	25.10	0.14	0.03693
			2	207.0	56.2	150.8	25.02	0.39	0.01329
			4	278.7	87.6	191.1	24.91	0.41	0.01248
<i>Sample Parameters</i>									
Sample Diameter (in)	2.5	2.5	1	NA	NA	NA	NA	NA	NA
Sample Height (in)	1.0000	0.9468	0.25	NA	NA	NA	NA	NA	NA
Sample Volume (cm ³)	80.44	76.16	0.5	229.4	31.4	198.0	24.90	0.20	0.02523
Wt. Wet Sample + Ring (g)	368.83	368.95	1	245.5	45.6	199.9	24.89	0.28	0.01829
Wt. of Ring (g)	214.83	214.83	2	266.8	60.3	206.5	24.88	0.34	0.01479
Wt. of Wet Sample (g)	154.00	154.12	4	309.1	86.5	222.7	24.83	0.39	0.01312
Wet Density (pcf)	119.46	126.27	8	395.5	137.0	258.5	24.74	0.36	0.01401
Wet Density (g/cm ³)	1.91	2.02	16	538.3	196.5	341.8	24.53	0.18	0.02773
Water Content (%)	25.32	25.41	32	798.6	283.7	514.9	24.09	0.13	0.03682
Wt. of Dry Sample (g)	122.89	122.89	8	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	95.33	100.68	2	NA	NA	NA	NA	NA	NA
Dry Density (g/cm ³)	1.53	1.61	0.5	NA	NA	NA	NA	NA	NA
Void Ratio	0.7281	0.6362							
Saturation (%)	91.80	105.46							
Specific Gravity	2.64	Measured							

Tested By DB Date 11/29/13 Input Checked By TM Date 12/12/13

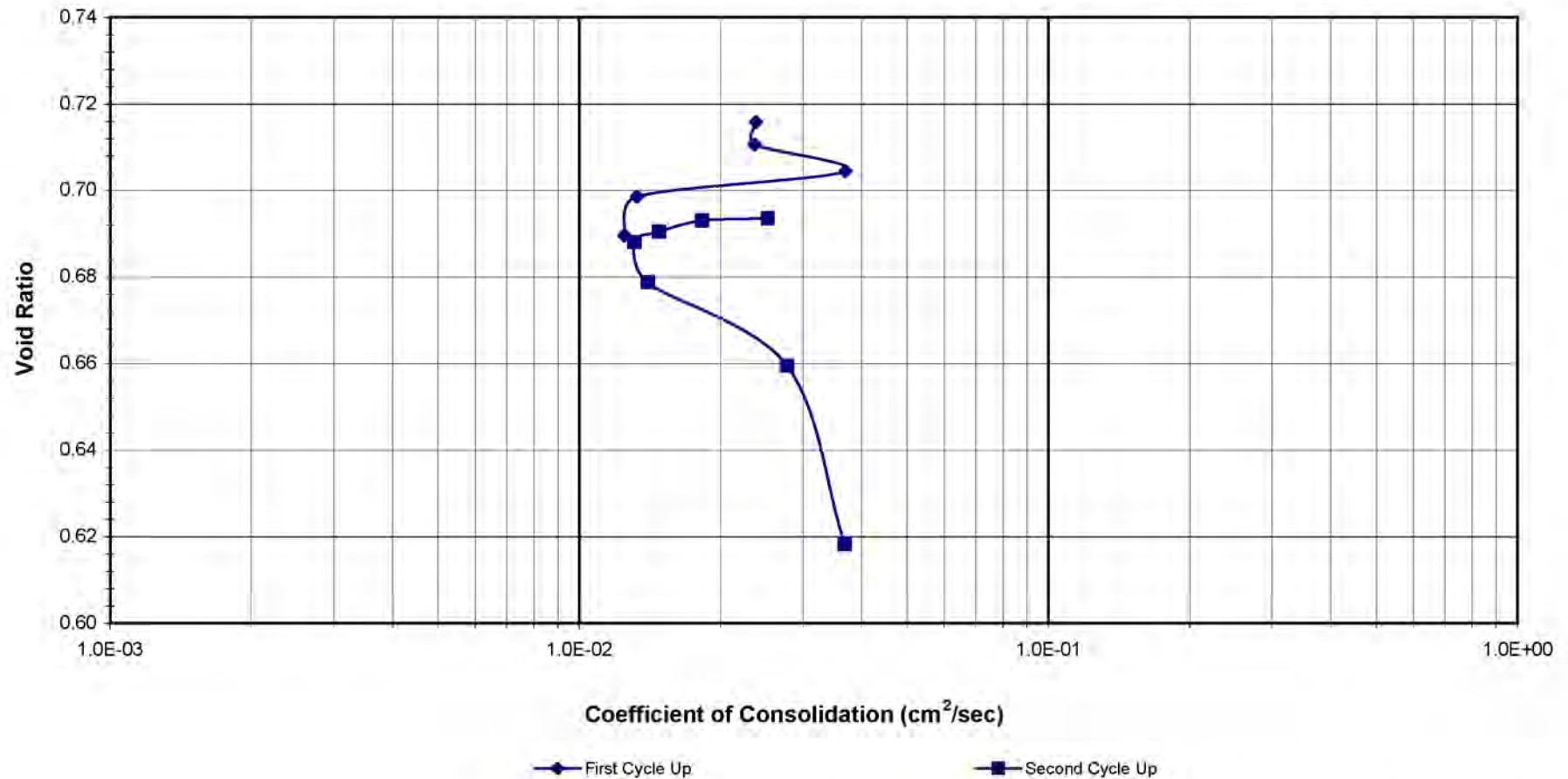
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-003
 Lab ID 2013-465-003-001

Boring No. R-6-1b
 Depth (ft) 260.1-260.3
 Sample No. ST-33
 Visual Description Gray Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/29/13

Approved By RJO Date 12/12/13

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	260.1-260.3
Project No.	2013-465-003	Sample No.	ST-33
Lab ID #	2013-465-003-001		

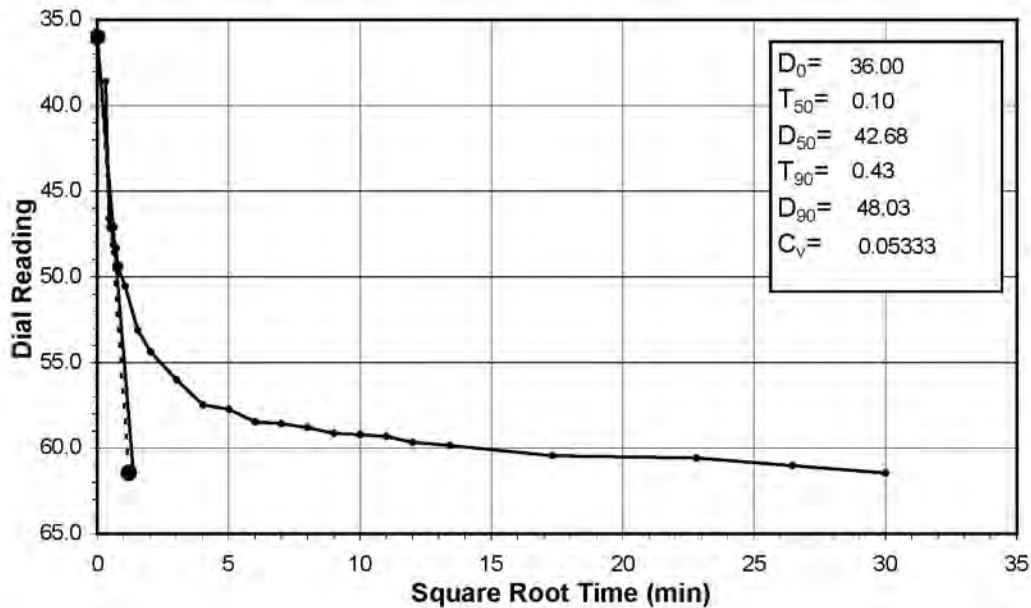
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1424	1/9/14
Load Cell	G1425	1/9/14
LVDT	G1426	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

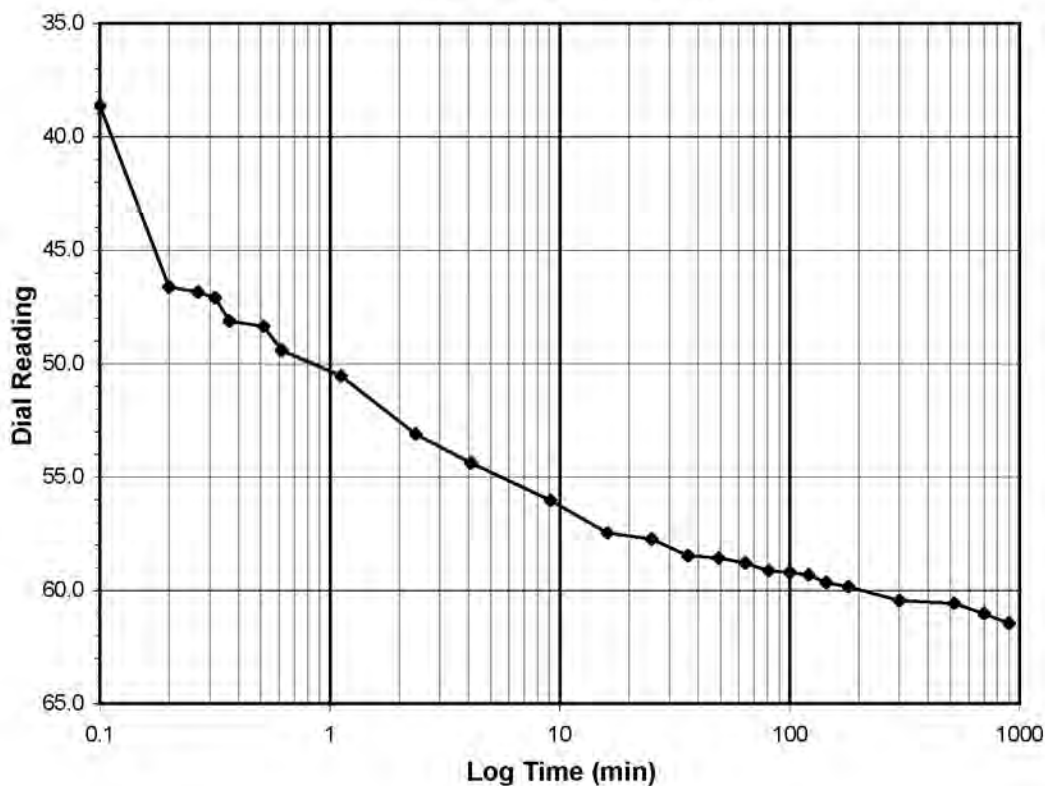
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 61.4
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/18/13
 Start Time 10:02:20

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	38.6
0.20	46.6
0.27	46.8
0.32	47.1
0.37	48.1
0.52	48.3
0.62	49.4
1.12	50.5
2.37	53.1
4.12	54.4
9.12	56.0
16.12	57.5
25.12	57.7
36.12	58.5
49.12	58.6
64.12	58.8
81.12	59.1
100.12	59.2
121.12	59.3
144.12	59.7
180.12	59.8
300.12	60.4
520.13	60.6
700.13	61.0
900.37	61.4



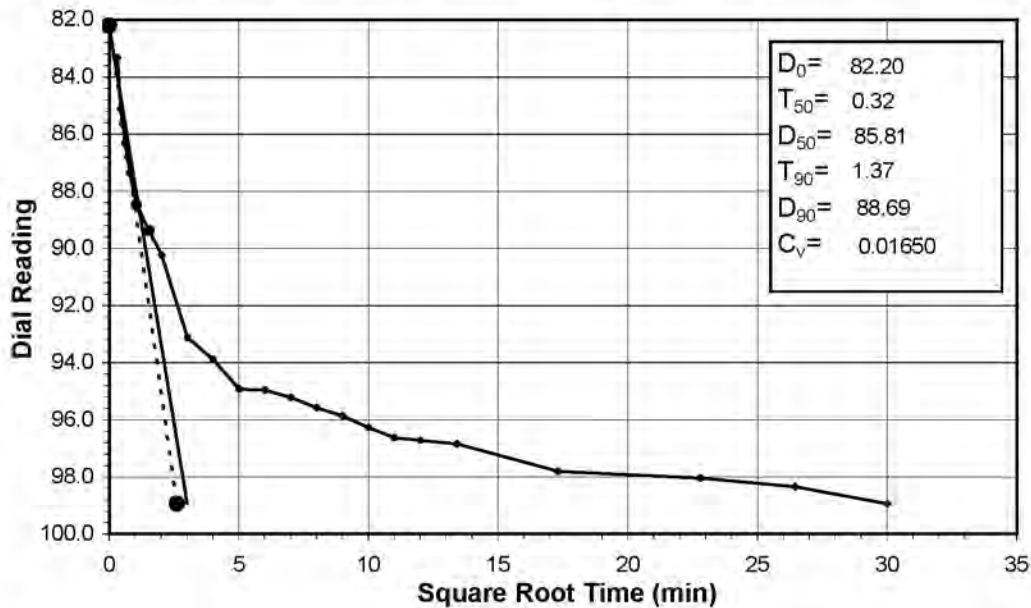
Tested By DB Date 11/18/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

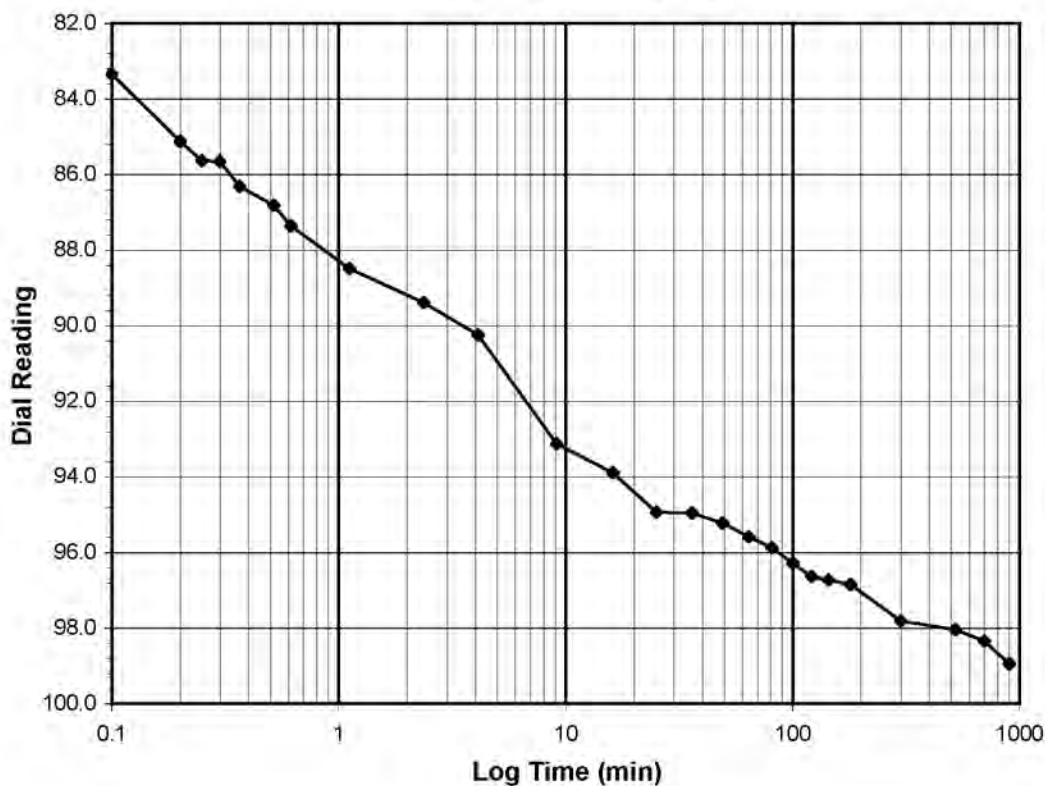
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **98.9**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/19/13
 Start Time 1:02:42

Elapsed Time (min)	Dial Reading (div)
Initial	61.4
0.10	83.3
0.20	85.1
0.25	85.6
0.30	85.6
0.37	86.3
0.52	86.8
0.62	87.4
1.12	88.5
2.37	89.4
4.12	90.2
9.12	93.1
16.12	93.9
25.12	94.9
36.12	95.0
49.12	95.2
64.12	95.6
81.12	95.9
100.12	96.3
121.12	96.6
144.12	96.7
180.12	96.8
300.12	97.8
520.13	98.0
700.13	98.3
900.15	98.9



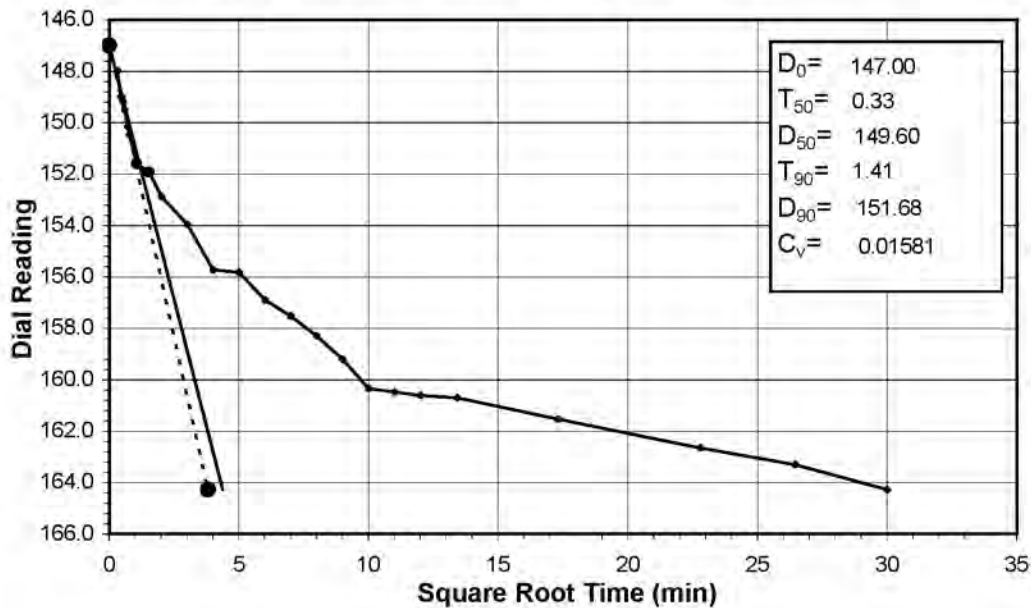
Tested By DB Date 11/19/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

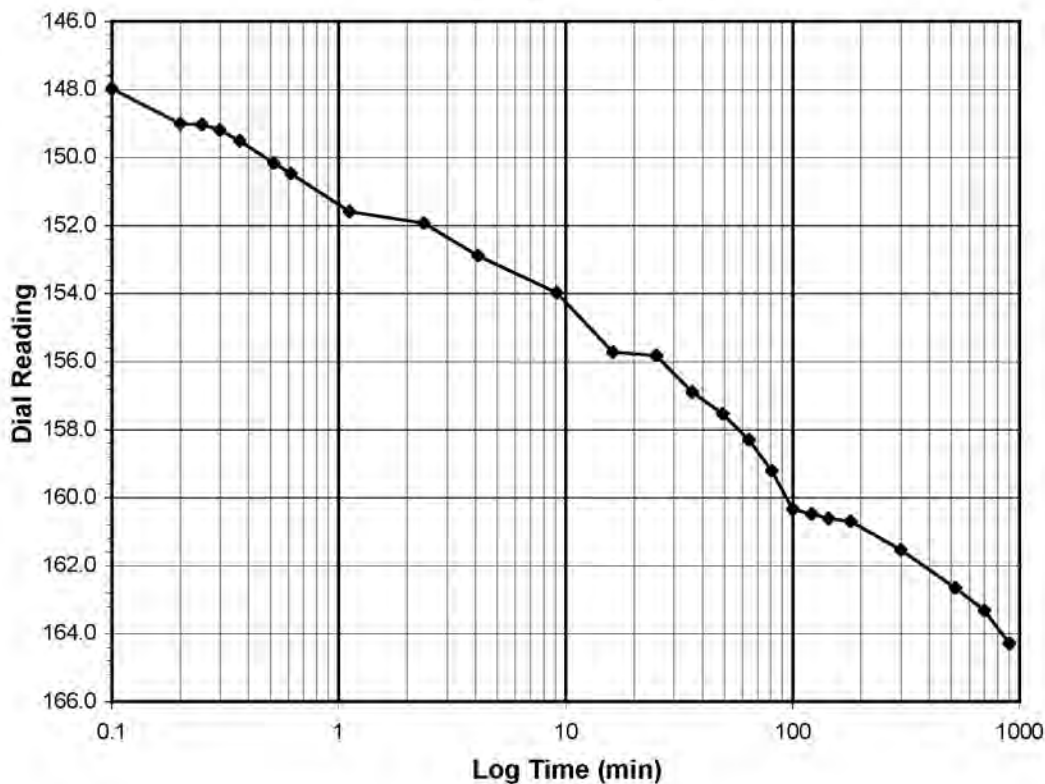
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 164.3
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/19/13
 Start Time 16:02:51

Elapsed Time (min)	Dial Reading (div)
Initial	98.9
0.10	148.0
0.20	149.0
0.25	149.0
0.30	149.2
0.37	149.5
0.52	150.2
0.62	150.5
1.12	151.6
2.37	151.9
4.12	152.9
9.12	154.0
16.12	155.7
25.12	155.8
36.13	156.9
49.13	157.5
64.13	158.3
81.13	159.2
100.13	160.3
121.13	160.5
144.13	160.6
180.13	160.7
300.13	161.5
520.13	162.7
700.13	163.3
900.30	164.3



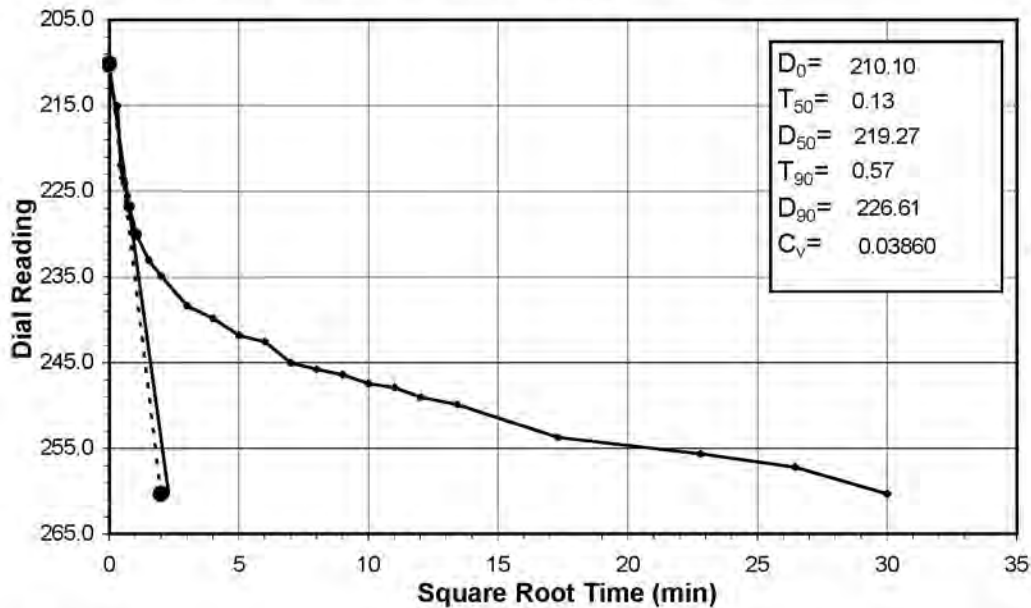
Tested By DB Date 11/19/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

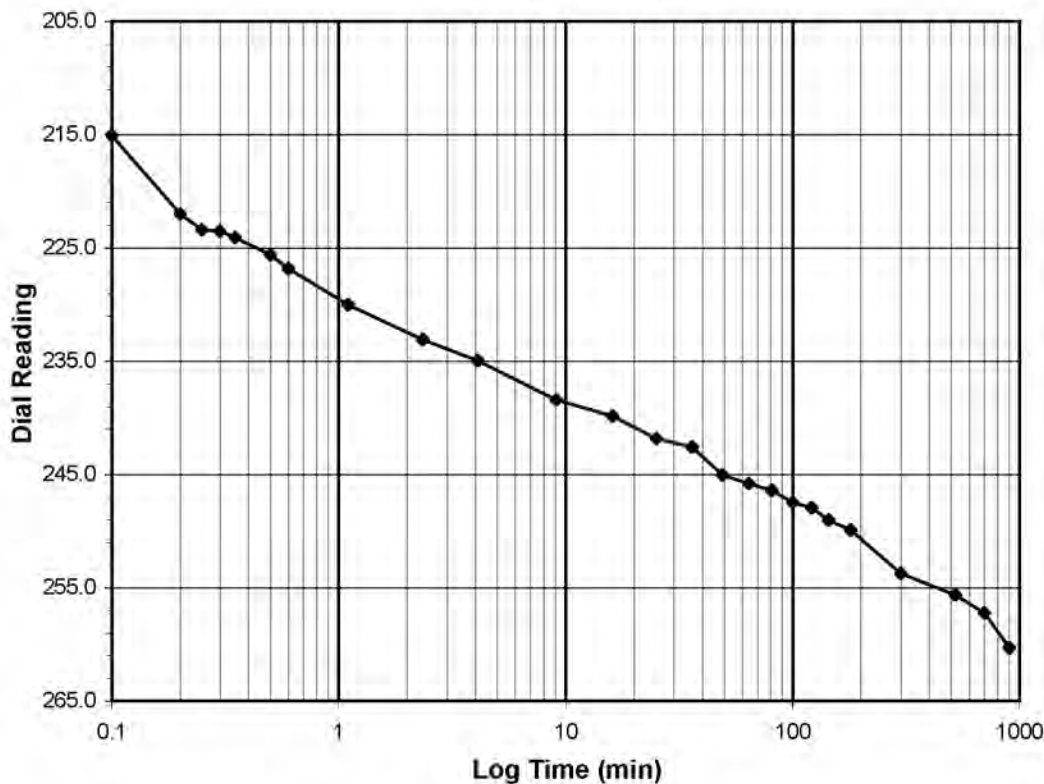
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 260.3
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/20/13
 Start Time 7:03:09

Elapsed Time (min)	Dial Reading (div)
Initial	164.3
0.10	215.0
0.20	222.0
0.25	223.4
0.30	223.5
0.35	224.1
0.50	225.6
0.60	226.8
1.10	230.0
2.35	233.1
4.10	235.0
9.10	238.4
16.10	239.8
25.10	241.8
36.10	242.6
49.10	245.0
64.10	245.8
81.10	246.4
100.12	247.5
121.12	247.9
144.12	249.0
180.12	249.9
300.12	253.7
520.12	255.6
700.12	257.2
900.22	260.3



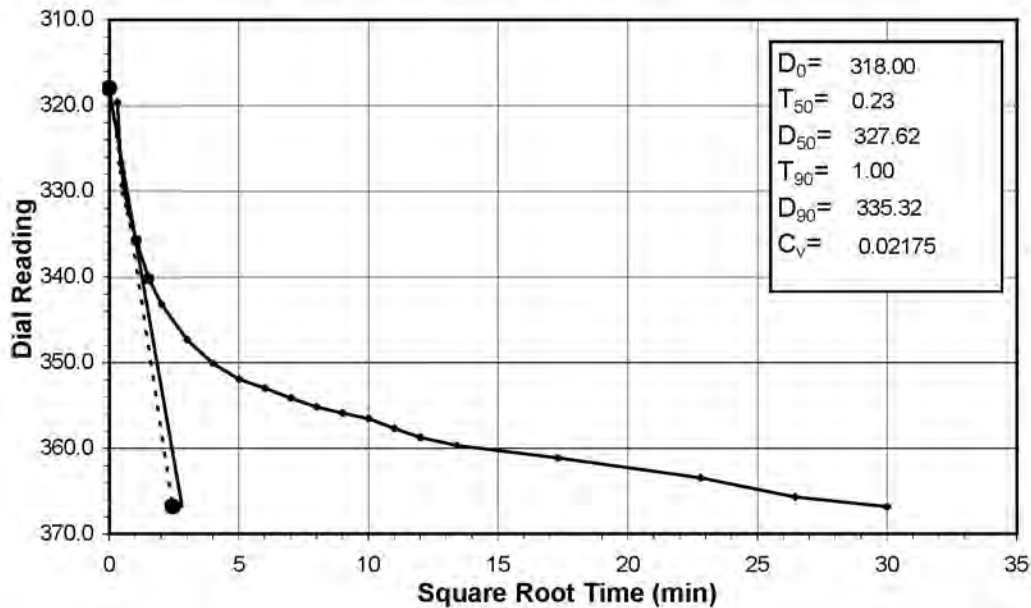
Tested By DB Date 11/20/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

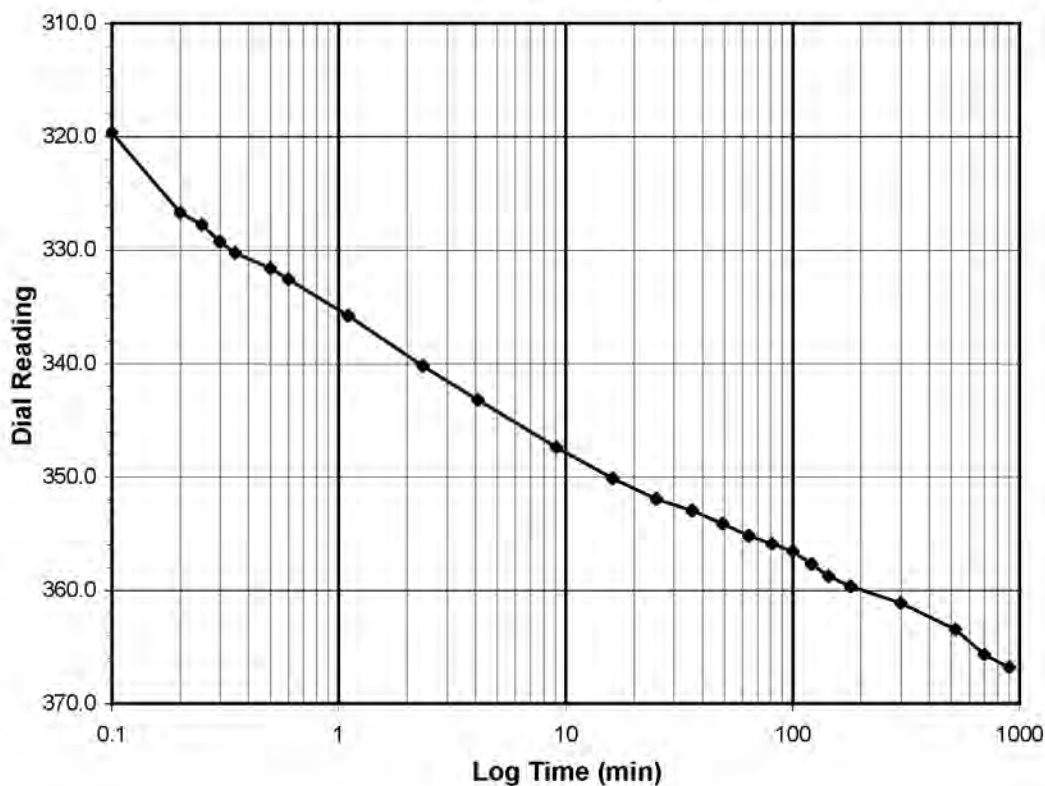
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **366.8**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/20/13
 Start Time 22:03:22

Elapsed Time (min)	Dial Reading (div)
Initial	260.3
0.10	319.6
0.20	326.7
0.25	327.7
0.30	329.3
0.35	330.2
0.50	331.6
0.60	332.6
1.10	335.8
2.35	340.2
4.10	343.2
9.10	347.4
16.10	350.1
25.10	351.9
36.10	353.0
49.10	354.1
64.10	355.2
81.10	355.9
100.10	356.5
121.12	357.7
144.12	358.7
180.12	359.7
300.12	361.1
520.12	363.4
700.12	365.7
900.33	366.8



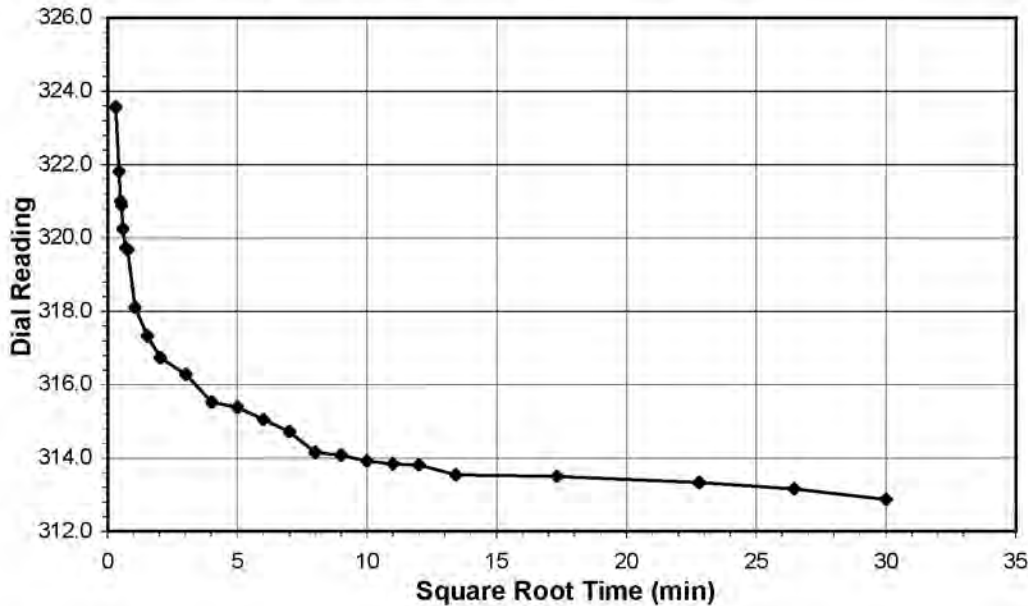
Tested By DB Date 11/20/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

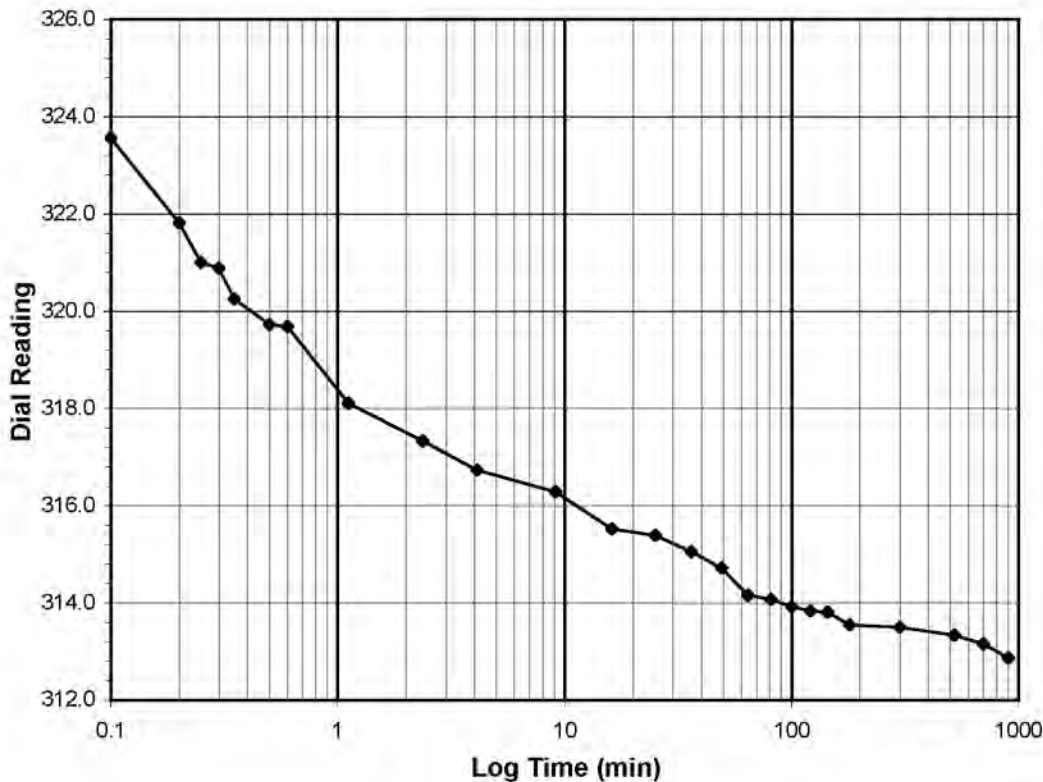
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
Final Reading (div) 312.9
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/21/13
Start Time 13:03:42

Elapsed Time (min)	Dial Reading (div)
Initial	366.8
0.10	323.6
0.20	321.8
0.25	321.0
0.30	320.9
0.35	320.3
0.50	319.7
0.60	319.7
1.12	318.1
2.37	317.3
4.12	316.7
9.12	316.3
16.12	315.5
25.12	315.4
36.12	315.1
49.12	314.7
64.12	314.2
81.12	314.1
100.12	313.9
121.12	313.8
144.12	313.8
180.12	313.5
300.12	313.5
520.12	313.3
700.12	313.2
900.23	312.9



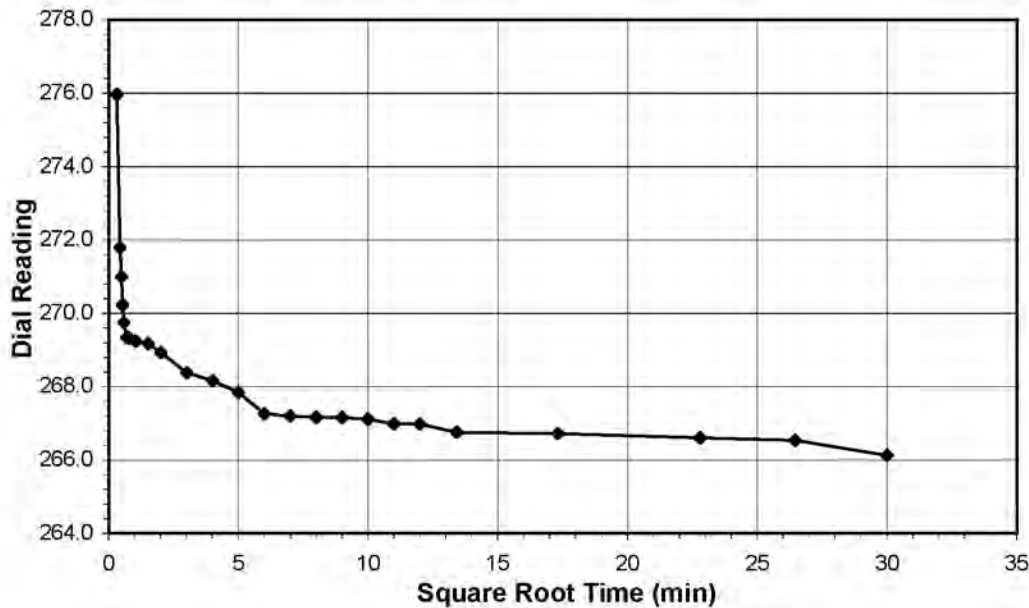
Tested By DB Date 11/21/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

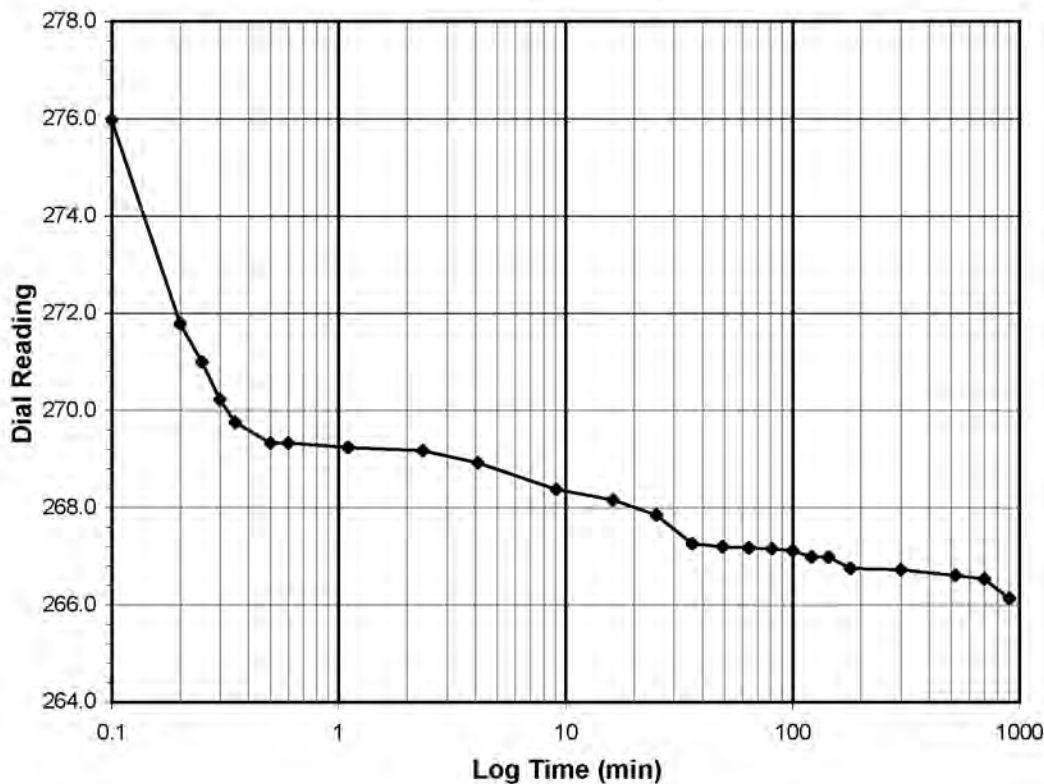
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 266.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 4:03:56

Elapsed Time (min)	Dial Reading (div)
Initial	312.9
0.10	276.0
0.20	271.8
0.25	271.0
0.30	270.2
0.35	269.8
0.50	269.3
0.60	269.3
1.10	269.2
2.35	269.2
4.10	268.9
9.10	268.4
16.12	268.2
25.12	267.9
36.12	267.3
49.12	267.2
64.12	267.2
81.12	267.2
100.12	267.1
121.12	267.0
144.12	267.0
180.12	266.8
300.12	266.7
520.12	266.6
700.12	266.5
900.30	266.1



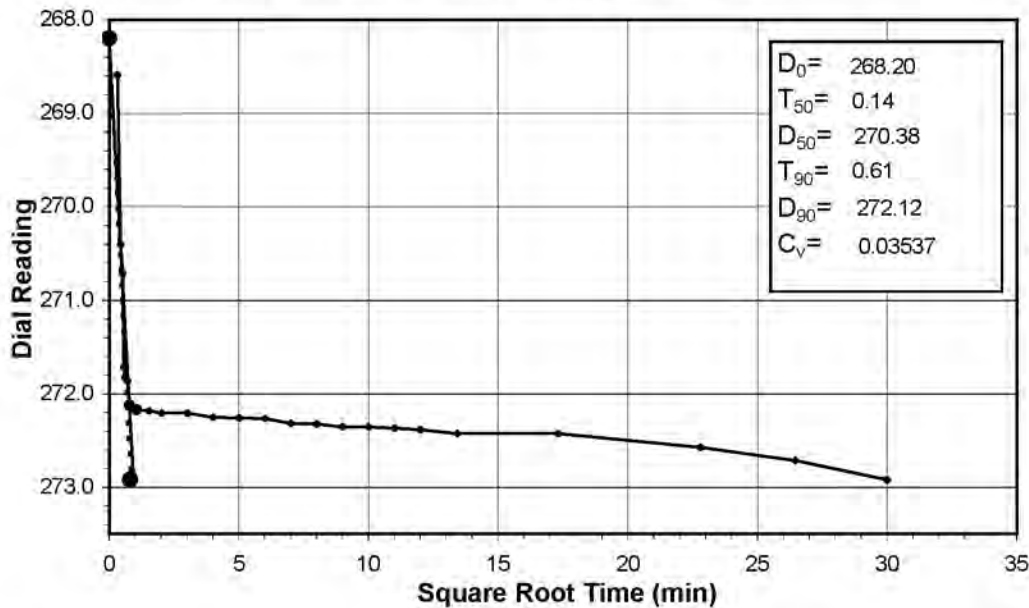
Tested By DB Date 11/22/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

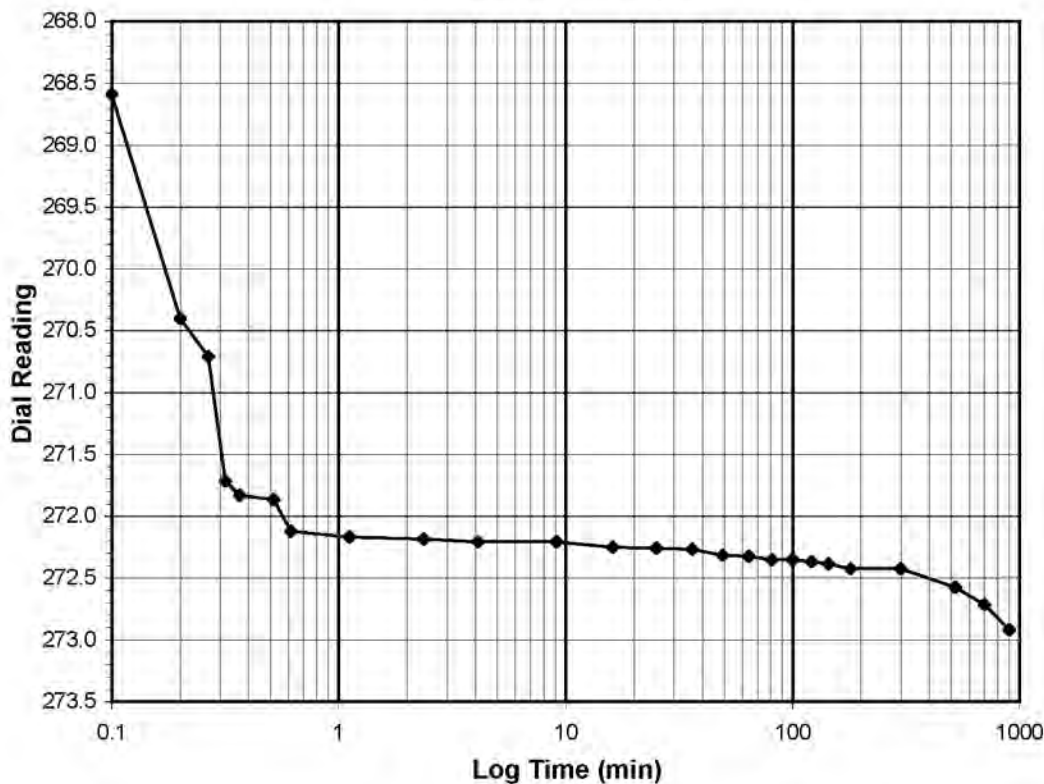
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **272.9**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/22/13
 Start Time 19:04:14

Elapsed Time (min)	Dial Reading (div)
Initial	266.1
0.10	268.6
0.20	270.4
0.27	270.7
0.32	271.7
0.37	271.8
0.52	271.9
0.62	272.1
1.12	272.2
2.37	272.2
4.12	272.2
9.12	272.2
16.12	272.3
25.12	272.3
36.12	272.3
49.12	272.3
64.12	272.3
81.12	272.4
100.13	272.4
121.13	272.4
144.13	272.4
180.13	272.4
300.13	272.4
520.13	272.6
700.13	272.7
900.23	272.9



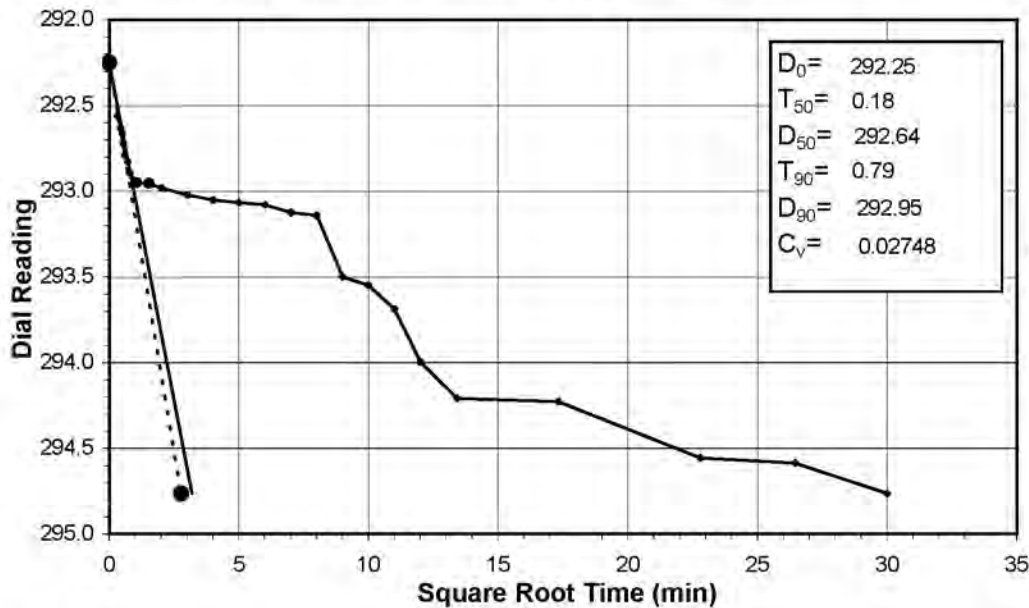
Tested By DB Date 11/22/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

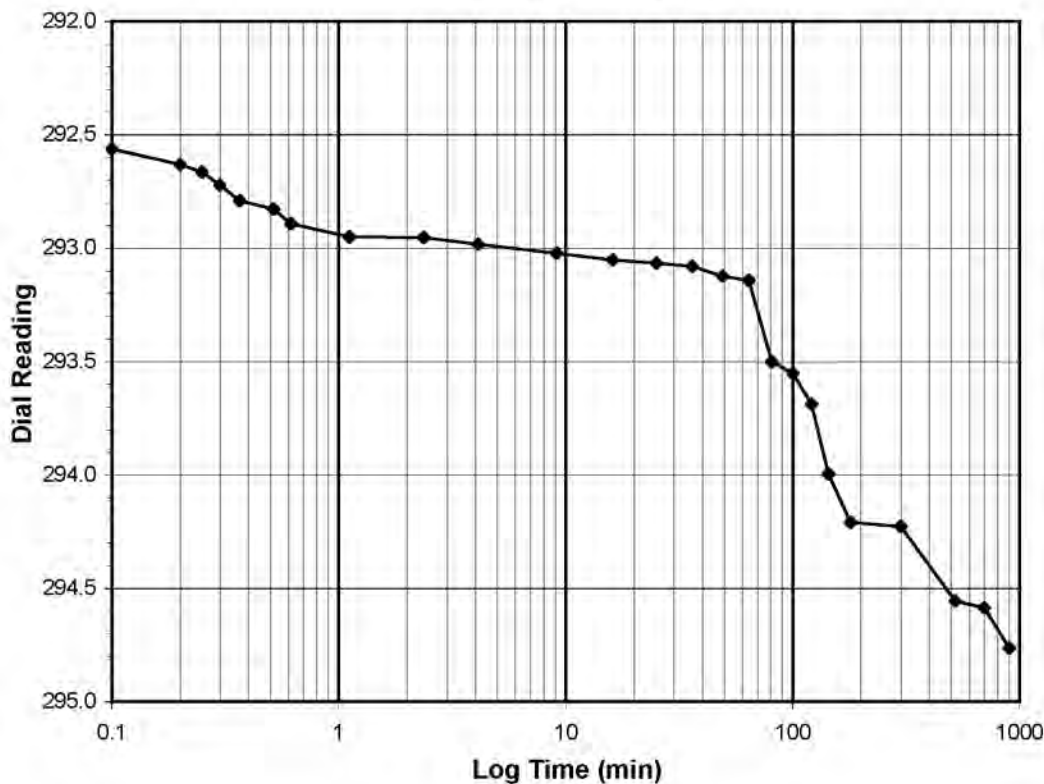
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 294.8
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/23/13
 Start Time 10:04:28

Elapsed Time (min)	Dial Reading (div)
Initial	272.9
0.10	292.6
0.20	292.6
0.25	292.7
0.30	292.7
0.37	292.8
0.52	292.8
0.62	292.9
1.12	292.9
2.37	293.0
4.12	293.0
9.12	293.0
16.12	293.1
25.12	293.1
36.12	293.1
49.12	293.1
64.12	293.1
81.13	293.5
100.13	293.6
121.13	293.7
144.13	294.0
180.13	294.2
300.13	294.2
520.13	294.6
700.13	294.6
900.30	294.8



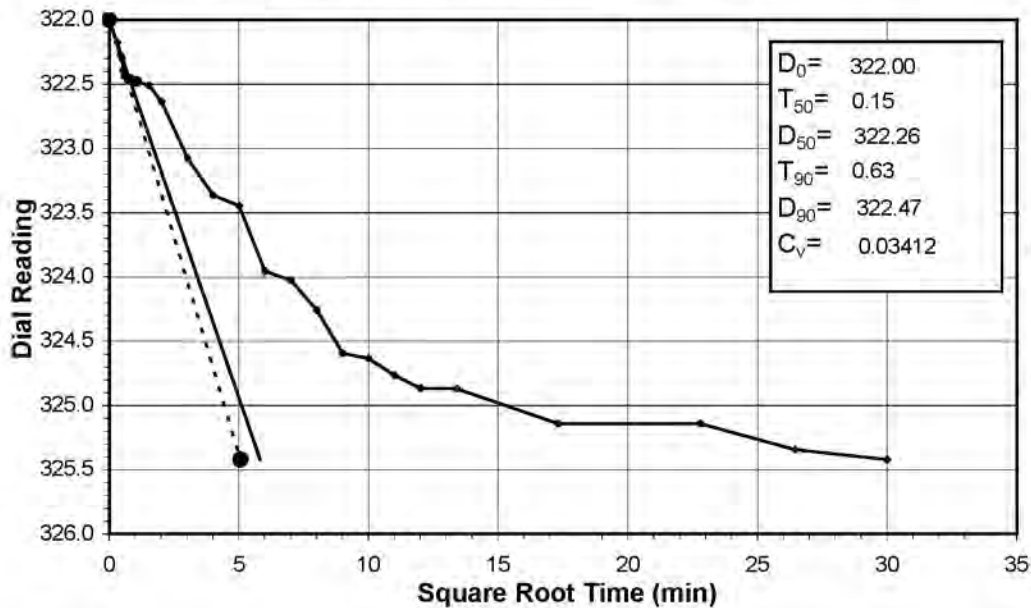
Tested By DB Date 11/23/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

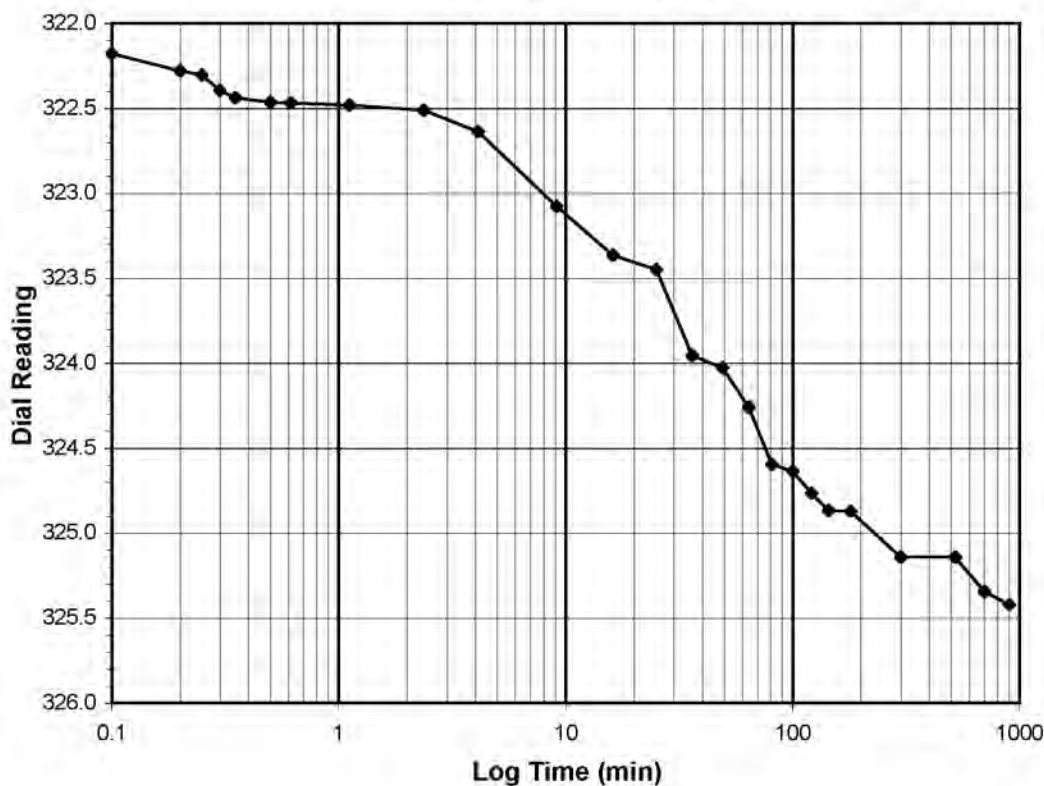
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 325.4
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/24/13
 Start Time 1:04:46

Elapsed Time (min)	Dial Reading (div)
Initial	294.8
0.10	322.2
0.20	322.3
0.25	322.3
0.30	322.4
0.35	322.4
0.50	322.5
0.62	322.5
1.12	322.5
2.37	322.5
4.12	322.6
9.12	323.1
16.12	323.4
25.12	323.4
36.12	324.0
49.12	324.0
64.12	324.3
81.12	324.6
100.12	324.6
121.12	324.8
144.12	324.9
180.12	324.9
300.13	325.1
520.13	325.1
700.13	325.3
900.18	325.4



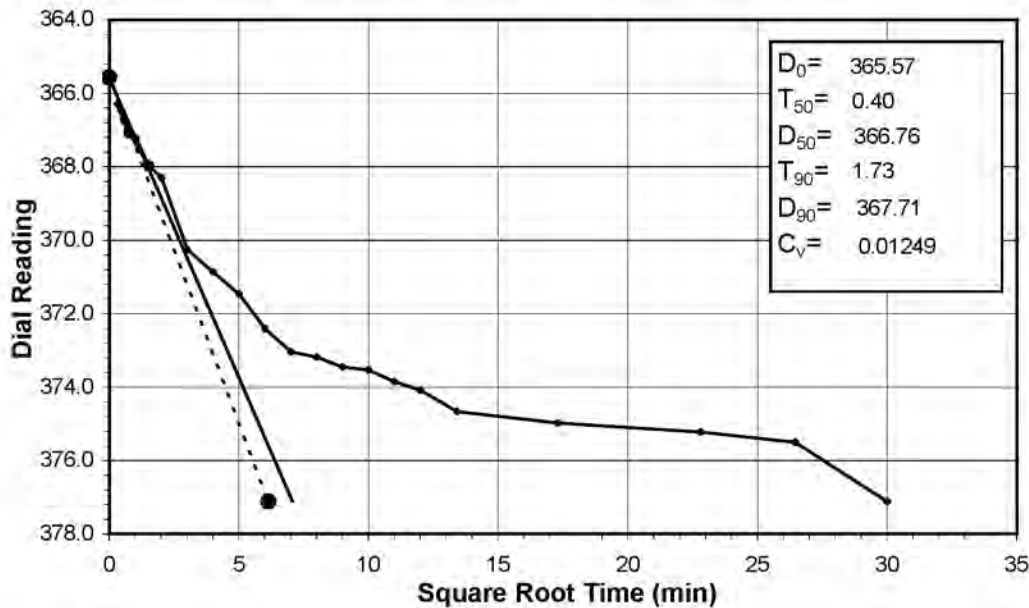
Tested By DB Date 11/24/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

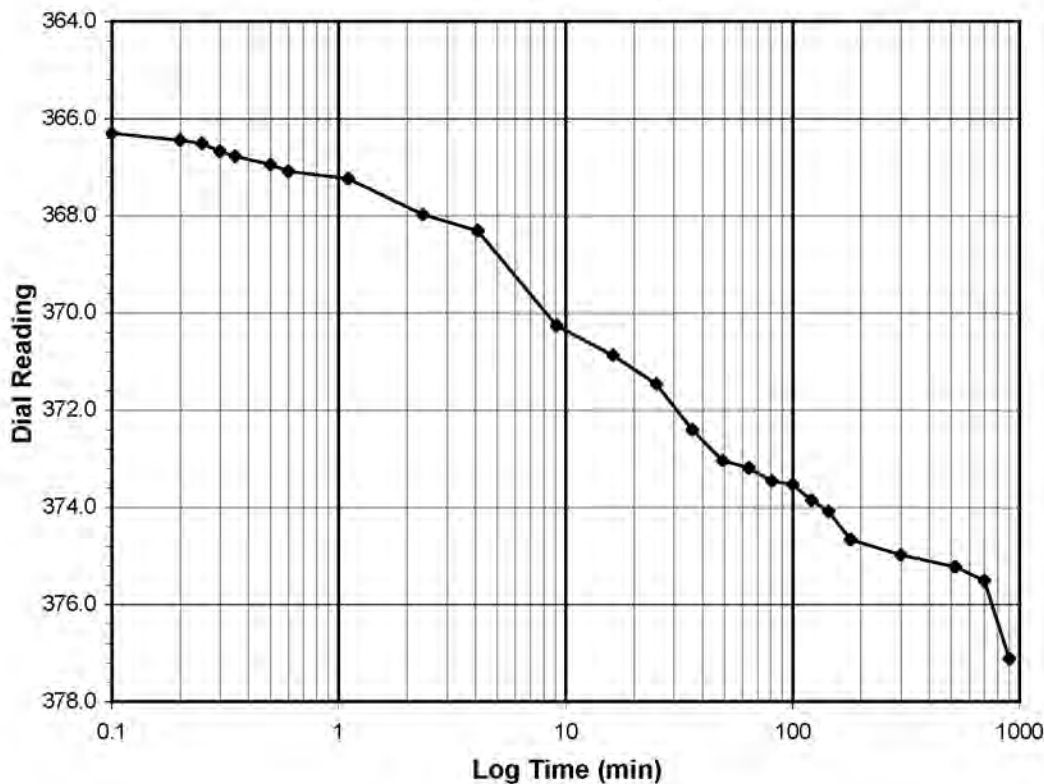
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **377.1**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/24/13
 Start Time 16:04:57

Elapsed Time (min)	Dial Reading (div)
Initial	325.4
0.10	366.3
0.20	366.4
0.25	366.5
0.30	366.7
0.35	366.8
0.50	366.9
0.60	367.1
1.10	367.2
2.35	368.0
4.10	368.3
9.12	370.3
16.12	370.9
25.12	371.5
36.12	372.4
49.12	373.0
64.12	373.2
81.12	373.5
100.12	373.5
121.12	373.9
144.12	374.1
180.12	374.7
300.12	375.0
520.12	375.2
700.12	375.5
900.27	377.1



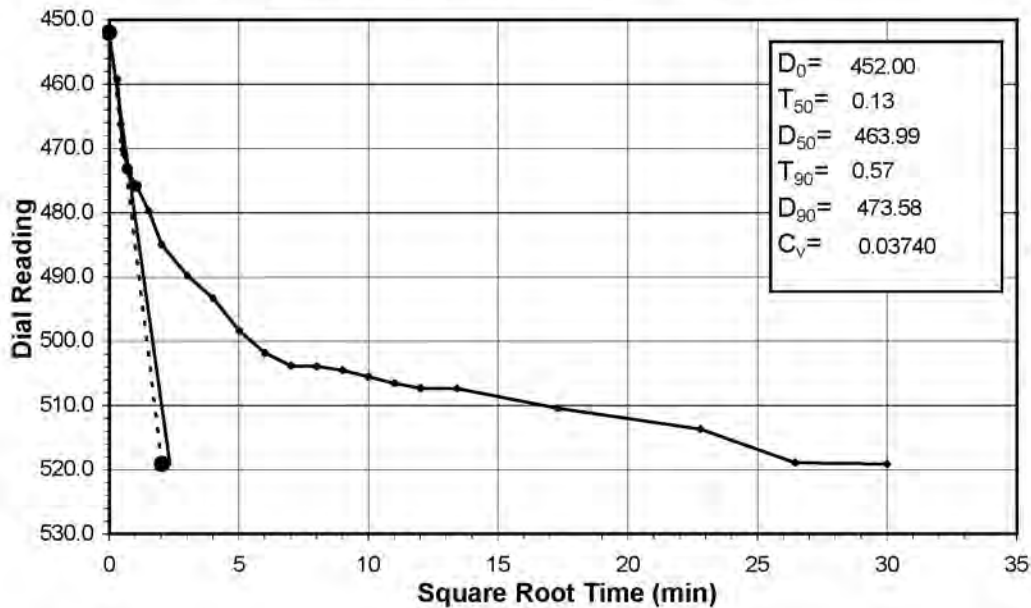
Tested By DB Date 11/24/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

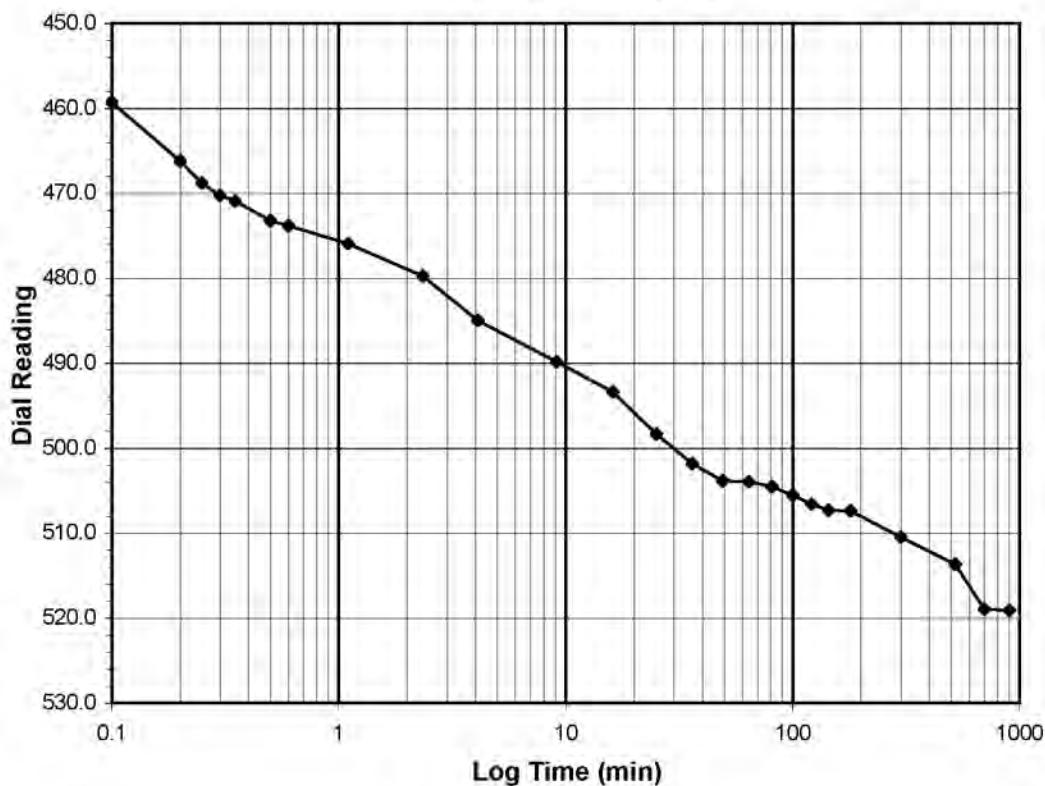
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **519.1**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/25/13
 Start Time 7:05:13

Elapsed Time (min)	Dial Reading (div)
Initial	377.1
0.10	459.2
0.20	466.2
0.25	468.8
0.30	470.2
0.35	470.9
0.50	473.2
0.60	473.8
1.10	475.9
2.35	479.7
4.10	485.0
9.12	489.8
16.12	493.3
25.12	498.3
36.12	501.8
49.12	503.8
64.12	503.9
81.12	504.5
100.12	505.5
121.12	506.6
144.12	507.3
180.12	507.3
300.12	510.5
520.12	513.7
700.12	518.9
900.08	519.1



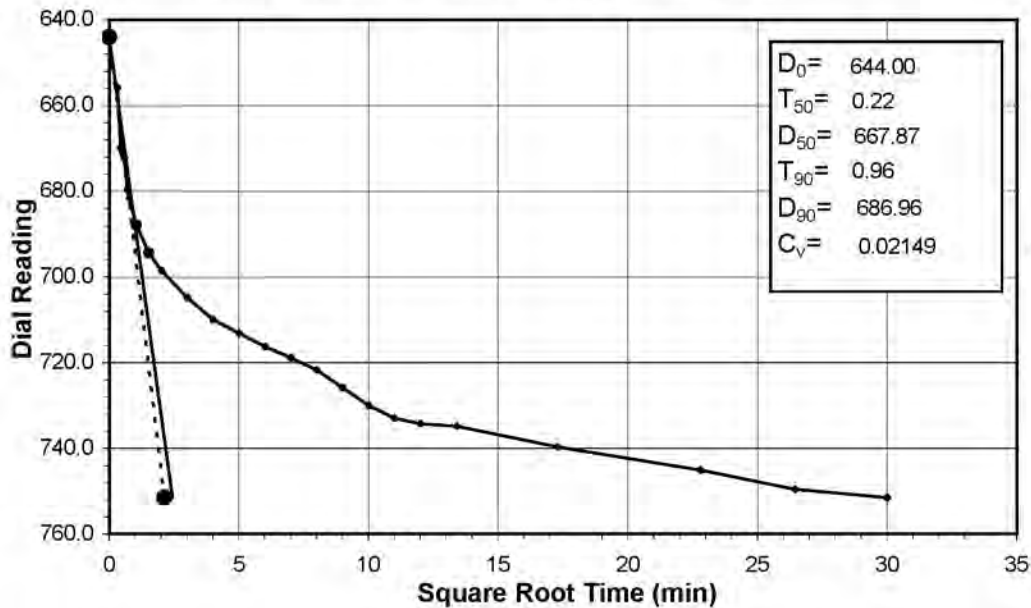
Tested By DB Date 11/25/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

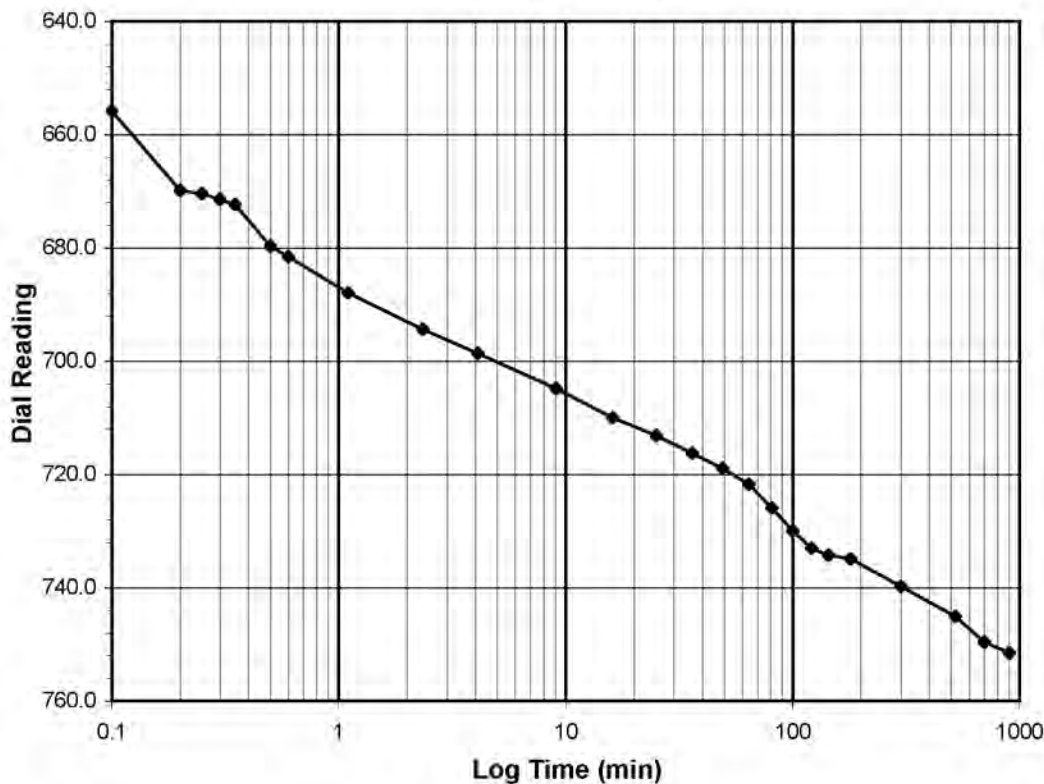
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 751.5
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/25/13
 Start Time 22:05:19

Elapsed Time (min)	Dial Reading (div)
Initial	519.1
0.10	655.8
0.20	669.8
0.25	670.4
0.30	671.4
0.35	672.3
0.50	679.6
0.60	681.6
1.10	687.9
2.35	694.4
4.10	698.6
9.10	704.8
16.10	709.9
25.12	713.1
36.12	716.2
49.12	718.9
64.12	721.7
81.12	725.9
100.12	730.0
121.12	733.0
144.12	734.2
180.12	734.8
300.12	739.7
520.12	745.0
700.12	749.6
900.02	751.5



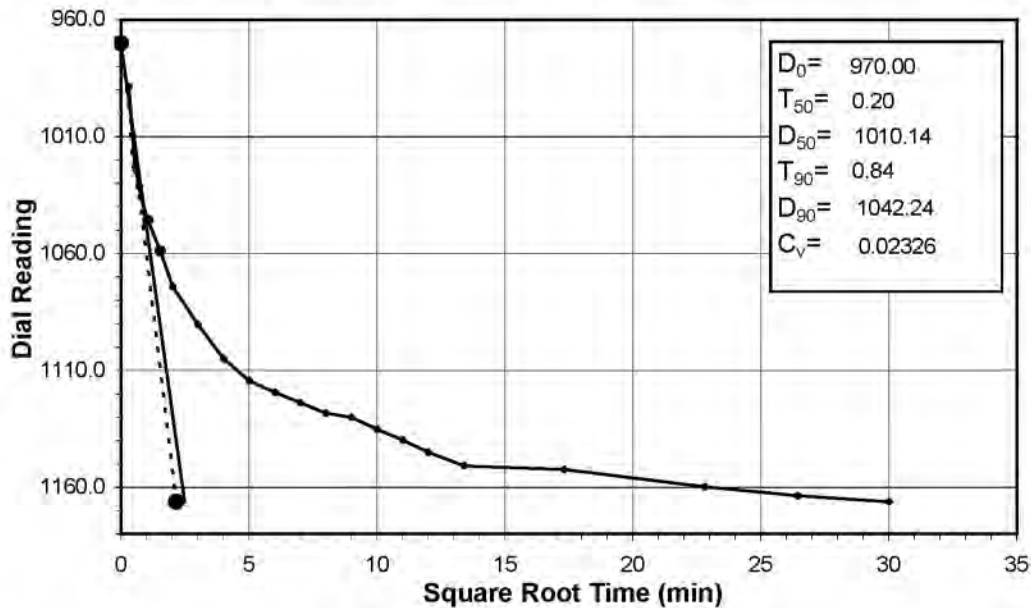
Tested By DB Date 11/25/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

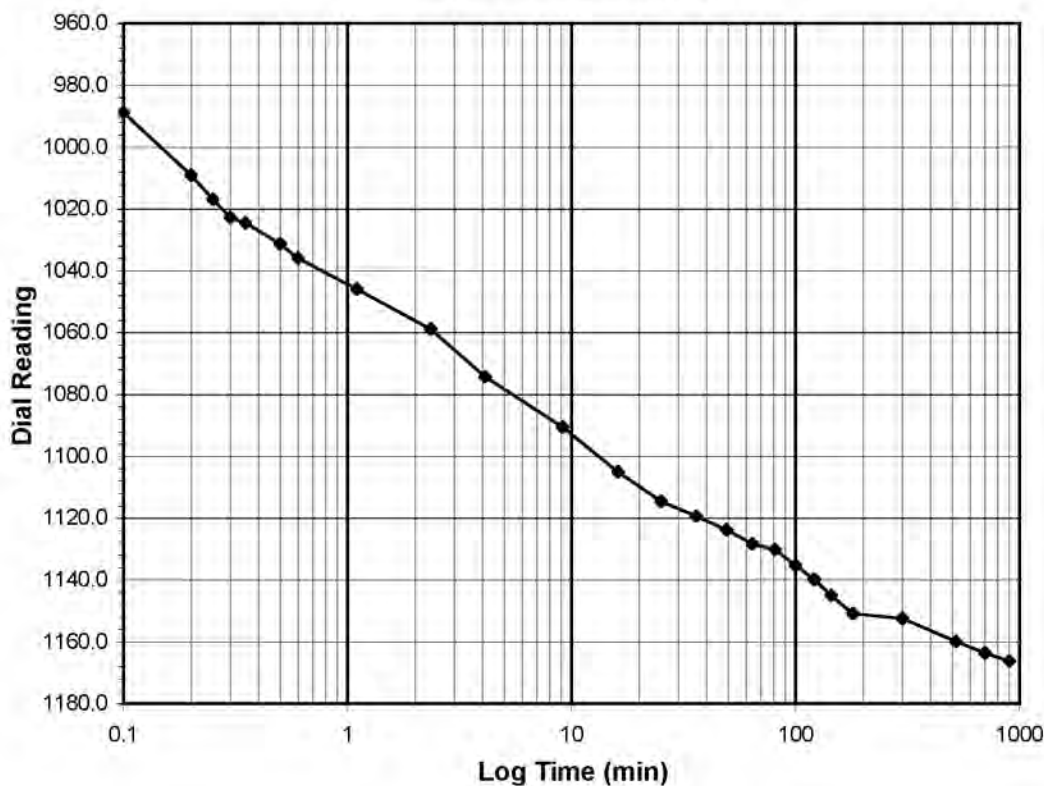
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **1166.2**
 Consolidometer No. **G1418**
 1 Division (in) 0.0001

Start Date 11/26/13
 Start Time 13:05:20

Elapsed Time (min)	Dial Reading (div)
Initial	751.5
0.10	988.8
0.20	1009.0
0.25	1016.8
0.30	1022.7
0.35	1024.5
0.50	1031.2
0.60	1035.8
1.10	1045.8
2.35	1058.8
4.12	1074.2
9.12	1090.5
16.12	1105.0
25.12	1114.4
36.12	1119.4
49.12	1123.7
64.12	1128.3
81.12	1130.1
100.12	1135.2
121.12	1139.7
144.12	1144.9
180.12	1150.8
300.12	1152.4
520.12	1159.8
700.12	1163.5
900.42	1166.2



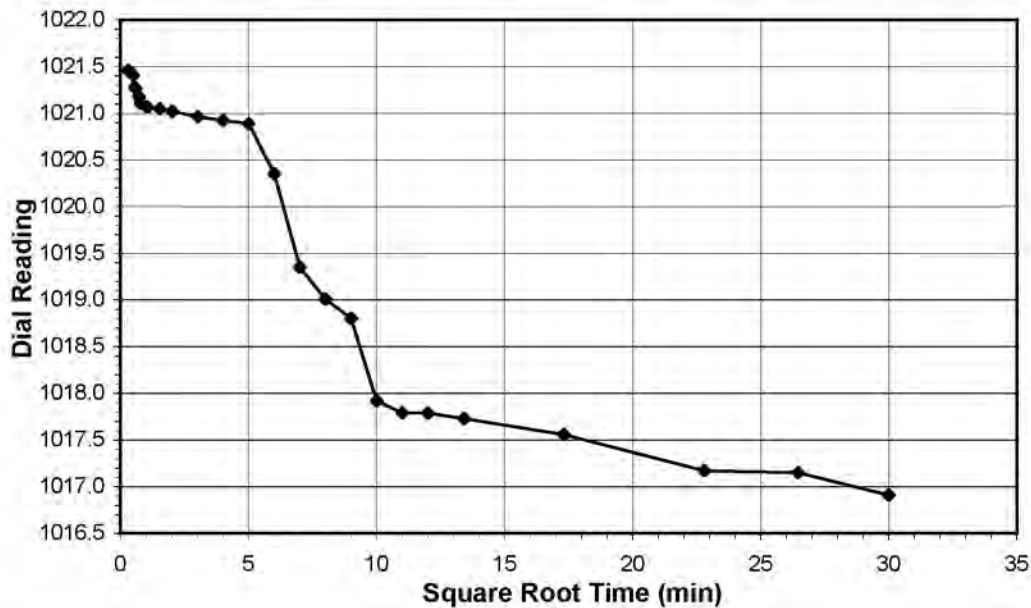
Tested By DB Date 11/26/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

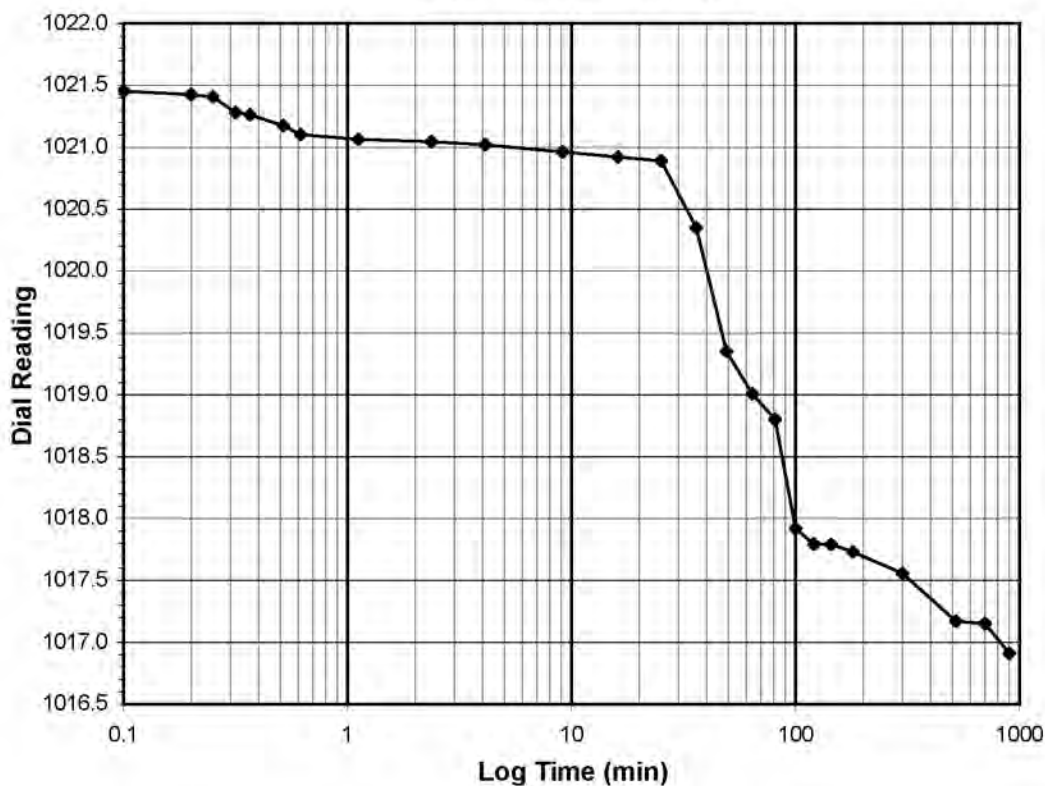
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **32.0-8.0**
 Final Reading (div) **1016.9**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/27/13
 Start Time 4:05:45

Elapsed Time (min)	Dial Reading (div)
Initial	1166.2
0.10	1021.5
0.20	1021.4
0.25	1021.4
0.32	1021.3
0.37	1021.3
0.52	1021.2
0.62	1021.1
1.12	1021.1
2.37	1021.0
4.12	1021.0
9.12	1021.0
16.12	1020.9
25.12	1020.9
36.12	1020.4
49.12	1019.4
64.12	1019.0
81.12	1018.8
100.12	1017.9
121.12	1017.8
144.12	1017.8
180.12	1017.7
300.13	1017.6
520.13	1017.2
700.13	1017.2
900.33	1016.9



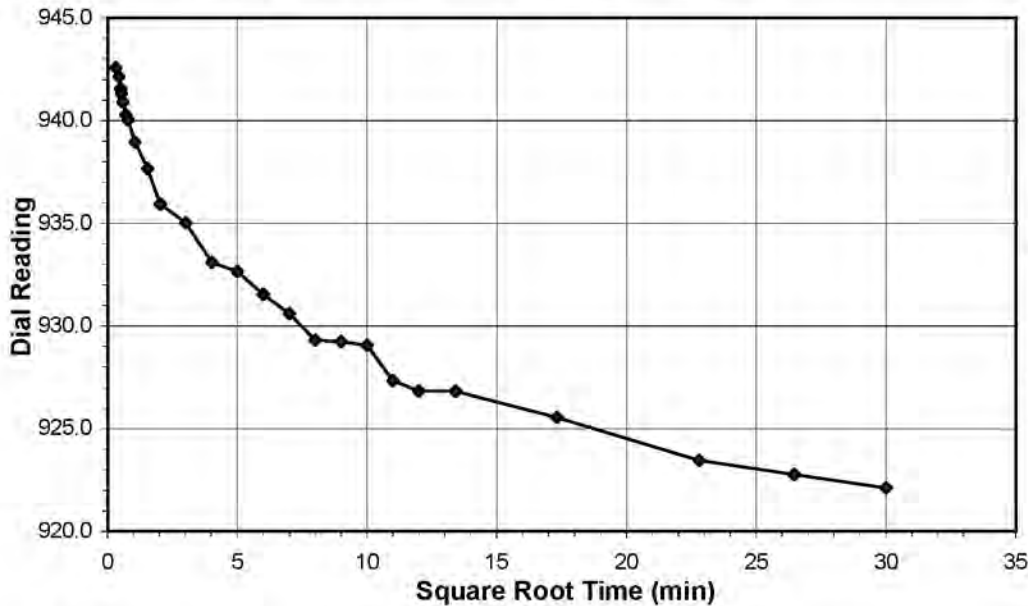
Tested By DB Date 11/27/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

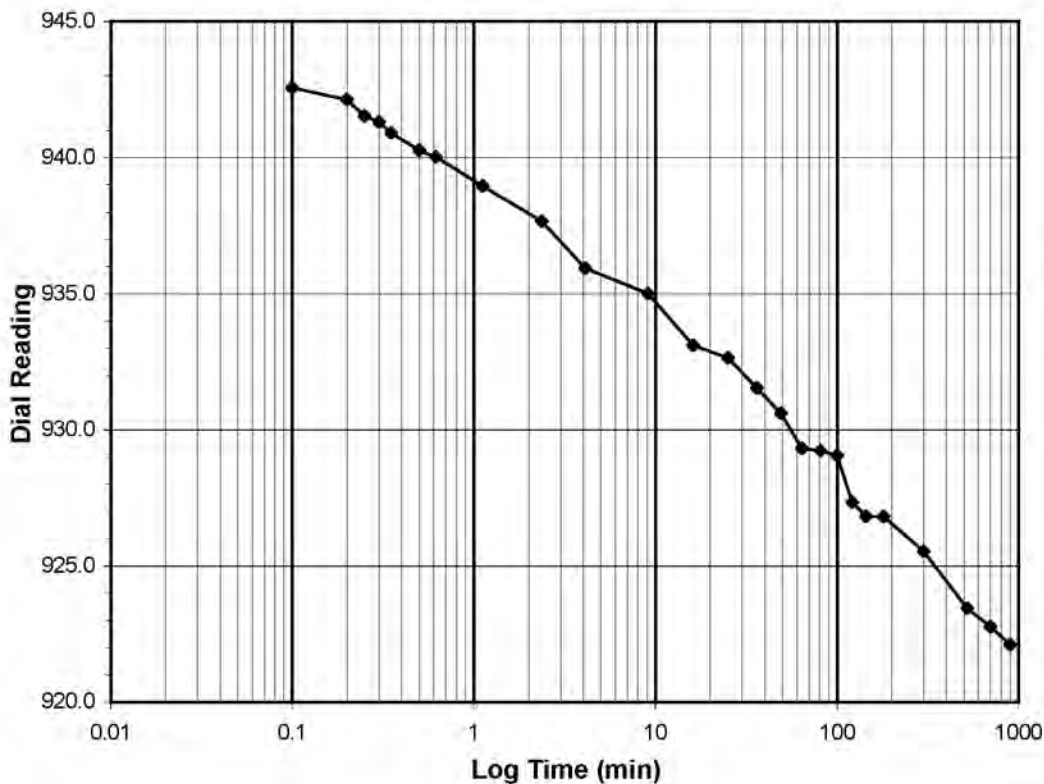
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **8.0-2.0**
 Final Reading (div) **922.1**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/27/13
 Start Time 19:06:05

Elapsed Time (min)	Dial Reading (div)
Initial	1016.9
0.10	942.6
0.20	942.1
0.25	941.5
0.30	941.3
0.35	940.9
0.50	940.3
0.62	940.0
1.12	939.0
2.37	937.7
4.12	935.9
9.12	935.0
16.12	933.1
25.12	932.7
36.12	931.5
49.12	930.6
64.12	929.3
81.12	929.2
100.12	929.1
121.12	927.3
144.12	926.8
180.12	926.8
300.12	925.5
520.12	923.5
700.13	922.8
900.42	922.1



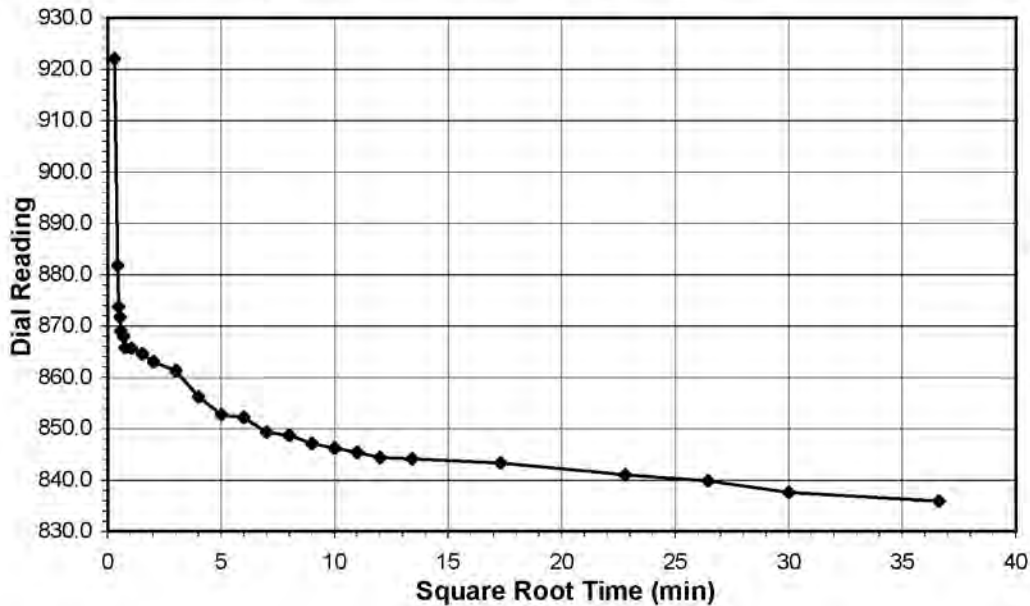
Tested By DB Date 11/27/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

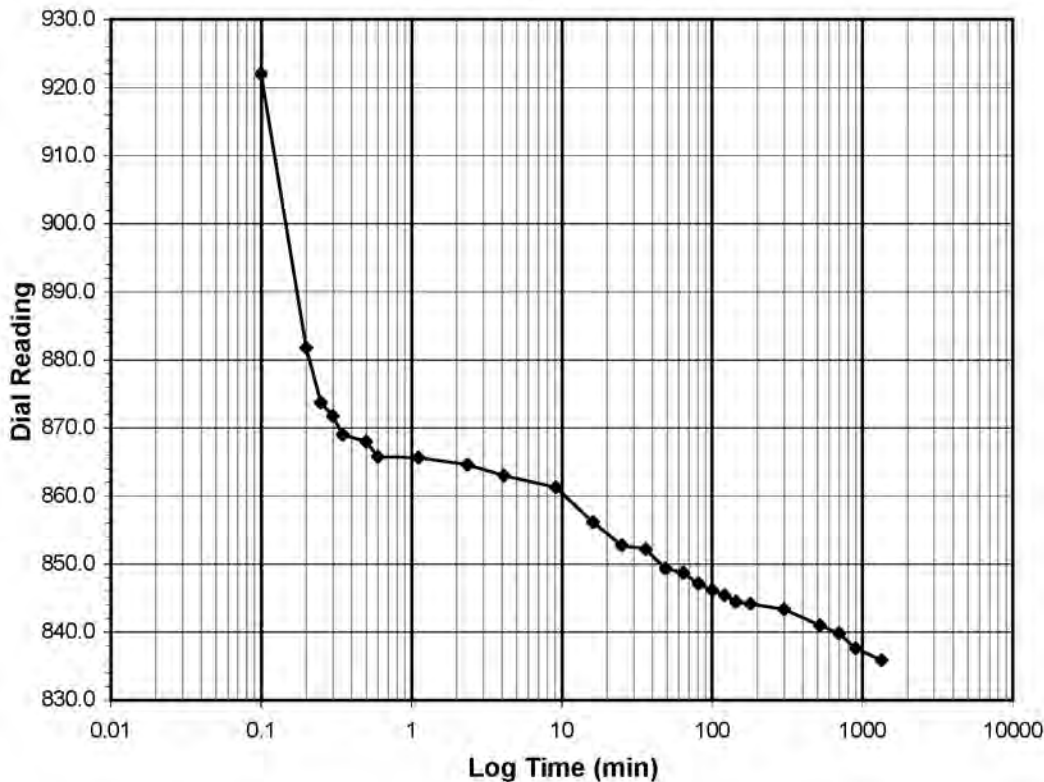
Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-0.5
 Final Reading (div) 835.9
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/28/13
 Start Time 10:06:30

Elapsed Time (min)	Dial Reading (div)
Initial	922.1
0.10	922.0
0.20	881.8
0.25	873.7
0.30	871.7
0.35	869.0
0.50	868.0
0.60	865.8
1.12	865.6
2.37	864.6
4.12	863.0
9.12	861.3
16.12	856.1
25.12	852.7
36.12	852.2
49.12	849.3
64.12	848.7
81.12	847.1
100.13	846.2
121.13	845.4
144.13	844.4
180.13	844.2
300.13	843.3
520.13	841.0
700.13	839.8
900.30	837.6
1340.33	835.9



Tested By DB Date 11/28/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	280.7-280.9
Project No.	2013-465-001	Sample No.	ST-40
Lab ID	2013-465-001-032	Visual Description	Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained**Consolidometer No.** G1418**1 Division** = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied Pressure	Final Dial Reading	Machine Deflection	Corrected Reading	Height of Sample	Volume	Dry Density	Void Ratio
Tare Number	2620	2689	(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	117.72	151.57								
Wt. Tare & DS (g)	91.57	118.90								
Wt. Water (g)	26.15	32.67	Seating	0	0	0	25.400	80.440	1.40502	0.88610
Wt. Tare (g)	7.25	6.62	0.25	61.4	17.6	43.8	25.289	80.087	1.41120	0.87783
Wt. DS (g)	84.32	112.28	0.5	98.9	27.0	71.9	25.217	79.861	1.41520	0.87253
Water Content (%)	31.01	29.10	1	164.3	40.4	123.9	25.085	79.443	1.42265	0.86273
			2	260.3	66.6	193.7	24.908	78.882	1.43277	0.84956
			4	366.8	97.5	269.3	24.716	78.273	1.44391	0.83530
<u>Sample Parameters</u>			1	312.9	58.5	254.4	24.754	78.394	1.44169	0.83812
Sample Diameter (in)	2.5	2.5	0.25	266.1	28.5	237.6	24.796	78.528	1.43922	0.84128
Sample Height (in)	1.0000	0.9217	0.5	272.9	33.9	239.0	24.793	78.517	1.43942	0.84102
Sample Volume (cm ³)	80.44	74.15	1	294.8	48.4	246.3	24.774	78.458	1.44050	0.83964
Wt. Wet Sample + Ring (g)	362.53	360.36	2	325.4	68.5	256.9	24.747	78.373	1.44207	0.83764
Wt. of Ring (g)	214.46	214.46	4	377.1	97.9	279.2	24.691	78.194	1.44538	0.83343
Wt. of Wet Sample (g)	148.07	145.90	8	519.1	129.5	389.6	24.411	77.306	1.46197	0.81262
Wet Density (pcf)	114.86	122.79	16	751.5	176.6	574.8	23.940	75.816	1.49071	0.77767
Wet Density (g/cm ³)	1.84	1.97	32	1166.2	251.4	914.8	23.077	73.082	1.54648	0.71356
Water Content (%)	31.01	29.10	8	1016.9	142.9	874.0	23.180	73.409	1.53958	0.72125
Wt. of Dry Sample (g)	113.02	113.02	2	922.1	89.7	832.4	23.286	73.744	1.53260	0.72909
Dry Density (pcf)	87.67	95.12	0.5	835.9	53.4	782.5	23.412	74.145	1.52430	0.73850
Dry Density (g/cm ³)	1.41	1.52								
Void Ratio	0.8861	0.7385								
Saturation (%)	92.75	104.41								
Specific Gravity	2.65	Measured								

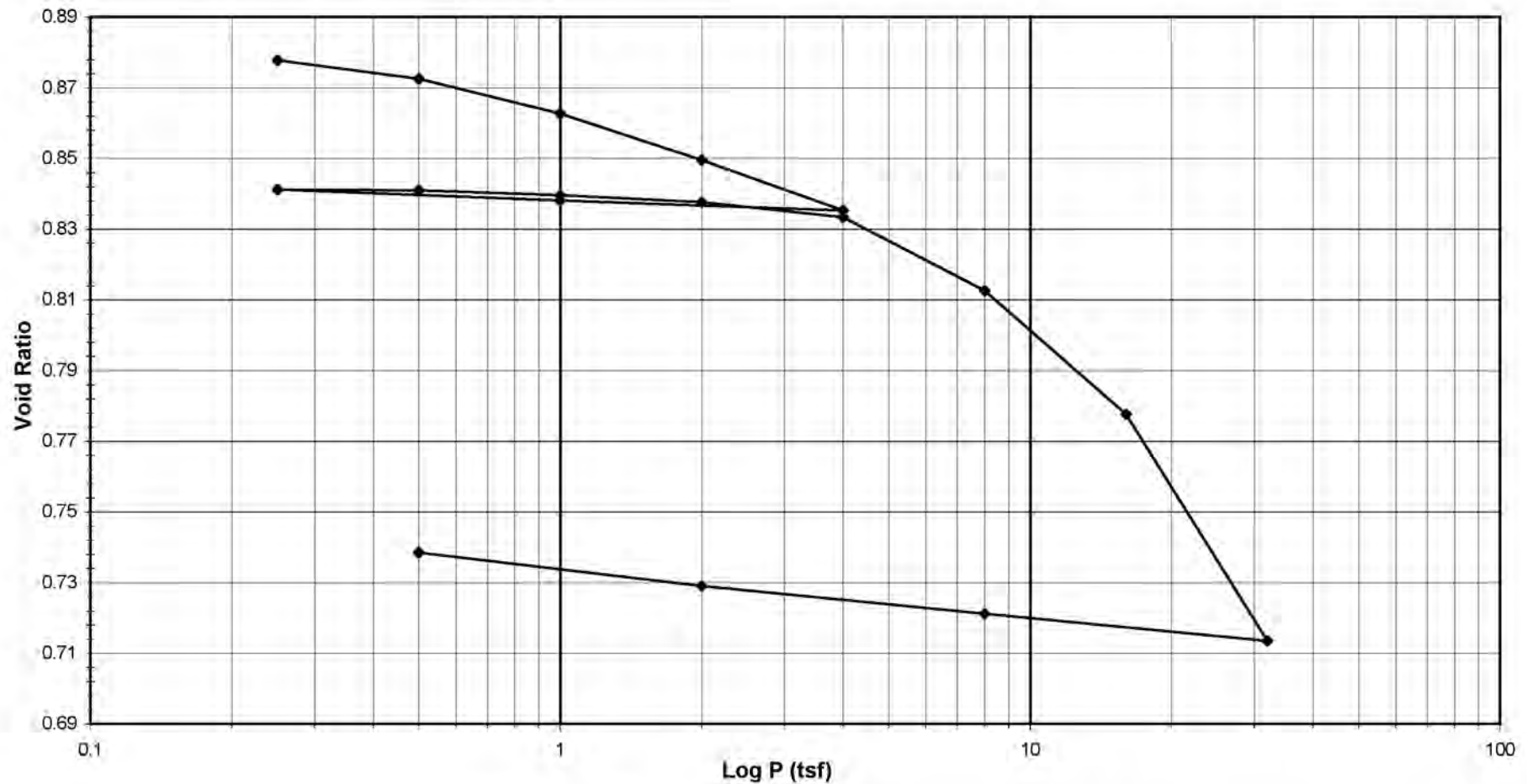
Tested By	DB	Date	11/18/13	Input Checked By	TM	Date	12/6/13
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-032

Boring No. R-6-1b
Depth (ft) 280.7-280.9
Sample No. ST-40
Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Tested By DB Date 11/18/13

Approved By RJO Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

C_v Test Data Summary

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>						
			Load	Dial	Machine	Corrected	Sample	Time
			Increment	Reading	Deflection	Dial Reading	Height	t₅₀
				@ t₅₀		@ t₅₀	@ t₅₀	
			(tsf)	(div)	(div)	(div)	(mm)	(min)
								C_v
								(cm²/sec)
<i>Water Content</i>								
Tare Number	2620	2689						
Wt. Tare & WS (g)	117.72	151.57						
Wt. Tare & DS (g)	91.57	118.9						
Wt. Water (g)	26.15	32.67						
Wt. Tare (g)	7.25	6.62						
Wt. DS (g)	84.32	112.28						
Water Content (%)	31.01	29.10						
<i>Sample Parameters</i>								
Sample Diameter (in)	2.5	2.5						
Sample Height (in)	1.0000	0.9217						
Sample Volume (cm ³)	80.44	74.15						
Wt. Wet Sample + Ring (g)	362.53	360.36						
Wt. of Ring (g)	214.46	214.46						
Wt. of Wet Sample (g)	148.07	145.90						
Wet Density (pcf)	114.86	122.79						
Wet Density (g/cm ³)	1.84	1.97						
Water Content (%)	31.01	29.10						
Wt. of Dry Sample (g)	113.02	113.02						
Dry Density (pcf)	87.67	95.12						
Dry Density (g/cm ³)	1.41	1.52						
Void Ratio	0.8861	0.7385						
Saturation (%)	92.75	104.41						
Specific Gravity	2.65	Measured						

Tested By DB **Date** 11/18/13 **Input Checked By** TM **Date** 12/6/13

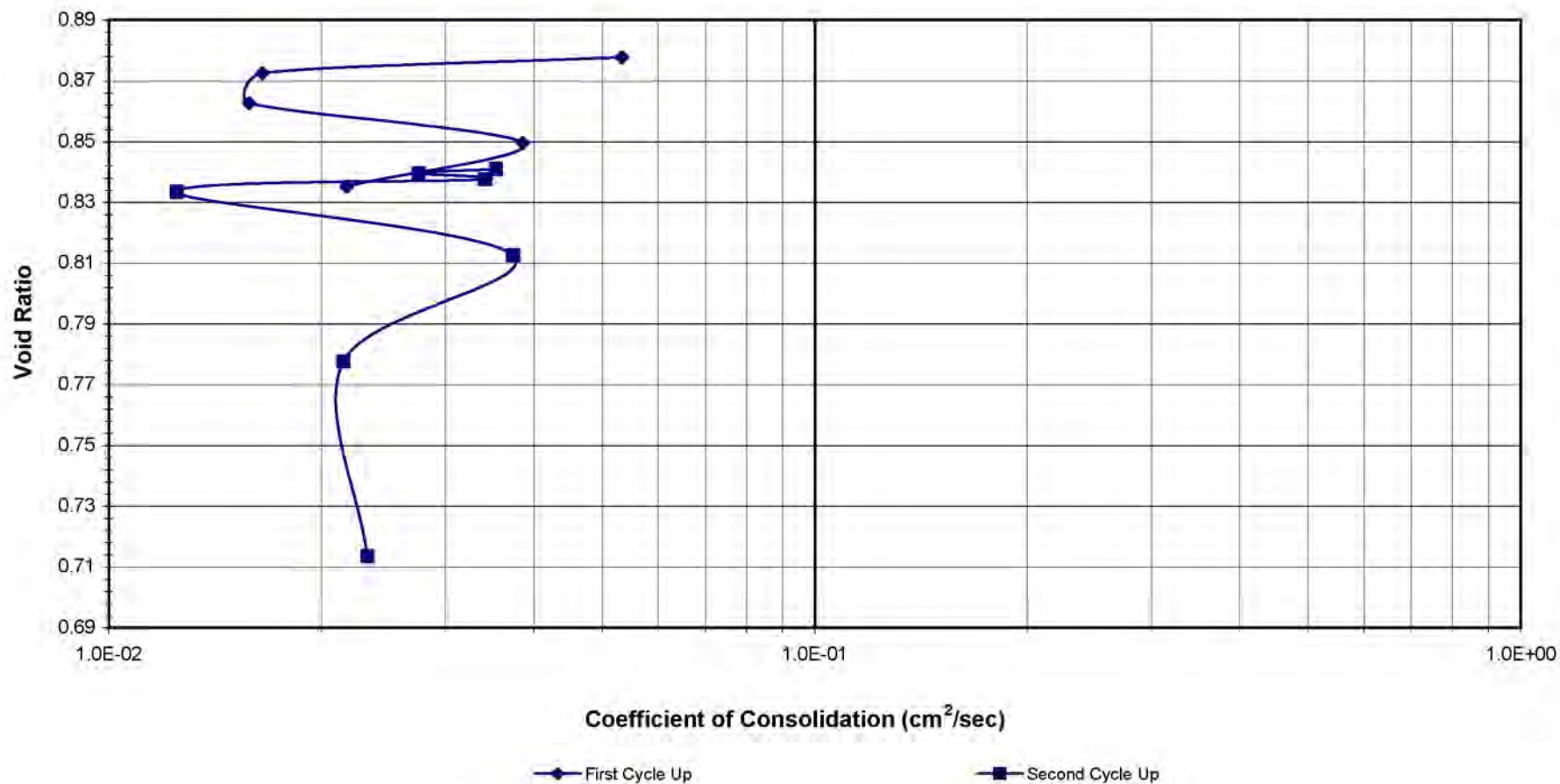
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-032

Boring No. R-6-1b
 Depth (ft) 280.7-280.9
 Sample No. ST-40
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/18/13

Approved By RJO Date 12/6/13

DCN: CT-24 AutoT50-CV, Date: 11/27/13, Revision: 0

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	280.7-280.9
Project No.	2013-465-001	Sample No.	ST-40
Lab ID #	2013-465-001-032		

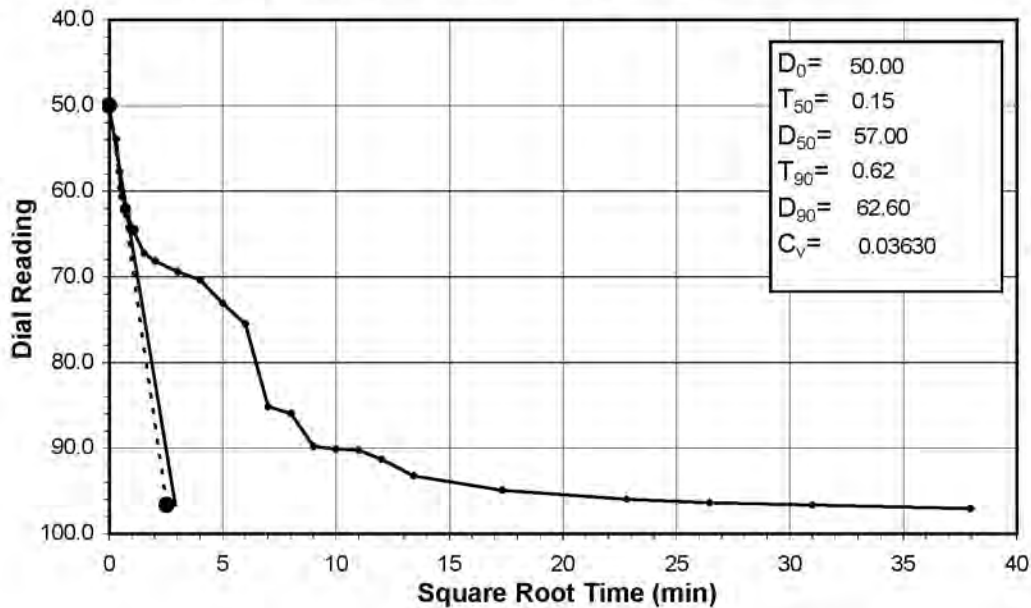
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1418	1/9/14
Load Cell	G1419	1/9/14
LVDT	G1420	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

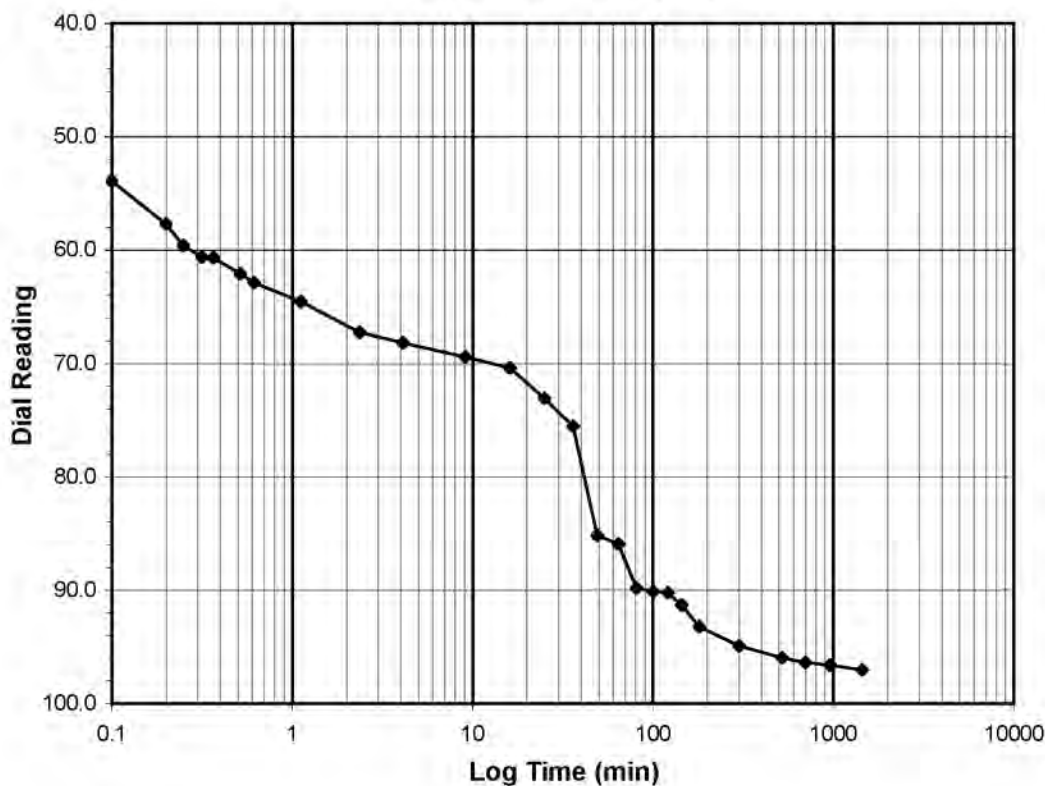
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 97.0
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 10/24/13
 Start Time 15:21:04

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	53.9
0.20	57.7
0.25	59.6
0.32	60.6
0.37	60.7
0.52	62.1
0.62	62.9
1.12	64.5
2.37	67.3
4.12	68.2
9.12	69.4
16.12	70.4
25.12	73.1
36.12	75.5
49.12	85.2
64.12	85.9
81.12	89.8
100.12	90.1
121.13	90.2
144.13	91.3
180.13	93.2
300.13	94.9
520.13	96.0
700.13	96.4
960.13	96.6
1440.17	97.0



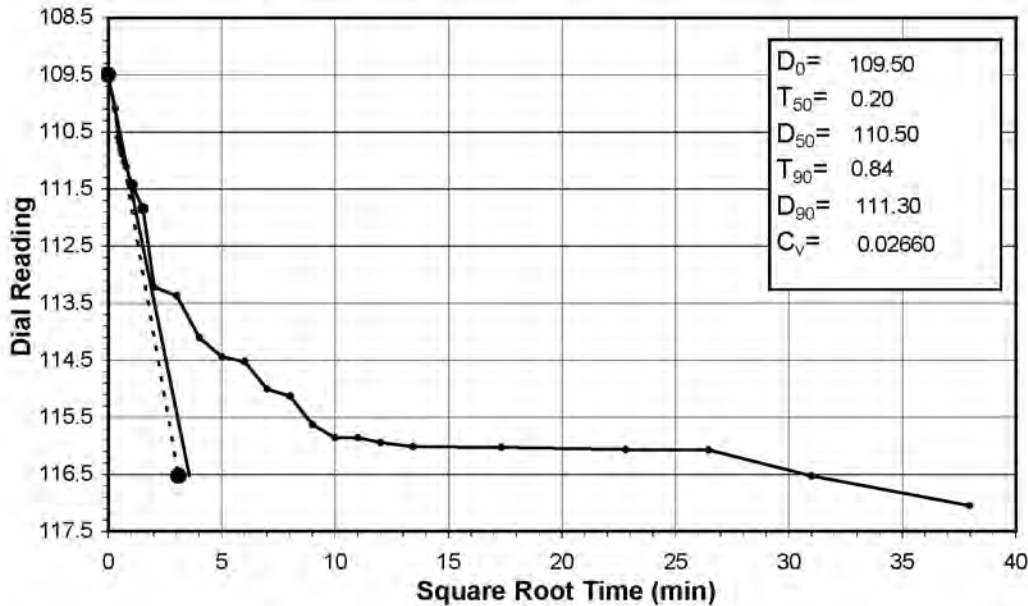
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

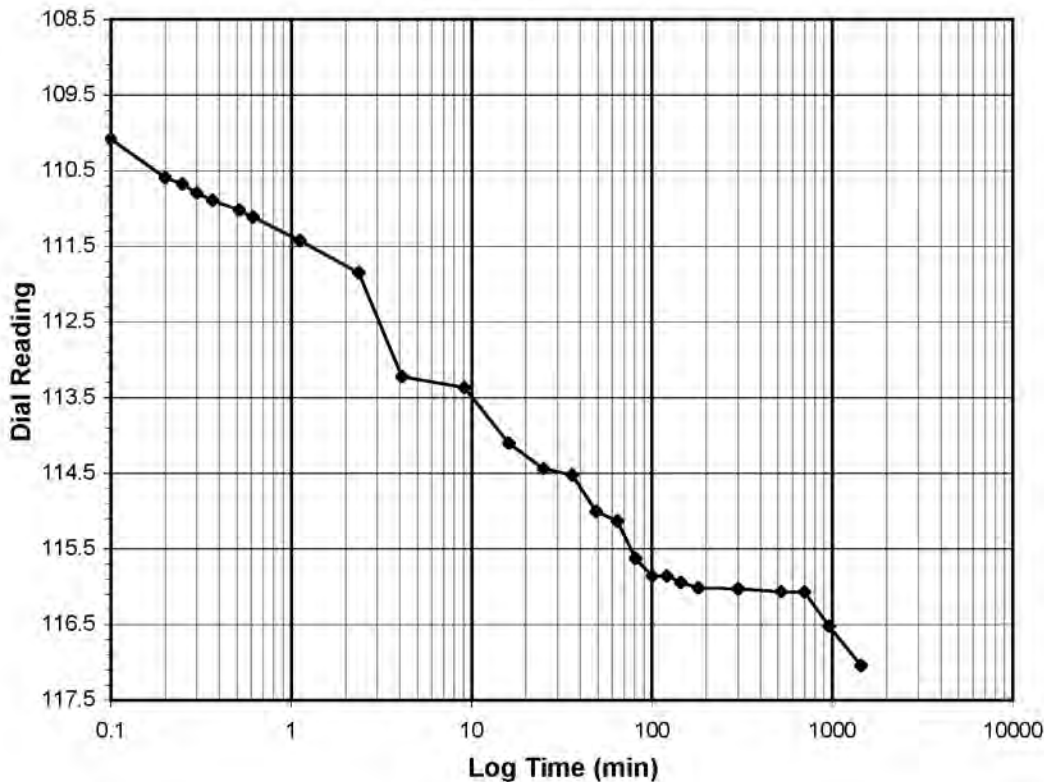
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **117.0**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 10/25/13
 Start Time 15:21:14

Elapsed Time (min)	Dial Reading (div)
Initial	97.0
0.10	110.1
0.20	110.6
0.25	110.7
0.30	110.8
0.37	110.9
0.52	111.0
0.62	111.1
1.12	111.4
2.37	111.8
4.12	113.2
9.12	113.4
16.12	114.1
25.12	114.4
36.12	114.5
49.12	115.0
64.12	115.1
81.12	115.6
100.13	115.9
121.13	115.9
144.13	115.9
180.13	116.0
300.13	116.0
520.13	116.1
700.13	116.1
960.13	116.5
1440.27	117.0



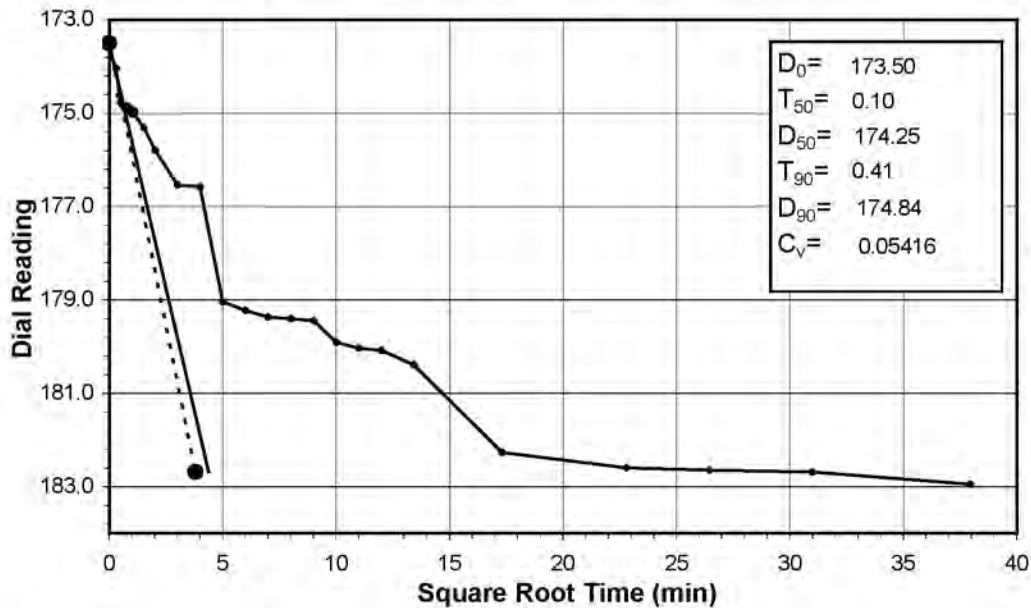
Tested By DB Date 10/25/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

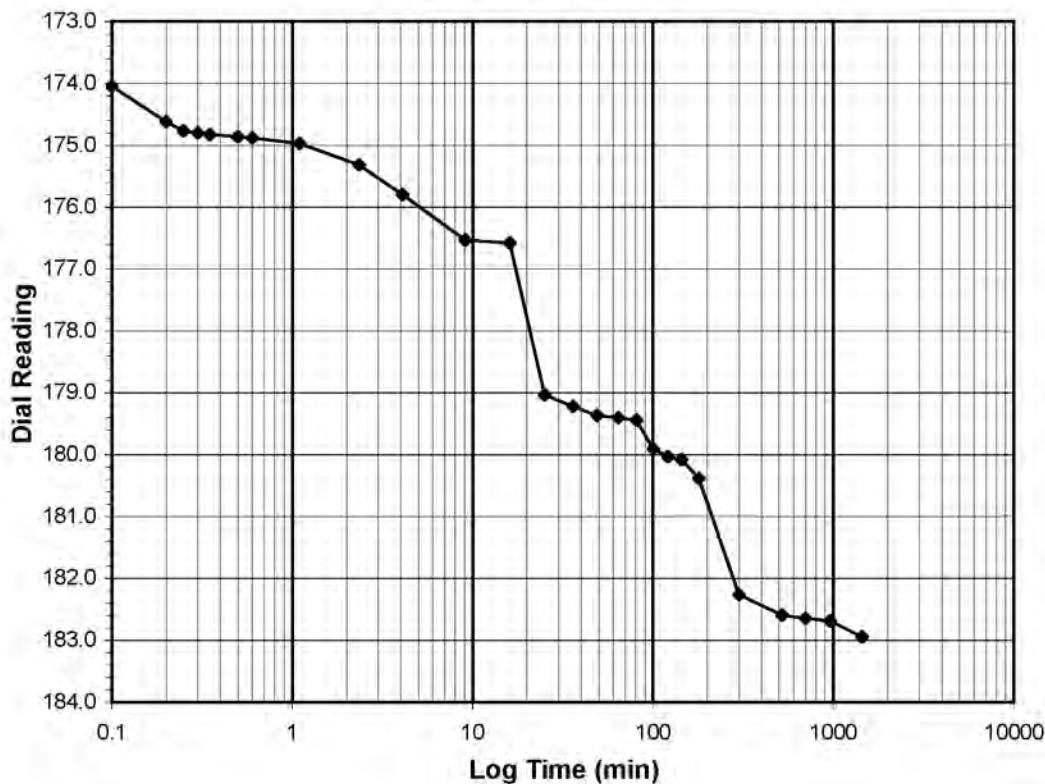
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 182.9
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 10/26/13
 Start Time 15:21:31

Elapsed Time (min)	Dial Reading (div)
Initial	117.0
0.10	174.0
0.20	174.6
0.25	174.8
0.30	174.8
0.35	174.8
0.50	174.9
0.60	174.9
1.10	175.0
2.35	175.3
4.10	175.8
9.10	176.5
16.10	176.6
25.10	179.0
36.12	179.2
49.12	179.4
64.12	179.4
81.12	179.4
100.12	179.9
121.12	180.0
144.12	180.1
180.12	180.4
300.12	182.3
520.12	182.6
700.12	182.6
960.12	182.7
1440.27	182.9



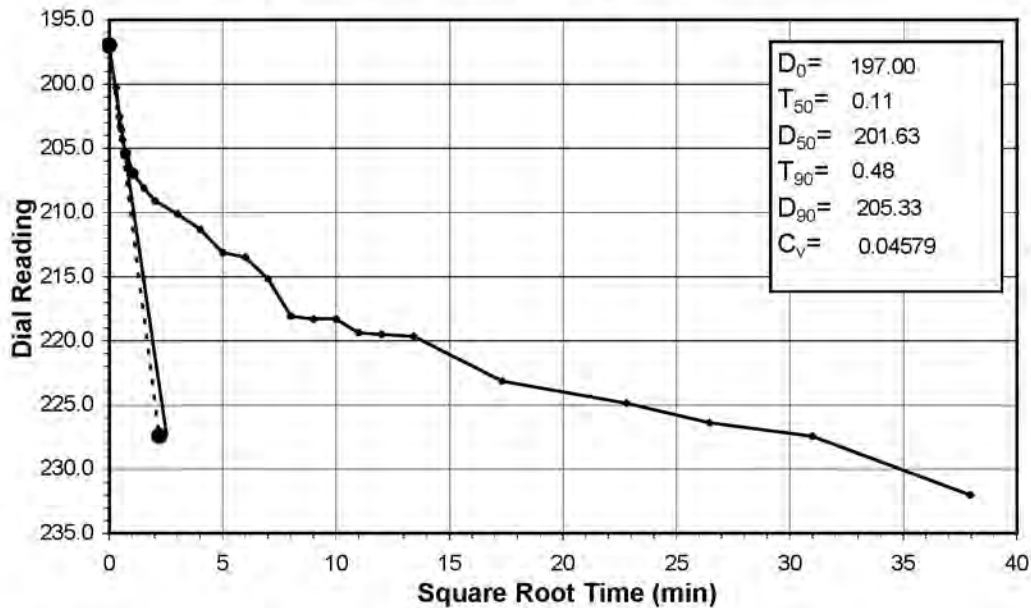
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

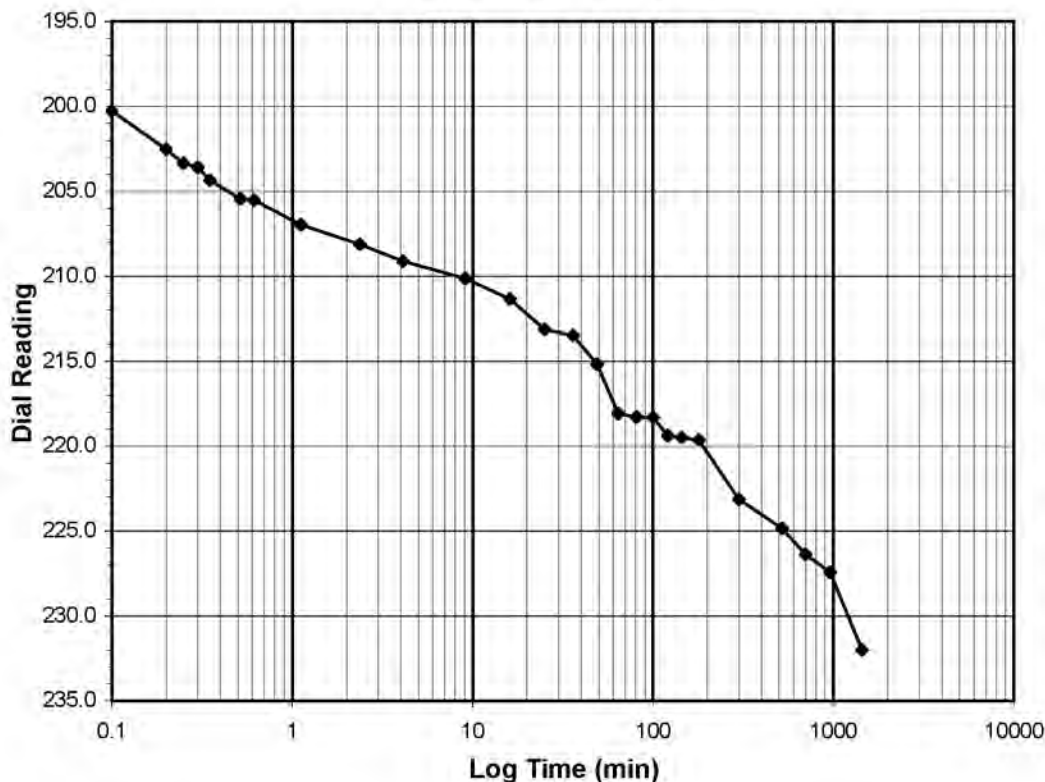
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **1.0-2.0**
 Final Reading (div) **232.0**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 10/27/13
 Start Time 15:21:47

Elapsed Time (min)	Dial Reading (div)
Initial	182.9
0.10	200.3
0.20	202.5
0.25	203.3
0.30	203.6
0.35	204.3
0.52	205.4
0.62	205.5
1.12	207.0
2.37	208.1
4.12	209.1
9.12	210.1
16.12	211.3
25.12	213.1
36.12	213.5
49.12	215.2
64.12	218.1
81.12	218.3
100.12	218.3
121.12	219.4
144.12	219.5
180.12	219.7
300.12	223.1
520.12	224.8
700.12	226.4
960.13	227.4
1440.42	232.0



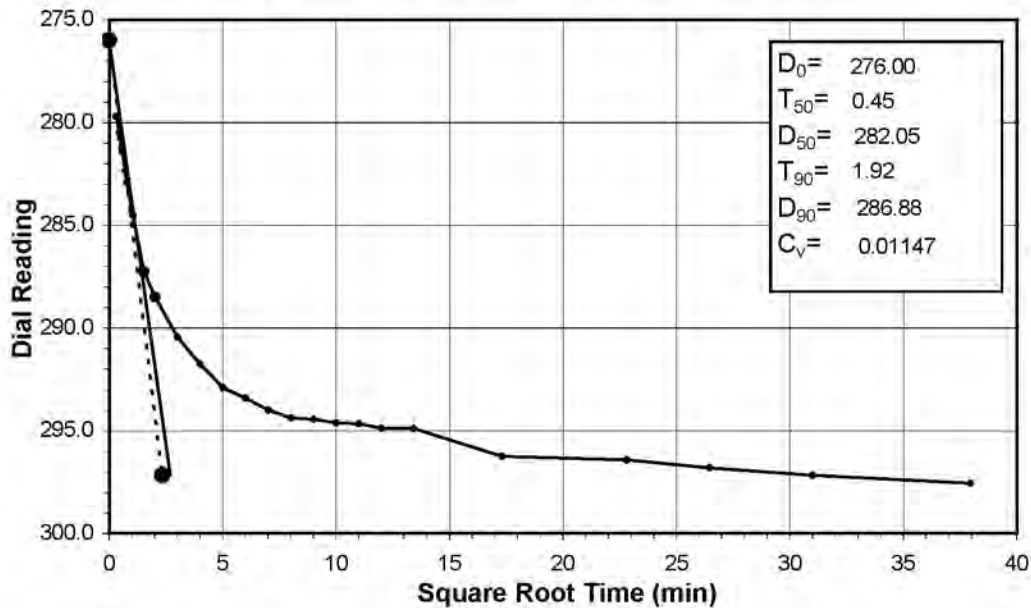
Tested By DB Date 10/27/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

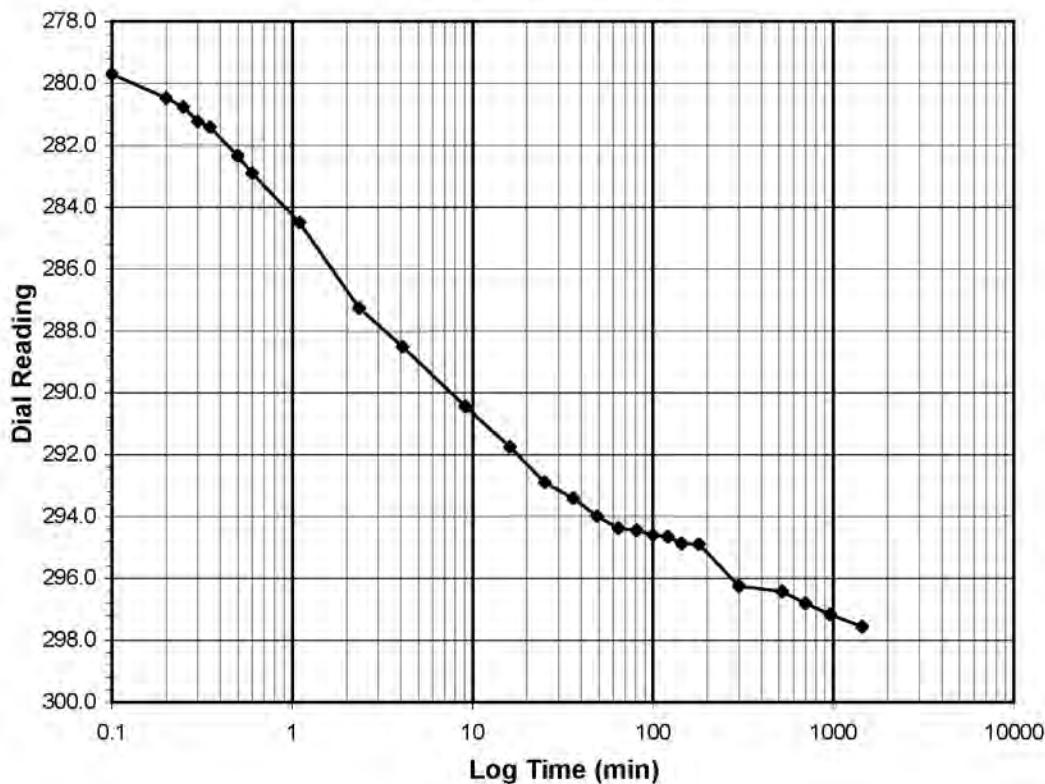
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **297.6**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 10/28/13
 Start Time 15:22:12

Elapsed Time (min)	Dial Reading (div)
Initial	232.0
0.10	279.7
0.20	280.5
0.25	280.8
0.30	281.2
0.35	281.4
0.50	282.3
0.60	282.9
1.10	284.5
2.35	287.3
4.10	288.5
9.10	290.4
16.10	291.7
25.12	292.9
36.12	293.4
49.12	294.0
64.12	294.4
81.12	294.4
100.12	294.6
121.12	294.7
144.12	294.9
180.12	294.9
300.12	296.2
520.12	296.4
700.12	296.8
960.12	297.2
1440.28	297.6



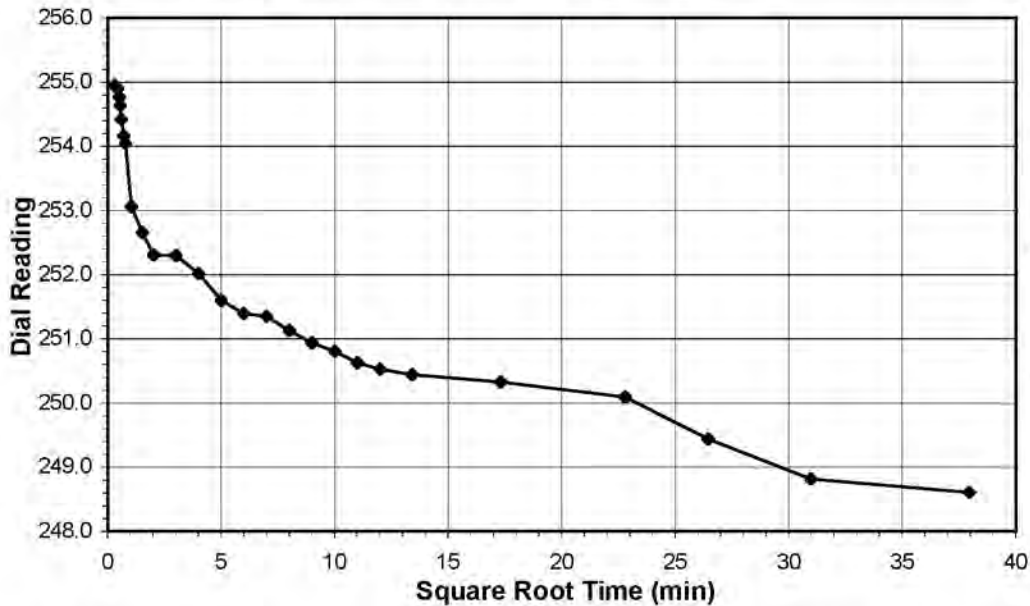
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

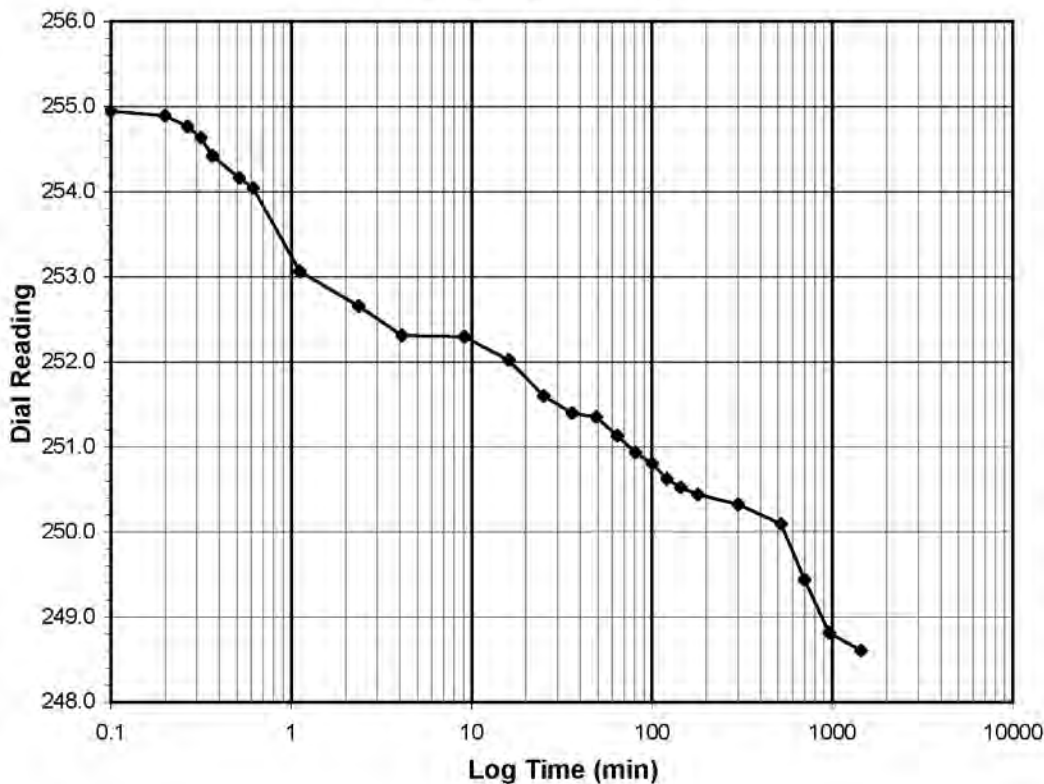
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
 Final Reading (div) 248.6
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 10/29/13
 Start Time 15:22:29

Elapsed Time (min)	Dial Reading (div)
Initial	297.6
0.10	254.9
0.20	254.9
0.27	254.8
0.32	254.6
0.37	254.4
0.52	254.2
0.62	254.0
1.12	253.1
2.37	252.7
4.12	252.3
9.12	252.3
16.12	252.0
25.12	251.6
36.12	251.4
49.12	251.3
64.12	251.1
81.12	250.9
100.12	250.8
121.12	250.6
144.12	250.5
180.12	250.4
300.13	250.3
520.13	250.1
700.13	249.4
960.13	248.8
1440.33	248.6



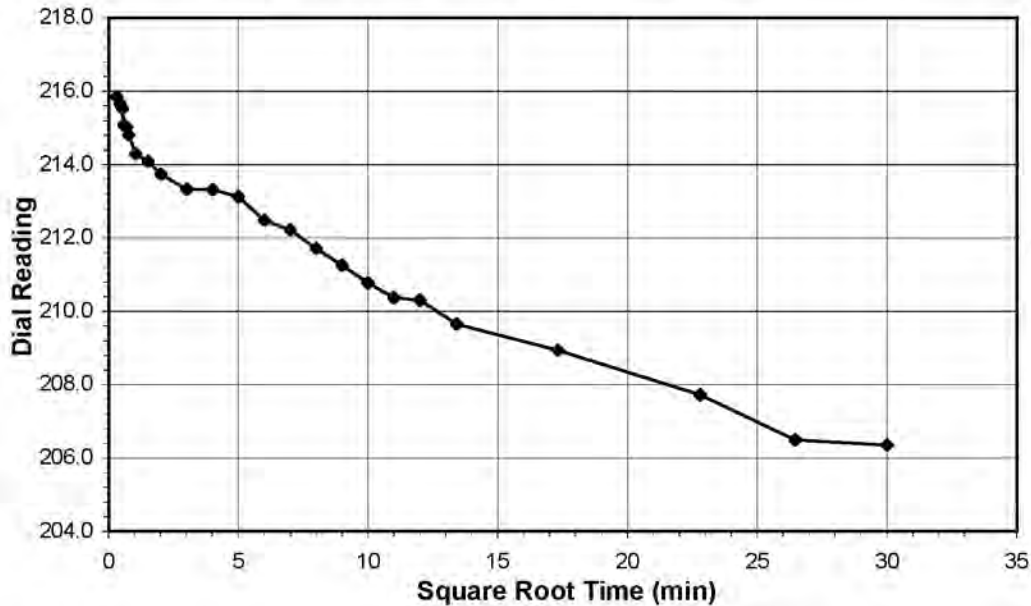
Tested By DB Date 10/29/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

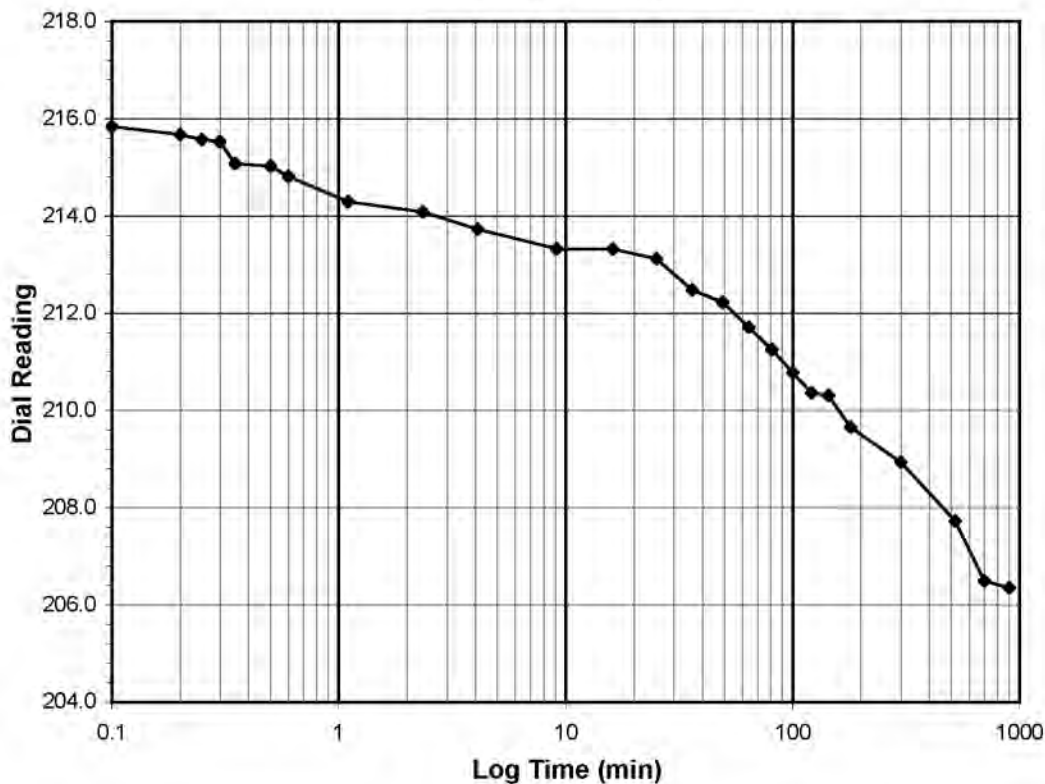
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 206.4
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 10/30/13
 Start Time 15:22:49



Elapsed Time (min)	Dial Reading (div)
Initial	248.6
0.10	215.8
0.20	215.7
0.25	215.6
0.30	215.5
0.35	215.1
0.50	215.0
0.60	214.8
1.10	214.3
2.35	214.1
4.10	213.7
9.12	213.3
16.12	213.3
25.12	213.1
36.12	212.5
49.12	212.2
64.12	211.7
81.12	211.3
100.12	210.8
121.12	210.4
144.12	210.3
180.12	209.7
300.12	208.9
520.12	207.7
700.12	206.5
900.20	206.4

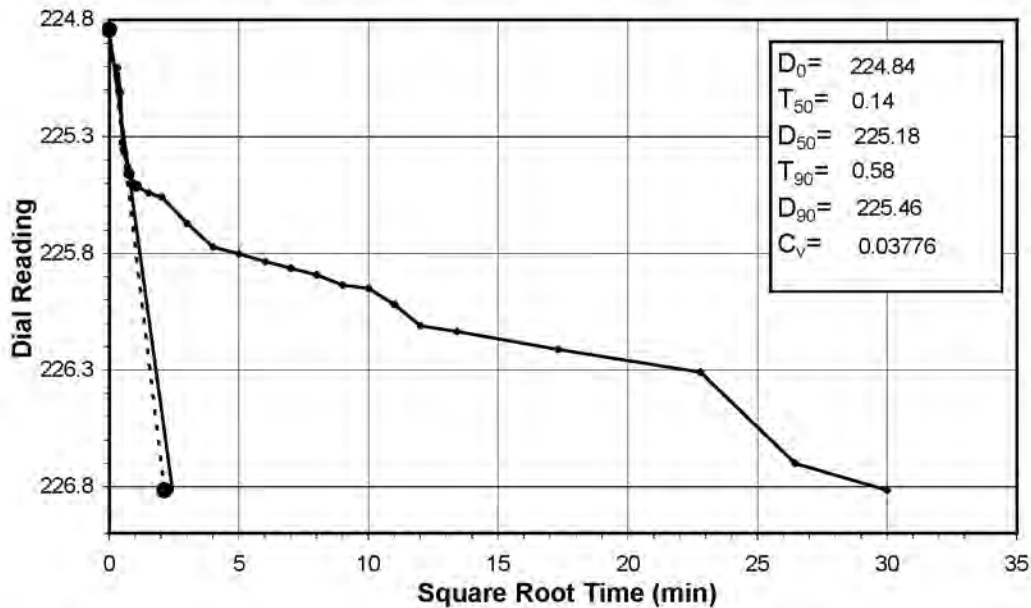
Tested By DB Date 10/30/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

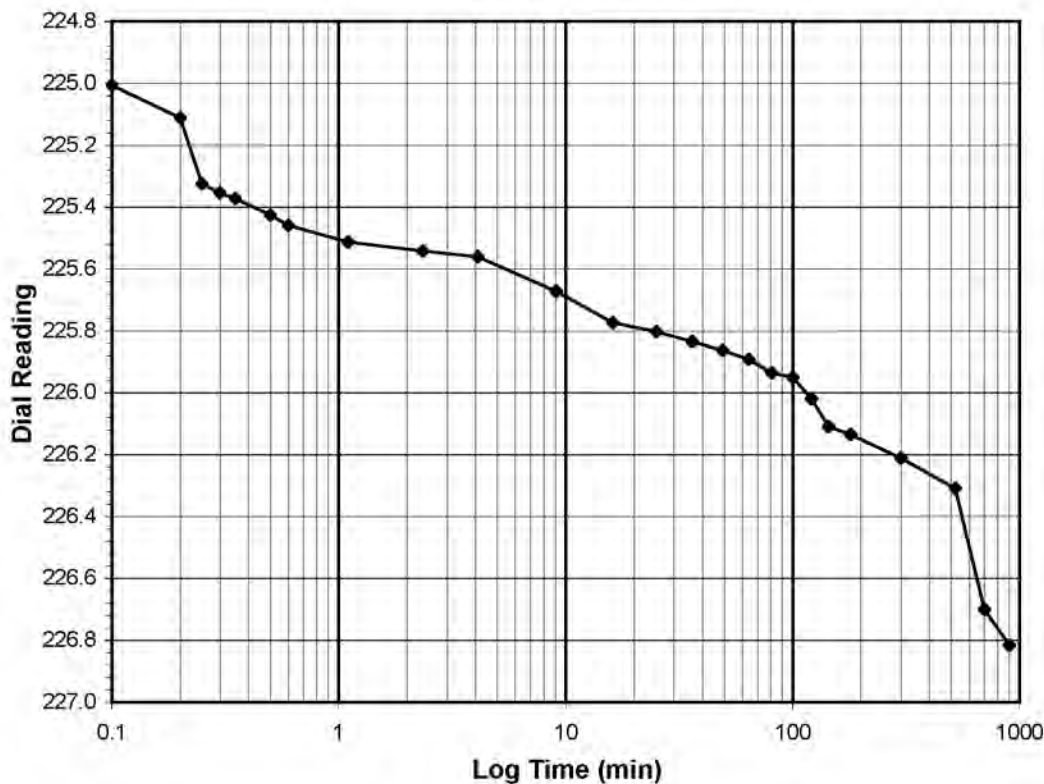
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **226.8**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 10/31/13
 Start Time 6:23:01

Elapsed Time (min)	Dial Reading (div)
Initial	206.4
0.10	225.0
0.20	225.1
0.25	225.3
0.30	225.4
0.35	225.4
0.50	225.4
0.60	225.5
1.10	225.5
2.35	225.5
4.10	225.6
9.10	225.7
16.12	225.8
25.12	225.8
36.12	225.8
49.12	225.9
64.12	225.9
81.12	225.9
100.12	226.0
121.12	226.0
144.12	226.1
180.12	226.1
300.12	226.2
520.12	226.3
700.12	226.7
900.22	226.8



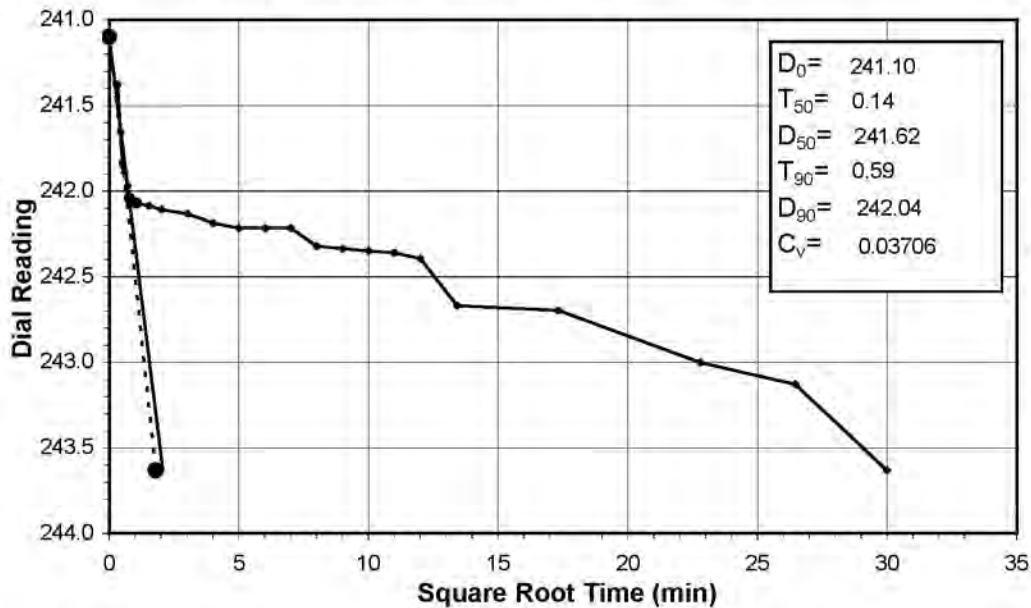
Tested By DB Date 10/31/13 Checked By TM Date 12/5/13

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 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

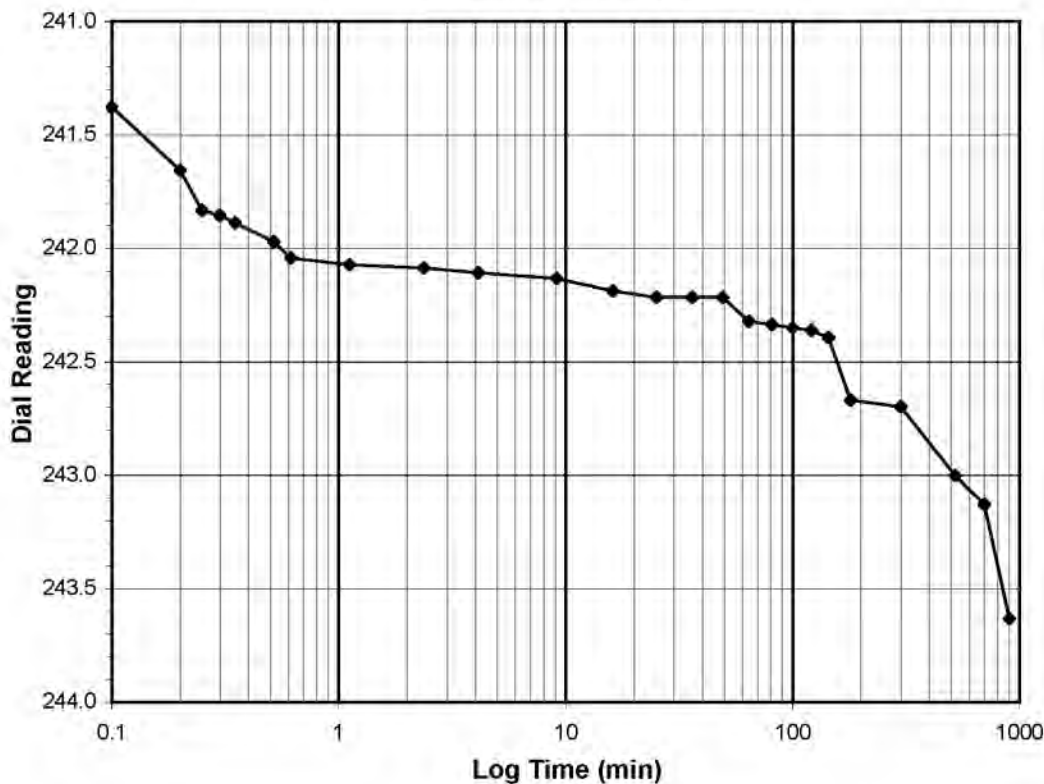
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 243.6
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 10/31/13
 Start Time 21:23:14

Elapsed Time (min)	Dial Reading (div)
Initial	226.8
0.10	241.4
0.20	241.7
0.25	241.8
0.30	241.9
0.35	241.9
0.52	242.0
0.62	242.0
1.12	242.1
2.37	242.1
4.12	242.1
9.12	242.1
16.12	242.2
25.12	242.2
36.12	242.2
49.12	242.2
64.12	242.3
81.12	242.3
100.12	242.4
121.12	242.4
144.12	242.4
180.12	242.7
300.12	242.7
520.12	243.0
700.12	243.1
900.37	243.6



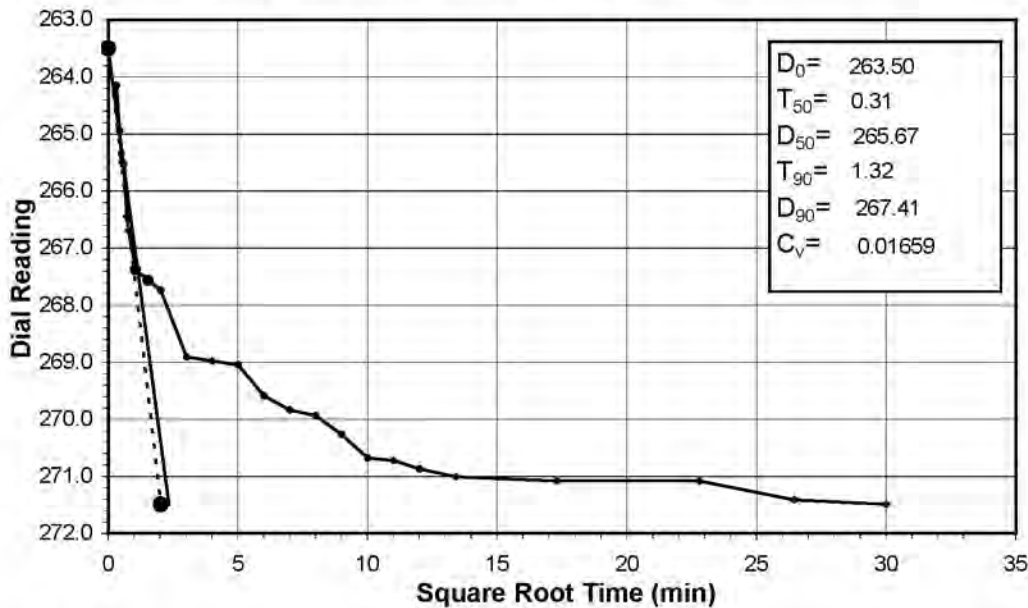
Tested By DB Date 10/31/13 Checked By TM Date 12/5/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

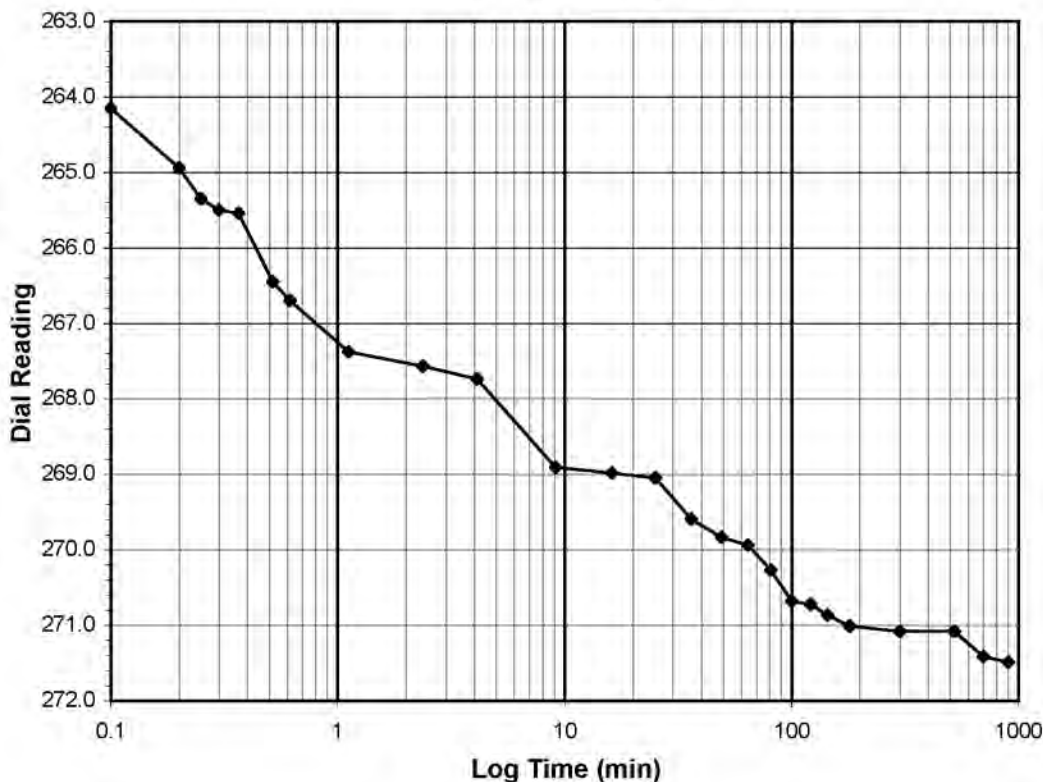
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 271.5
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/1/13
 Start Time 12:23:36

Elapsed Time (min)	Dial Reading (div)
Initial	243.6
0.10	264.1
0.20	264.9
0.25	265.4
0.30	265.5
0.37	265.5
0.52	266.4
0.62	266.7
1.12	267.4
2.37	267.6
4.12	267.7
9.12	268.9
16.12	269.0
25.12	269.0
36.12	269.6
49.12	269.8
64.12	269.9
81.12	270.3
100.12	270.7
121.12	270.7
144.12	270.9
180.12	271.0
300.13	271.1
520.13	271.1
700.13	271.4
900.35	271.5



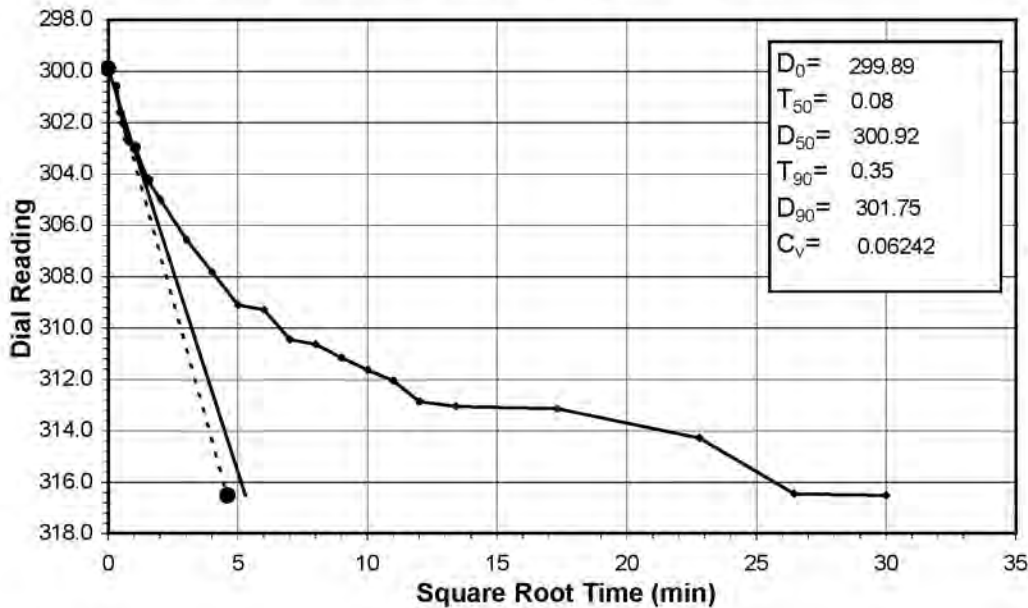
Tested By DB Date 11/1/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

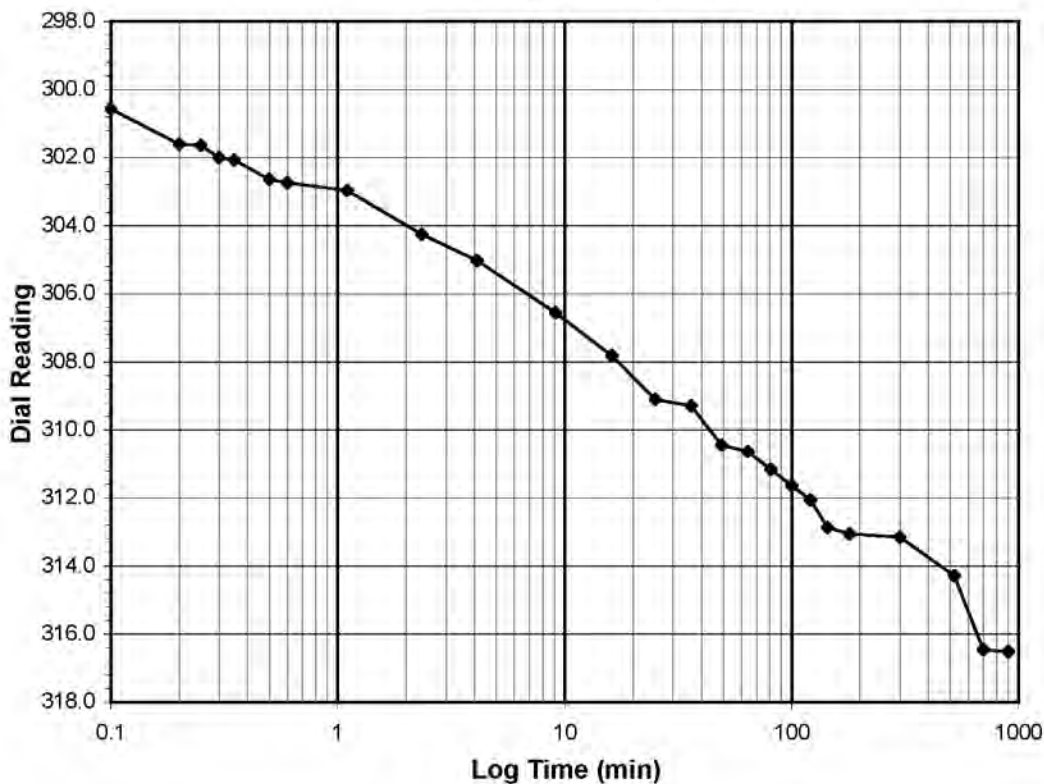
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **316.5**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/2/13
 Start Time 3:23:57

Elapsed Time (min)	Dial Reading (div)
Initial	271.5
0.10	300.6
0.20	301.6
0.25	301.6
0.30	302.0
0.35	302.1
0.50	302.6
0.60	302.7
1.10	303.0
2.35	304.3
4.12	305.0
9.12	306.6
16.12	307.8
25.12	309.1
36.12	309.3
49.12	310.4
64.12	310.6
81.12	311.2
100.12	311.6
121.12	312.1
144.12	312.9
180.12	313.1
300.12	313.1
520.12	314.3
700.12	316.5
900.33	316.5



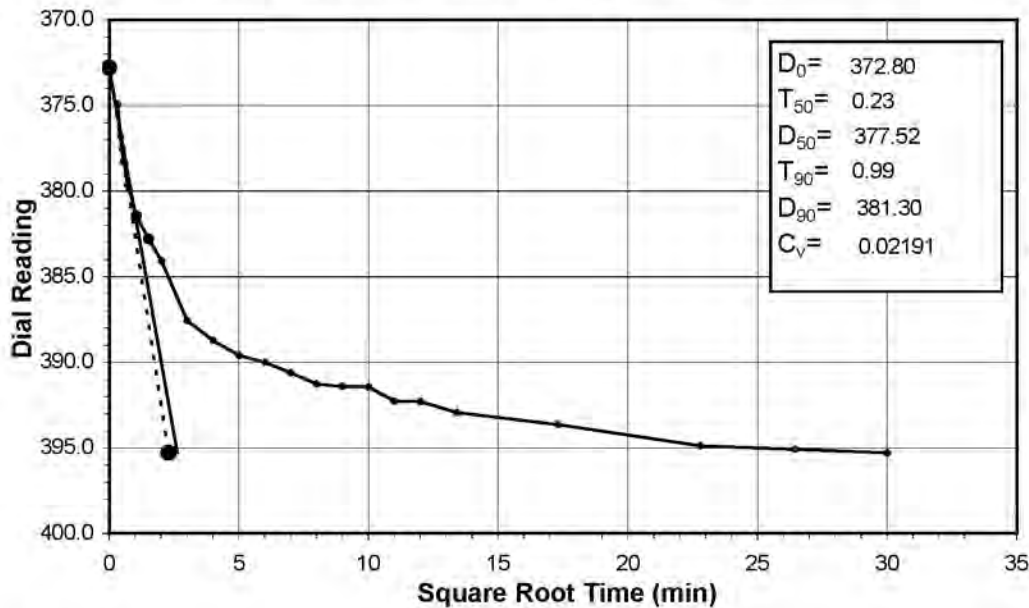
Tested By DB Date 11/2/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

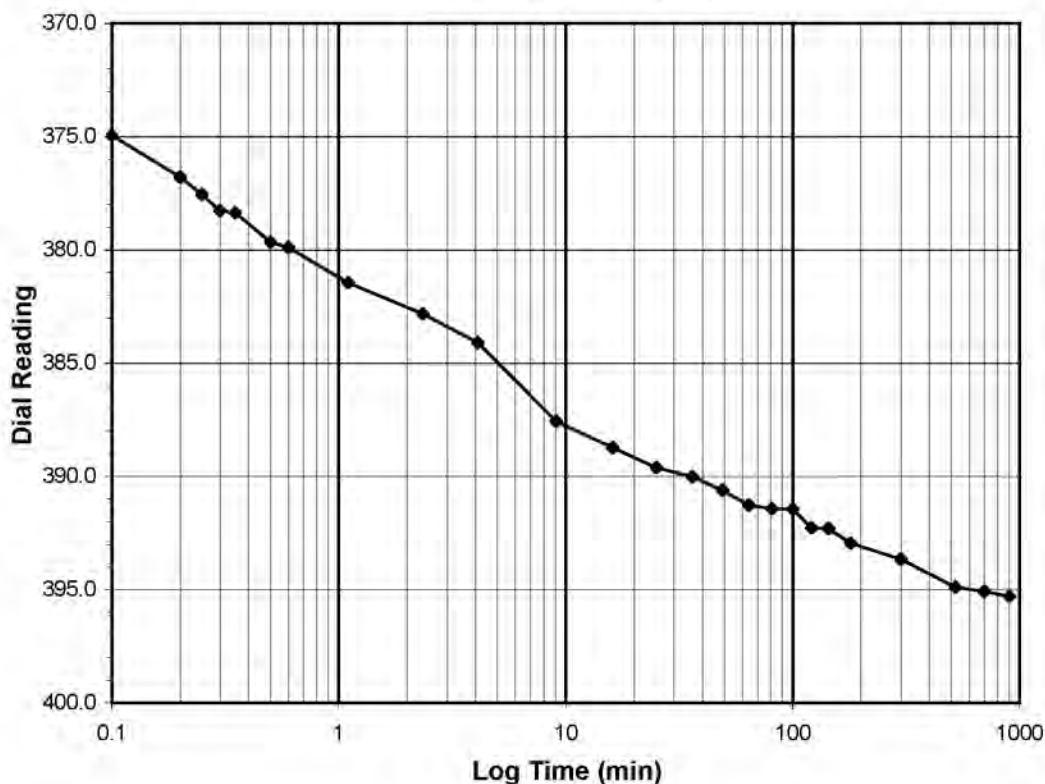
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **395.3**
 Consolidometer No. **G1418**
 1 Division (in) 0.0001

Start Date 11/2/13
 Start Time 18:24:18

Elapsed Time (min)	Dial Reading (div)
Initial	316.5
0.10	374.9
0.20	376.8
0.25	377.5
0.30	378.3
0.35	378.4
0.50	379.7
0.60	379.9
1.10	381.5
2.35	382.8
4.10	384.1
9.10	387.6
16.10	388.7
25.10	389.6
36.12	390.0
49.12	390.6
64.12	391.3
81.12	391.4
100.12	391.4
121.12	392.3
144.12	392.3
180.12	392.9
300.12	393.7
520.12	394.9
700.12	395.1
900.17	395.3



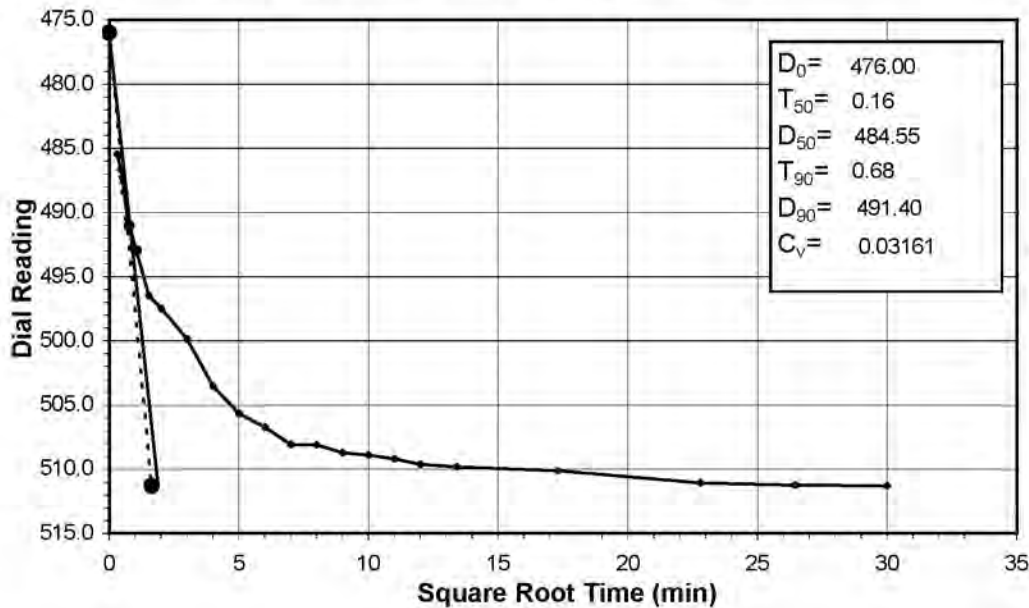
Tested By DB Date 11/2/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

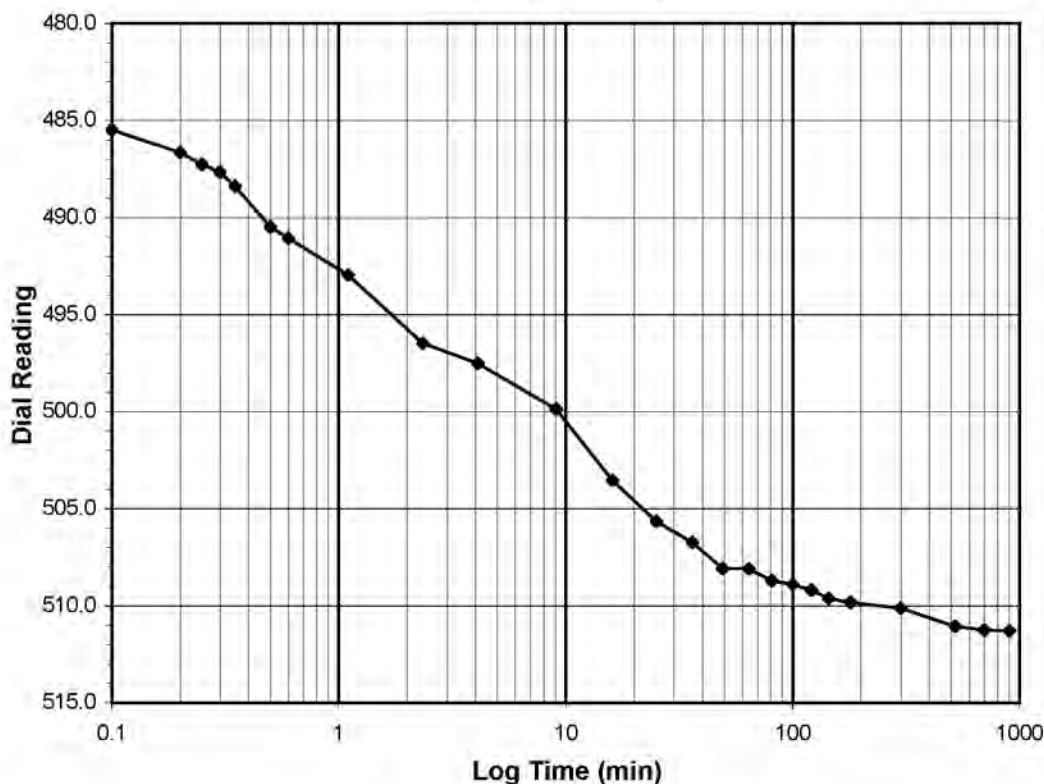
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
Final Reading (div) 511.3
Consolidometer No. G1418
1 Division (in) 0.0001

Start Date 11/3/13
Start Time 9:24:28

Elapsed Time (min)	Dial Reading (div)
Initial	395.3
0.10	485.5
0.20	486.6
0.25	487.3
0.30	487.6
0.35	488.4
0.50	490.5
0.60	491.1
1.10	493.0
2.35	496.5
4.10	497.5
9.10	499.9
16.10	503.5
25.10	505.7
36.10	506.7
49.12	508.1
64.12	508.1
81.12	508.7
100.12	508.9
121.12	509.2
144.12	509.6
180.12	509.8
300.12	510.1
520.12	511.1
700.12	511.2
900.32	511.3



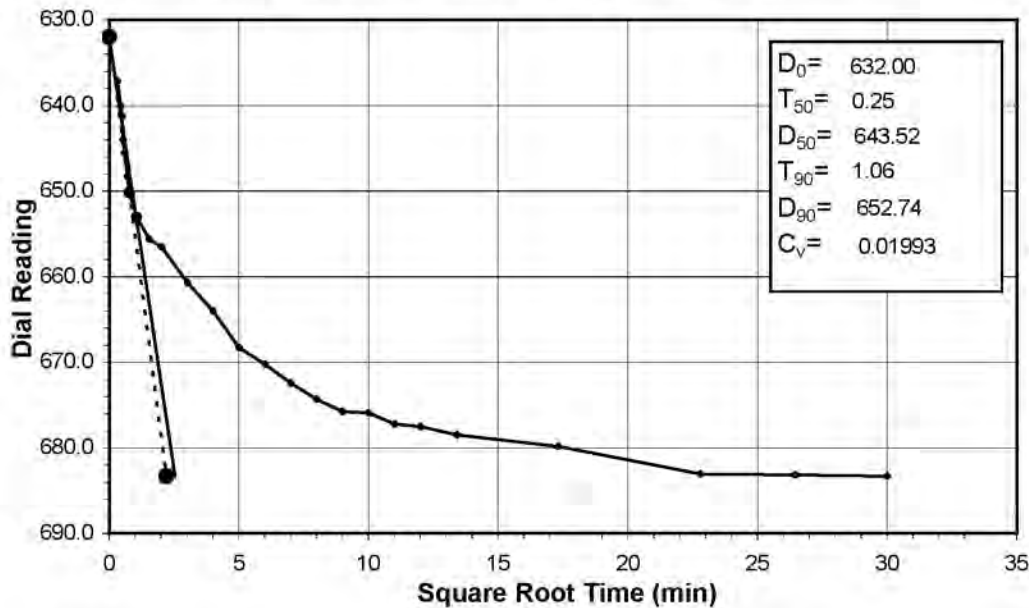
Tested By DB Date 11/3/13 Checked By TM Date 12/5/13

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Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

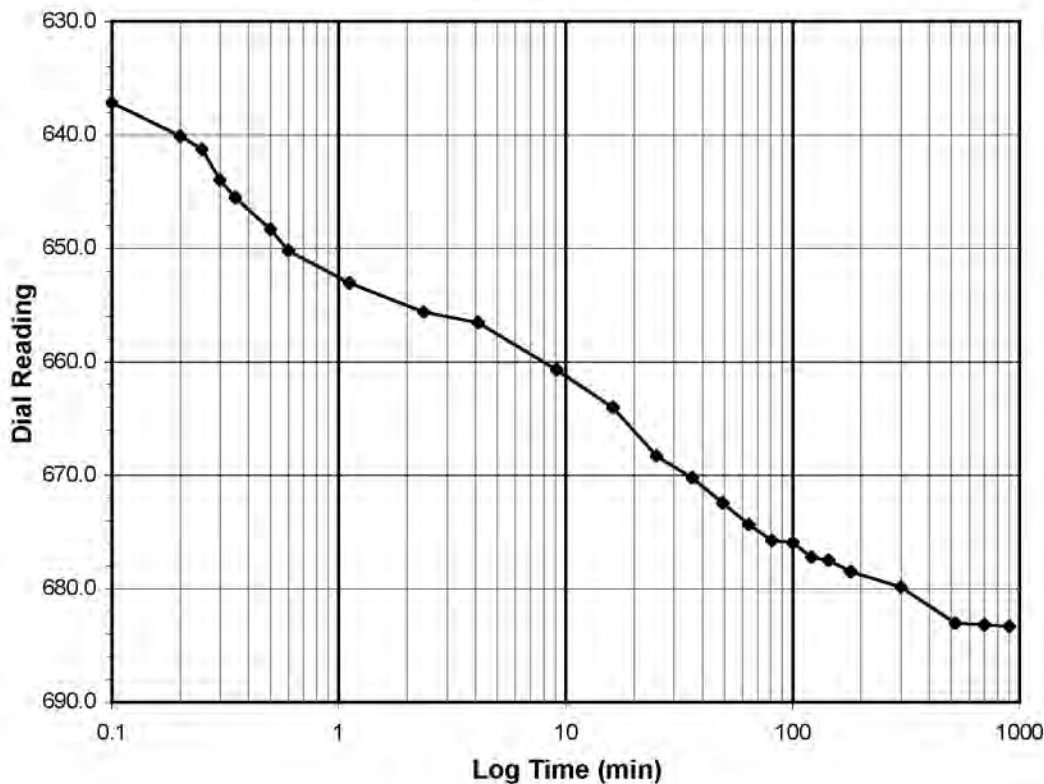
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **683.3**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/4/13
 Start Time 0:24:47

Elapsed Time (min)	Dial Reading (div)
Initial	511.3
0.10	637.1
0.20	640.1
0.25	641.2
0.30	644.0
0.35	645.5
0.50	648.3
0.60	650.2
1.12	653.0
2.37	655.6
4.12	656.5
9.12	660.7
16.12	664.0
25.12	668.3
36.12	670.2
49.12	672.4
64.12	674.4
81.12	675.7
100.12	675.9
121.12	677.2
144.12	677.5
180.12	678.5
300.12	679.8
520.12	683.0
700.12	683.2
900.22	683.3



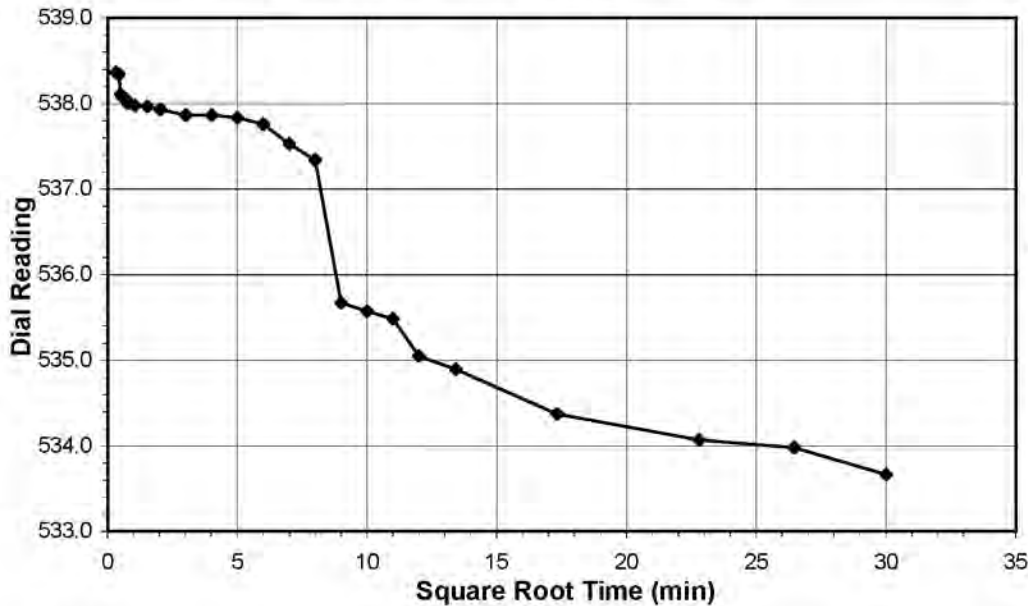
Tested By DB Date 11/4/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

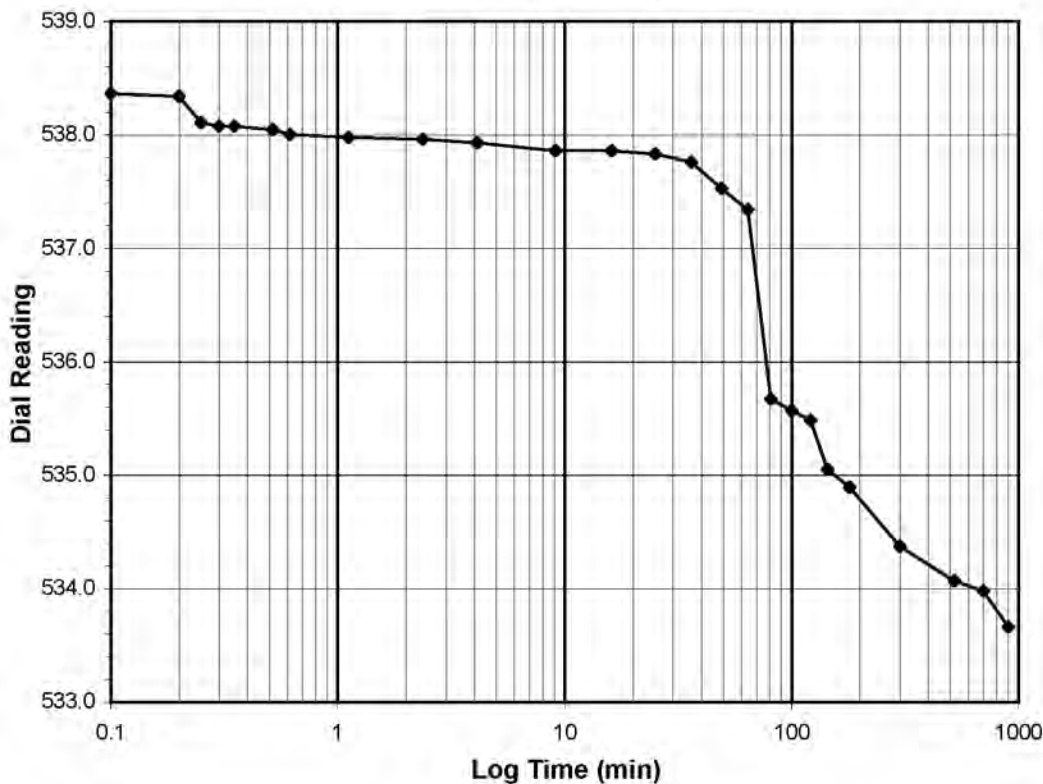
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 32.0-8.0
 Final Reading (div) 533.7
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/4/13
 Start Time 15:25:00

Elapsed Time (min)	Dial Reading (div)
Initial	683.3
0.10	538.4
0.20	538.3
0.25	538.1
0.30	538.1
0.35	538.1
0.52	538.0
0.62	538.0
1.12	538.0
2.37	538.0
4.12	537.9
9.12	537.9
16.12	537.9
25.12	537.8
36.12	537.8
49.12	537.5
64.13	537.3
81.13	535.7
100.13	535.6
121.13	535.5
144.13	535.1
180.13	534.9
300.13	534.4
520.13	534.1
700.13	534.0
900.32	533.7



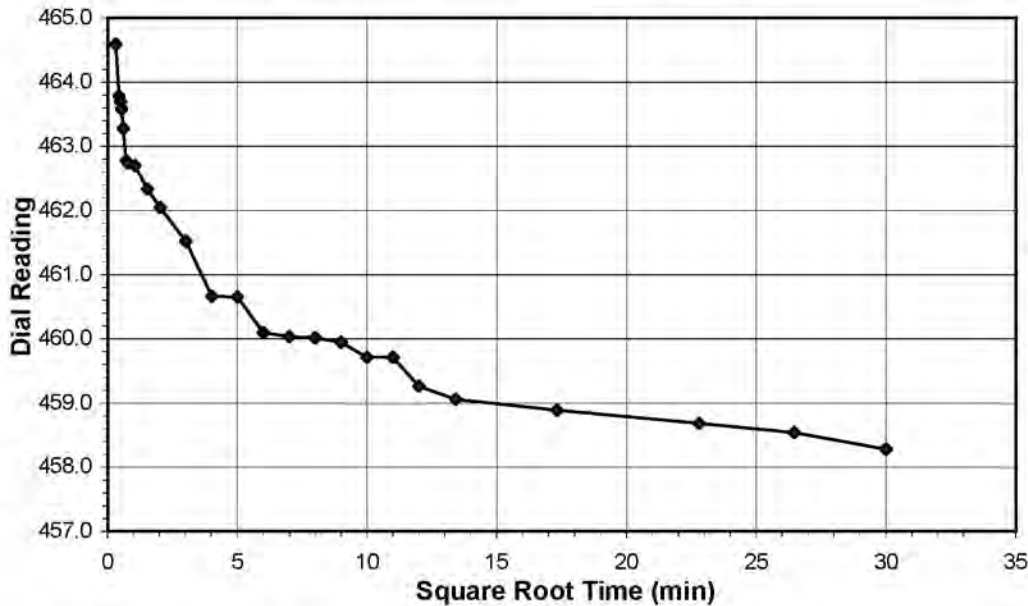
Tested By DB Date 11/4/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

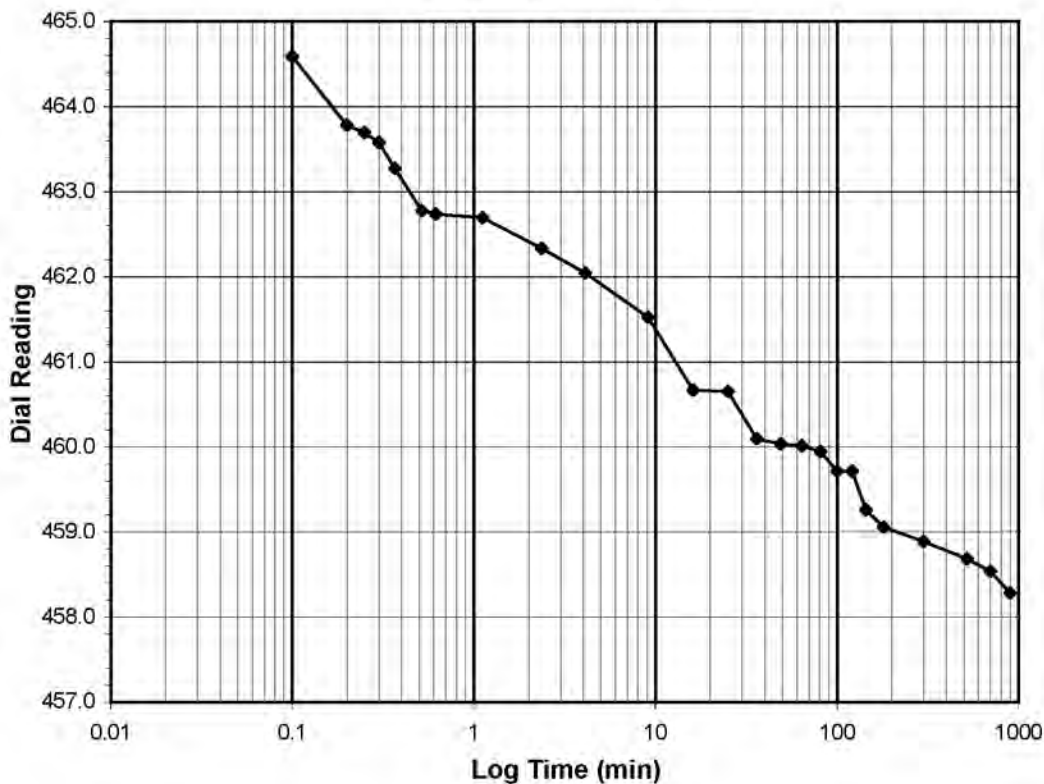
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-2.0
 Final Reading (div) 458.3
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/5/13
 Start Time 6:25:19

Elapsed Time (min)	Dial Reading (div)
Initial	533.7
0.10	464.6
0.20	463.8
0.25	463.7
0.30	463.6
0.37	463.3
0.52	462.8
0.62	462.7
1.12	462.7
2.37	462.3
4.12	462.0
9.12	461.5
16.12	460.7
25.12	460.7
36.12	460.1
49.12	460.0
64.12	460.0
81.12	459.9
100.12	459.7
121.12	459.7
144.12	459.3
180.12	459.1
300.13	458.9
520.13	458.7
700.13	458.5
900.28	458.3



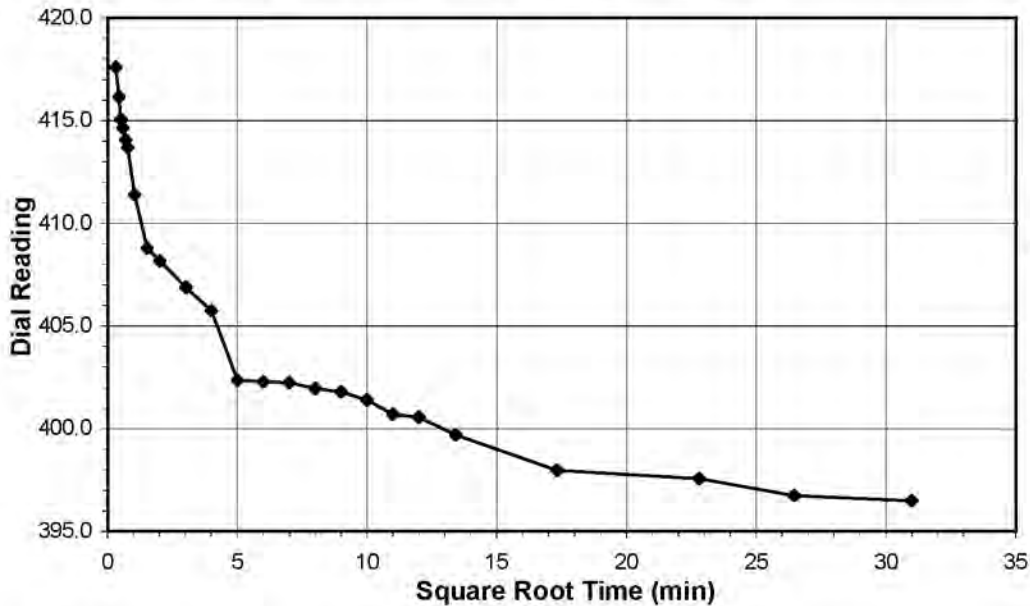
Tested By DB Date 11/5/13 Checked By TM Date 12/5/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

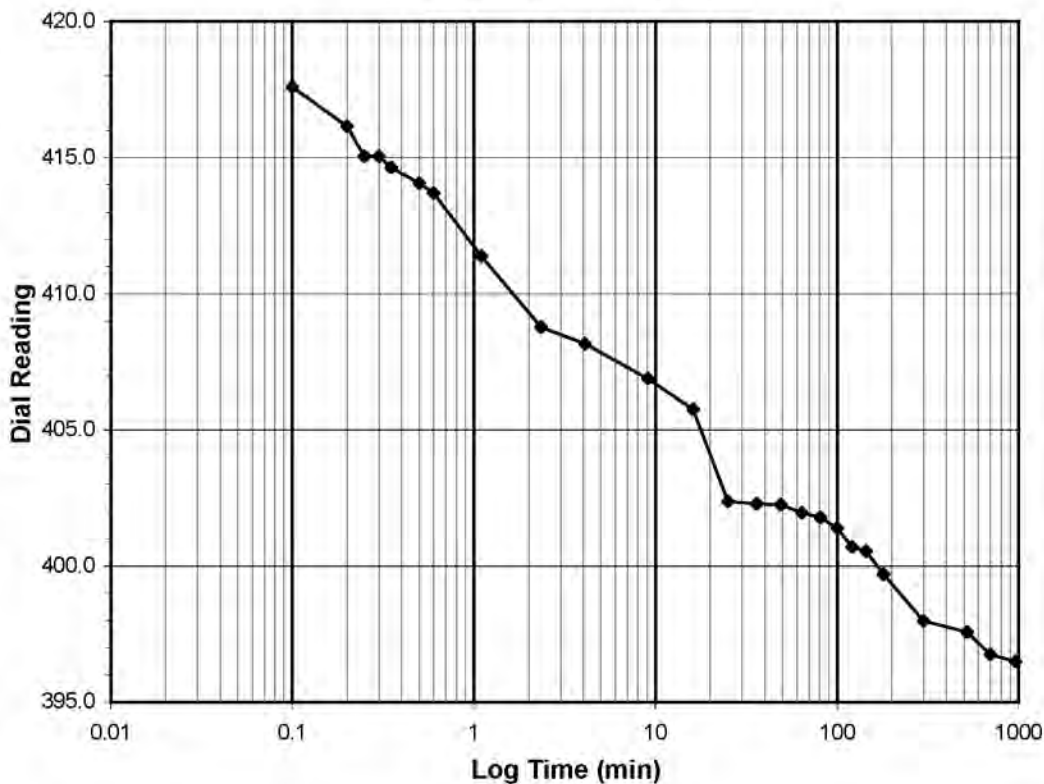
Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **396.5**
 Consolidometer No. **G1418**
 1 Division (in) 0.0001

Start Date 11/5/13
 Start Time 21:25:37

Elapsed Time (min)	Dial Reading (div)
Initial	458.3
0.10	417.6
0.20	416.2
0.25	415.1
0.30	415.0
0.35	414.6
0.50	414.1
0.60	413.7
1.10	411.4
2.35	408.8
4.10	408.2
9.10	406.9
16.10	405.7
25.10	402.4
36.10	402.3
49.10	402.2
64.12	402.0
81.12	401.8
100.12	401.4
121.12	400.7
144.12	400.6
180.12	399.7
300.12	398.0
520.12	397.6
700.12	396.7
960.12	396.5



Tested By DB Date 11/5/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

Sample Properties

Initial **Final**

Water Content

	Initial	Final
Tare Number	2736	2550
Wt. Tare & WS (g)	146.15	155.47
Wt. Tare & DS (g)	117.21	124.92
Wt. Water (g)	28.94	30.55
Wt. Tare (g)	6.66	6.72
Wt. DS (g)	110.55	118.20
Water Content (%)	26.18	25.85

Sample Parameters

	Initial	Final
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9657
Sample Volume (cm ³)	80.44	77.68
Wt. Wet Sample + Ring (g)	365.14	364.74
Wt. of Ring (g)	214.50	214.50
Wt. of Wet Sample (g)	150.64	150.24
Wet Density (pcf)	116.86	120.69
Wet Density (g/cm ³)	1.87	1.93
Water Content (%)	26.18	25.85
Wt. of Dry Sample (g)	119.39	119.39
Dry Density (pcf)	92.61	95.90
Dry Density (g/cm ³)	1.48	1.54
Void Ratio	0.7653	0.7047
Saturation (%)	89.62	96.09
Specific Gravity	2.62	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.48417	0.76529
0.25	97.0	17.6	79.4	25.198	79.801	1.49605	0.75128
0.5	117.0	27.0	90.0	25.171	79.716	1.49766	0.74940
1	182.9	40.4	142.6	25.038	79.293	1.50564	0.74012
2	232.0	66.6	165.4	24.980	79.109	1.50914	0.73609
4	297.6	97.5	200.1	24.892	78.830	1.51448	0.72997
1	248.6	58.5	190.1	24.917	78.910	1.51294	0.73173
0.25	206.4	28.5	177.8	24.948	79.009	1.51105	0.73390
0.5	226.8	33.9	192.9	24.910	78.888	1.51336	0.73124
1	243.6	48.4	195.2	24.904	78.870	1.51372	0.73084
2	271.5	68.5	203.0	24.884	78.807	1.51492	0.72946
4	316.5	97.9	218.6	24.845	78.681	1.51735	0.72670
8	395.3	129.5	265.8	24.725	78.302	1.52470	0.71837
16	511.3	176.6	334.7	24.550	77.748	1.53556	0.70621
32	683.3	251.4	431.9	24.303	76.966	1.55117	0.68905
8	533.7	142.9	390.8	24.407	77.297	1.54453	0.69631
2	458.3	89.7	368.6	24.464	77.475	1.54097	0.70022
0.5	396.5	53.4	343.1	24.528	77.680	1.53691	0.70472

Tested By DB Date 10/24/13 Input Checked By TM Date 12/5/13

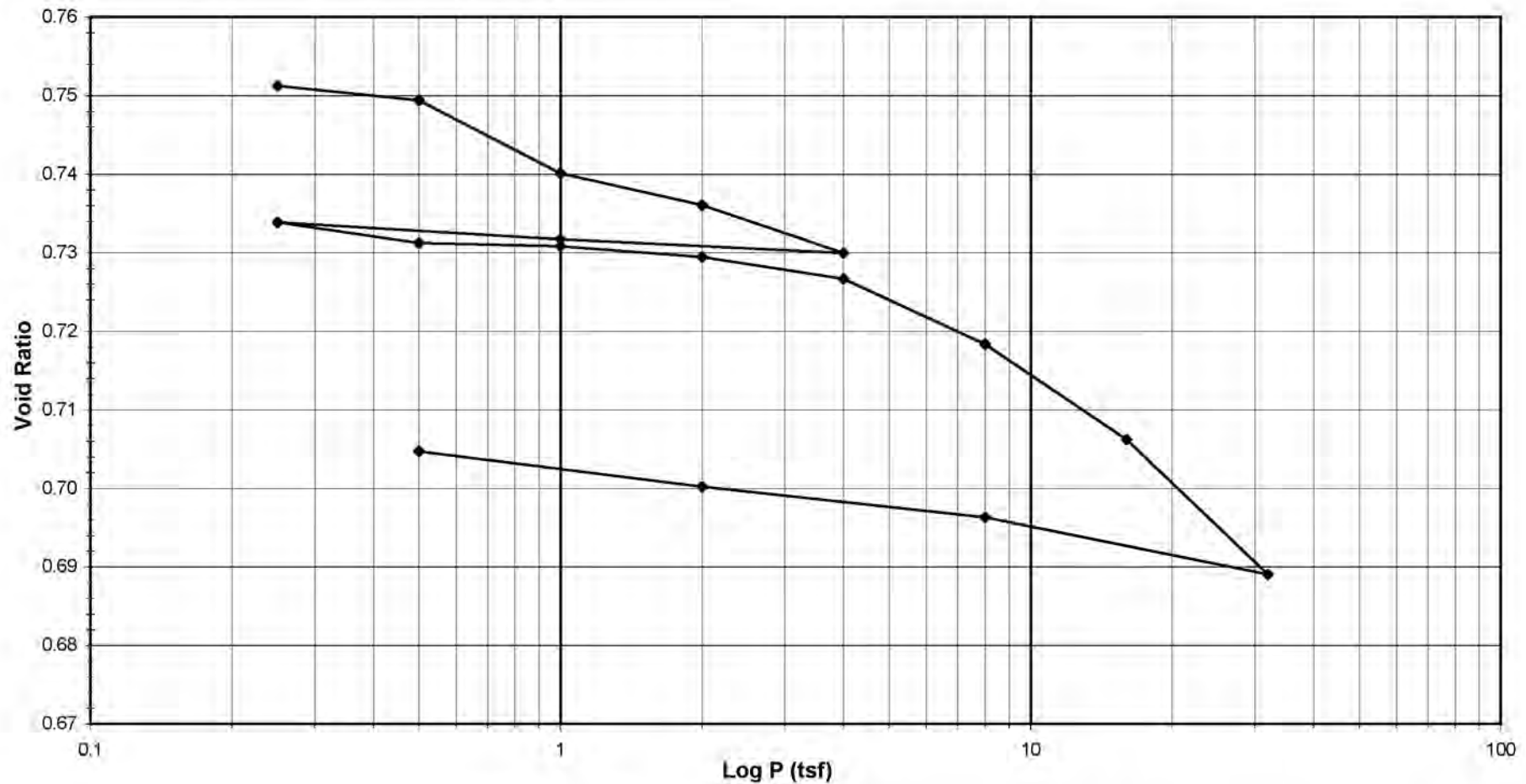
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 10/24/13

Approved By RJO Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-037

Boring No. R-6-1b
 Depth (ft) 356.6-356.9
 Sample No. ST-66
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final	Load Increment	Dial Reading @ t₅₀	Machine Deflection	Corrected Dial Reading @ t₅₀	Sample Height @ t₅₀	Time t₅₀	C_v
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
<i>Water Content</i>									
Tare Number	2736	2550							
Wt. Tare & WS (g)	146.15	155.47							
Wt. Tare & DS (g)	117.21	124.92							
Wt. Water (g)	28.94	30.55							
Wt. Tare (g)	6.66	6.72							
Wt. DS (g)	110.55	118.2							
Water Content (%)	26.18	25.85							
<i>Sample Parameters</i>									
Sample Diameter (in)	2.5	2.5							
Sample Height (in)	1.0000	0.9657							
Sample Volume (cm ³)	80.44	77.68							
Wt. Wet Sample + Ring (g)	365.14	364.74							
Wt. of Ring (g)	214.50	214.50							
Wt. of Wet Sample (g)	150.64	150.24							
Wet Density (pcf)	116.86	120.69							
Wet Density (g/cm ³)	1.87	1.93							
Water Content (%)	26.18	25.85							
Wt. of Dry Sample (g)	119.39	119.39							
Dry Density (pcf)	92.61	95.90							
Dry Density (g/cm ³)	1.48	1.54							
Void Ratio	0.7653	0.7047							
Saturation (%)	89.62	96.09							
Specific Gravity	2.62	Measured							

Tested By DB Date 10/24/13 Input Checked By TM Date 12/5/13

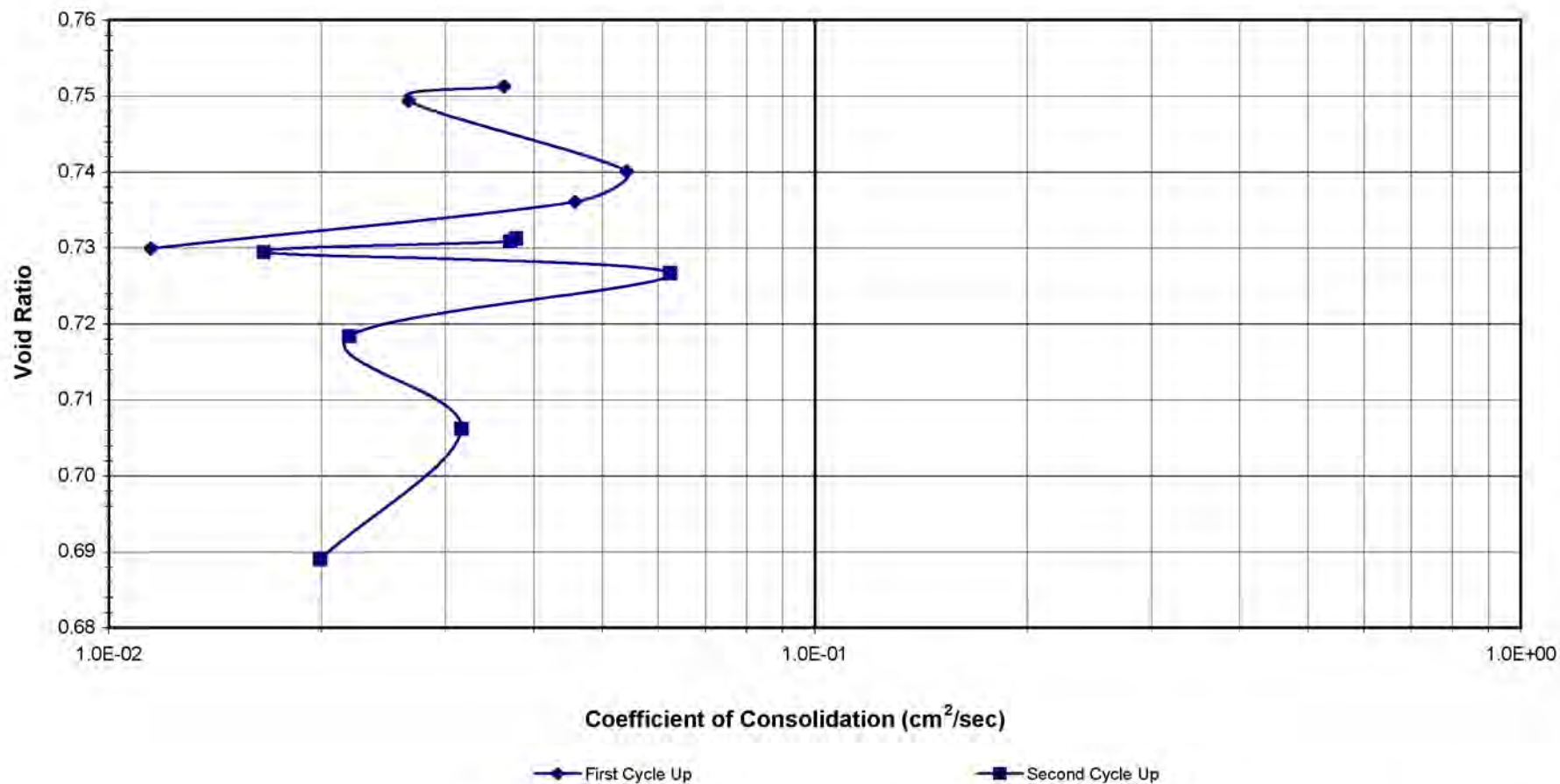
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-037

Boring No. R-6-1b
Depth (ft) 356.6-356.9
Sample No. ST-66
Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 10/24/13

Approved By RJO Date 12/5/13

DCN: CT-24 AutoT50-CV, Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	356.6-356.9
Project No.	2013-465-001	Sample No.	ST-66
Lab ID #	2013-465-001-037		

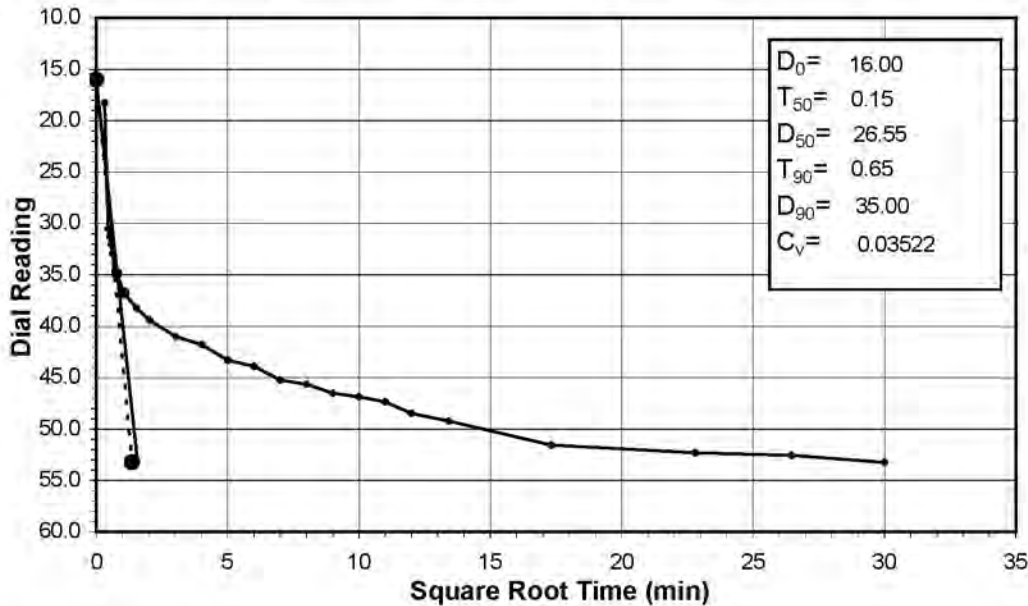
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1393 : G1394	5/13/14 : 5/15/14
Oven	G624 : G1387	11/9/13 : 8/16/14
Consolidometer	G1418	1/9/14
Load Cell	G1419	1/9/14
LVDT	G1420	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

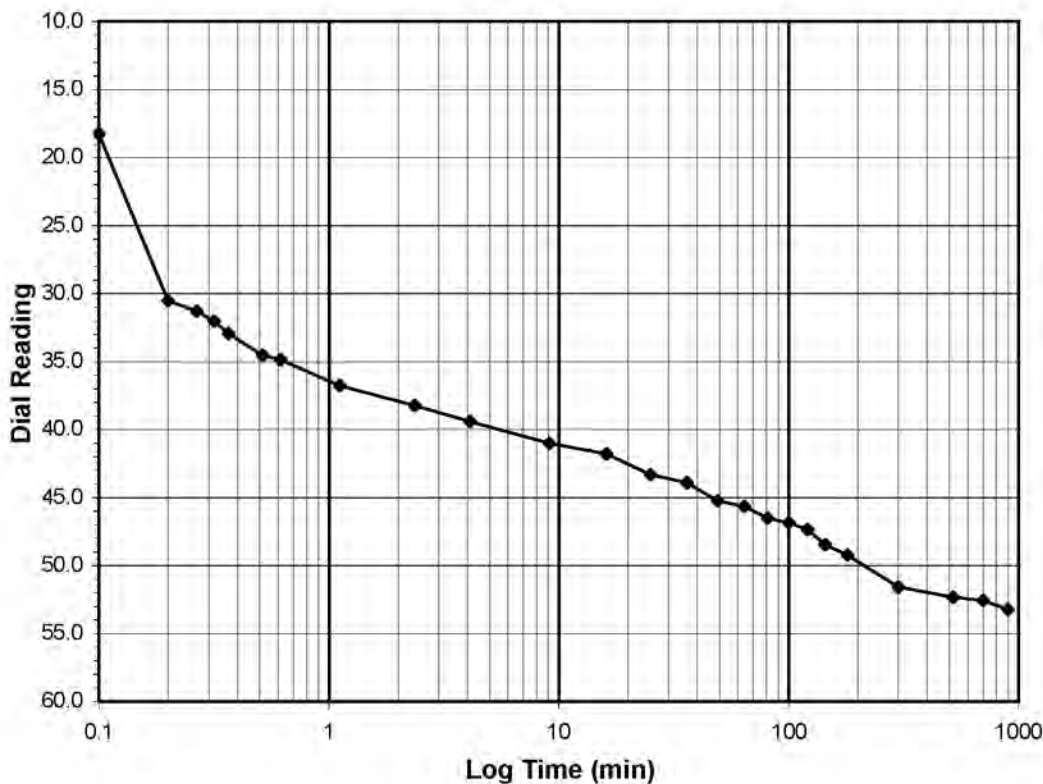
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 53.2
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/29/13
 Start Time 9:07:48

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	18.2
0.20	30.5
0.27	31.3
0.32	32.0
0.37	32.9
0.52	34.5
0.62	34.9
1.12	36.8
2.37	38.2
4.12	39.4
9.12	41.0
16.12	41.8
25.12	43.3
36.12	43.9
49.12	45.2
64.12	45.6
81.12	46.5
100.13	46.9
121.13	47.4
144.13	48.5
180.13	49.2
300.13	51.6
520.13	52.3
700.13	52.6
900.30	53.2



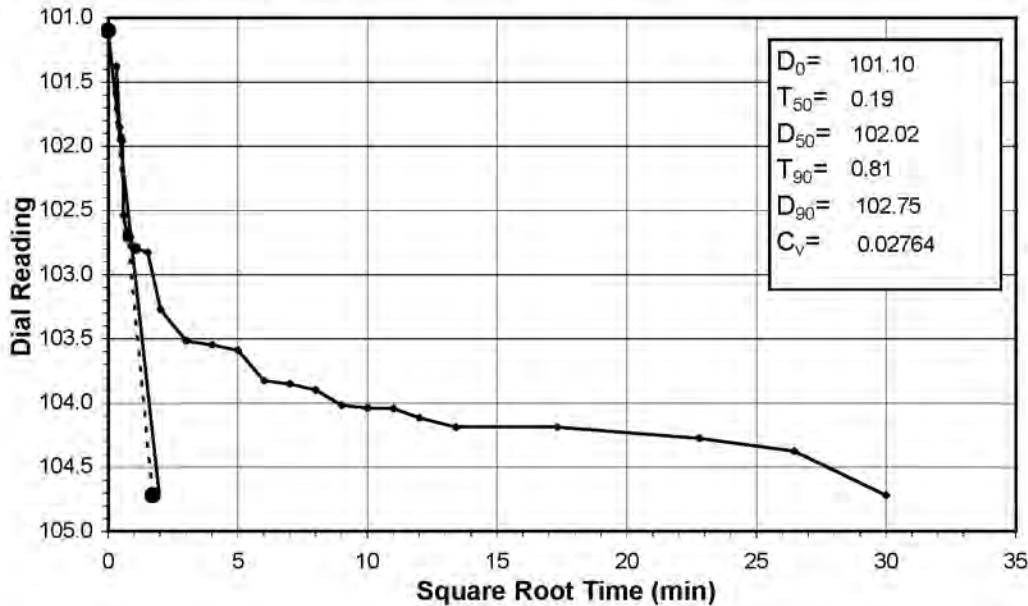
Tested By DB Date 11/29/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

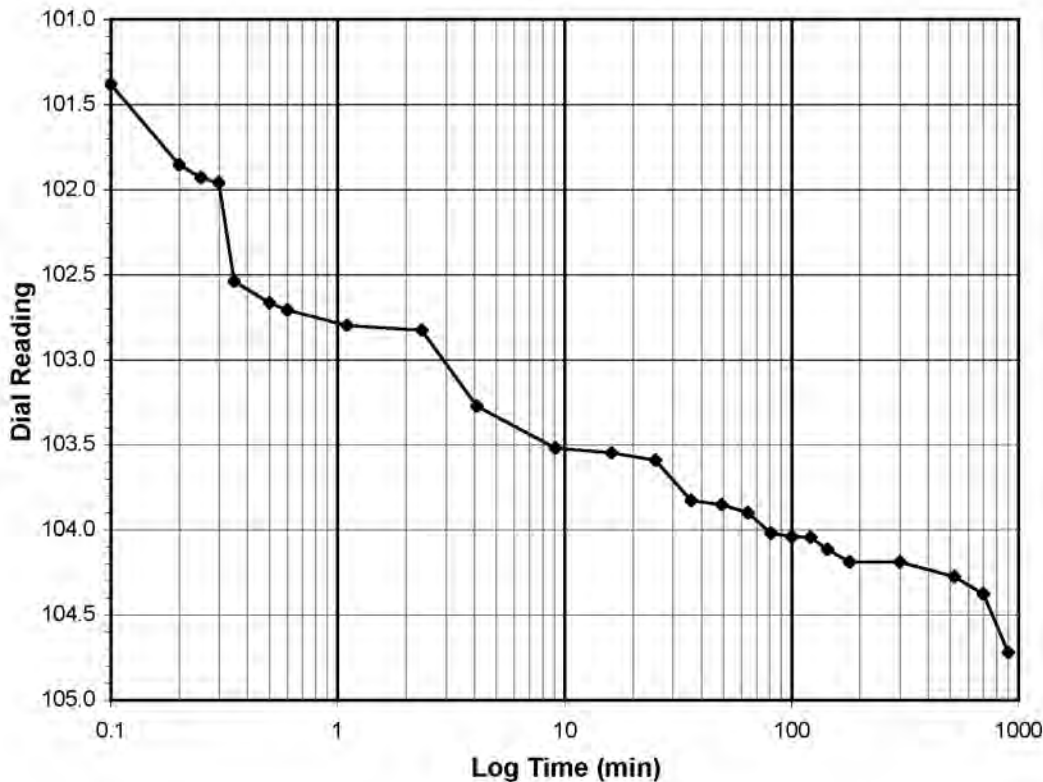
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **104.7**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/30/13
 Start Time 0:08:06

Elapsed Time (min)	Dial Reading (div)
Initial	53.2
0.10	101.4
0.20	101.9
0.25	101.9
0.30	102.0
0.35	102.5
0.50	102.7
0.60	102.7
1.10	102.8
2.35	102.8
4.10	103.3
9.10	103.5
16.10	103.5
25.10	103.6
36.10	103.8
49.10	103.9
64.12	103.9
81.12	104.0
100.12	104.0
121.12	104.0
144.12	104.1
180.12	104.2
300.12	104.2
520.12	104.3
700.12	104.4
900.18	104.7



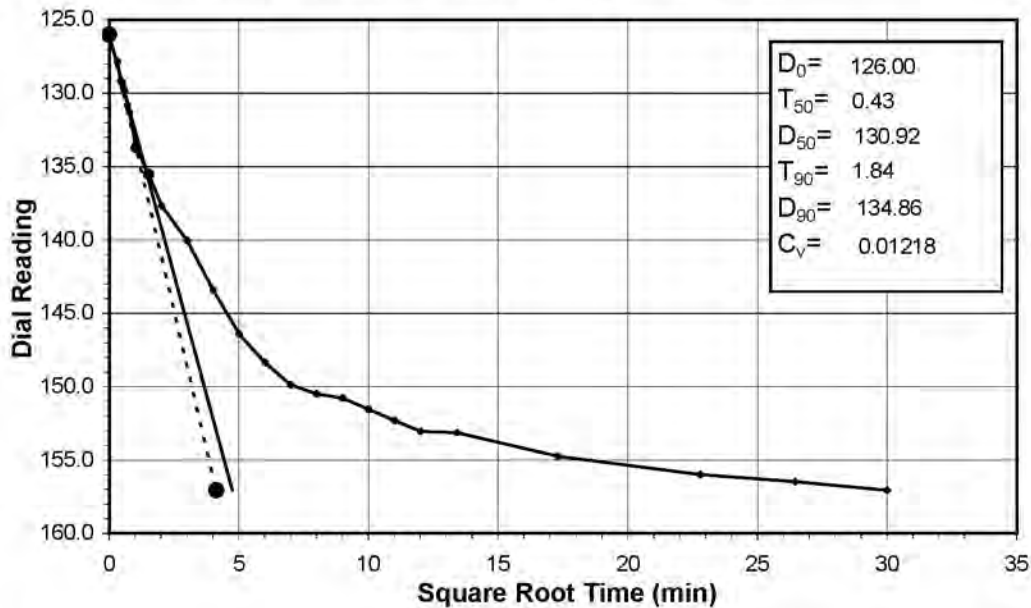
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

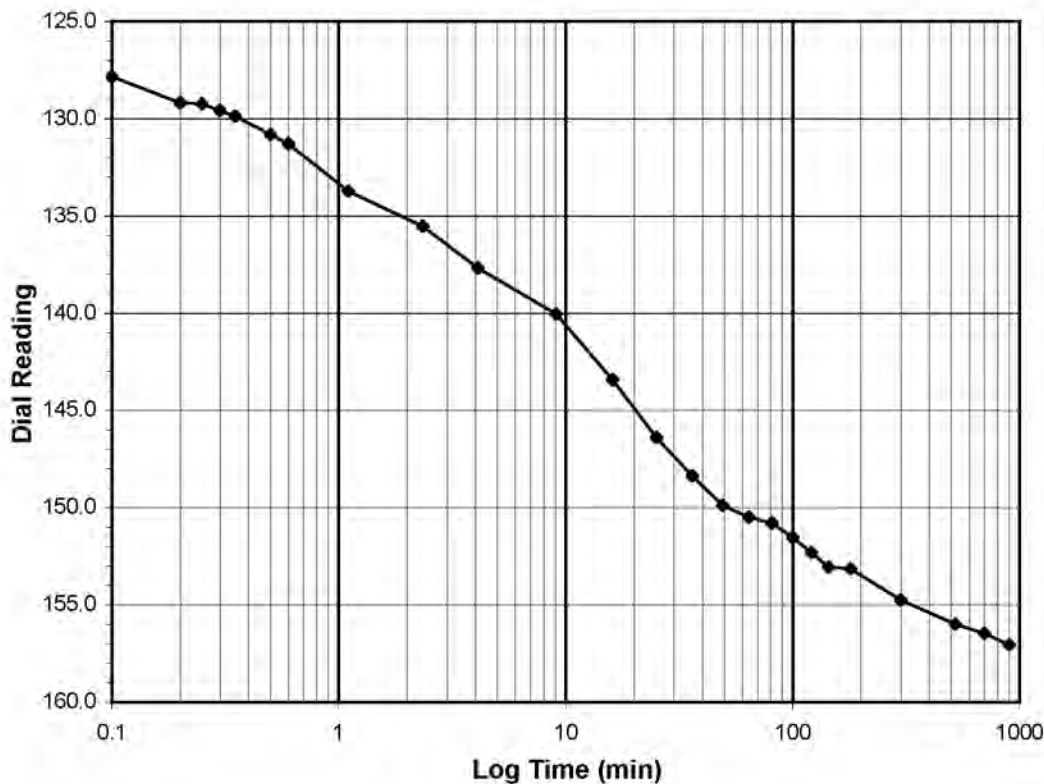
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 157.0
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/30/13
 Start Time 15:08:18

Elapsed Time (min)	Dial Reading (div)
Initial	104.7
0.10	127.8
0.20	129.2
0.25	129.2
0.30	129.6
0.35	129.9
0.50	130.8
0.60	131.3
1.10	133.7
2.35	135.5
4.10	137.7
9.10	140.0
16.10	143.4
25.10	146.4
36.12	148.4
49.12	149.9
64.12	150.5
81.12	150.8
100.12	151.5
121.12	152.3
144.12	153.1
180.12	153.1
300.12	154.8
520.12	156.0
700.12	156.5
900.18	157.0



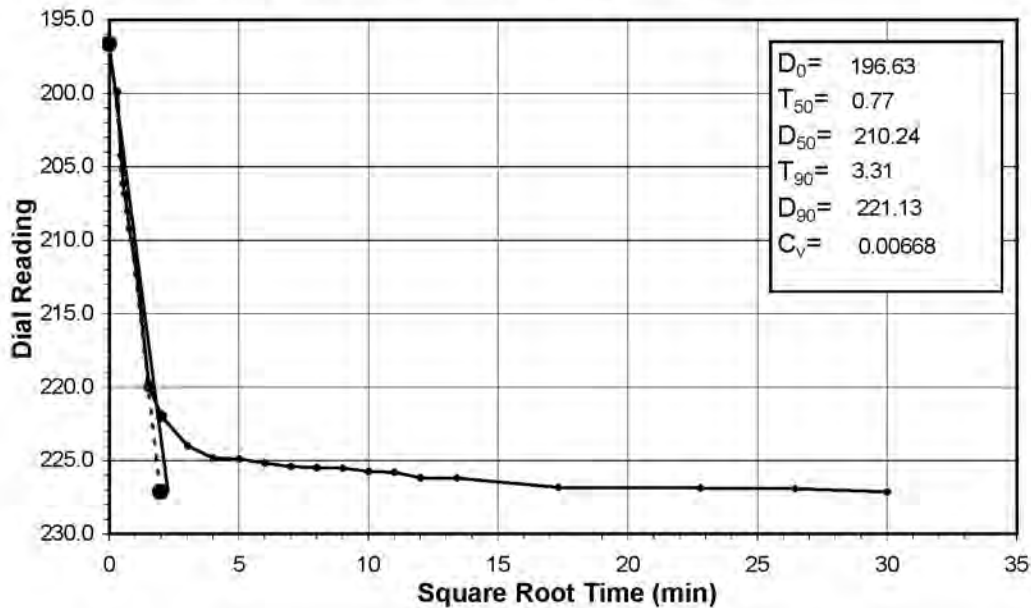
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

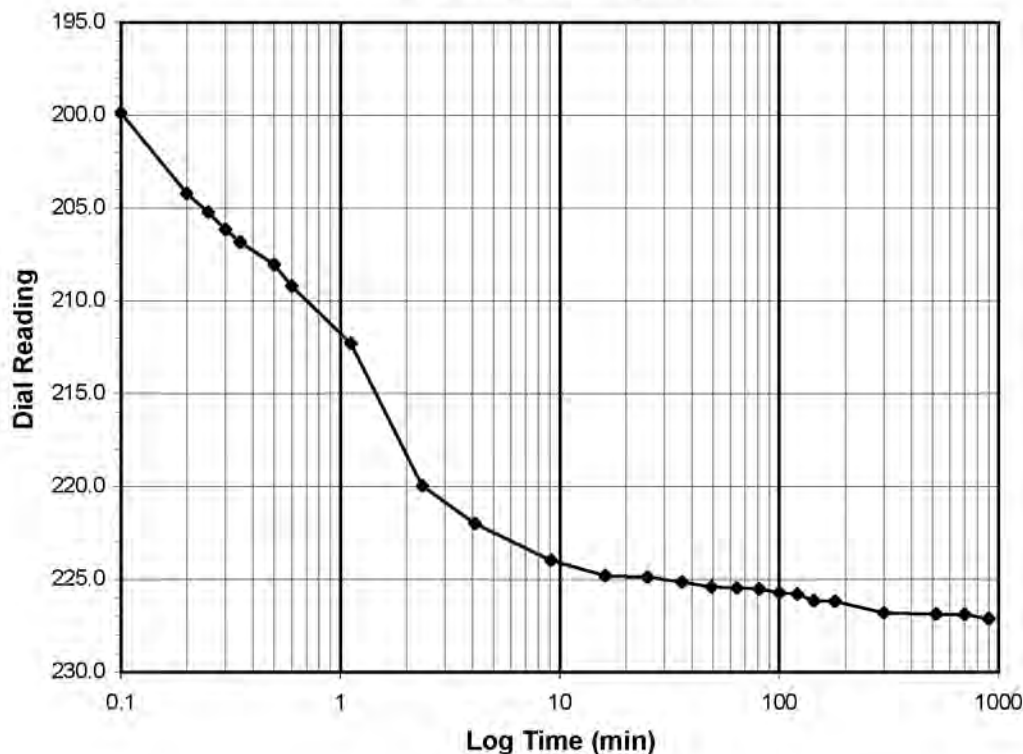
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 227.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/1/13
 Start Time 6:08:29



Elapsed Time (min)	Dial Reading (div)
Initial	157.0
0.10	199.9
0.20	204.2
0.25	205.2
0.30	206.2
0.35	206.8
0.50	208.0
0.60	209.2
1.12	212.3
2.37	220.0
4.12	222.0
9.12	224.0
16.12	224.8
25.12	224.9
36.12	225.2
49.12	225.4
64.12	225.5
81.12	225.5
100.12	225.7
121.12	225.8
144.12	226.2
180.12	226.2
300.12	226.8
520.12	226.9
700.12	226.9
900.08	227.1

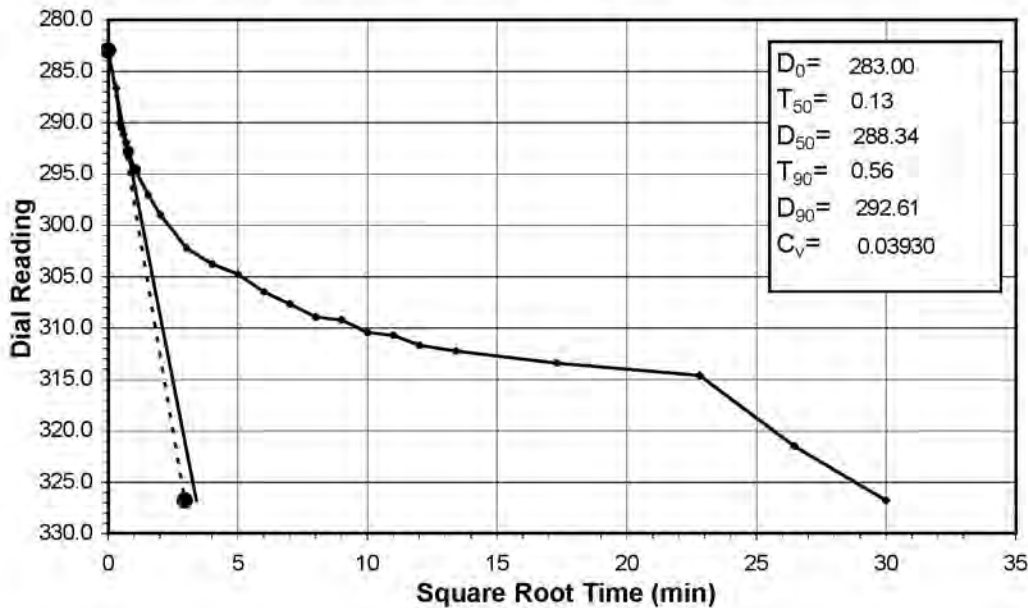
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

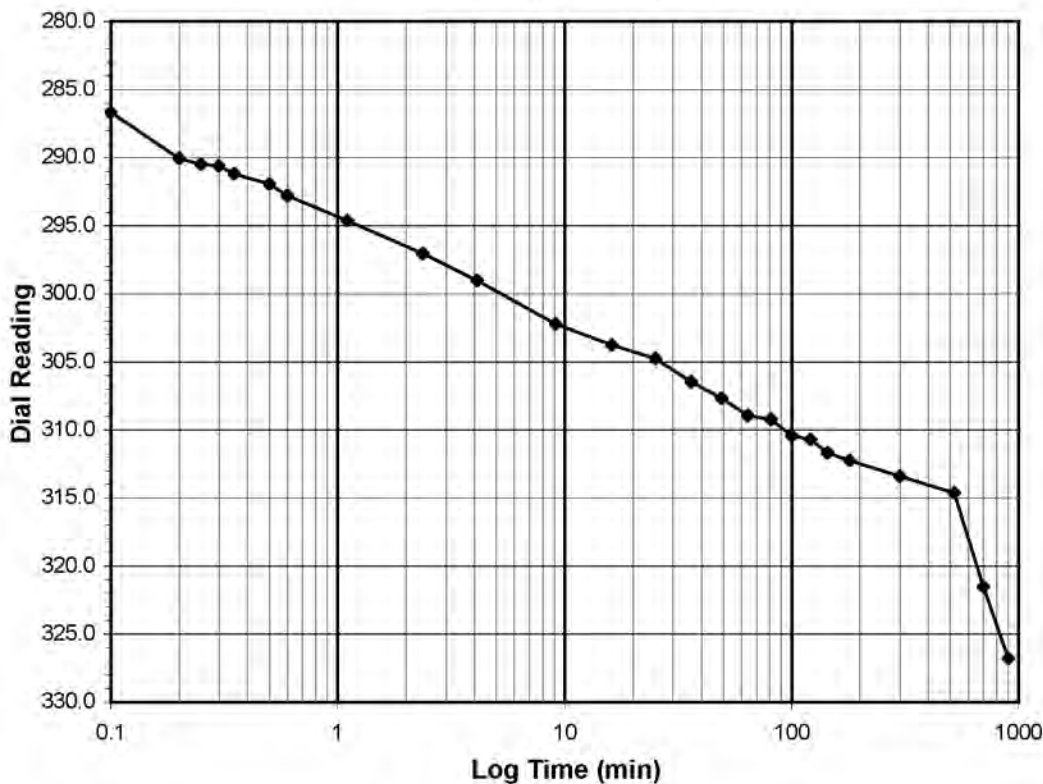
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **326.8**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 12/1/13
 Start Time 21:08:34

Elapsed Time (min)	Dial Reading (div)
Initial	227.1
0.10	286.6
0.20	290.1
0.25	290.5
0.30	290.6
0.35	291.2
0.50	291.9
0.60	292.8
1.10	294.6
2.37	297.0
4.12	299.0
9.12	302.2
16.12	303.8
25.12	304.8
36.12	306.5
49.12	307.7
64.12	308.9
81.12	309.2
100.12	310.4
121.12	310.7
144.12	311.7
180.12	312.3
300.12	313.4
520.12	314.6
700.12	321.5
900.05	326.8



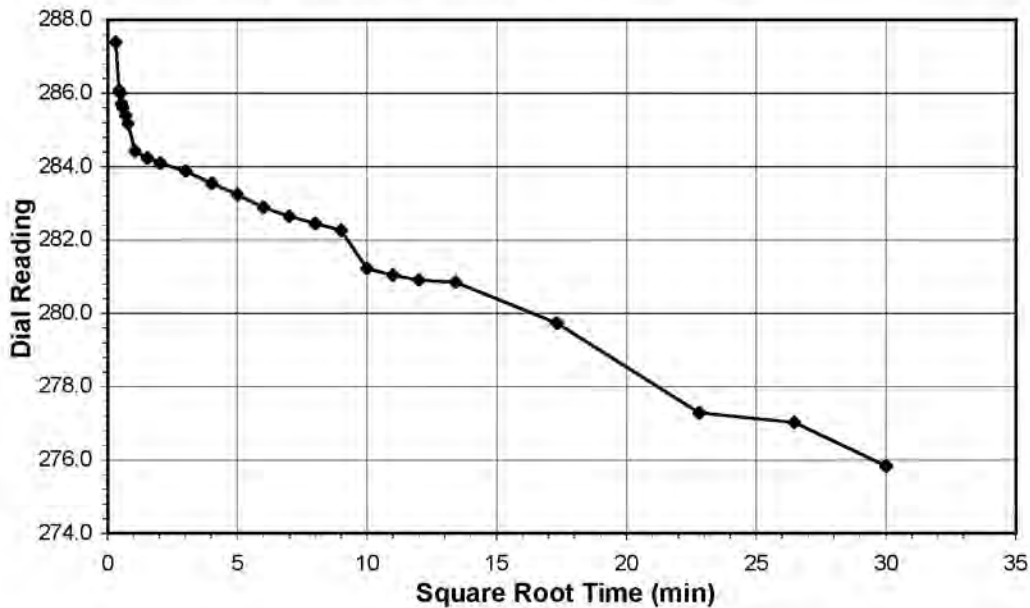
Tested By DB Date 12/1/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

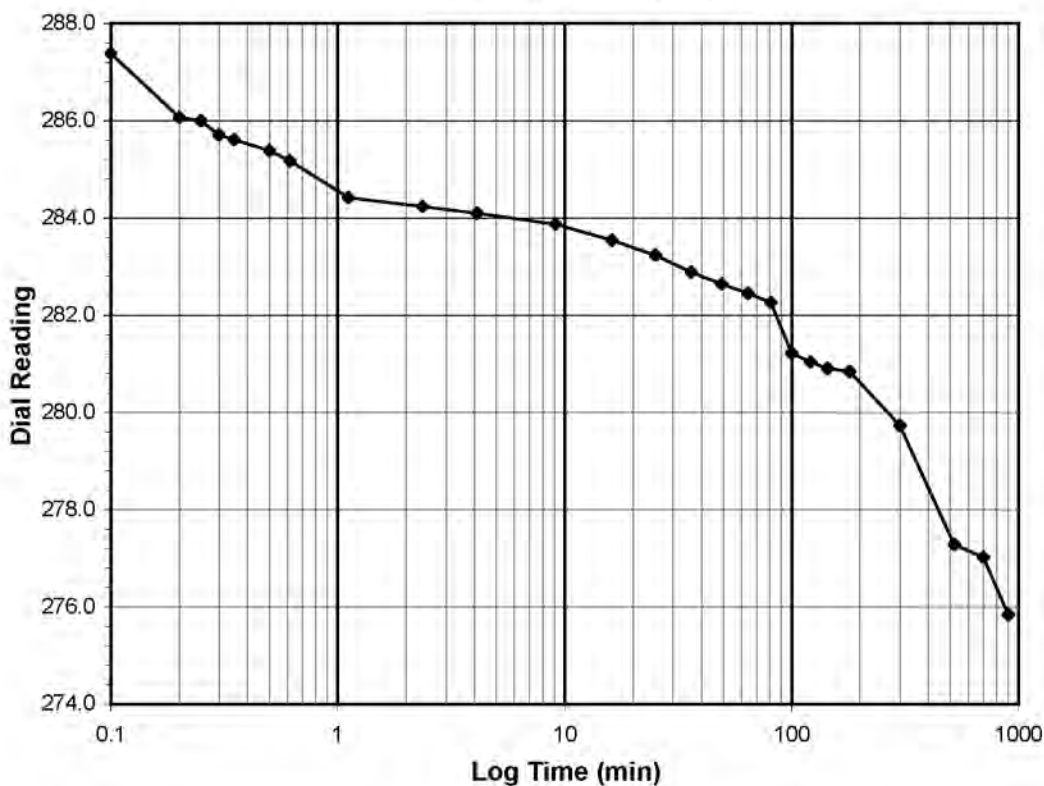
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
Final Reading (div) 275.8
Consolidometer No. G1418
1 Division (in) 0.0001

Start Date 12/2/13
Start Time 12:08:37

Elapsed Time (min)	Dial Reading (div)
Initial	326.8
0.10	287.4
0.20	286.1
0.25	286.0
0.30	285.7
0.35	285.6
0.50	285.4
0.62	285.2
1.12	284.4
2.37	284.2
4.12	284.1
9.12	283.9
16.12	283.5
25.12	283.2
36.12	282.9
49.12	282.6
64.12	282.5
81.12	282.3
100.12	281.2
121.12	281.0
144.12	280.9
180.12	280.8
300.13	279.7
520.13	277.3
700.13	277.0
900.17	275.8



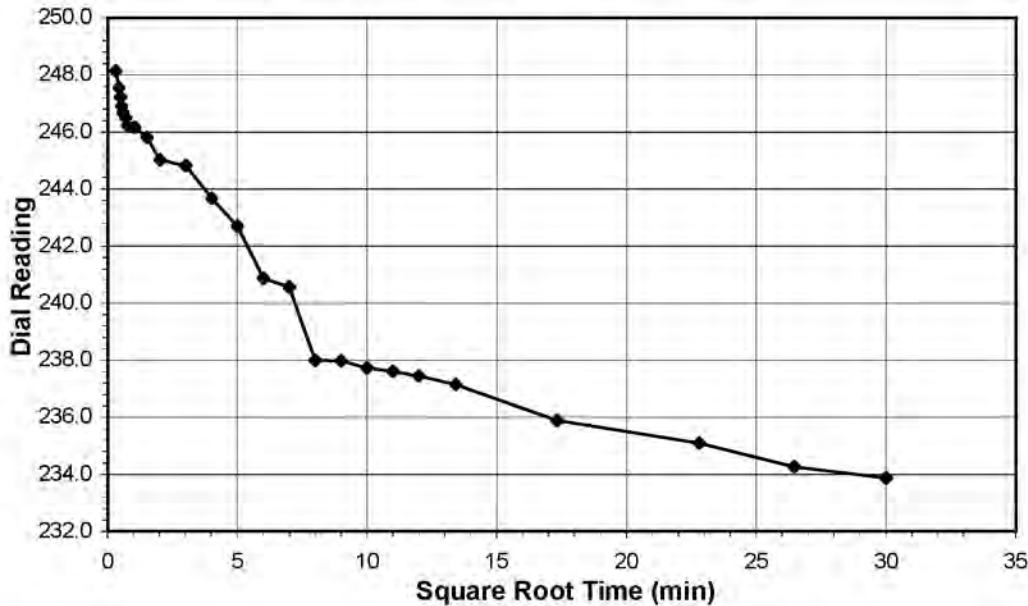
Tested By DB **Date** 12/2/13 **Checked By** TM **Date** 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

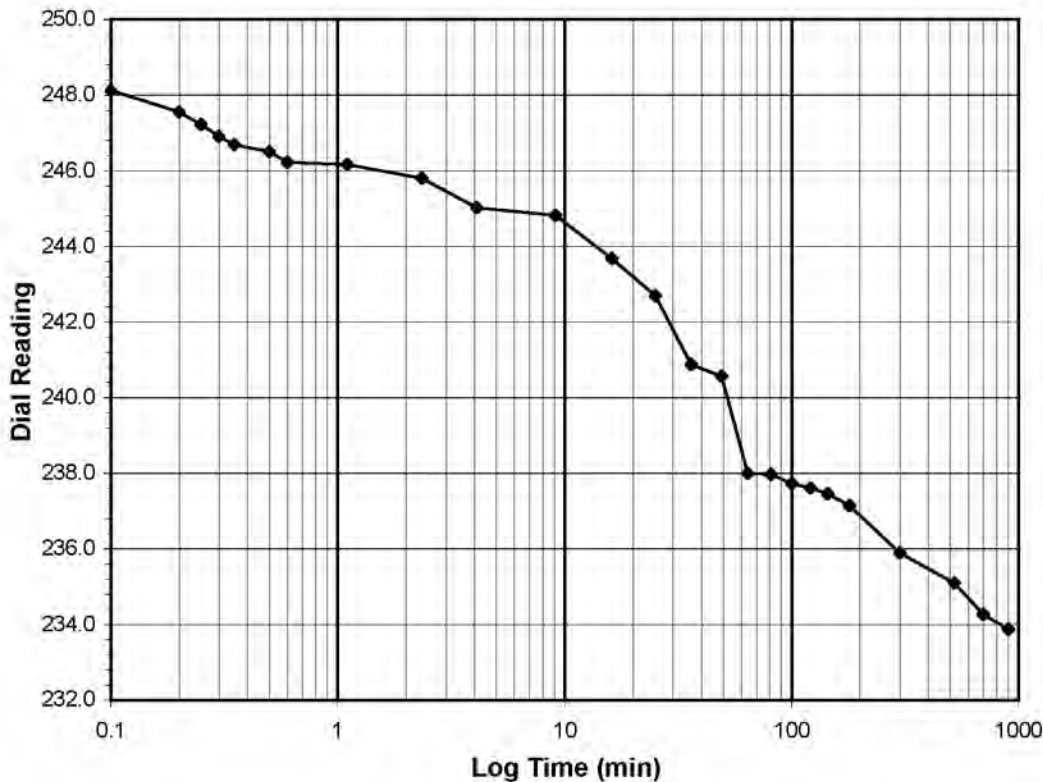
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 233.9
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/3/13
 Start Time 3:08:47

Elapsed Time (min)	Dial Reading (div)
Initial	275.8
0.10	248.1
0.20	247.6
0.25	247.2
0.30	246.9
0.35	246.7
0.50	246.5
0.60	246.2
1.10	246.2
2.35	245.8
4.10	245.0
9.12	244.8
16.12	243.7
25.12	242.7
36.12	240.9
49.12	240.6
64.12	238.0
81.12	238.0
100.12	237.7
121.12	237.6
144.12	237.5
180.12	237.1
300.12	235.9
520.12	235.1
700.13	234.3
900.40	233.9



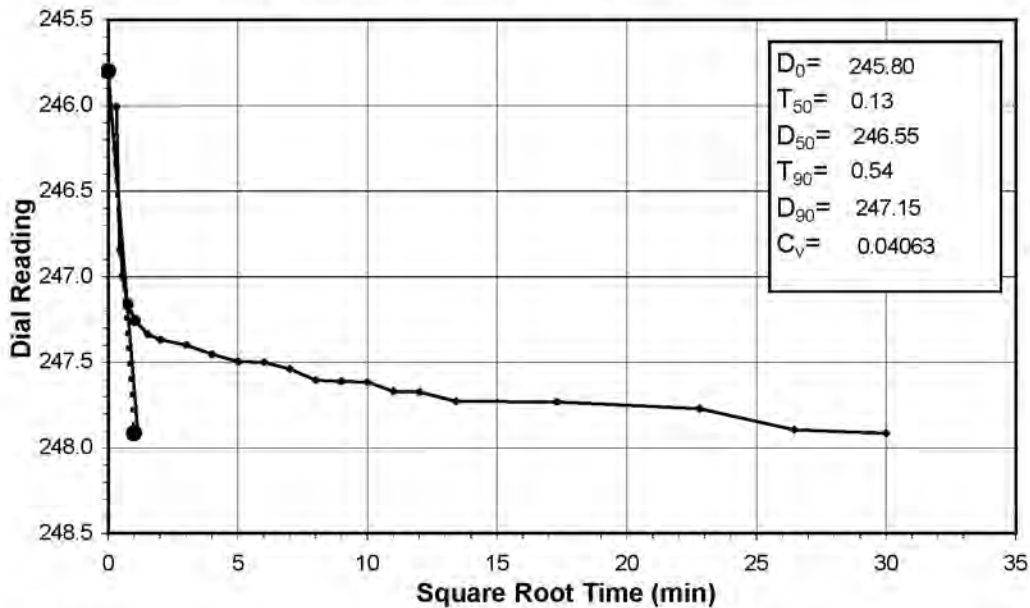
Tested By DB Date 12/3/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

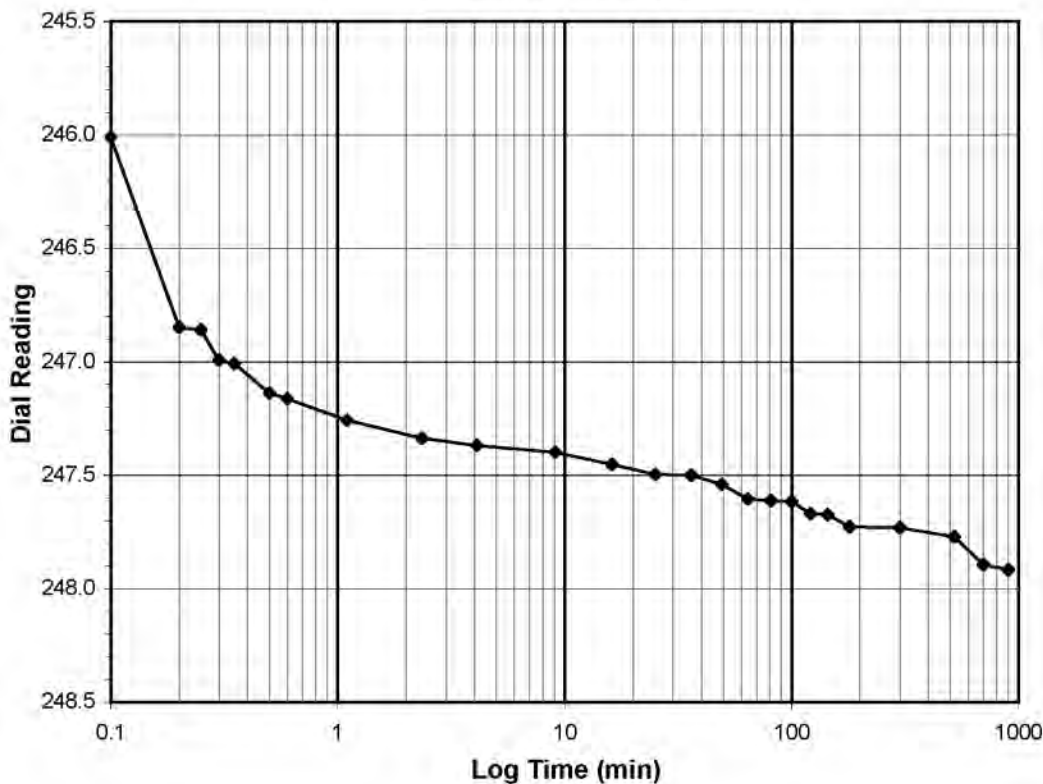
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **247.9**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 12/3/13
 Start Time 18:09:11

Elapsed Time (min)	Dial Reading (div)
Initial	233.9
0.10	246.0
0.20	246.8
0.25	246.9
0.30	247.0
0.35	247.0
0.50	247.1
0.60	247.2
1.10	247.3
2.35	247.3
4.10	247.4
9.10	247.4
16.12	247.5
25.12	247.5
36.12	247.5
49.12	247.5
64.12	247.6
81.12	247.6
100.12	247.6
121.12	247.7
144.12	247.7
180.12	247.7
300.12	247.7
520.12	247.8
700.13	247.9
900.12	247.9



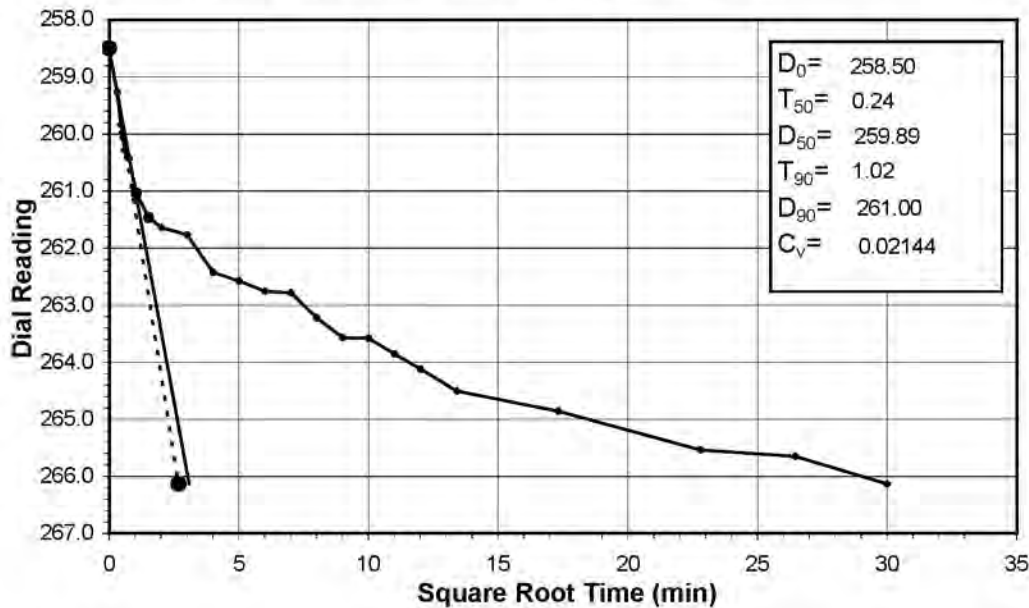
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

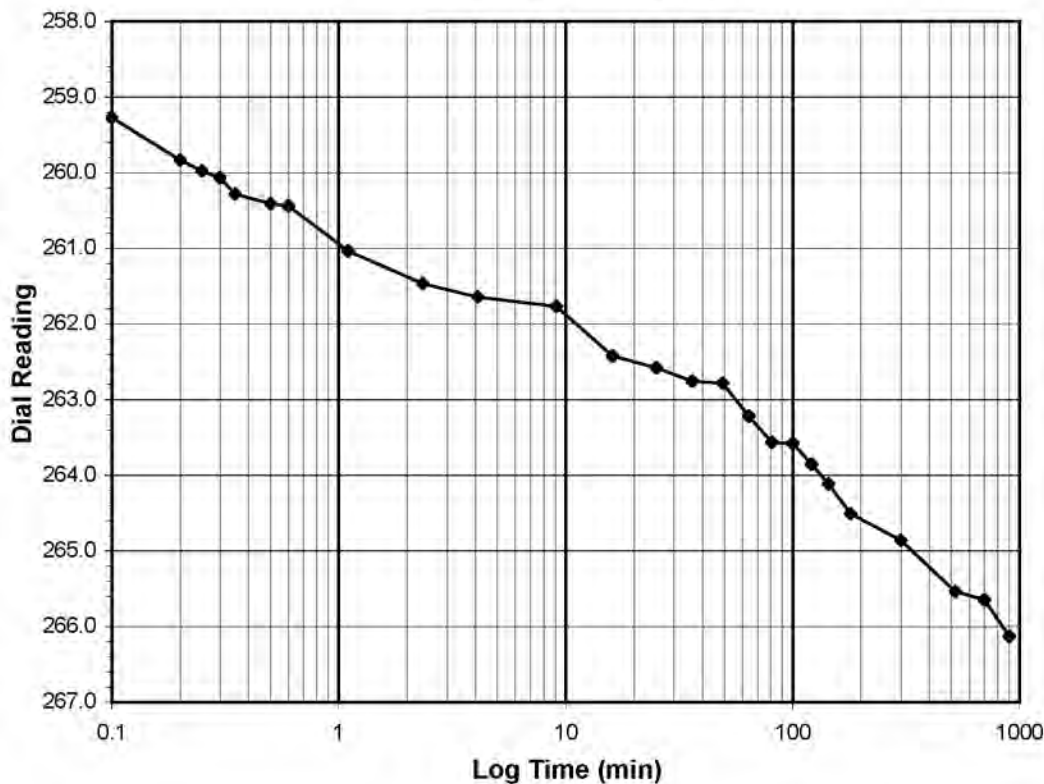
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 266.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/4/13
 Start Time 9:09:18

Elapsed Time (min)	Dial Reading (div)
Initial	247.9
0.10	259.3
0.20	259.8
0.25	260.0
0.30	260.1
0.35	260.3
0.50	260.4
0.60	260.4
1.10	261.0
2.35	261.5
4.10	261.6
9.10	261.8
16.10	262.4
25.10	262.6
36.12	262.8
49.12	262.8
64.12	263.2
81.12	263.6
100.12	263.6
121.12	263.9
144.12	264.1
180.12	264.5
300.12	264.9
520.12	265.5
700.12	265.6
900.05	266.1



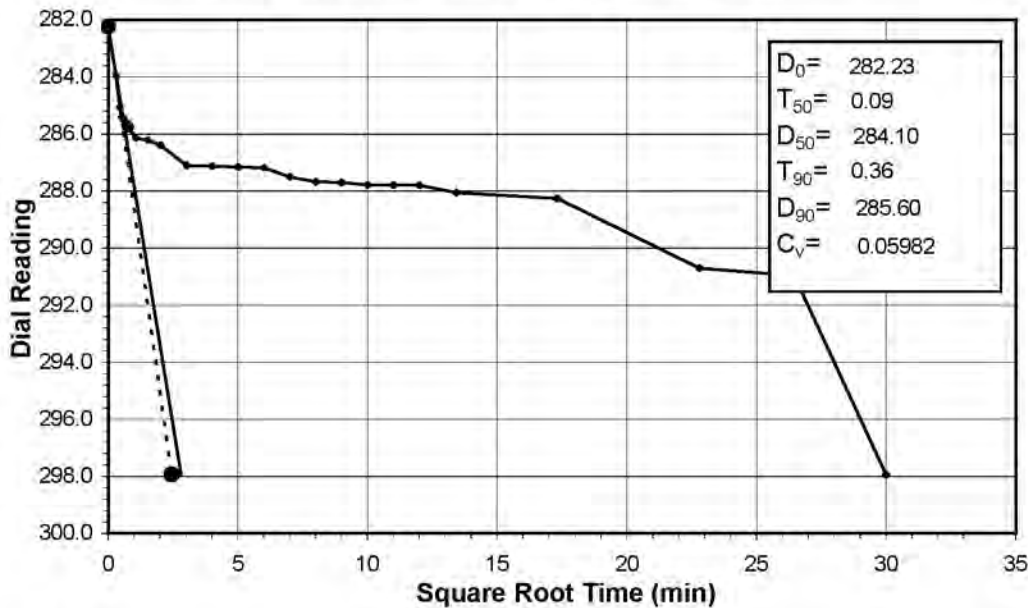
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ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

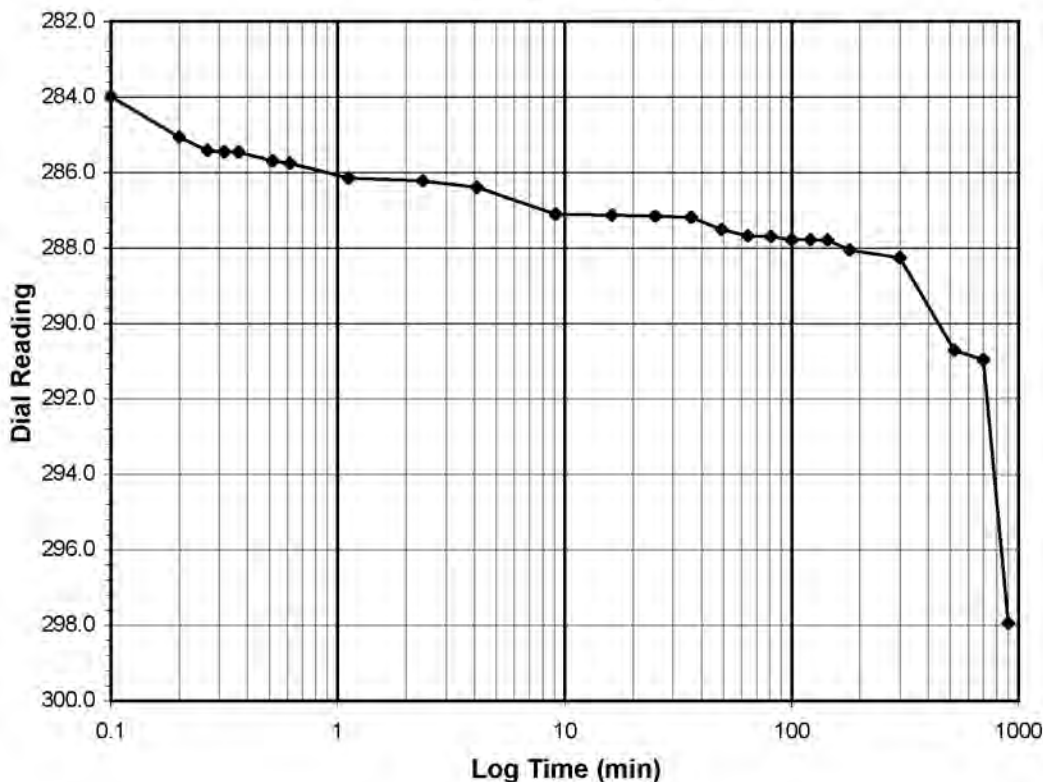
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 297.9
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/5/13
 Start Time 0:09:21

Elapsed Time (min)	Dial Reading (div)
Initial	266.1
0.10	284.0
0.20	285.1
0.27	285.4
0.32	285.4
0.37	285.5
0.52	285.7
0.62	285.8
1.12	286.1
2.37	286.2
4.12	286.4
9.12	287.1
16.12	287.1
25.12	287.2
36.12	287.2
49.12	287.5
64.12	287.7
81.13	287.7
100.13	287.8
121.13	287.8
144.13	287.8
180.13	288.1
300.13	288.3
520.13	290.7
700.13	291.0
900.15	297.9



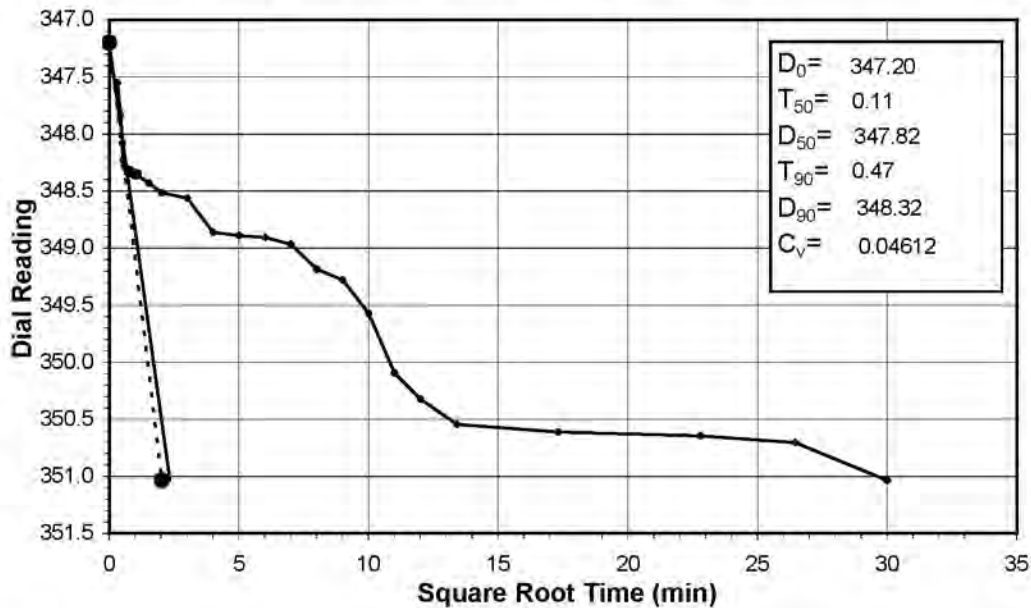
Tested By DB Date 12/5/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

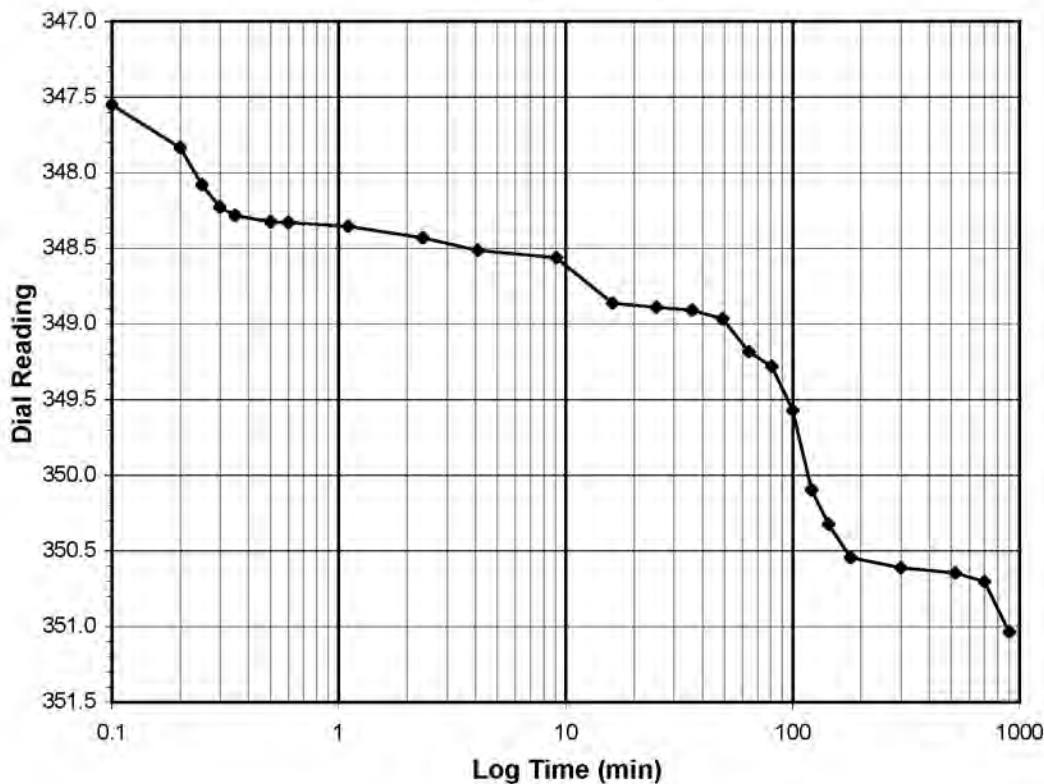
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-4.0
 Final Reading (div) 351.0
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/5/13
 Start Time 15:09:30

Elapsed Time (min)	Dial Reading (div)
Initial	297.9
0.10	347.6
0.20	347.8
0.25	348.1
0.30	348.2
0.35	348.3
0.50	348.3
0.60	348.3
1.10	348.4
2.35	348.4
4.10	348.5
9.10	348.6
16.10	348.9
25.10	348.9
36.12	348.9
49.12	349.0
64.12	349.2
81.12	349.3
100.12	349.6
121.12	350.1
144.12	350.3
180.12	350.5
300.12	350.6
520.12	350.6
700.12	350.7
900.10	351.0



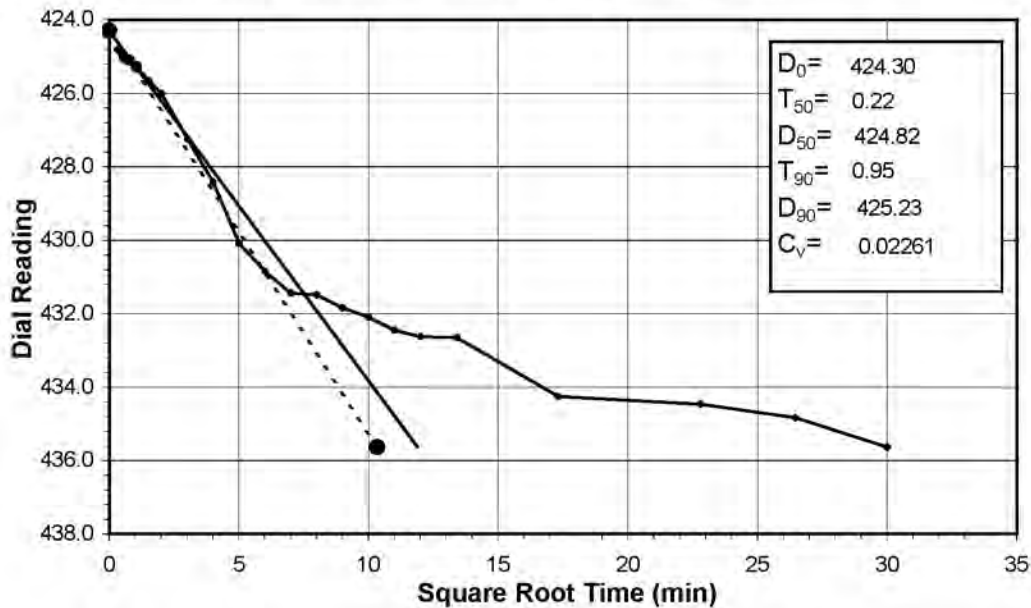
Tested By DB Date 12/5/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

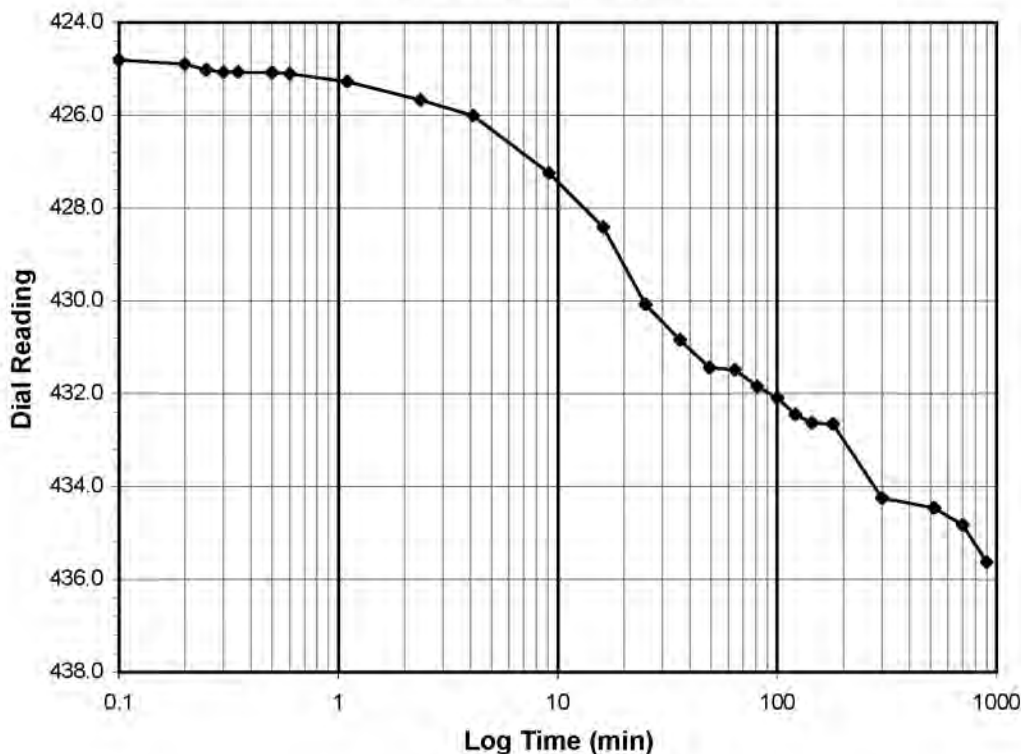
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **435.6**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 12/6/13
 Start Time 6:09:36



Elapsed Time (min)	Dial Reading (div)
Initial	351.0
0.10	424.8
0.20	424.9
0.25	425.0
0.30	425.1
0.35	425.1
0.50	425.1
0.60	425.1
1.10	425.3
2.37	425.7
4.12	426.0
9.12	427.2
16.12	428.4
25.12	430.1
36.12	430.8
49.12	431.4
64.12	431.5
81.12	431.8
100.12	432.1
121.12	432.5
144.12	432.6
180.12	432.7
300.12	434.2
520.12	434.5
700.12	434.8
900.13	435.6

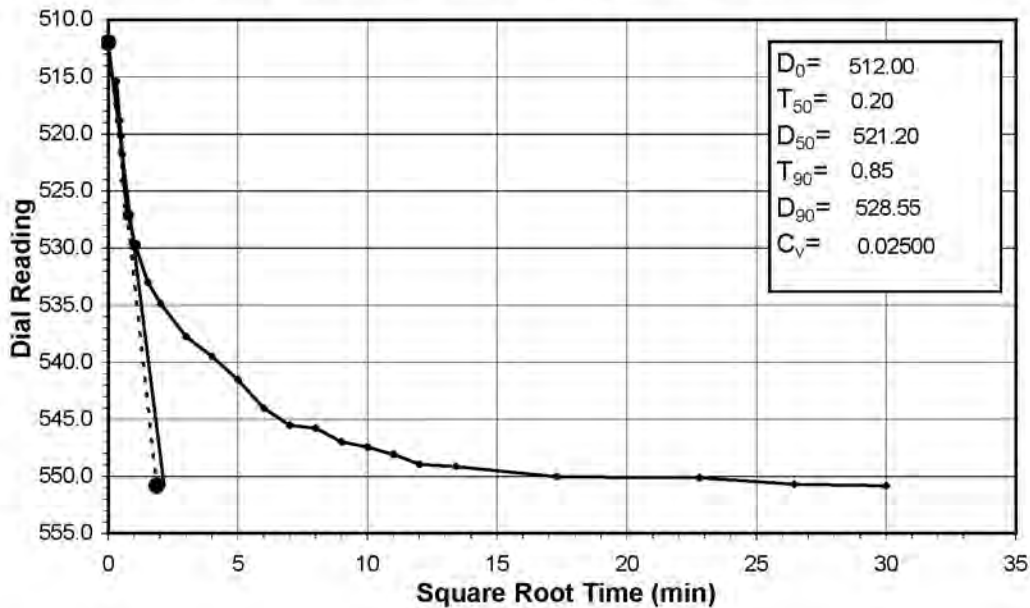
Tested By DB Date 12/6/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

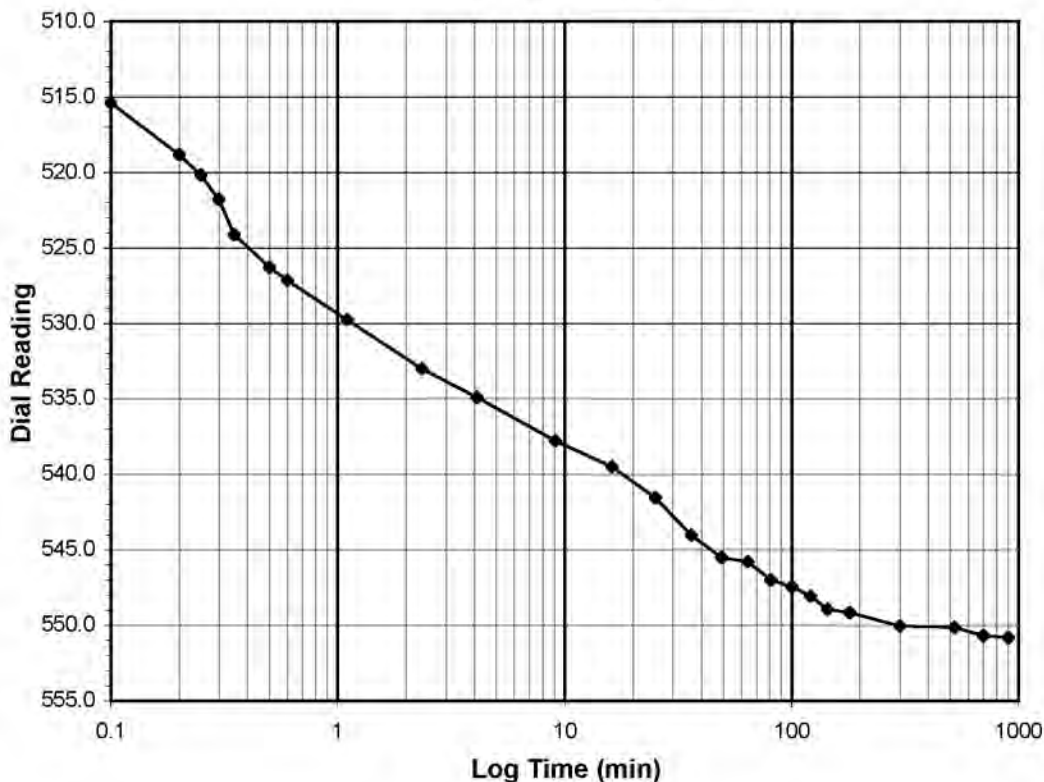
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 550.8
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/6/13
 Start Time 21:09:44

Elapsed Time (min)	Dial Reading (div)
Initial	435.6
0.10	515.4
0.20	518.8
0.25	520.2
0.30	521.8
0.35	524.1
0.50	526.3
0.60	527.1
1.10	529.8
2.35	533.0
4.10	534.9
9.10	537.8
16.12	539.5
25.12	541.5
36.12	544.0
49.12	545.5
64.12	545.8
81.12	547.0
100.12	547.4
121.12	548.1
144.12	548.9
180.12	549.1
300.12	550.0
520.12	550.1
700.12	550.7
900.05	550.8



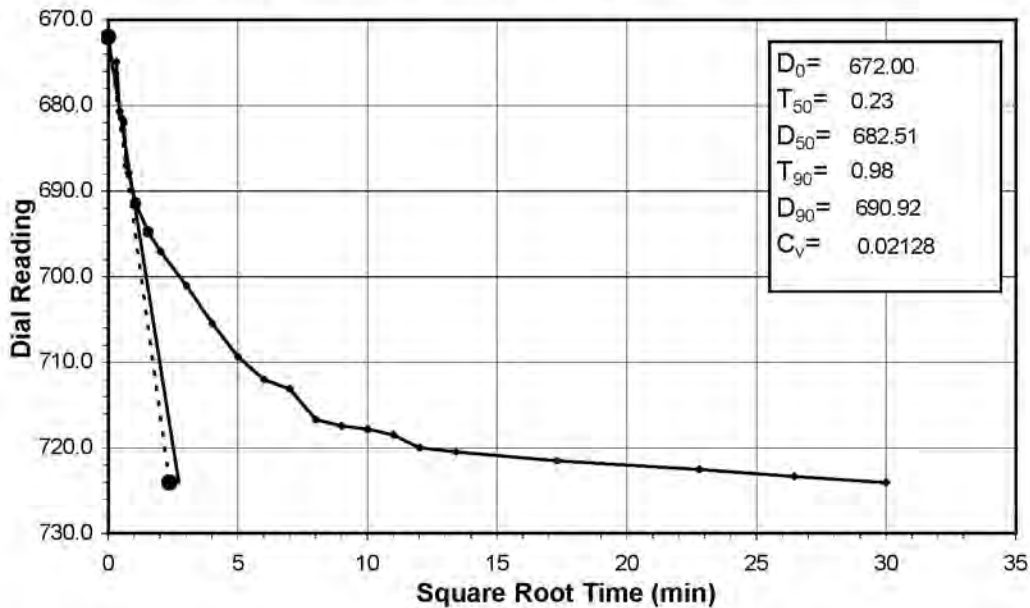
Tested By DB Date 12/6/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

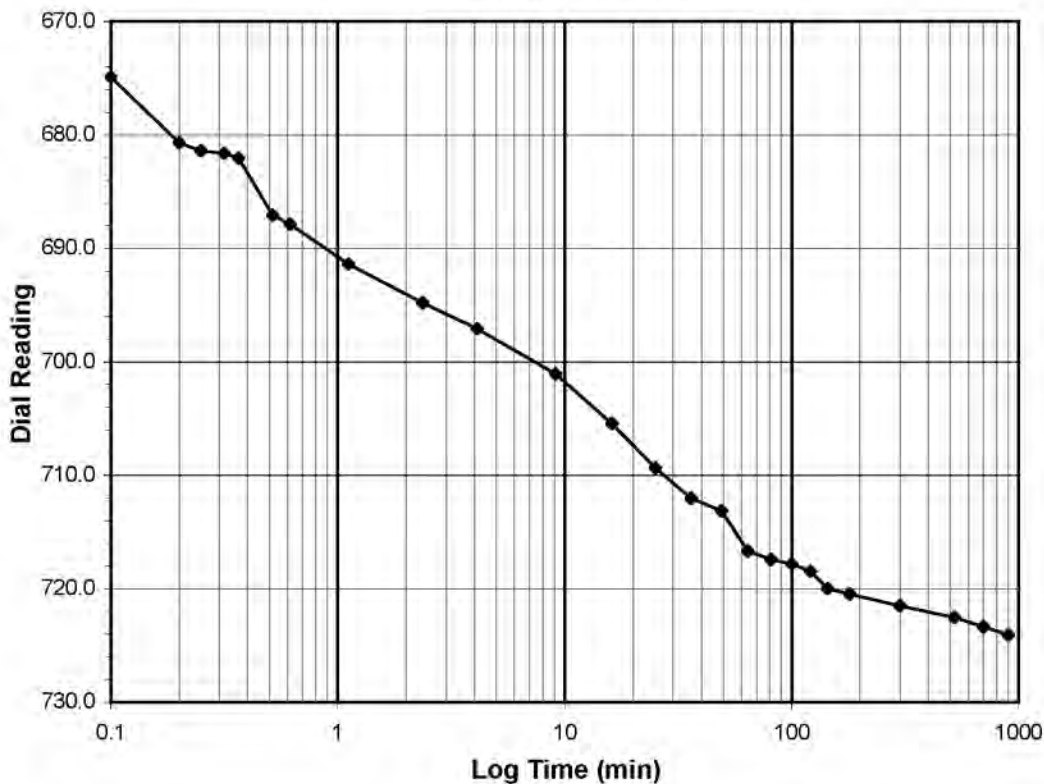
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **724.1**
 Consolidometer No. **G1418**
 1 Division (in) 0.0001

Start Date 12/7/13
 Start Time 12:09:47

Elapsed Time (min)	Dial Reading (div)
Initial	550.8
0.10	674.9
0.20	680.7
0.25	681.4
0.32	681.6
0.37	682.0
0.52	687.1
0.62	687.9
1.12	691.4
2.37	694.8
4.12	697.1
9.12	701.1
16.12	705.4
25.12	709.4
36.12	712.0
49.12	713.1
64.12	716.7
81.12	717.4
100.12	717.8
121.12	718.5
144.12	720.0
180.12	720.5
300.12	721.5
520.12	722.5
700.12	723.3
900.20	724.1



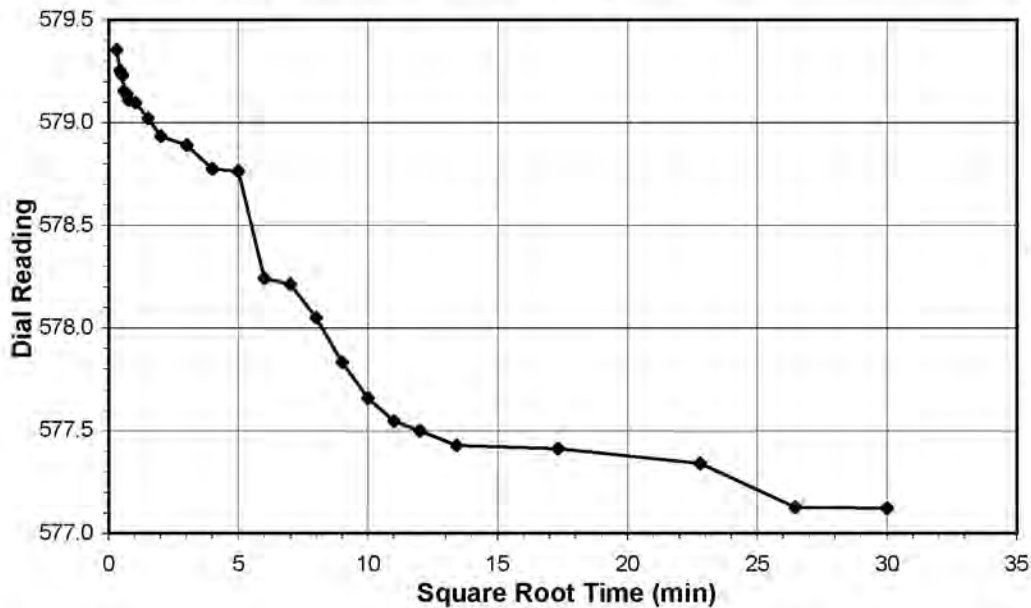
Tested By DB Date 12/7/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

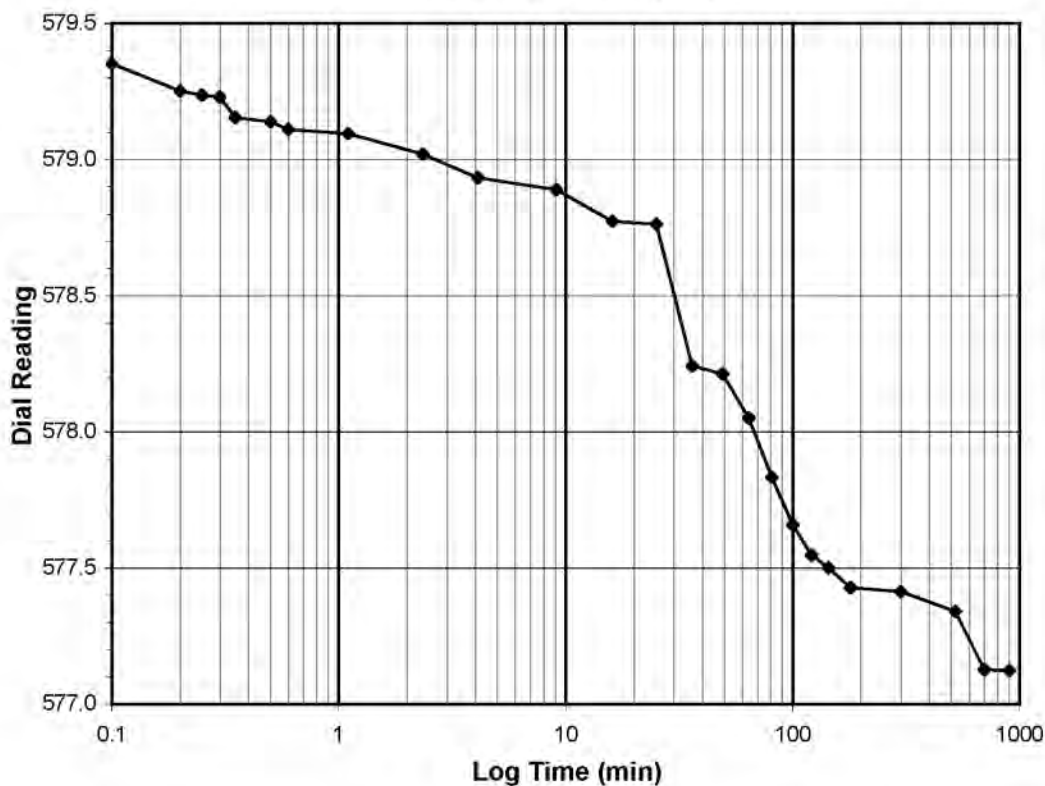
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **32.0-8.0**
 Final Reading (div) **577.1**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 12/8/13
 Start Time 3:09:59

Elapsed Time (min)	Dial Reading (div)
Initial	724.1
0.10	579.4
0.20	579.3
0.25	579.2
0.30	579.2
0.35	579.2
0.50	579.1
0.60	579.1
1.10	579.1
2.35	579.0
4.10	578.9
9.10	578.9
16.10	578.8
25.10	578.8
36.10	578.2
49.10	578.2
64.12	578.1
81.12	577.8
100.12	577.7
121.12	577.5
144.12	577.5
180.12	577.4
300.12	577.4
520.12	577.3
700.12	577.1
900.02	577.1



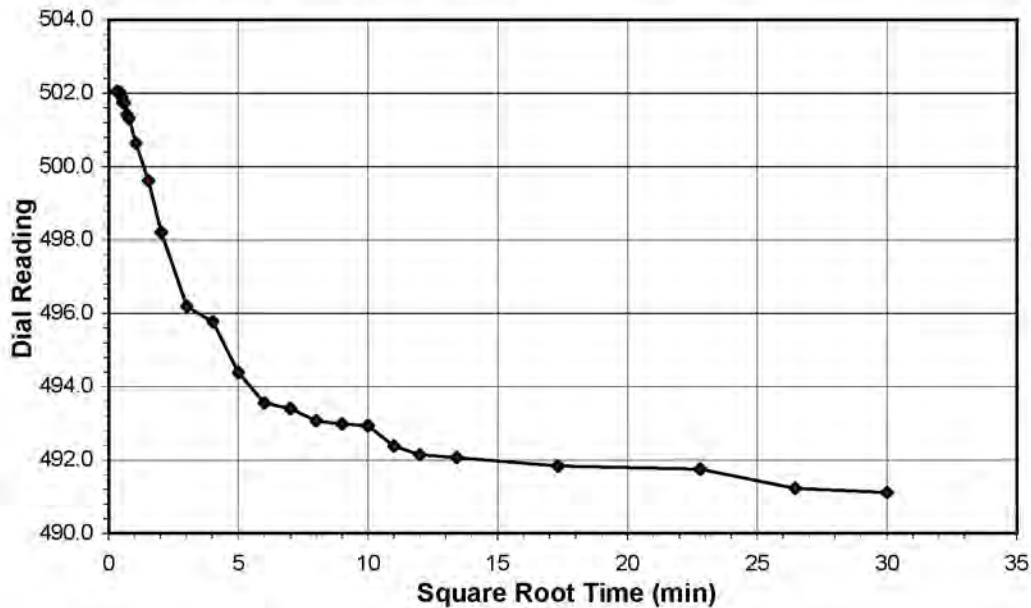
Tested By DB Date 12/8/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

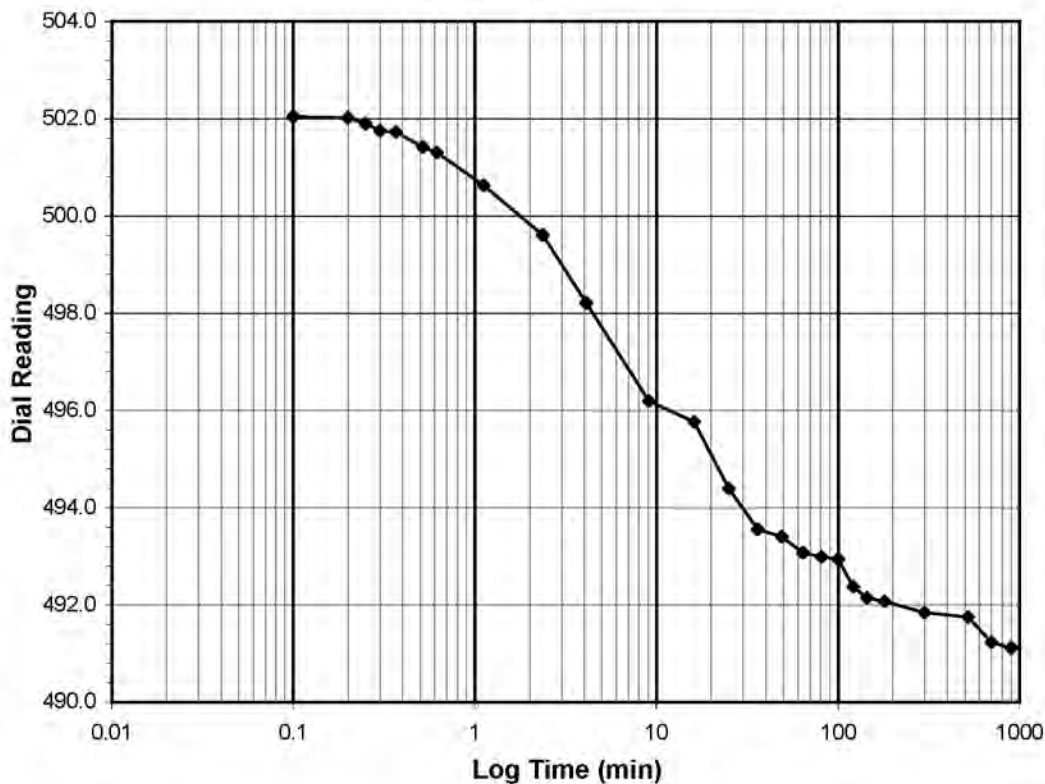
Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-2.0
 Final Reading (div) 491.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 12/8/13
 Start Time 18:10:00

Elapsed Time (min)	Dial Reading (div)
Initial	577.1
0.10	502.0
0.20	502.0
0.25	501.9
0.30	501.8
0.37	501.7
0.52	501.4
0.62	501.3
1.12	500.6
2.37	499.6
4.12	498.2
9.12	496.2
16.12	495.8
25.12	494.4
36.12	493.6
49.12	493.4
64.12	493.1
81.12	493.0
100.12	492.9
121.13	492.4
144.13	492.1
180.13	492.1
300.13	491.8
520.13	491.8
700.13	491.2
900.20	491.1



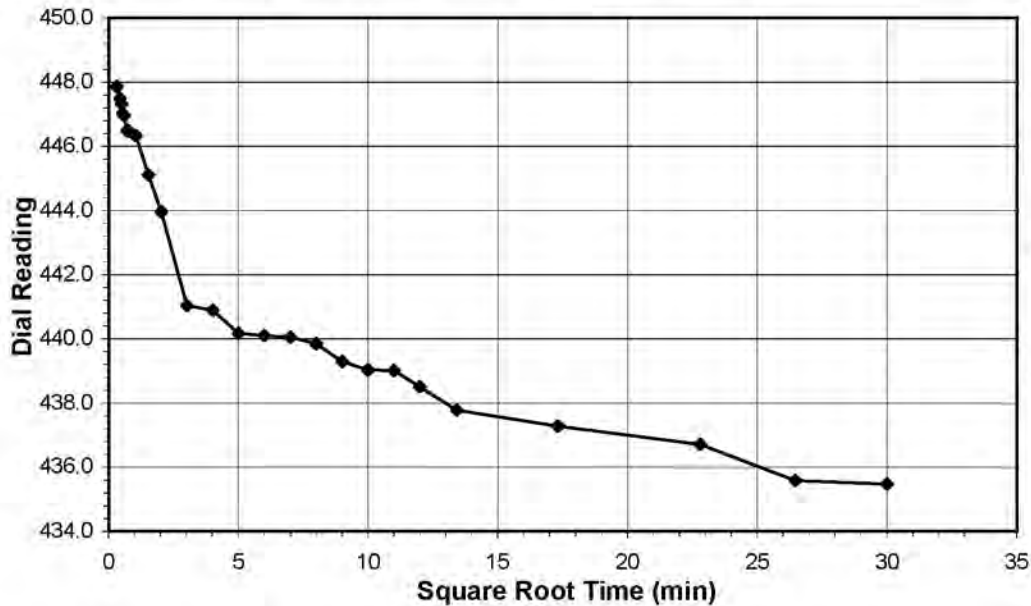
Tested By DB Date 12/8/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

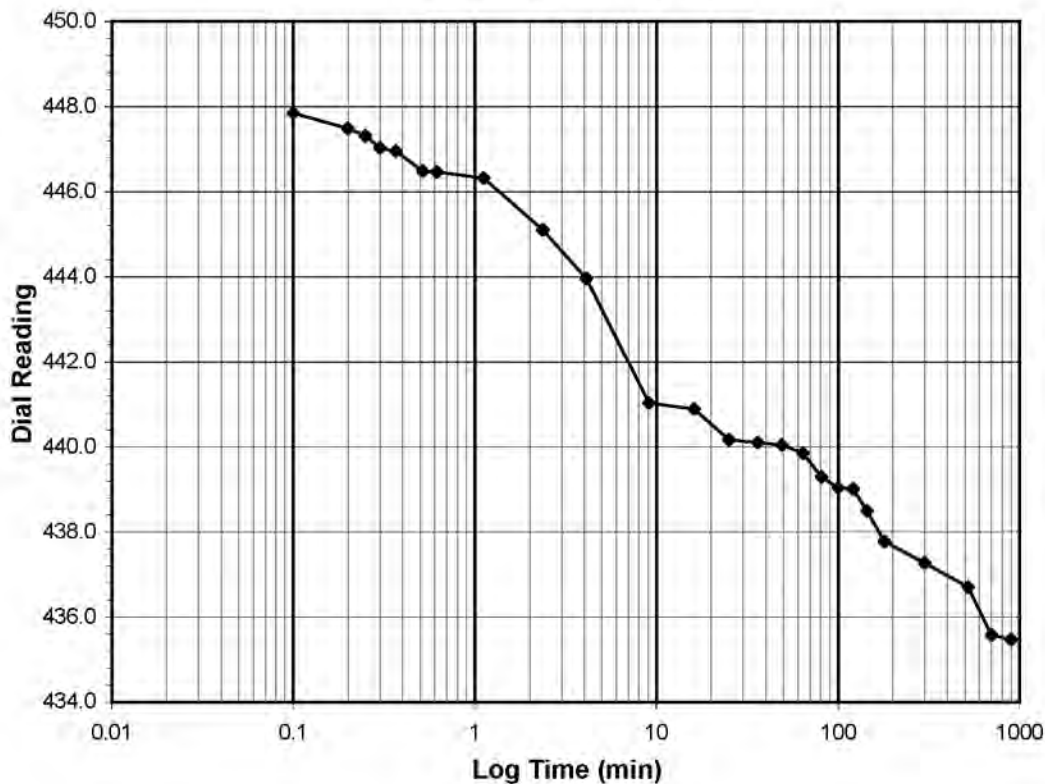
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **435.5**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 12/9/13
 Start Time 9:10:12



Elapsed Time (min)	Dial Reading (div)
Initial	491.1
0.10	447.9
0.20	447.5
0.25	447.3
0.30	447.0
0.37	447.0
0.52	446.5
0.62	446.5
1.12	446.3
2.37	445.1
4.12	444.0
9.12	441.0
16.12	440.9
25.12	440.2
36.12	440.1
49.12	440.1
64.12	439.9
81.13	439.3
100.13	439.0
121.13	439.0
144.13	438.5
180.13	437.8
300.13	437.3
520.13	436.7
700.13	435.6
900.13	435.5

Tested By DB Date 12/9/13 Checked By TM Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied	Final Dial	Machine	Corrected	Height of	Volume	Dry	Void
Tare Number	2702	2670	Pressure	Reading	Deflection	Reading	Sample		Density	Ratio
			(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	135.40	152.70								
Wt. Tare & DS (g)	113.52	123.40								
Wt. Water (g)	21.88	29.30	Seating	0	0	0	25.400	80.440	1.46663	0.77277
Wt. Tare (g)	6.61	6.69	0.25	53.2	17.6	35.6	25.310	80.154	1.47187	0.76646
Wt. DS (g)	106.91	116.71	0.5	104.7	27.0	77.7	25.203	79.815	1.47811	0.75900
Water Content (%)	20.47	25.10	1	157.0	40.4	116.7	25.104	79.501	1.48394	0.75209
			2	227.1	66.6	160.5	24.992	79.148	1.49056	0.74431
			4	326.8	97.5	229.3	24.818	78.595	1.50105	0.73212
<u>Sample Parameters</u>			1	275.8	58.5	217.4	24.848	78.691	1.49922	0.73424
Sample Diameter (in)	2.5	2.5	0.25	233.9	28.5	205.4	24.878	78.788	1.49738	0.73637
Sample Height (in)	1.0000	0.9618	0.5	247.9	33.9	214.0	24.856	78.719	1.49870	0.73484
Sample Volume (cm ³)	80.44	77.37	1	266.1	48.4	217.7	24.847	78.689	1.49927	0.73418
Wt. Wet Sample + Ring (g)	353.93	359.40	2	297.9	68.5	229.4	24.817	78.594	1.50107	0.73210
Wt. of Ring (g)	211.81	211.81	4	351.0	97.9	253.2	24.757	78.403	1.50472	0.72789
Wt. of Wet Sample (g)	142.12	147.59	8	435.6	129.5	306.1	24.622	77.977	1.51294	0.71851
Wet Density (pcf)	110.25	119.04	16	550.8	176.6	374.2	24.450	77.430	1.52364	0.70644
Wet Density (g/cm ³)	1.77	1.91	32	724.1	251.4	472.7	24.199	76.638	1.53939	0.68898
Water Content (%)	20.47	25.10	8	577.1	142.9	434.2	24.297	76.947	1.53320	0.69580
Wt. of Dry Sample (g)	117.98	117.98	2	491.1	89.7	401.4	24.380	77.211	1.52797	0.70161
Dry Density (pcf)	91.52	95.15	0.5	435.5	53.4	382.1	24.429	77.366	1.52490	0.70503
Dry Density (g/cm ³)	1.47	1.52								
Void Ratio	0.7728	0.7050								
Saturation (%)	68.86	92.58								
Specific Gravity	2.60	Measured								

Tested By DB Date 11/29/13 Input Checked By TM Date 12/12/13

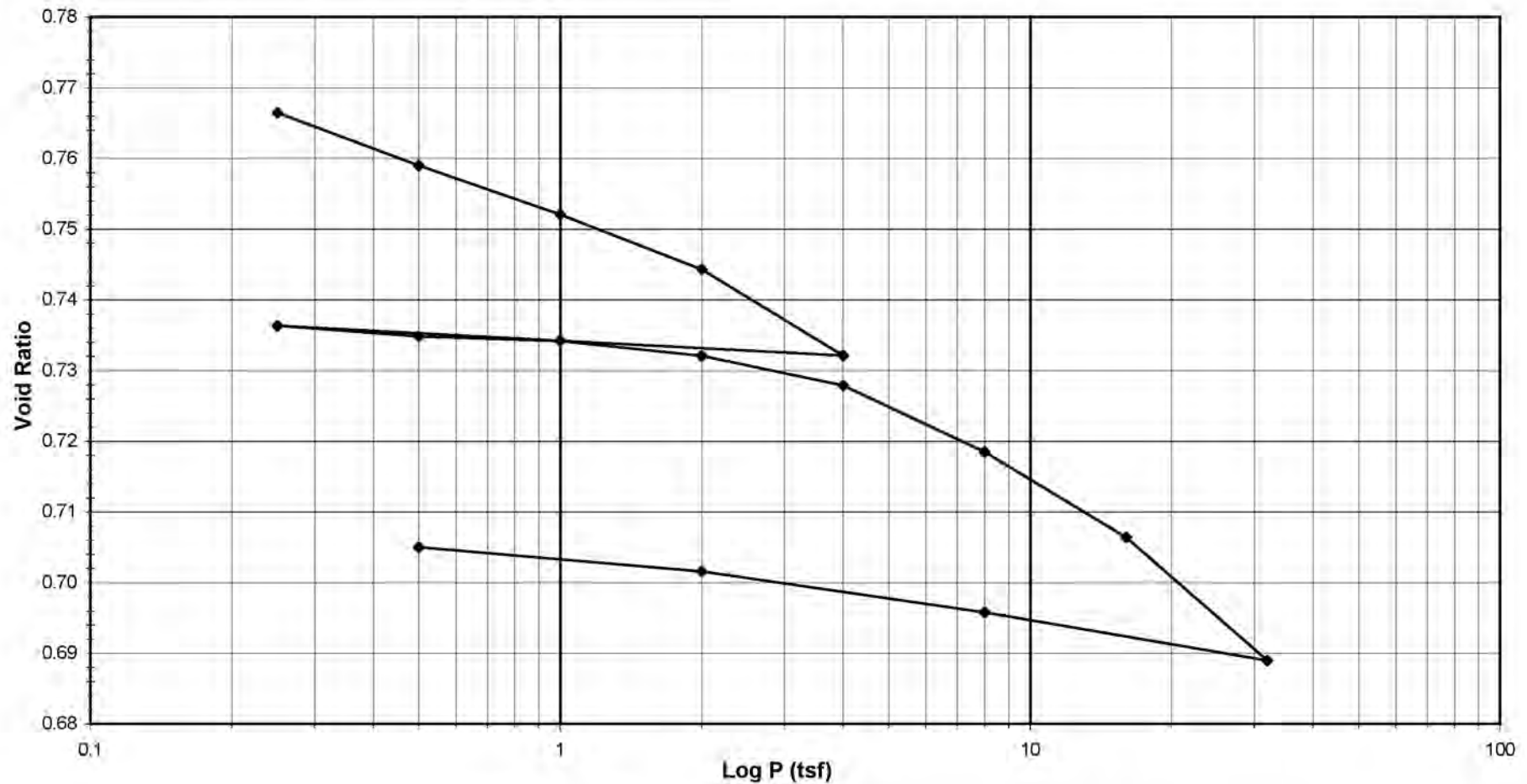
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-040

Boring No. R-6-1b
Depth (ft) 402.8-403.0
Sample No. ST-82
Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/29/13

Approved By RJO

Date 12/12/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

C_v Test Data Summary

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>							
			Load	Dial	Machine	Corrected	Sample	Time	C _v
			Increment	Reading	Deflection	Dial Reading	Height	t ₅₀	
			(tsf)	@ t ₅₀	(div)	@ t ₅₀	@ t ₅₀	(min)	(cm ² /sec)
							(mm)		
<i>Water Content</i>									
Tare Number	2702	2670							
Wt. Tare & WS (g)	135.4	152.7							
Wt. Tare & DS (g)	113.52	123.4							
Wt. Water (g)	21.88	29.3							
Wt. Tare (g)	6.61	6.69							
Wt. DS (g)	106.91	116.71							
Water Content (%)	20.47	25.10							
<i>Sample Parameters</i>									
Sample Diameter (in)	2.5	2.5							
Sample Height (in)	1.0000	0.9618							
Sample Volume (cm ³)	80.44	77.37							
Wt. Wet Sample + Ring (g)	353.93	359.40							
Wt. of Ring (g)	211.81	211.81							
Wt. of Wet Sample (g)	142.12	147.59							
Wet Density (pcf)	110.25	119.04							
Wet Density (g/cm ³)	1.77	1.91							
Water Content (%)	20.47	25.10							
Wt. of Dry Sample (g)	117.98	117.98							
Dry Density (pcf)	91.52	95.15							
Dry Density (g/cm ³)	1.47	1.52							
Void Ratio	0.7728	0.7050							
Saturation (%)	68.86	92.58							
Specific Gravity	2.60	Measured							

Tested By DB Date 11/29/13 Input Checked By TM Date 12/12/13

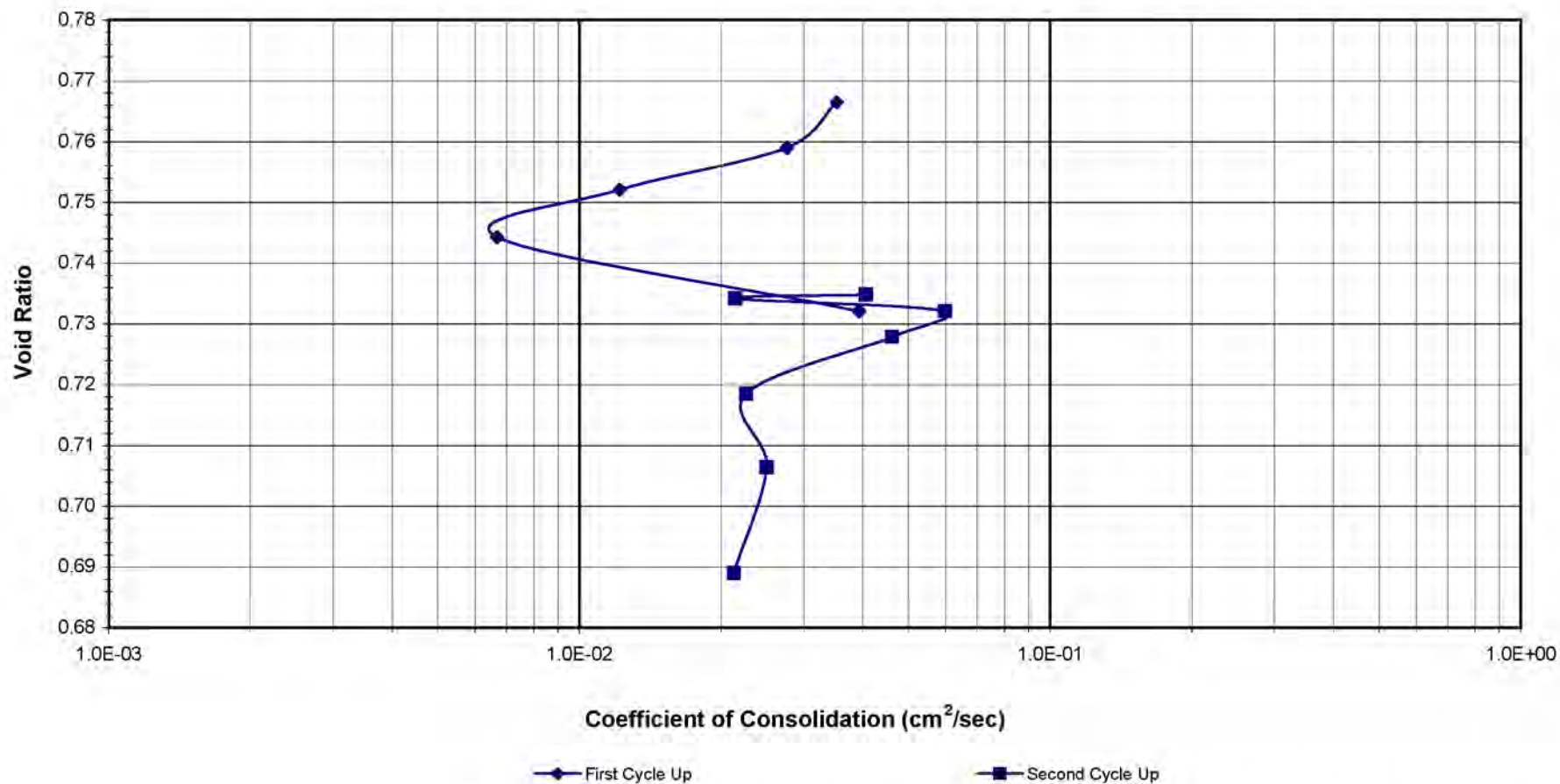
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-040

Boring No. R-6-1b
 Depth (ft) 402.8-403.0
 Sample No. ST-82
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/29/13

Approved By RJO Date 12/12/13

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	402.8-403.0
Project No.	2013-465-001	Sample No.	ST-82
Lab ID #	2013-465-001-040		

Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1418	1/9/14
Load Cell	G1419	1/9/14
LVDT	G1420	1/9/14



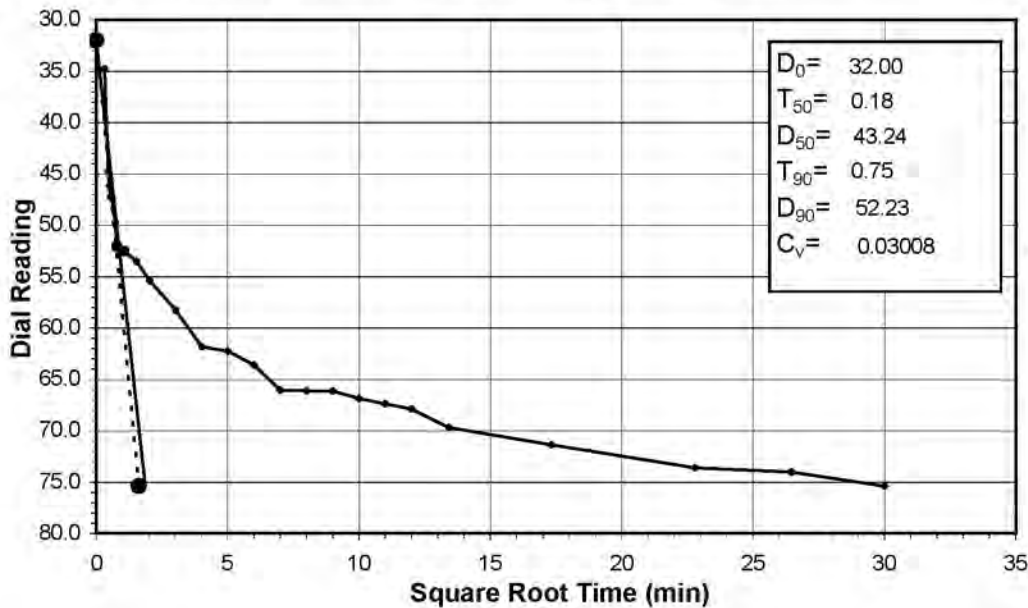
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

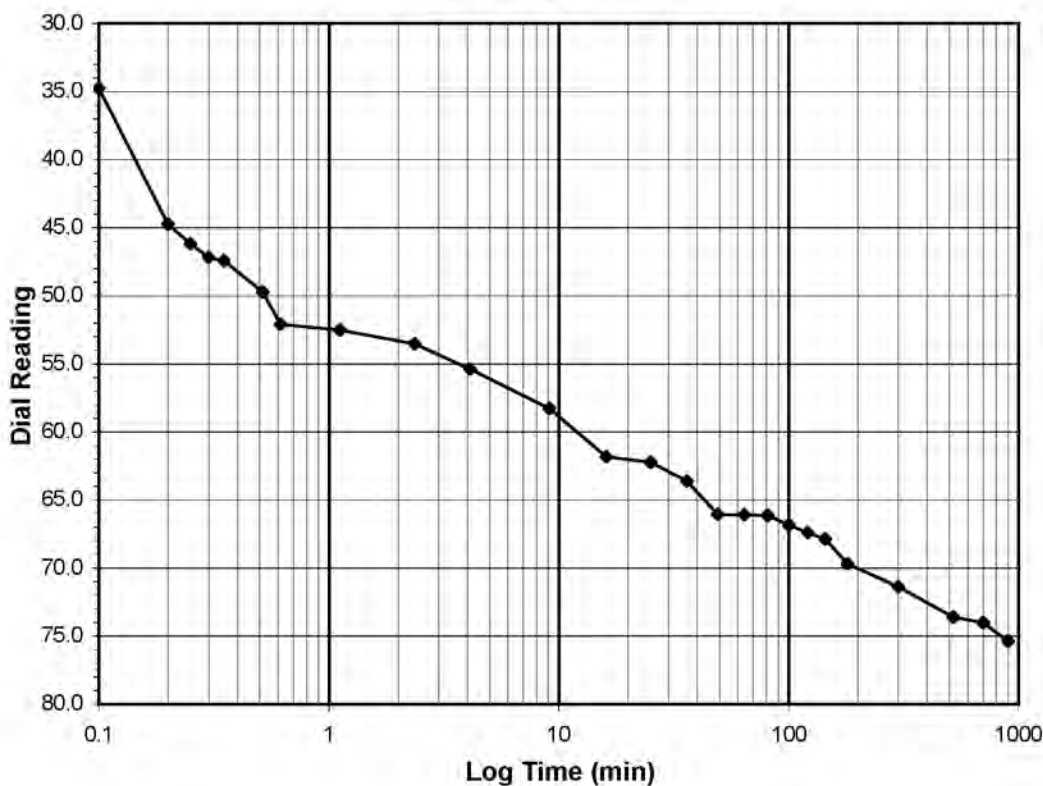
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.0-0.25
 Final Reading (div) 75.4
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/8/13
 Start Time 17:09:35

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	34.8
0.20	44.7
0.25	46.2
0.30	47.2
0.35	47.4
0.52	49.7
0.62	52.1
1.12	52.5
2.37	53.5
4.12	55.4
9.12	58.3
16.12	61.8
25.12	62.2
36.12	63.6
49.12	66.1
64.12	66.1
81.12	66.1
100.12	66.8
121.12	67.4
144.12	67.9
180.12	69.7
300.12	71.4
520.13	73.6
700.13	74.0
900.25	75.4



Tested By DB Date 11/8/13 Checked By TM Date 12/6/13



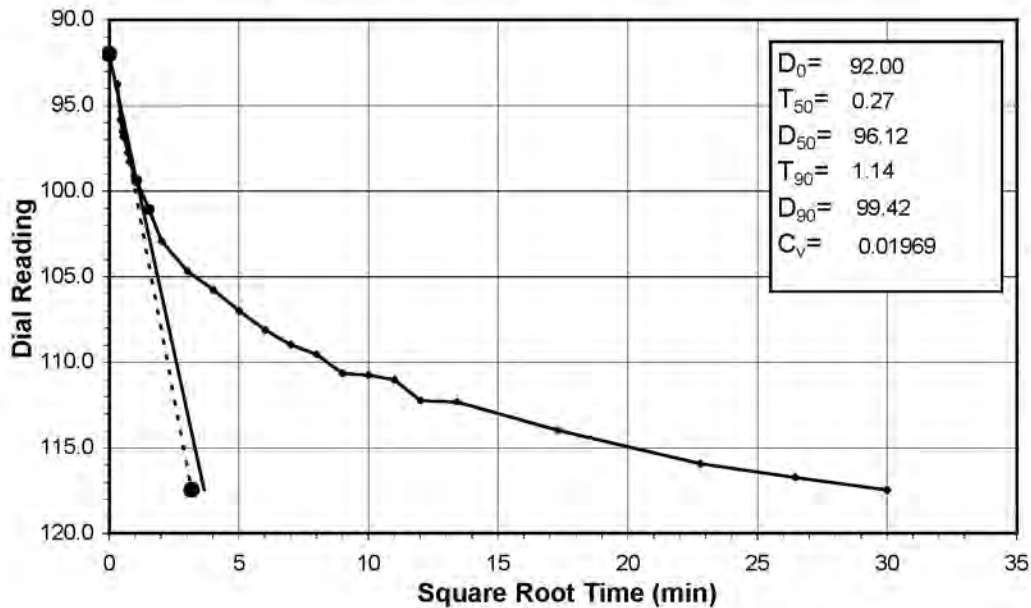
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

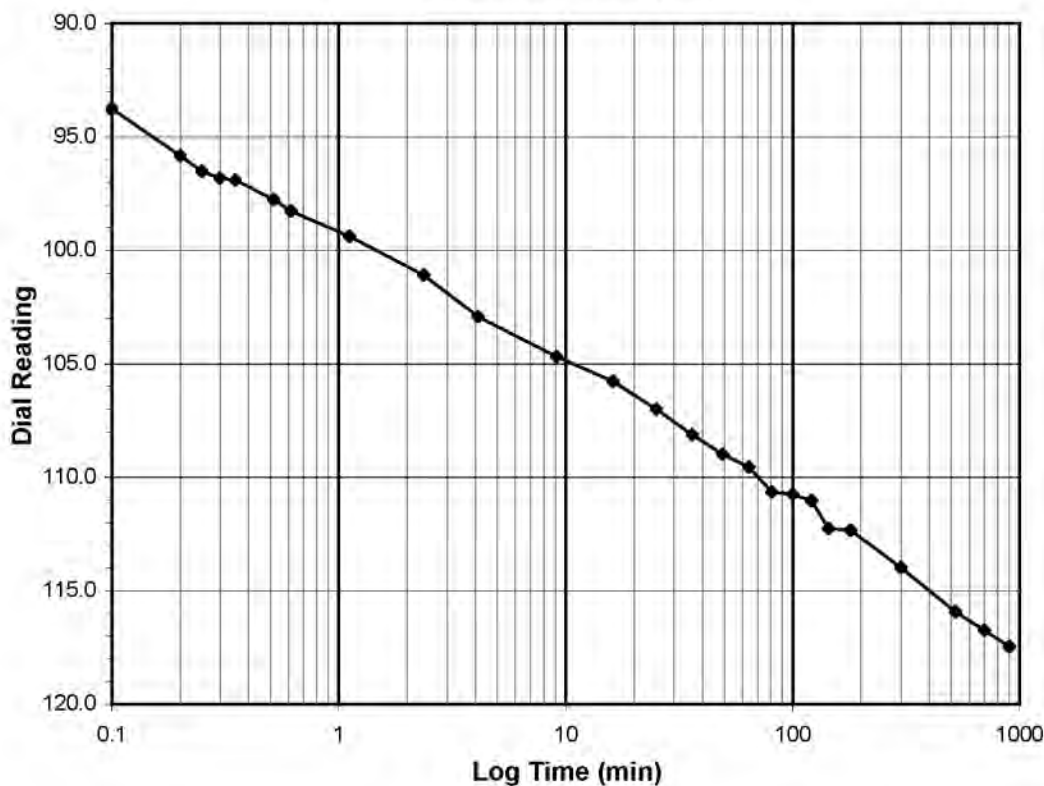
Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) **0.25-0.5**
 Final Reading (div) **117.5**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**
 Start Date **11/9/13**
 Start Time **8:09:50**

Elapsed Time (min)	Dial Reading (div)
Initial	75.4
0.10	93.8
0.20	95.8
0.25	96.5
0.30	96.8
0.35	96.9
0.52	97.8
0.62	98.3
1.12	99.4
2.37	101.1
4.12	102.9
9.12	104.7
16.12	105.8
25.12	107.0
36.12	108.1
49.12	109.0
64.12	109.6
81.12	110.7
100.12	110.8
121.12	111.0
144.12	112.3
180.12	112.3
300.12	114.0
520.12	115.9
700.12	116.7
900.08	117.5



Tested By **DB** Date **11/9/13** Checked By **TM** Date **12/6/13**

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv

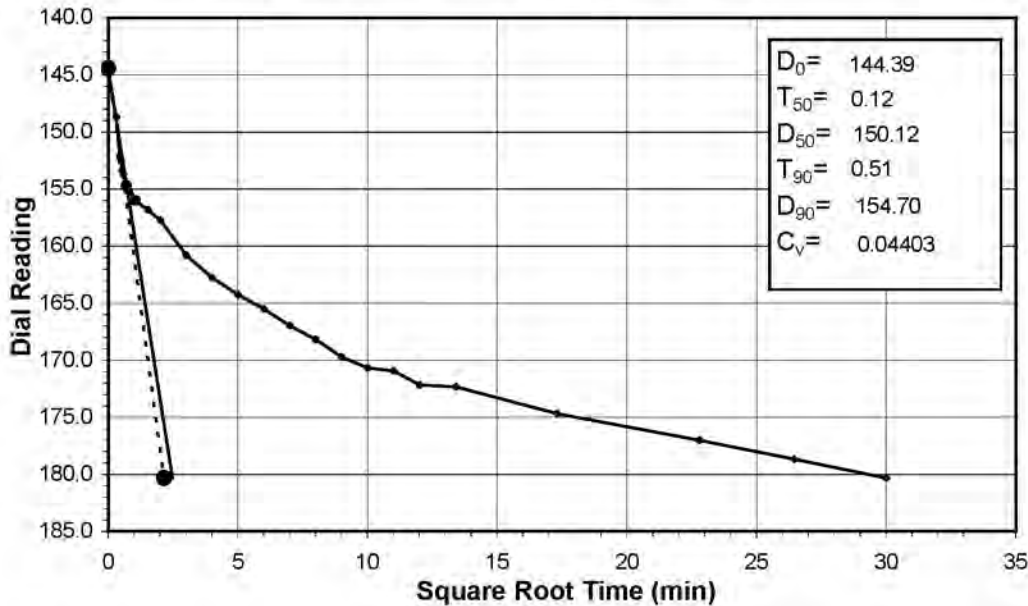
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

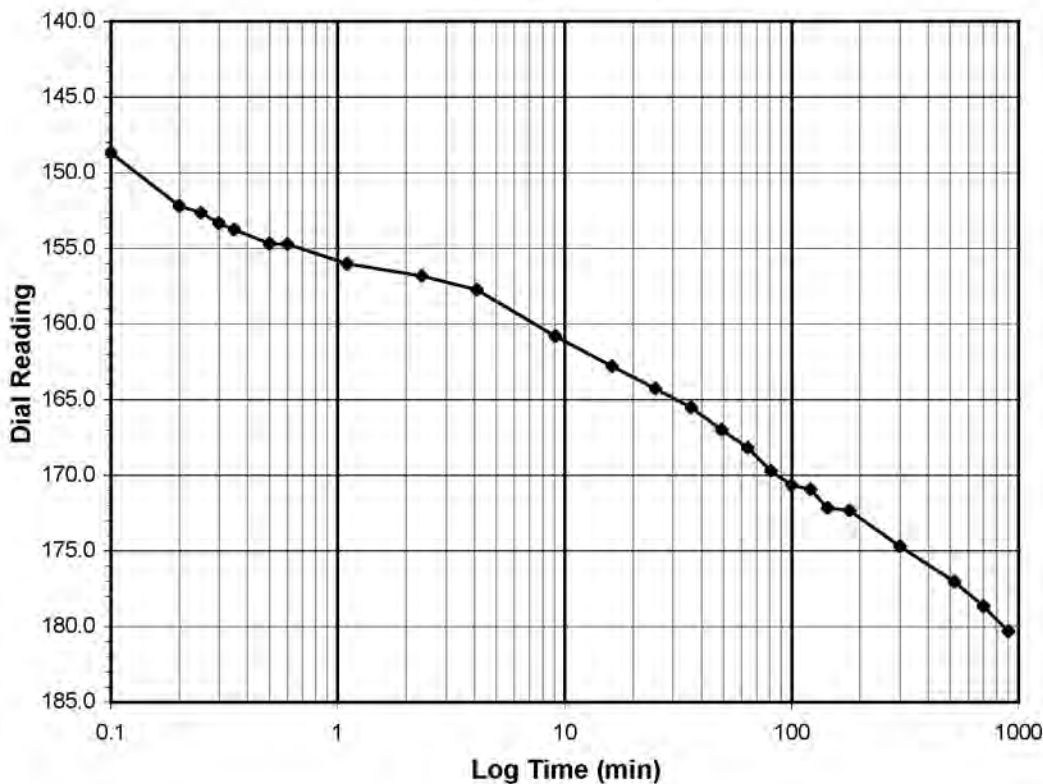
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 180.3
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/9/13
 Start Time 23:09:55

Elapsed Time (min)	Dial Reading (div)
Initial	117.5
0.10	148.7
0.20	152.2
0.25	152.6
0.30	153.3
0.35	153.8
0.50	154.7
0.60	154.7
1.10	156.0
2.35	156.8
4.10	157.7
9.10	160.8
16.12	162.8
25.12	164.3
36.12	165.5
49.12	167.0
64.12	168.2
81.12	169.7
100.12	170.7
121.12	170.9
144.12	172.2
180.12	172.3
300.12	174.7
520.12	177.0
700.13	178.7
900.08	180.3



Tested By DB Date 11/9/13 Checked By TM Date 12/6/13



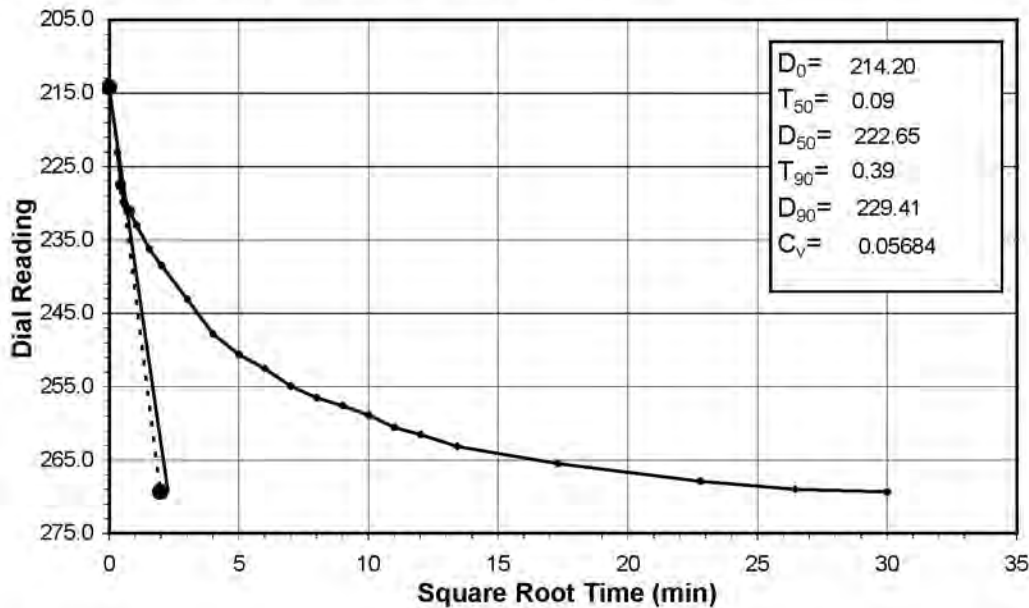
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

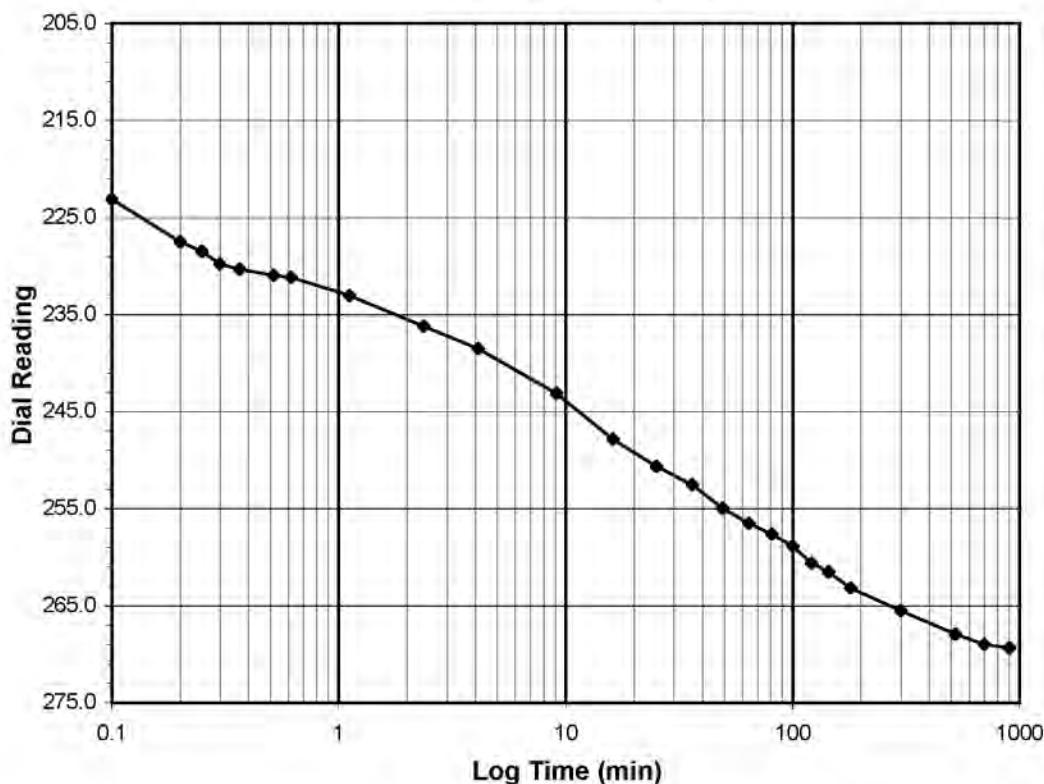
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 269.3
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/10/13
 Start Time 14:10:00

Elapsed Time (min)	Dial Reading (div)
Initial	180.3
0.10	223.1
0.20	227.5
0.25	228.5
0.30	229.8
0.37	230.3
0.52	231.0
0.62	231.1
1.12	233.0
2.37	236.2
4.12	238.5
9.12	243.1
16.12	247.8
25.12	250.6
36.12	252.5
49.12	254.9
64.13	256.5
81.13	257.6
100.13	258.9
121.13	260.6
144.13	261.5
180.13	263.1
300.13	265.5
520.13	267.9
700.13	269.0
900.25	269.3



Tested By DB Date 11/10/13 Checked By TM Date 12/6/13



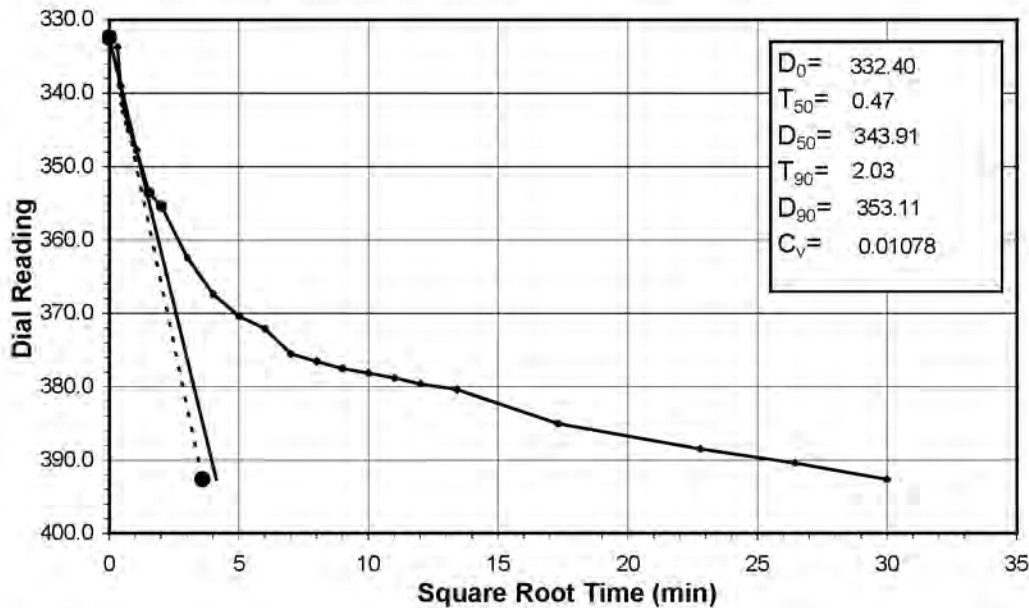
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

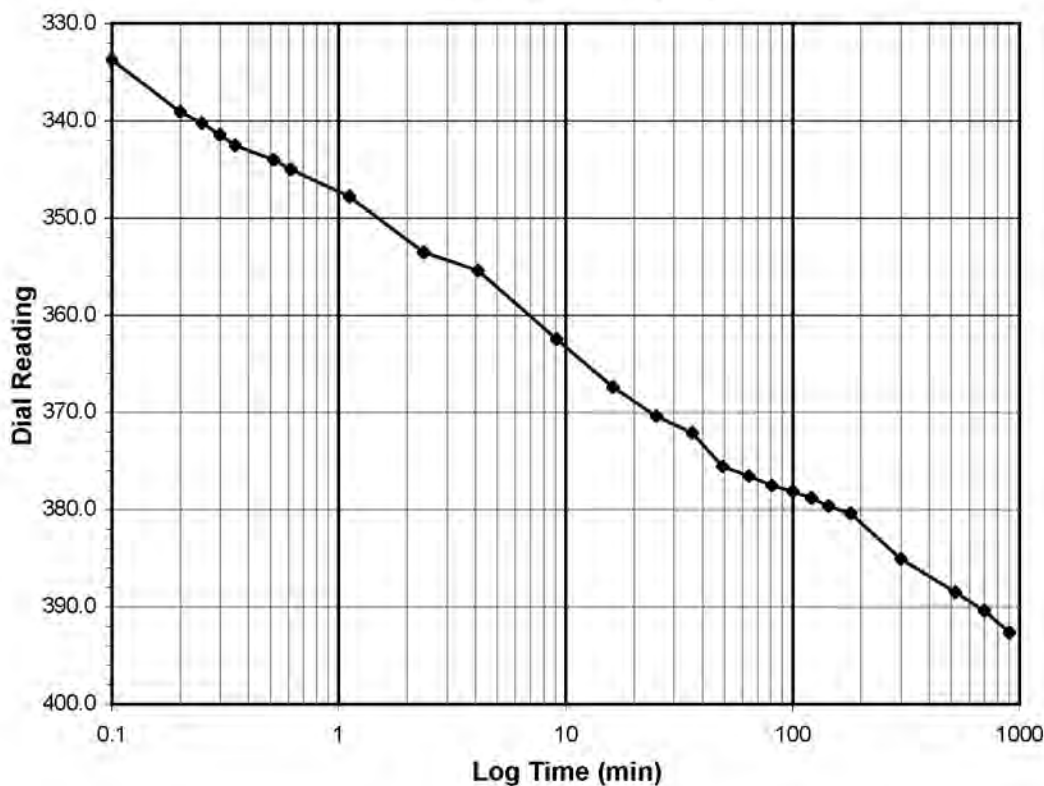
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 392.6
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/11/13
 Start Time 5:10:15

Elapsed Time (min)	Dial Reading (div)
Initial	269.3
0.10	333.7
0.20	339.1
0.25	340.2
0.30	341.4
0.35	342.5
0.52	344.0
0.62	345.0
1.12	347.8
2.37	353.5
4.12	355.4
9.12	362.5
16.12	367.4
25.12	370.4
36.12	372.1
49.12	375.5
64.12	376.5
81.12	377.5
100.12	378.1
121.12	378.8
144.12	379.6
180.12	380.4
300.12	385.0
520.13	388.5
700.13	390.4
900.20	392.6



Tested By DB Date 11/11/13 Checked By TM Date 12/6/13



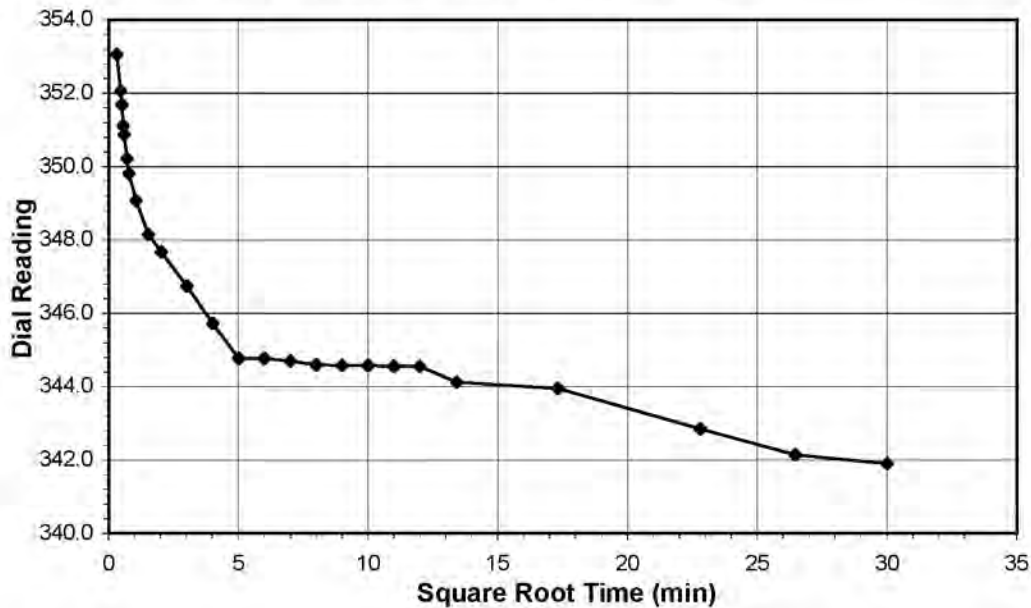
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

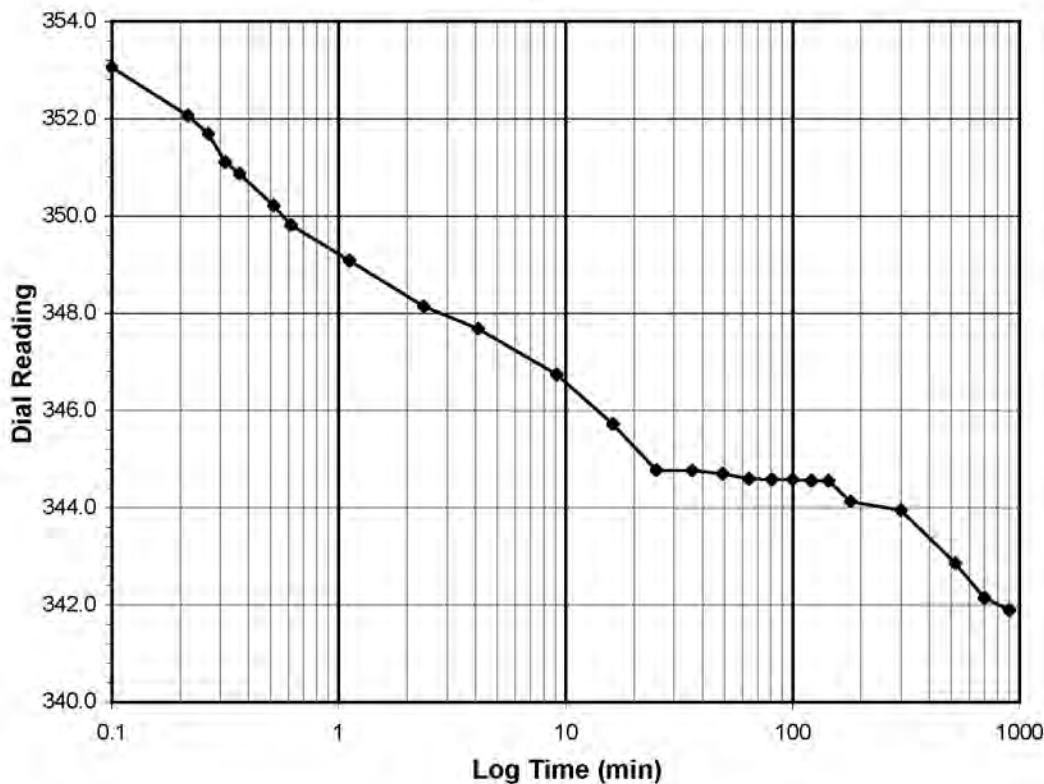
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 341.9
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/11/13
 Start Time 20:10:27

Elapsed Time (min)	Dial Reading (div)
Initial	392.6
0.10	353.1
0.22	352.1
0.27	351.7
0.32	351.1
0.37	350.9
0.52	350.2
0.62	349.8
1.12	349.1
2.37	348.1
4.12	347.7
9.13	346.7
16.13	345.7
25.13	344.8
36.13	344.8
49.13	344.7
64.13	344.6
81.13	344.6
100.13	344.6
121.13	344.6
144.13	344.6
180.13	344.1
300.13	343.9
520.13	342.9
700.13	342.1
900.32	341.9



Tested By DB Date 11/11/13 Checked By TM Date 12/6/13



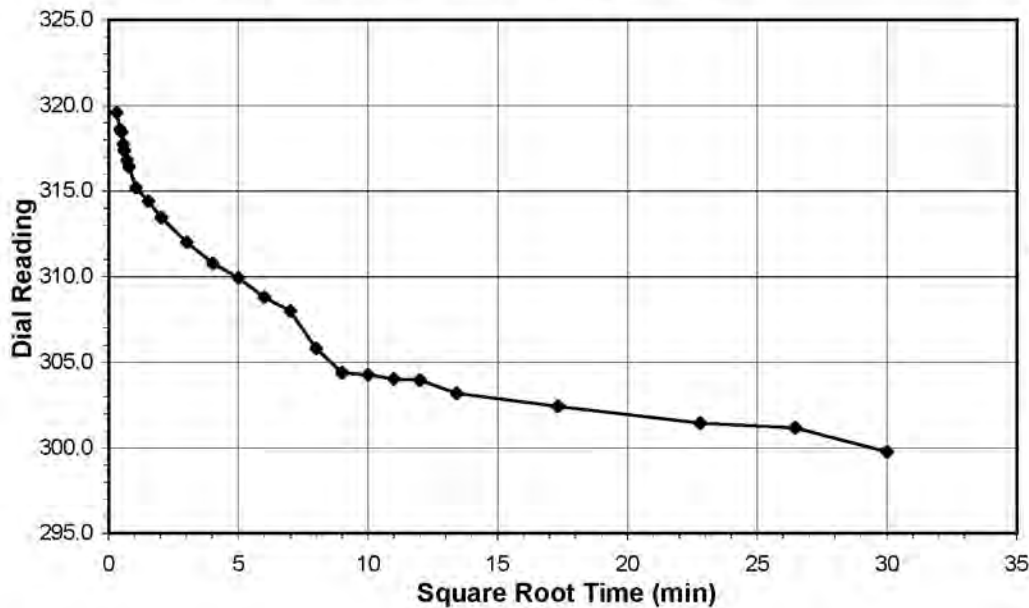
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

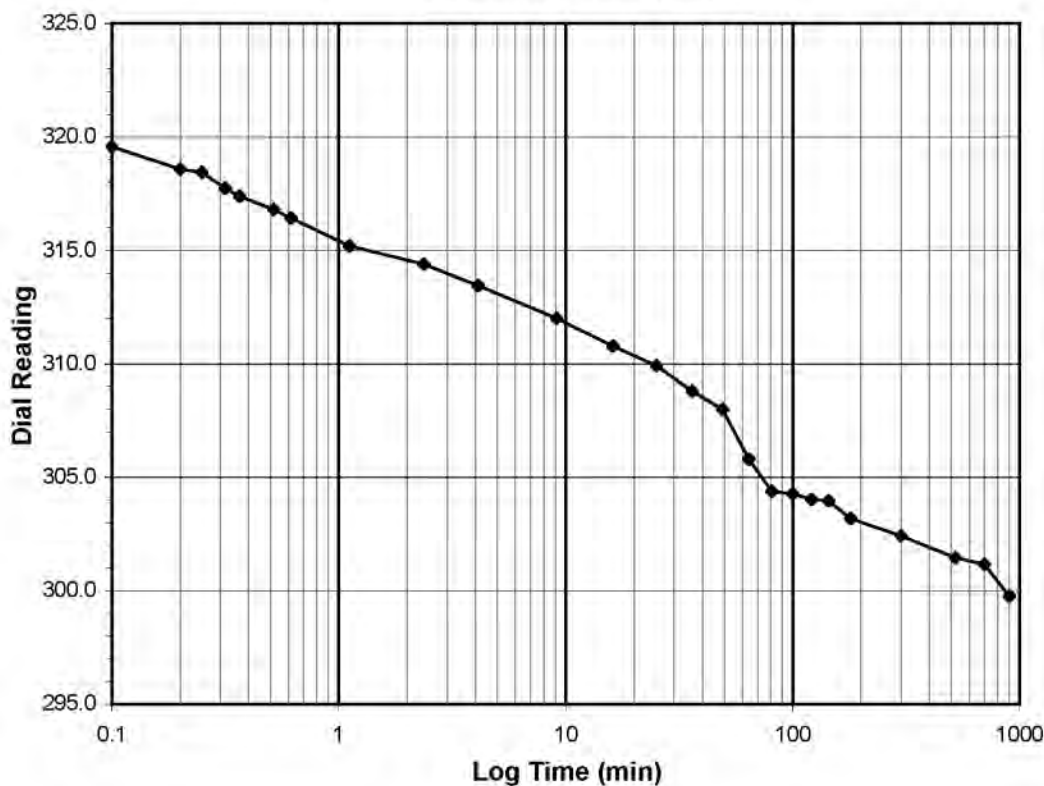
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-0.25
 Final Reading (div) 299.8
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/12/13
 Start Time 11:10:46

Elapsed Time (min)	Dial Reading (div)
Initial	341.9
0.10	319.6
0.20	318.6
0.25	318.4
0.32	317.7
0.37	317.4
0.52	316.8
0.62	316.4
1.12	315.2
2.37	314.4
4.12	313.4
9.12	312.0
16.12	310.8
25.12	309.9
36.12	308.8
49.12	308.0
64.12	305.8
81.12	304.4
100.13	304.3
121.13	304.0
144.13	304.0
180.13	303.2
300.13	302.4
520.13	301.5
700.13	301.2
900.35	299.8



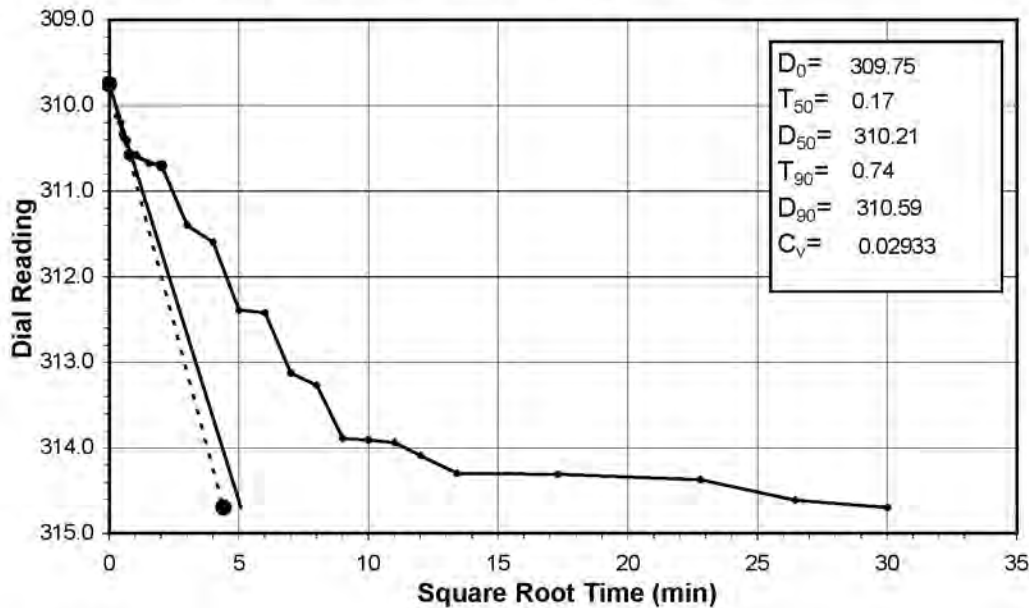
Tested By DB Date 11/12/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

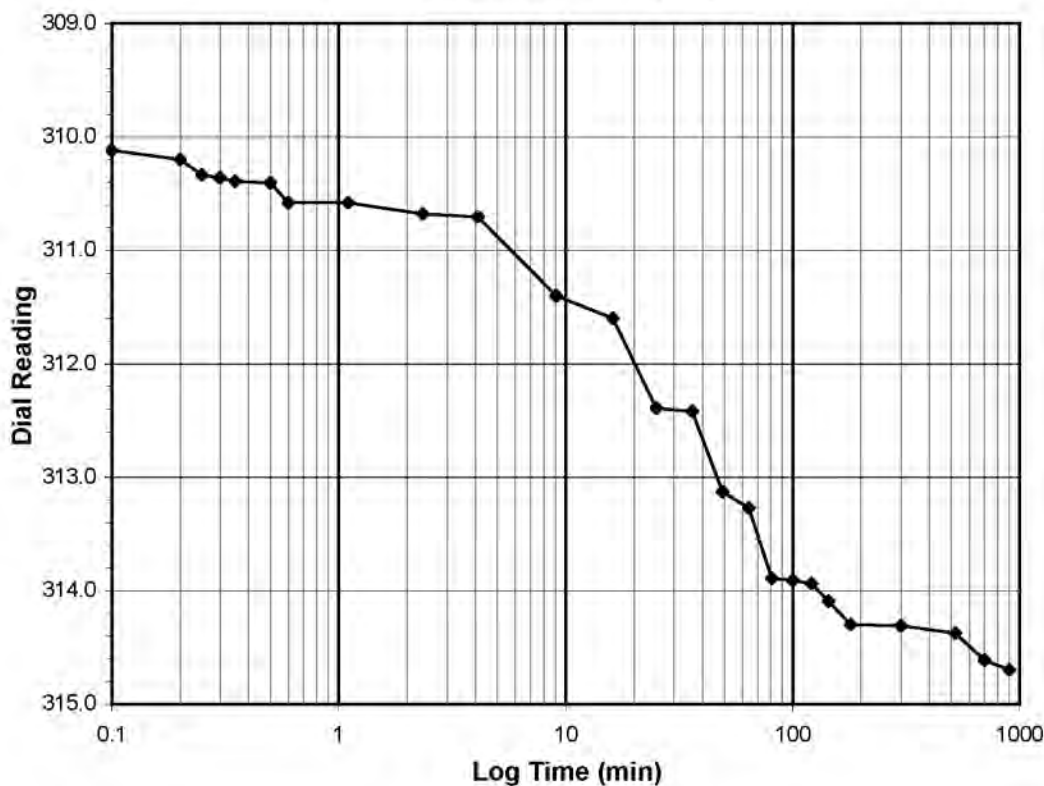
Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **314.7**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 11/13/13
 Start Time 2:11:07

Elapsed Time (min)	Dial Reading (div)
Initial	299.8
0.10	310.1
0.20	310.2
0.25	310.3
0.30	310.4
0.35	310.4
0.50	310.4
0.60	310.6
1.10	310.6
2.35	310.7
4.10	310.7
9.10	311.4
16.12	311.6
25.12	312.4
36.12	312.4
49.12	313.1
64.12	313.3
81.12	313.9
100.12	313.9
121.12	313.9
144.12	314.1
180.12	314.3
300.12	314.3
520.12	314.4
700.12	314.6
900.48	314.7



Tested By DB Date 11/13/13 Checked By TM Date 12/6/13



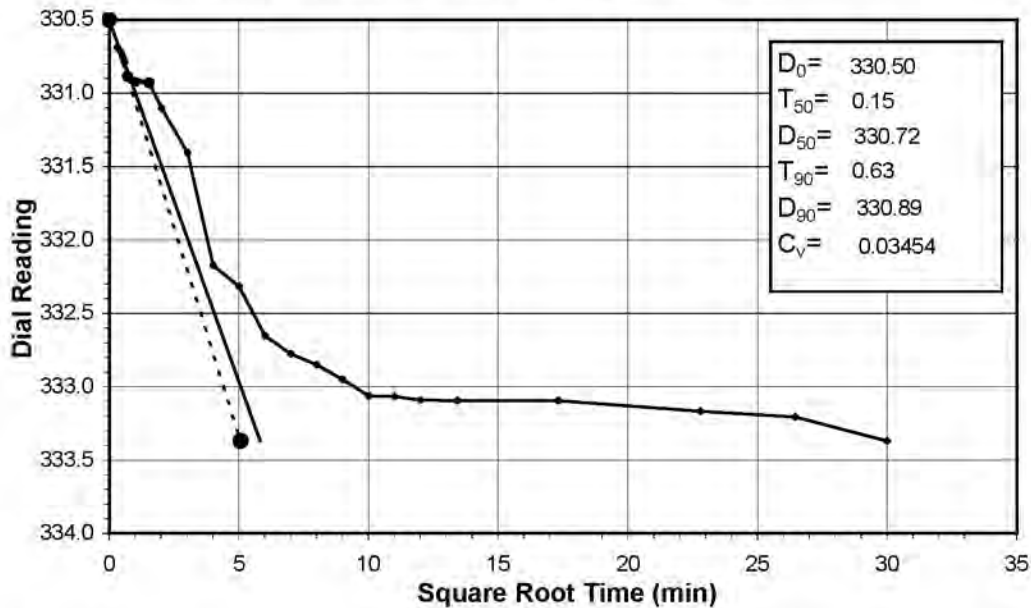
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

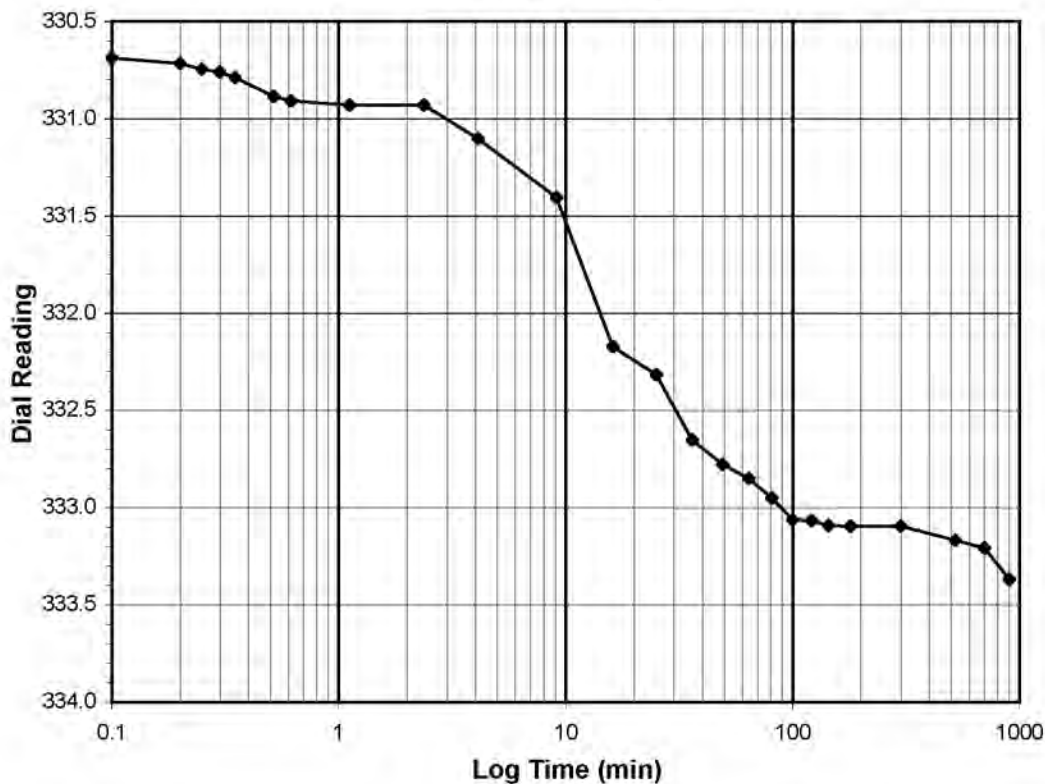
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 333.4
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/13/13
 Start Time 17:11:36

Elapsed Time (min)	Dial Reading (div)
Initial	314.7
0.10	330.7
0.20	330.7
0.25	330.7
0.30	330.8
0.35	330.8
0.52	330.9
0.62	330.9
1.12	330.9
2.37	330.9
4.12	331.1
9.12	331.4
16.12	332.2
25.12	332.3
36.12	332.7
49.12	332.8
64.12	332.8
81.12	333.0
100.12	333.1
121.12	333.1
144.12	333.1
180.13	333.1
300.13	333.1
520.13	333.2
700.13	333.2
900.33	333.4



Tested By DB Date 11/13/13 Checked By TM Date 12/6/13



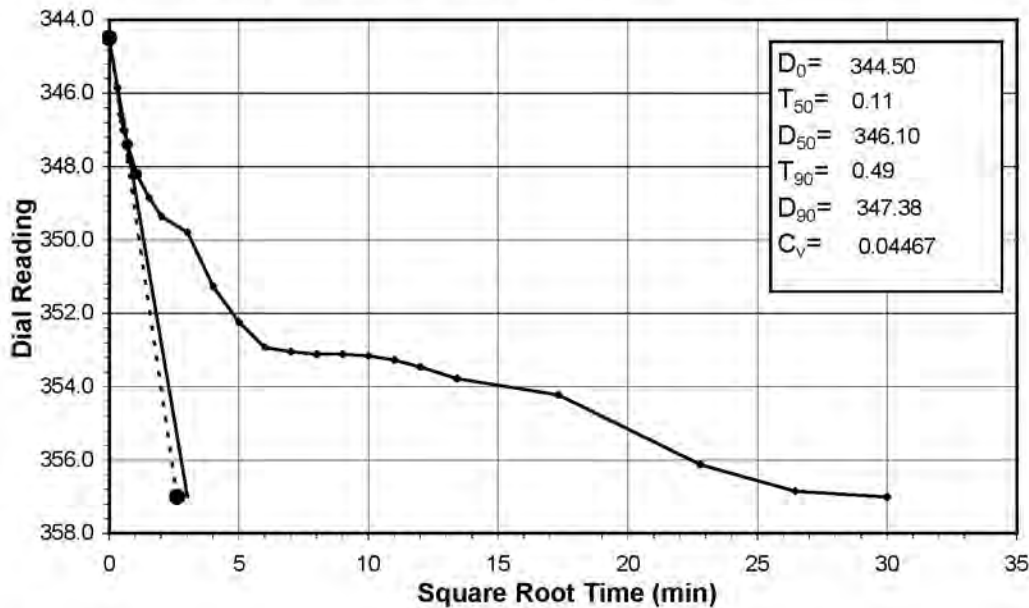
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

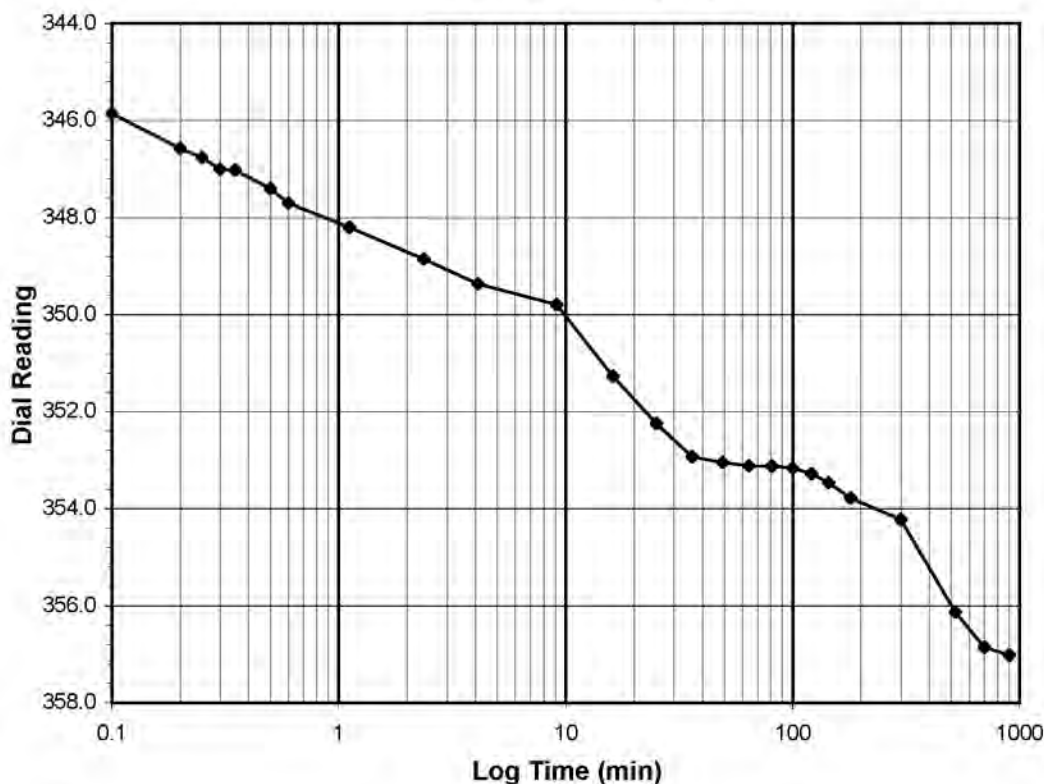
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 357.0
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/14/13
 Start Time 8:11:56

Elapsed Time (min)	Dial Reading (div)
Initial	333.4
0.10	345.9
0.20	346.6
0.25	346.8
0.30	347.0
0.35	347.0
0.50	347.4
0.60	347.7
1.12	348.2
2.37	348.9
4.12	349.4
9.12	349.8
16.12	351.3
25.12	352.2
36.12	352.9
49.12	353.0
64.12	353.1
81.12	353.1
100.12	353.2
121.12	353.3
144.12	353.5
180.12	353.8
300.12	354.2
520.12	356.1
700.12	356.9
900.15	357.0



Tested By DB Date 11/14/13 Checked By TM Date 12/6/13



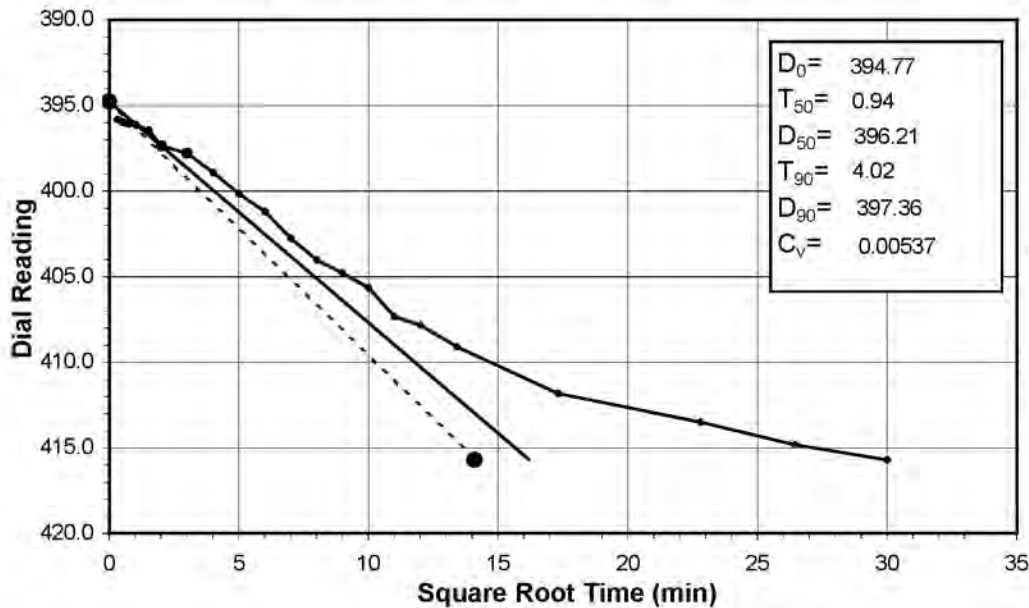
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

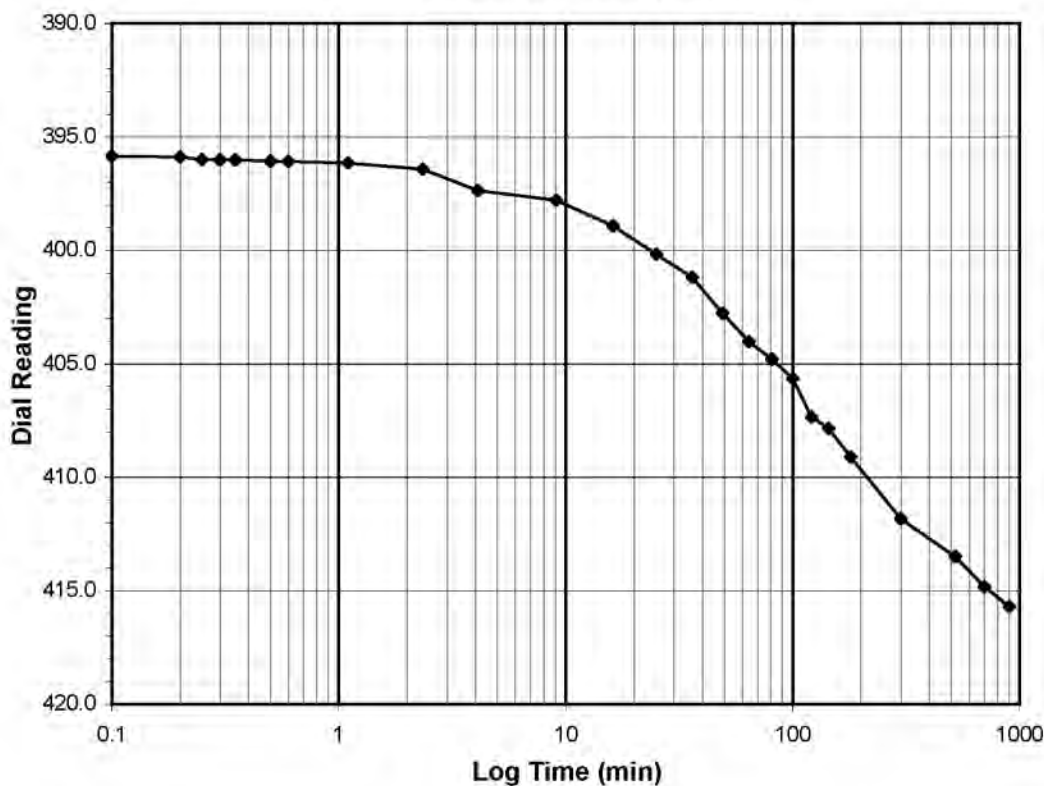
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 415.7
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/14/13
 Start Time 23:12:05

Elapsed Time (min)	Dial Reading (div)
Initial	357.0
0.10	395.8
0.20	395.9
0.25	396.0
0.30	396.0
0.35	396.0
0.50	396.1
0.60	396.1
1.10	396.1
2.35	396.4
4.10	397.4
9.10	397.8
16.12	398.9
25.12	400.2
36.12	401.2
49.12	402.8
64.12	404.0
81.12	404.8
100.12	405.6
121.12	407.3
144.12	407.8
180.12	409.1
300.12	411.8
520.12	413.5
700.12	414.8
900.17	415.7



Tested By DB Date 11/14/13 Checked By TM Date 12/6/13



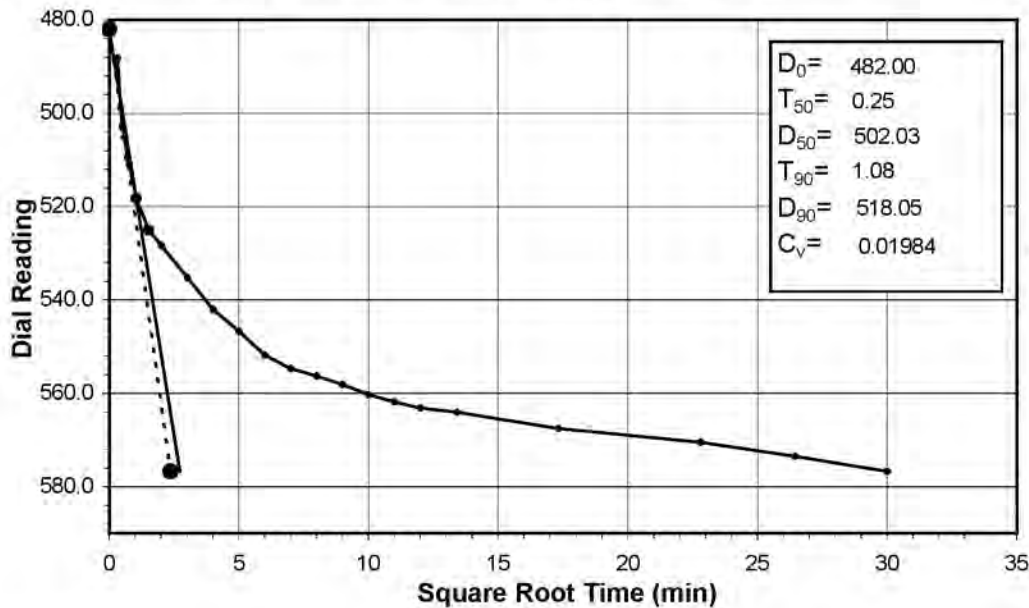
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

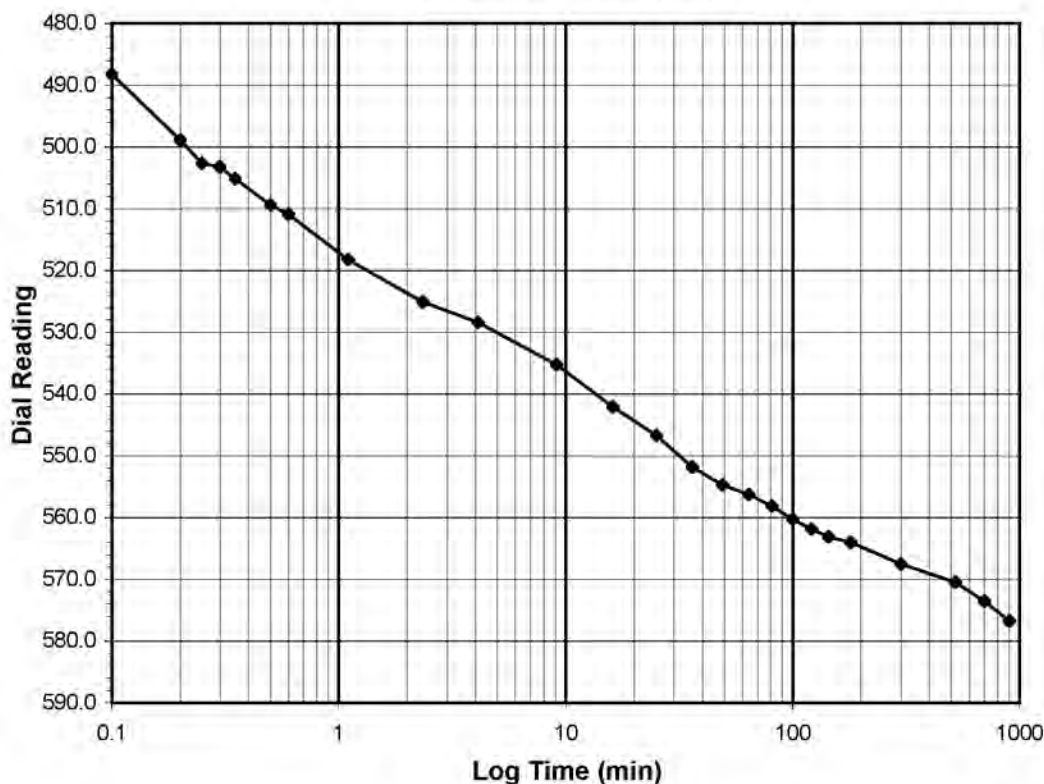
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-8.0
 Final Reading (div) 576.7
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 14:12:15

Elapsed Time (min)	Dial Reading (div)
Initial	415.7
0.10	488.2
0.20	498.9
0.25	502.7
0.30	503.2
0.35	505.2
0.50	509.4
0.60	510.9
1.10	518.2
2.35	525.1
4.12	528.4
9.12	535.2
16.12	542.1
25.12	546.7
36.12	551.8
49.12	554.7
64.12	556.3
81.12	558.1
100.12	560.3
121.12	561.9
144.12	563.1
180.12	564.0
300.12	567.5
520.12	570.5
700.12	573.5
900.28	576.7



Tested By DB Date 11/15/13 Checked By TM Date 12/6/13



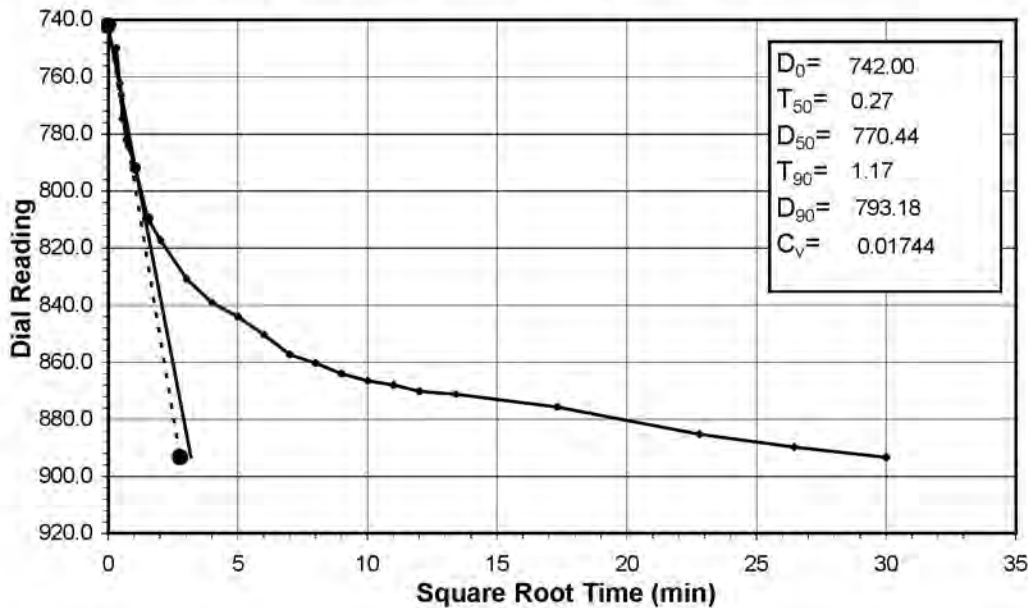
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

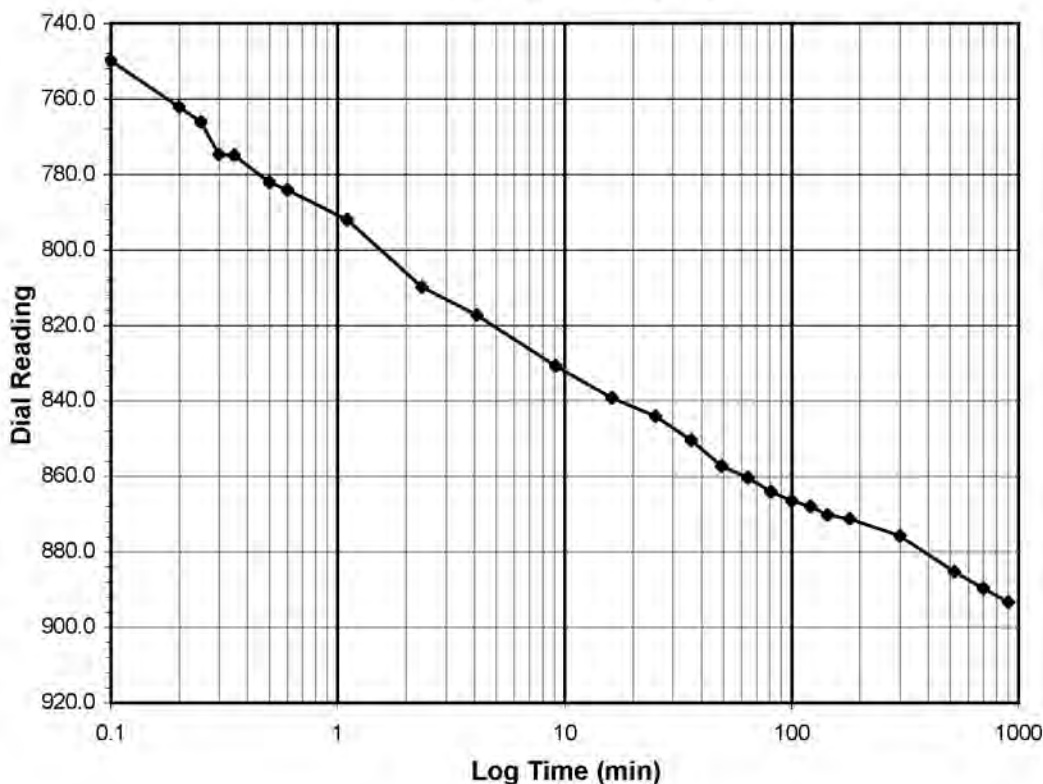
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-16.0
 Final Reading (div) 893.3
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/16/13
 Start Time 5:12:32

Elapsed Time (min)	Dial Reading (div)
Initial	576.7
0.10	749.8
0.20	762.2
0.25	766.1
0.30	774.7
0.35	774.9
0.50	782.1
0.60	784.1
1.10	792.0
2.35	809.8
4.10	817.3
9.12	830.8
16.12	839.2
25.12	844.0
36.12	850.4
49.12	857.3
64.12	860.3
81.12	864.1
100.12	866.5
121.12	867.9
144.12	870.2
180.12	871.2
300.12	875.7
520.12	885.2
700.12	889.7
900.05	893.3



Tested By DB Date 11/16/13 Checked By TM Date 12/6/13



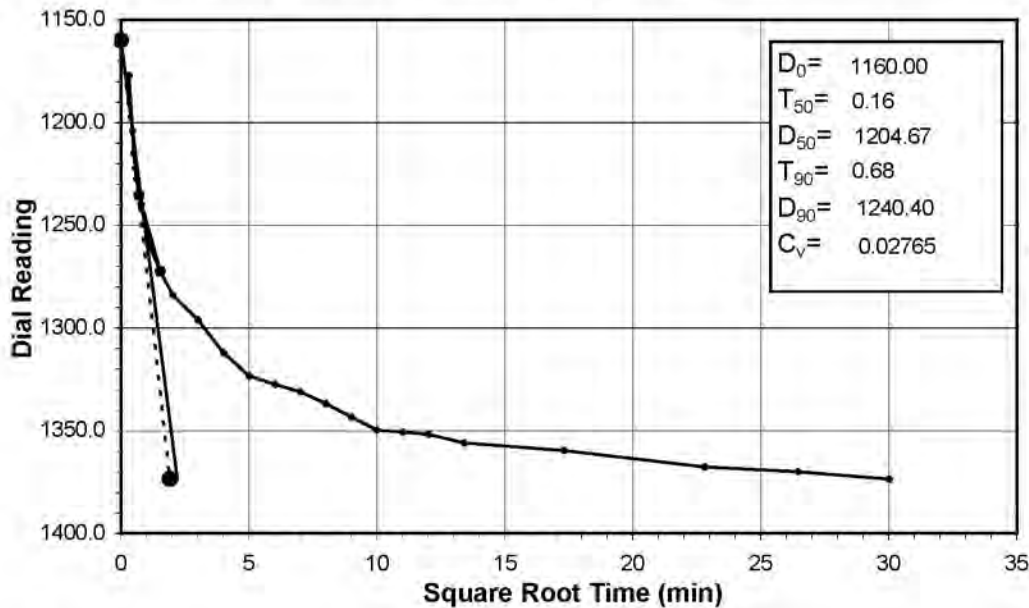
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

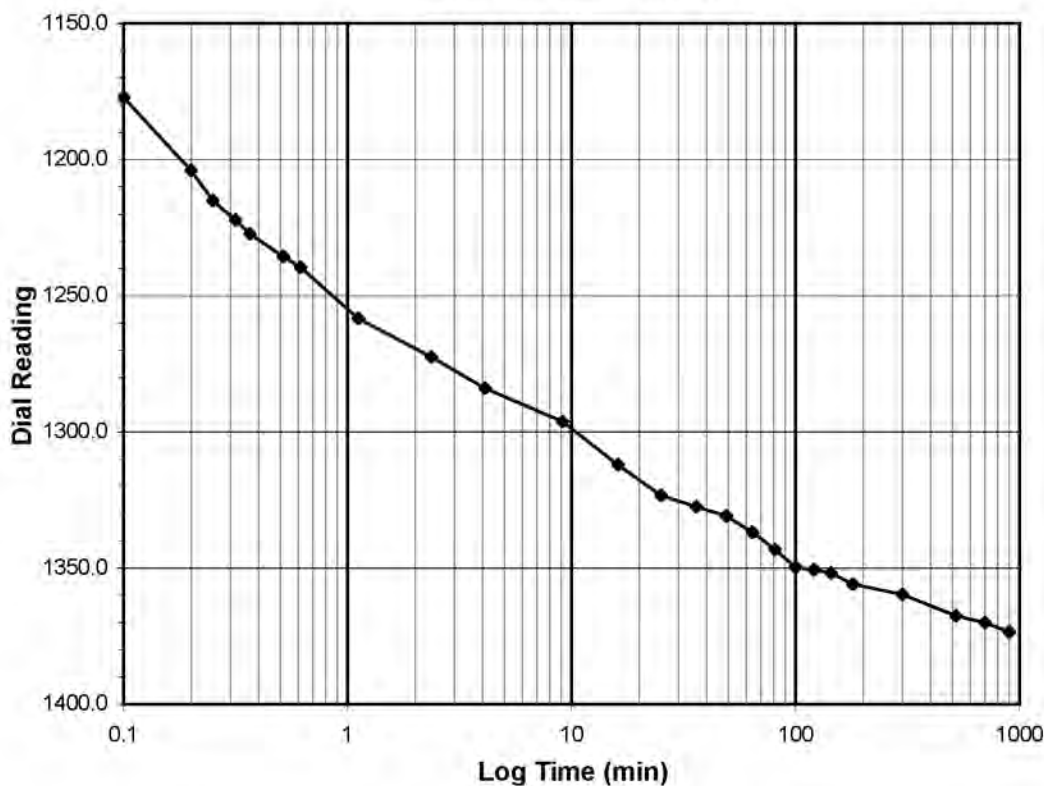
Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 16.0-32.0
 Final Reading (div) 1373.5
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/16/13
 Start Time 20:12:35



Elapsed Time (min)	Dial Reading (div)
Initial	893.3
0.10	1177.1
0.20	1204.0
0.25	1215.0
0.32	1222.1
0.37	1227.2
0.52	1235.5
0.62	1239.5
1.12	1258.4
2.37	1272.4
4.12	1284.0
9.12	1296.2
16.12	1312.1
25.12	1323.4
36.12	1327.4
49.12	1330.9
64.12	1336.8
81.12	1343.3
100.13	1349.7
121.13	1350.7
144.13	1351.8
180.13	1356.0
300.13	1359.7
520.13	1367.6
700.13	1370.0
900.28	1373.5

Tested By DB Date 11/16/13 Checked By TM Date 12/6/13



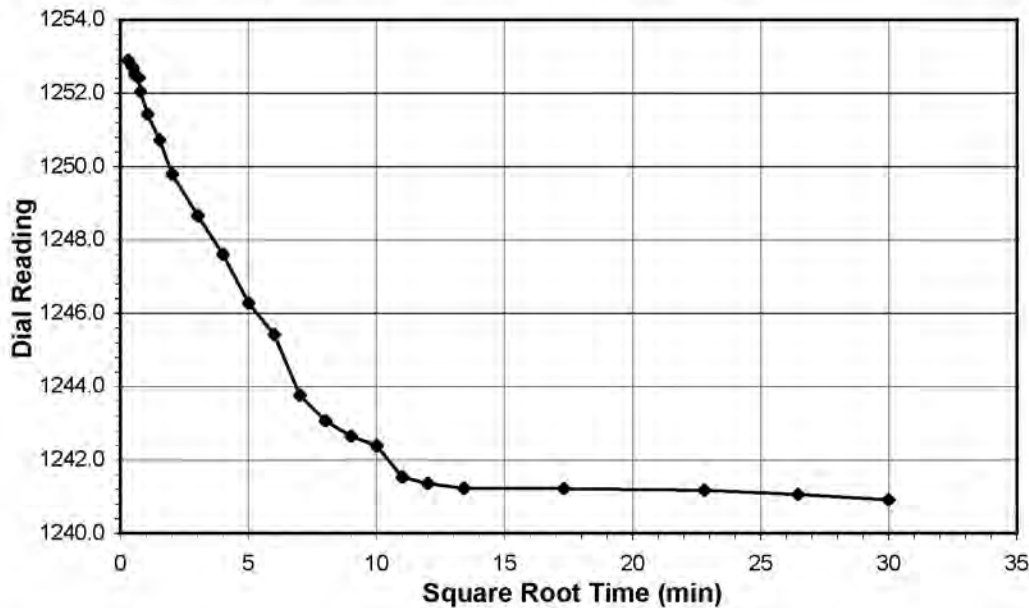
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

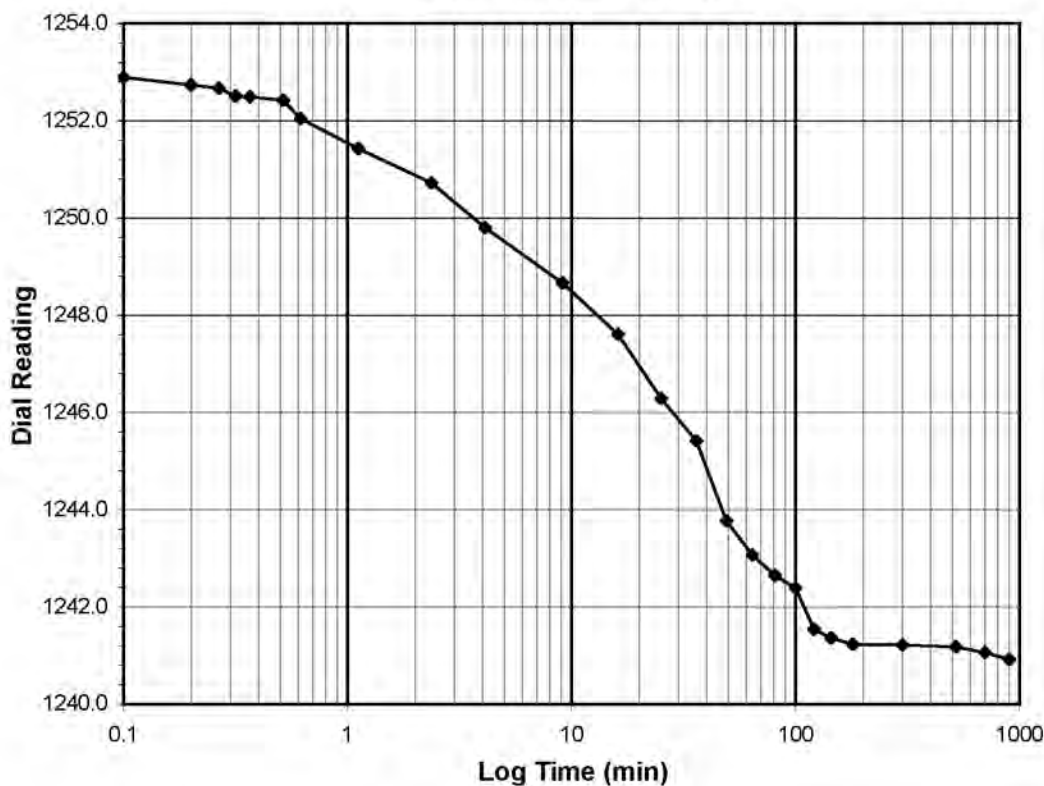
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 32.0-8.0
 Final Reading (div) 1240.9
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/17/13
 Start Time 11:12:52

Elapsed Time (min)	Dial Reading (div)
Initial	1373.5
0.10	1252.9
0.20	1252.7
0.27	1252.7
0.32	1252.5
0.37	1252.5
0.52	1252.4
0.62	1252.0
1.12	1251.4
2.37	1250.7
4.12	1249.8
9.12	1248.7
16.12	1247.6
25.12	1246.3
36.12	1245.4
49.12	1243.8
64.12	1243.1
81.12	1242.6
100.12	1242.4
121.13	1241.5
144.13	1241.4
180.13	1241.2
300.13	1241.2
520.13	1241.2
700.13	1241.1
900.37	1240.9



Tested By DB Date 11/17/13 Checked By TM Date 12/6/13



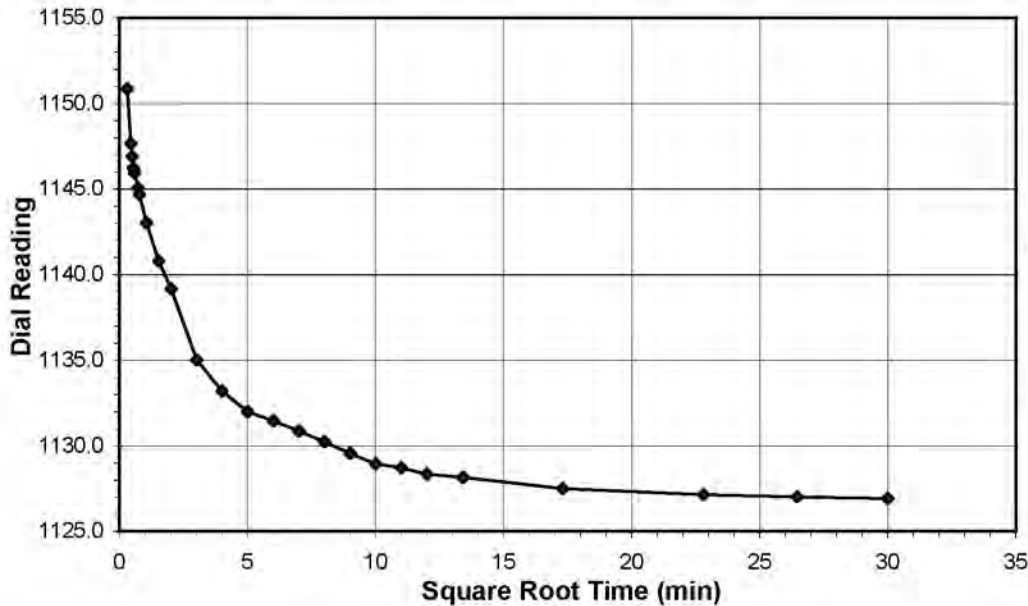
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

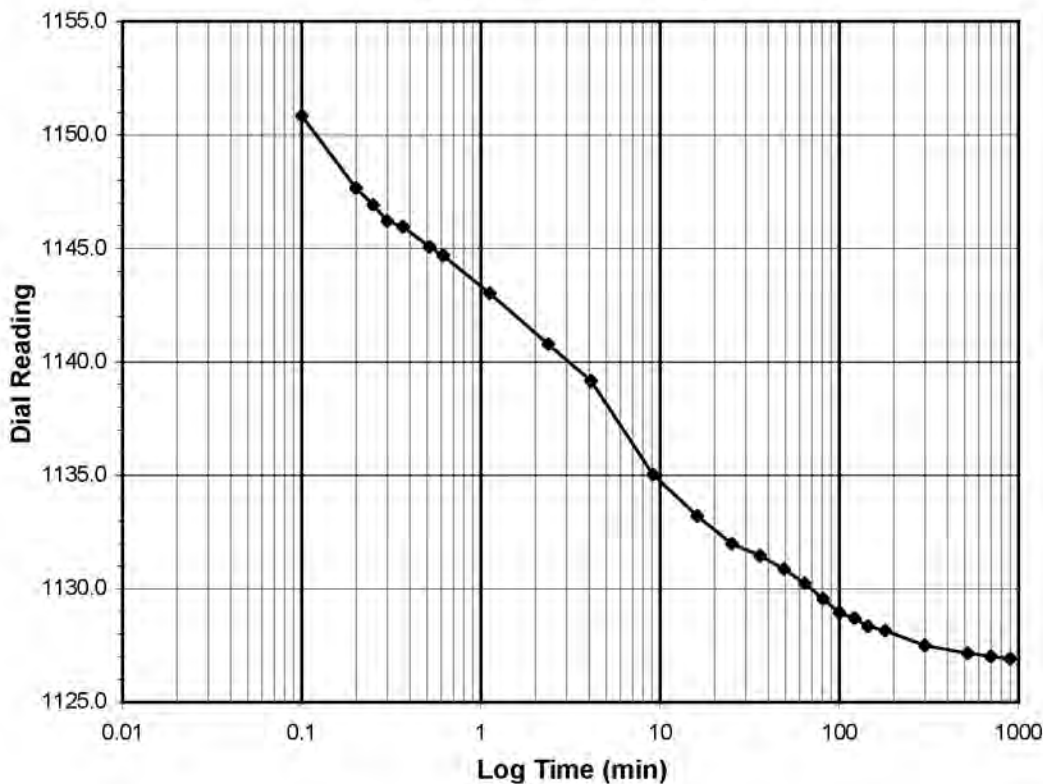
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-2.0
 Final Reading (div) 1126.9
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/18/13
 Start Time 2:13:14

Elapsed Time (min)	Dial Reading (div)
Initial	1240.9
0.10	1150.8
0.20	1147.7
0.25	1146.9
0.30	1146.2
0.37	1146.0
0.52	1145.1
0.62	1144.7
1.12	1143.0
2.37	1140.8
4.12	1139.2
9.12	1135.0
16.12	1133.2
25.12	1132.0
36.12	1131.5
49.12	1130.9
64.12	1130.2
81.12	1129.6
100.12	1129.0
121.12	1128.7
144.12	1128.3
180.12	1128.2
300.12	1127.5
520.12	1127.2
700.12	1127.0
900.27	1126.9



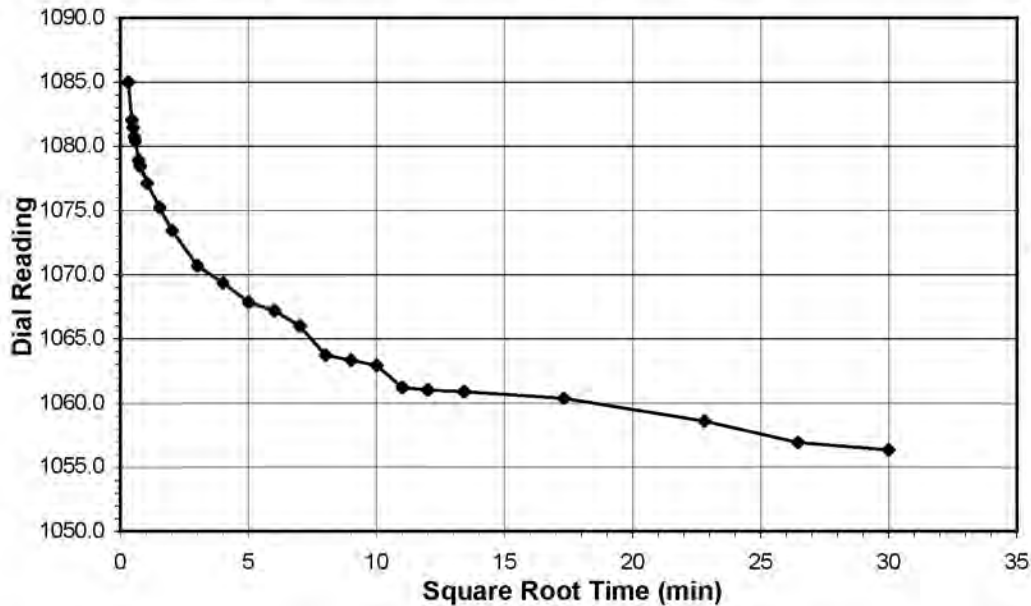
Tested By DB Date 11/18/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

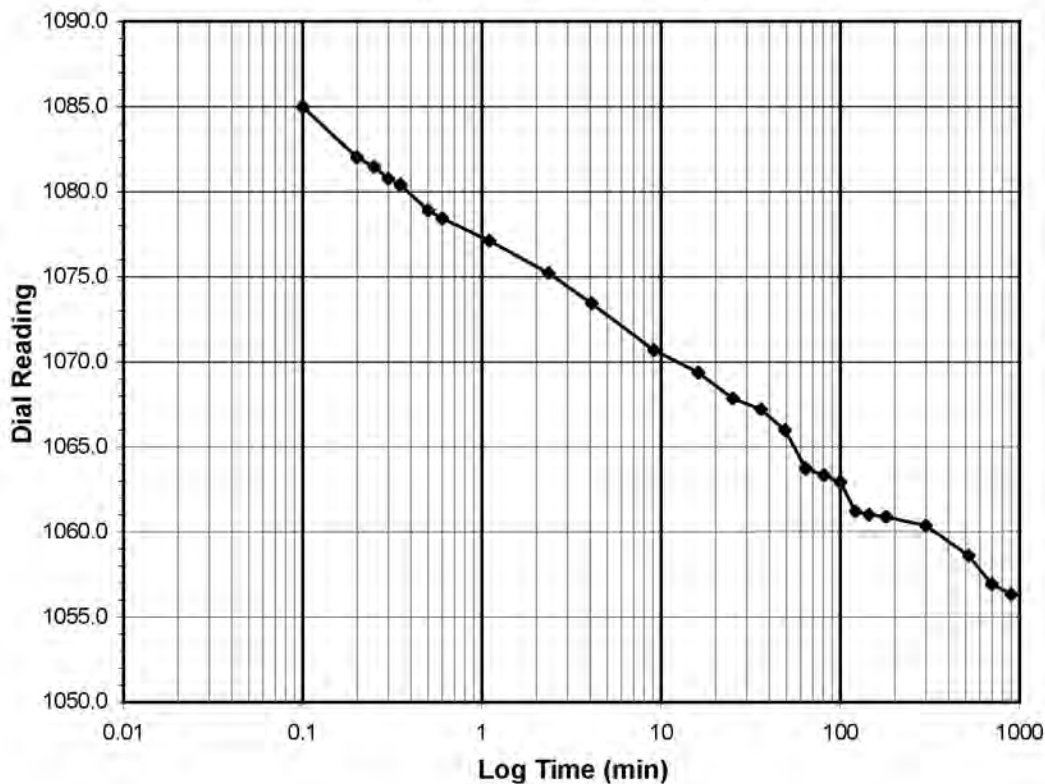
Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **1056.3**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 11/18/13
 Start Time 17:13:30

Elapsed Time (min)	Dial Reading (div)
Initial	1126.9
0.10	1085.0
0.20	1082.0
0.25	1081.5
0.30	1080.8
0.35	1080.4
0.50	1078.9
0.60	1078.4
1.10	1077.1
2.35	1075.2
4.10	1073.4
9.10	1070.7
16.10	1069.4
25.10	1067.9
36.12	1067.2
49.12	1066.0
64.12	1063.7
81.12	1063.3
100.12	1062.9
121.12	1061.2
144.12	1061.0
180.12	1060.9
300.12	1060.4
520.12	1058.6
700.12	1056.9
900.20	1056.3



Tested By DB Date 11/18/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	189.4-189.6
Project No.	2013-465-001	Sample No.	ST-4
Lab ID	2013-465-001-003	Visual Description	Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained**Consolidometer No.** G1427**1 Division** = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied	Final Dial	Machine	Corrected	Height of	Volume	Dry	Void
Tare Number	2535	2773	Pressure	Reading	Deflection	Reading	Sample	Volume	Density	Ratio
			(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	134.43	147.64								
Wt. Tare & DS (g)	102.29	115.20								
Wt. Water (g)	32.14	32.44	Seating	0	0	0	25.400	80.440	1.37577	0.91165
Wt. Tare (g)	6.71	6.93	0.25	75.4	23.9	51.5	25.269	80.026	1.38289	0.90181
Wt. DS (g)	95.58	108.27	0.5	117.5	40.1	77.3	25.204	79.818	1.38649	0.89687
Water Content (%)	33.63	29.96	1	180.3	62.7	117.6	25.101	79.494	1.39214	0.88917
			2	269.3	95.7	173.6	24.959	79.043	1.40008	0.87847
			4	392.6	128.7	263.9	24.730	78.317	1.41307	0.86120
<u>Sample Parameters</u>			1	341.9	87.7	254.2	24.754	78.395	1.41166	0.86305
Sample Diameter (in)	2.5	2.5	0.25	299.8	53.7	246.0	24.775	78.461	1.41047	0.86462
Sample Height (in)	1.0000	0.9052	0.5	314.7	64.2	250.5	24.764	78.425	1.41111	0.86378
Sample Volume (cm ³)	80.44	72.81	1	333.4	76.5	256.9	24.748	78.374	1.41204	0.86255
Wt. Wet Sample + Ring (g)	362.67	358.62	2	357.0	100.1	256.9	24.747	78.373	1.41205	0.86254
Wt. of Ring (g)	214.79	214.79	4	415.7	126.6	289.1	24.666	78.114	1.41673	0.85639
Wt. of Wet Sample (g)	147.88	143.83	8	576.7	178.9	397.8	24.390	77.240	1.43277	0.83561
Wet Density (pcf)	114.72	123.25	16	893.3	232.8	660.5	23.722	75.127	1.47306	0.78540
Wet Density (g/cm ³)	1.84	1.98	32	1373.5	317.3	1056.1	22.717	71.945	1.53822	0.70976
Water Content (%)	33.63	29.96	8	1240.9	217.5	1023.4	22.800	72.207	1.53263	0.71601
Wt. of Dry Sample (g)	110.67	110.67	2	1126.9	157.0	969.9	22.936	72.638	1.52354	0.72624
Dry Density (pcf)	85.85	94.84	0.5	1056.3	108.4	947.9	22.992	72.815	1.51985	0.73044
Dry Density (g/cm ³)	1.38	1.52								
Void Ratio	0.9117	0.7304								
Saturation (%)	97.01	107.88								
Specific Gravity	2.63	Measured								

<i>Tested By</i>	DB	<i>Date</i>	11/8/13	<i>Input Checked By</i>	TM	<i>Date</i>	12/6/13
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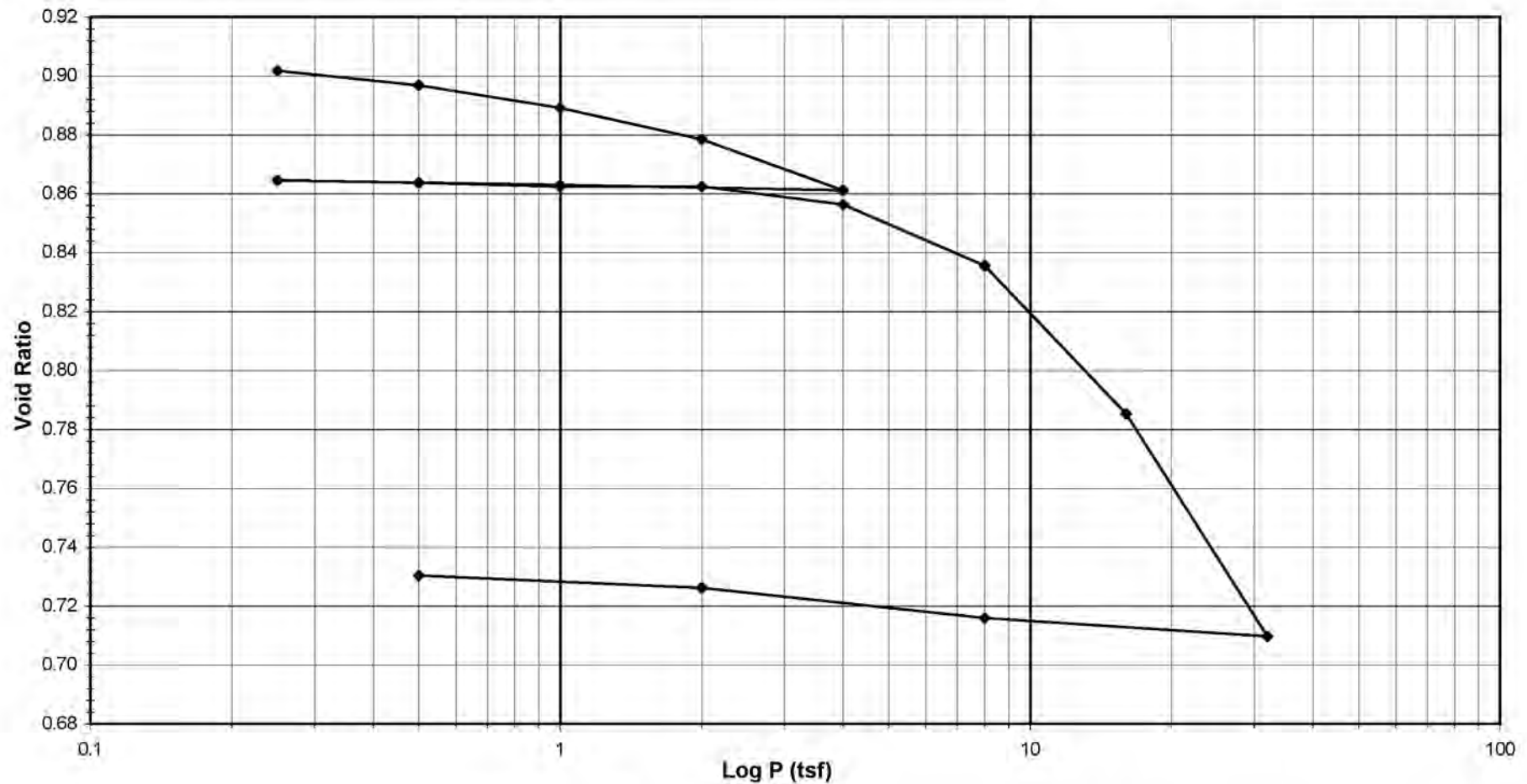
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/8/13

Approved By RJO Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-003

Boring No. R-7-1
 Depth (ft) 189.4-189.6
 Sample No. ST-4
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1427

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final							
<i>Water Content</i>			Load	Dial	Machine	Corrected	Sample	Time	C_v
Tare Number	2535	2773	Increment	Reading	Deflection	Dial Reading	Height	t₅₀	
				@ t₅₀		@ t₅₀	@ t₅₀		
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
Wt. Tare & WS (g)	134.43	147.64	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare & DS (g)	102.29	115.2	0.25	43.2	23.9	19.3	25.35	0.18	0.03008
Wt. Water (g)	32.14	32.44	0.5	96.1	40.1	56.0	25.26	0.27	0.01969
Wt. Tare (g)	6.71	6.93	1	150.1	62.7	87.4	25.18	0.12	0.04403
Wt. DS (g)	95.58	108.27	2	222.7	95.7	126.9	25.08	0.09	0.05684
Water Content (%)	33.63	29.96	4	343.9	128.7	215.2	24.85	0.47	0.01078
<i>Sample Parameters</i>			1	NA	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.25	NA	NA	NA	NA	NA	NA
Sample Height (in)	1.0000	0.9052	0.5	310.2	64.2	246.0	24.78	0.17	0.02933
Sample Volume (cm ³)	80.44	72.81	1	330.7	76.5	254.2	24.75	0.15	0.03454
Wt. Wet Sample + Ring (g)	362.67	358.62	2	346.1	100.1	246.0	24.78	0.11	0.04467
Wt. of Ring (g)	214.79	214.79	4	396.2	126.6	269.6	24.72	0.94	0.00537
Wt. of Wet Sample (g)	147.88	143.83	8	502.0	178.9	323.1	24.58	0.25	0.01984
Wet Density (pcf)	114.72	123.25	16	770.4	232.8	537.6	24.03	0.27	0.01744
Wet Density (g/cm ³)	1.84	1.98	32	1204.7	317.3	887.3	23.15	0.16	0.02765
Water Content (%)	33.63	29.96	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	110.67	110.67	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	85.85	94.84	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm ³)	1.38	1.52							
Void Ratio	0.9117	0.7304							
Saturation (%)	97.01	107.88							
Specific Gravity	2.63	Measured							

Tested By DB Date 11/8/13 Input Checked By TM Date 12/6/13

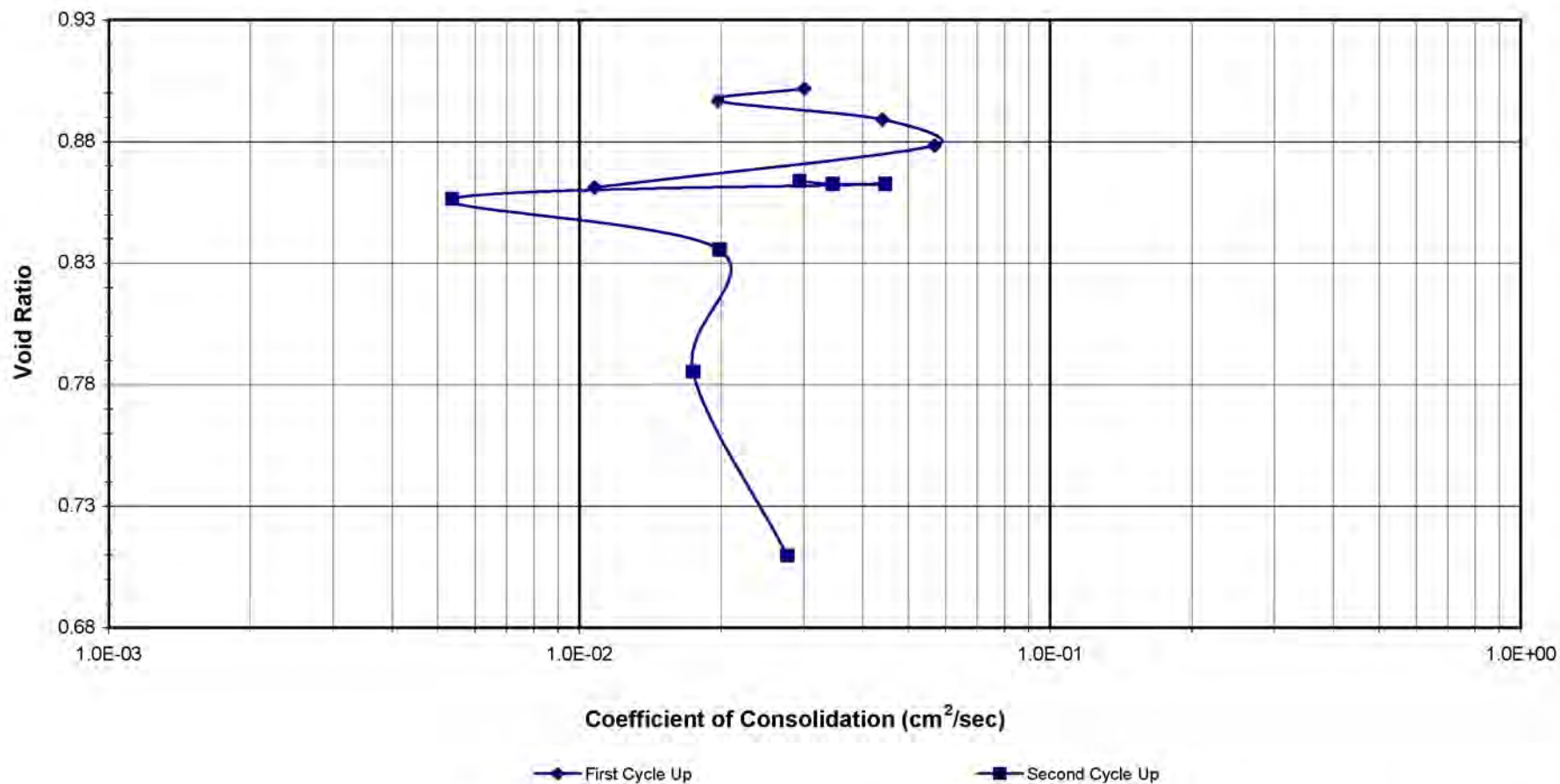
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-003

Boring No. R-7-1
Depth (ft) 189.4-189.6
Sample No. ST-4
Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/8/13

Approved By RJO Date 12/6/13

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	189.4-189.6
Project No.	2013-465-001	Sample No.	ST-4
Lab ID #	2013-465-001-003		

Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1427	1/9/14
Load Cell	G1428	1/9/14
LVDT	G1429	1/9/14



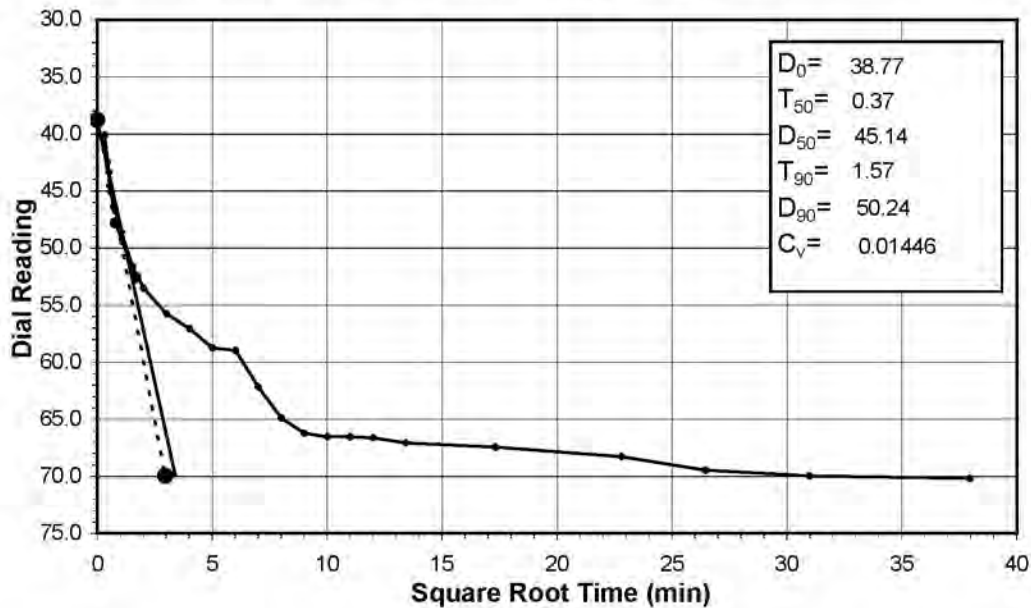
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

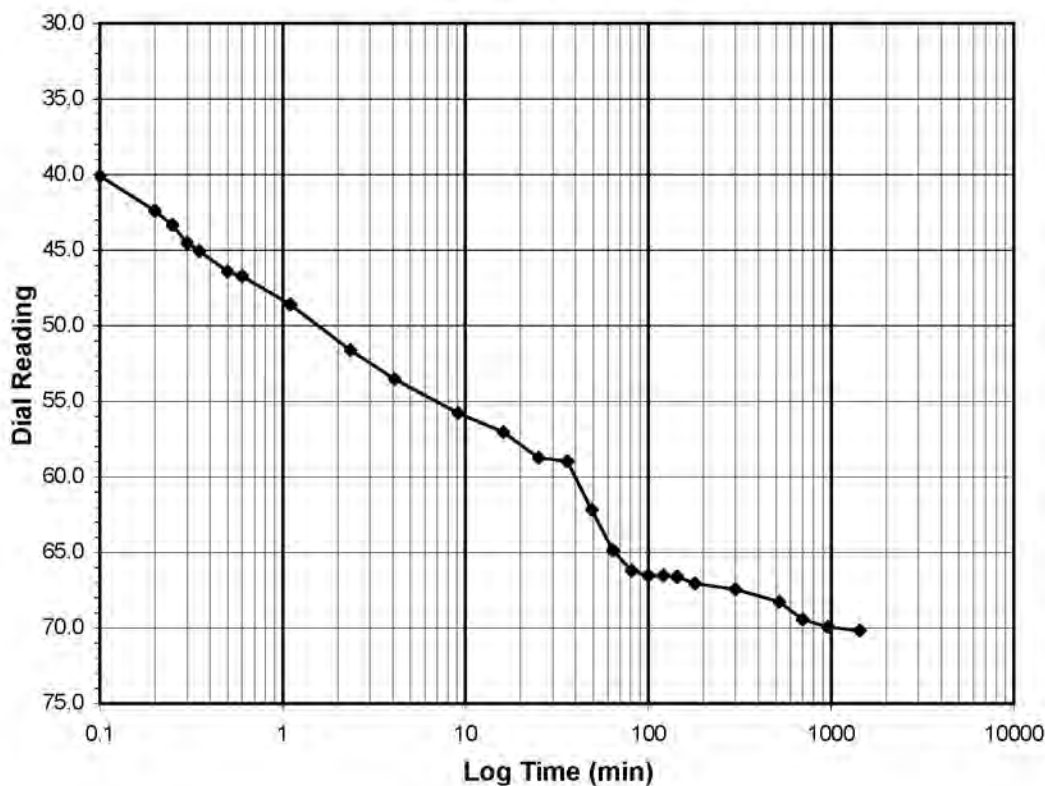
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.0-0.25
 Final Reading (div) 70.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/25/13
 Start Time 15:52:26

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	40.1
0.20	42.4
0.25	43.3
0.30	44.5
0.35	45.1
0.50	46.4
0.60	46.7
1.10	48.6
2.35	51.6
4.10	53.5
9.10	55.8
16.10	57.0
25.10	58.7
36.10	59.0
49.10	62.2
64.10	64.9
81.10	66.2
100.10	66.5
121.10	66.5
144.10	66.6
180.12	67.1
300.12	67.4
520.12	68.3
700.12	69.4
960.12	69.9
1440.05	70.2



Tested By DB Date 10/25/13 Checked By TM Date 12/5/13



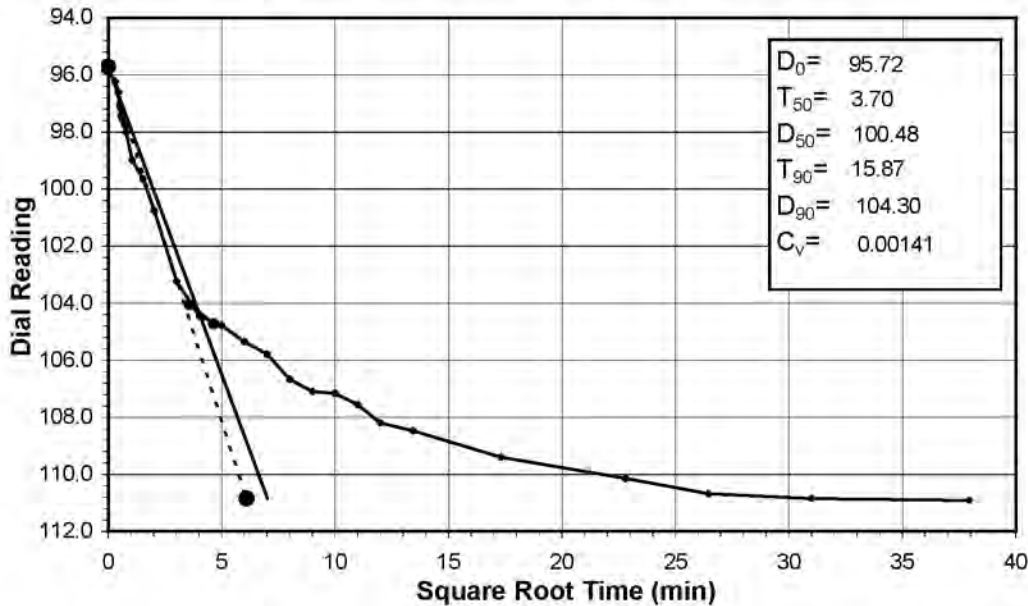
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

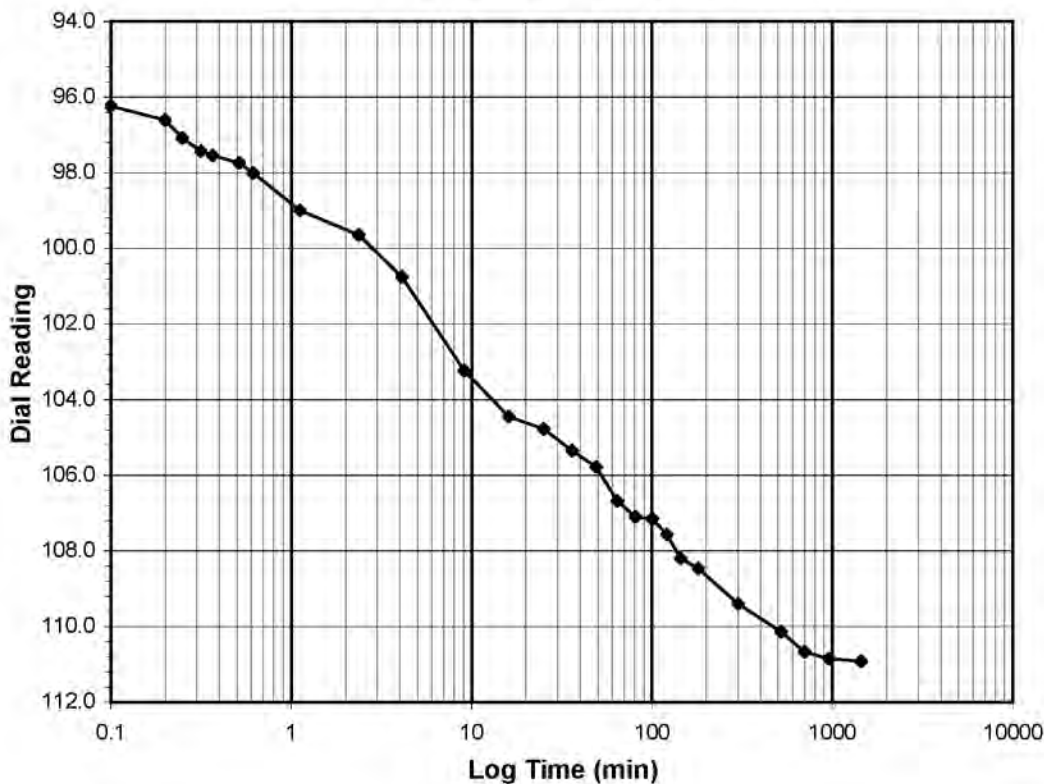
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.25-0.5
 Final Reading (div) 110.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/26/13
 Start Time 15:52:29

Elapsed Time (min)	Dial Reading (div)
Initial	70.2
0.10	96.2
0.20	96.6
0.25	97.1
0.32	97.4
0.37	97.5
0.52	97.7
0.62	98.0
1.12	99.0
2.37	99.6
4.12	100.8
9.12	103.2
16.12	104.4
25.12	104.8
36.12	105.3
49.12	105.8
64.12	106.7
81.12	107.1
100.13	107.2
121.13	107.6
144.13	108.2
180.13	108.5
300.13	109.4
520.13	110.1
700.13	110.7
960.13	110.8
1440.13	110.9



Tested By DB Date 10/26/13 Checked By TM Date 12/5/13



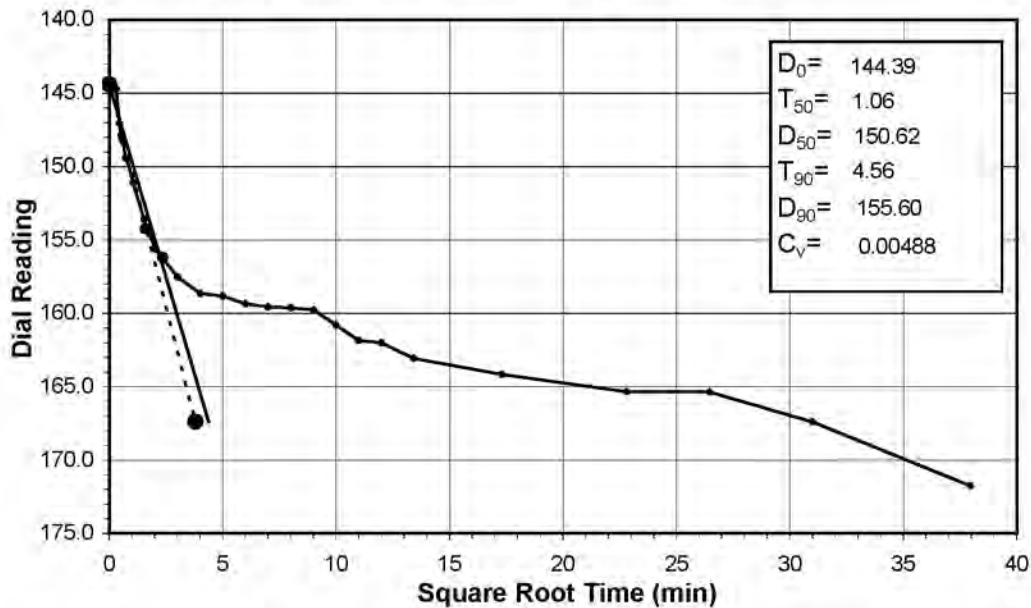
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

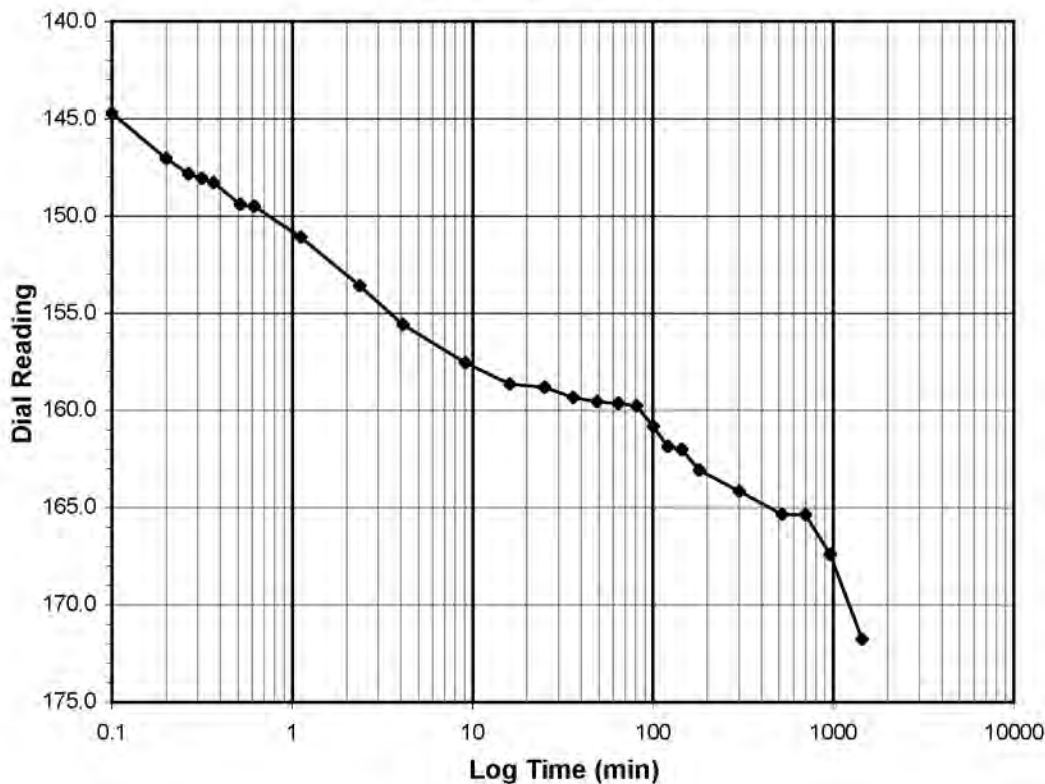
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 171.8
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/27/13
 Start Time 15:52:57

Elapsed Time (min)	Dial Reading (div)
Initial	110.9
0.10	144.7
0.20	147.0
0.27	147.8
0.32	148.1
0.37	148.3
0.52	149.4
0.62	149.5
1.12	151.1
2.37	153.6
4.12	155.6
9.12	157.5
16.12	158.6
25.12	158.8
36.12	159.3
49.13	159.6
64.13	159.6
81.13	159.8
100.13	160.8
121.13	161.8
144.13	162.0
180.13	163.1
300.13	164.2
520.13	165.3
700.13	165.4
960.13	167.4
1440.13	171.8



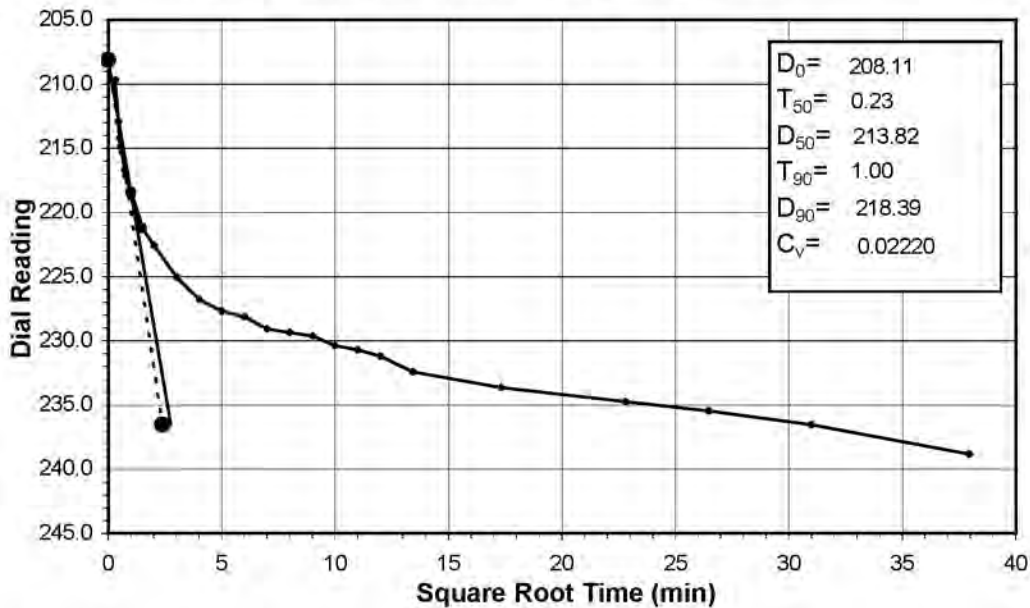
Tested By DB Date 10/27/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

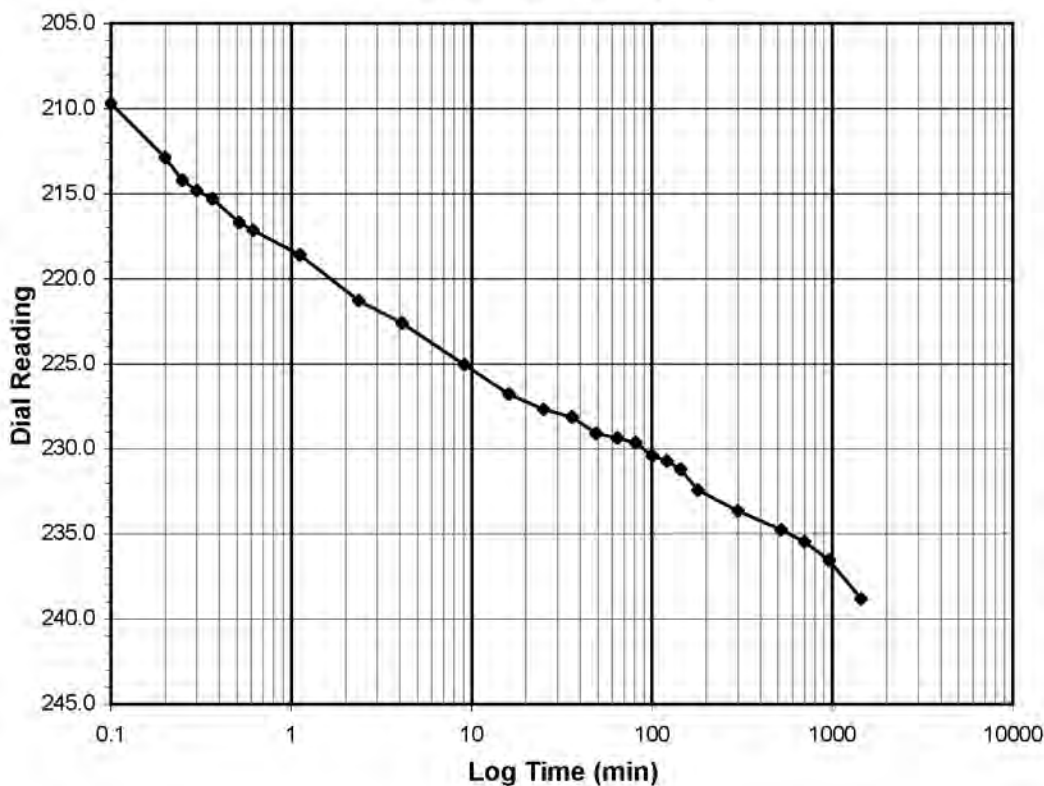
Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 238.8
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/28/13
 Start Time 15:53:12

Elapsed Time (min)	Dial Reading (div)
Initial	171.8
0.10	209.7
0.20	212.9
0.25	214.2
0.30	214.8
0.37	215.3
0.52	216.7
0.62	217.2
1.12	218.6
2.37	221.3
4.12	222.6
9.12	225.0
16.12	226.8
25.12	227.7
36.12	228.1
49.12	229.1
64.12	229.3
81.12	229.6
100.12	230.4
121.12	230.7
144.12	231.2
180.12	232.4
300.12	233.6
520.12	234.7
700.13	235.5
960.13	236.5
1440.17	238.8



Tested By DB Date 10/28/13 Checked By TM Date 12/5/13



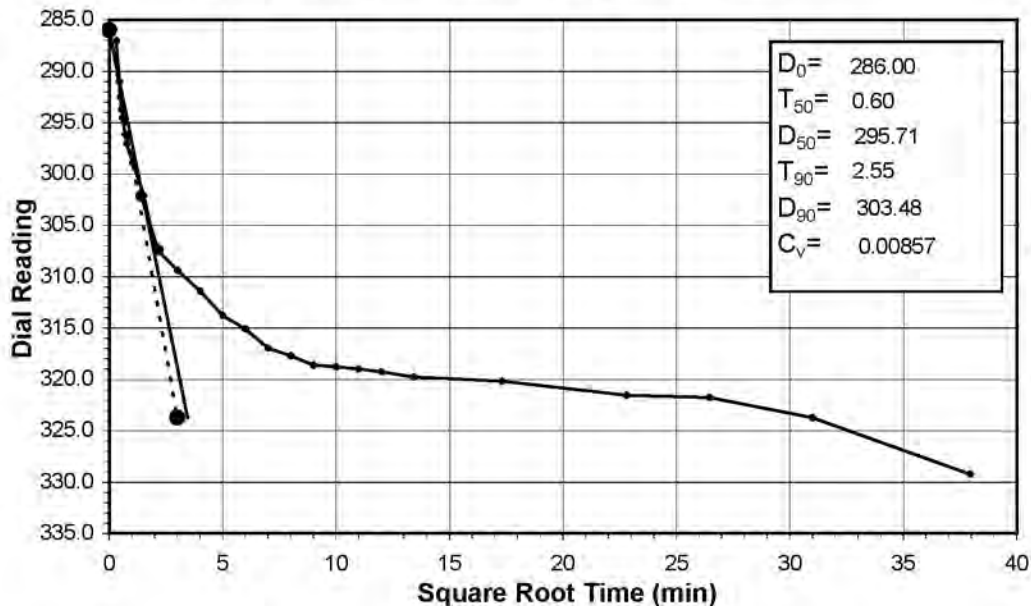
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

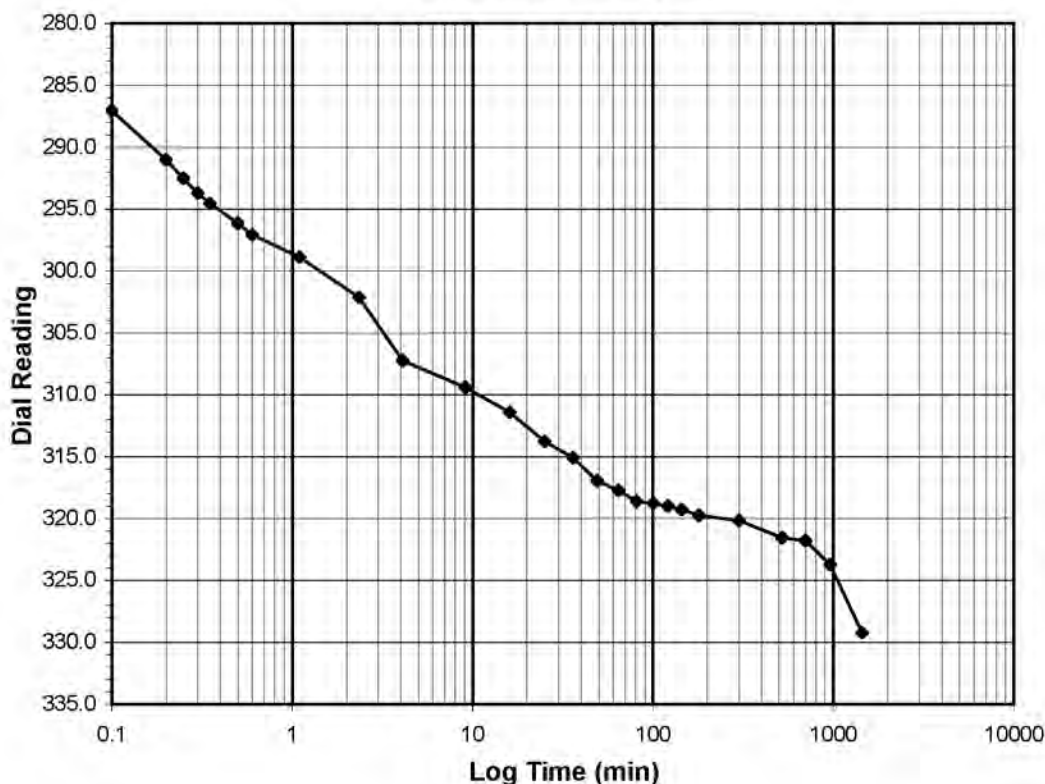
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 329.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/29/13
 Start Time 15:53:22

Elapsed Time (min)	Dial Reading (div)
Initial	238.8
0.10	287.0
0.20	291.0
0.25	292.5
0.30	293.7
0.35	294.5
0.50	296.1
0.60	297.1
1.10	298.9
2.35	302.1
4.10	307.2
9.10	309.4
16.12	311.4
25.12	313.8
36.12	315.1
49.12	316.9
64.12	317.7
81.12	318.6
100.12	318.8
121.12	319.0
144.12	319.3
180.12	319.8
300.12	320.2
520.12	321.6
700.12	321.8
960.12	323.7
1440.25	329.2



Tested By DB Date 10/29/13 Checked By TM Date 12/5/13



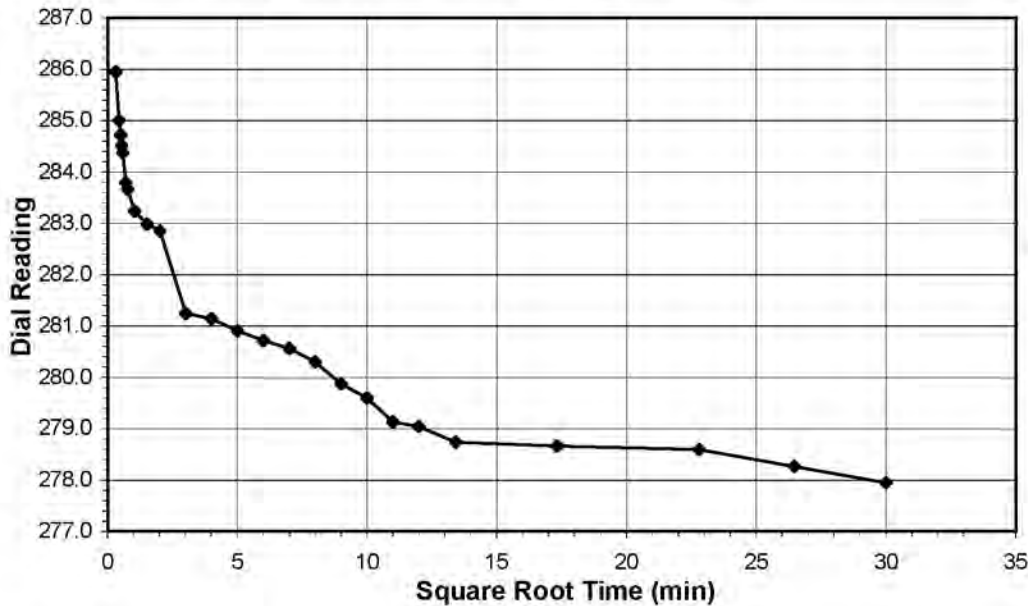
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

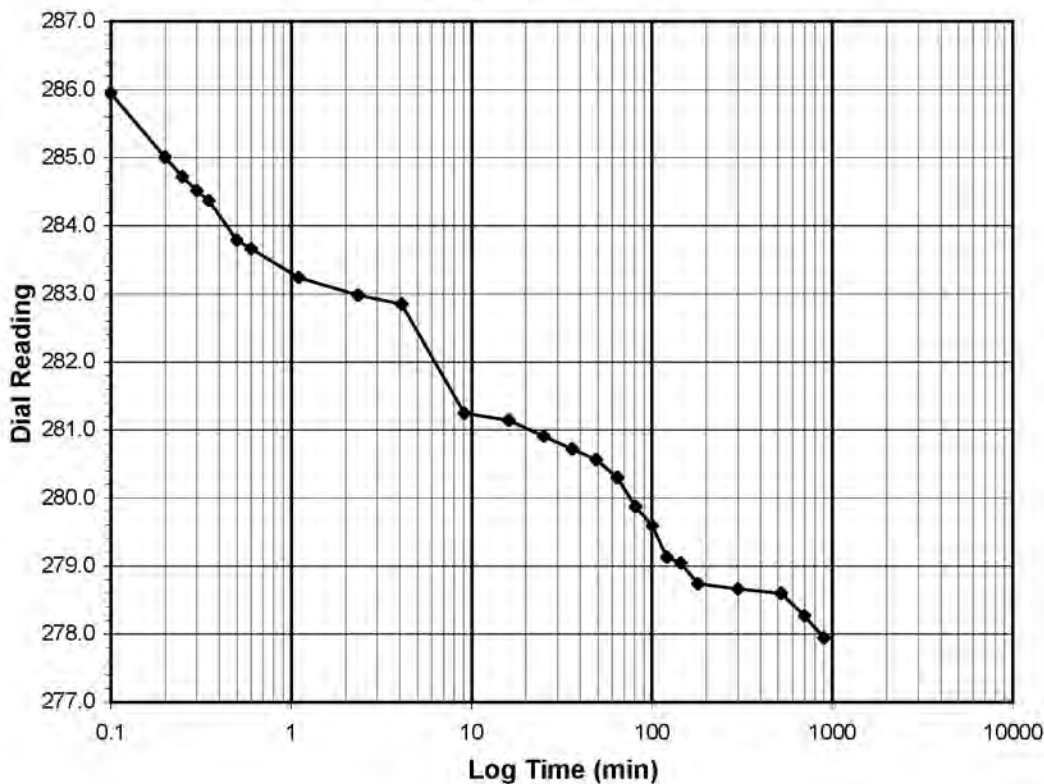
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 277.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/30/13
 Start Time 15:53:37

Elapsed Time (min)	Dial Reading (div)
Initial	329.2
0.10	285.9
0.20	285.0
0.25	284.7
0.30	284.5
0.35	284.4
0.50	283.8
0.60	283.7
1.10	283.2
2.35	283.0
4.10	282.8
9.10	281.2
16.10	281.1
25.12	280.9
36.12	280.7
49.12	280.6
64.12	280.3
81.12	279.9
100.12	279.6
121.12	279.1
144.12	279.0
180.12	278.7
300.12	278.7
520.12	278.6
700.12	278.3
900.27	277.9



Tested By DB Date 10/30/13 Checked By TM Date 12/5/13



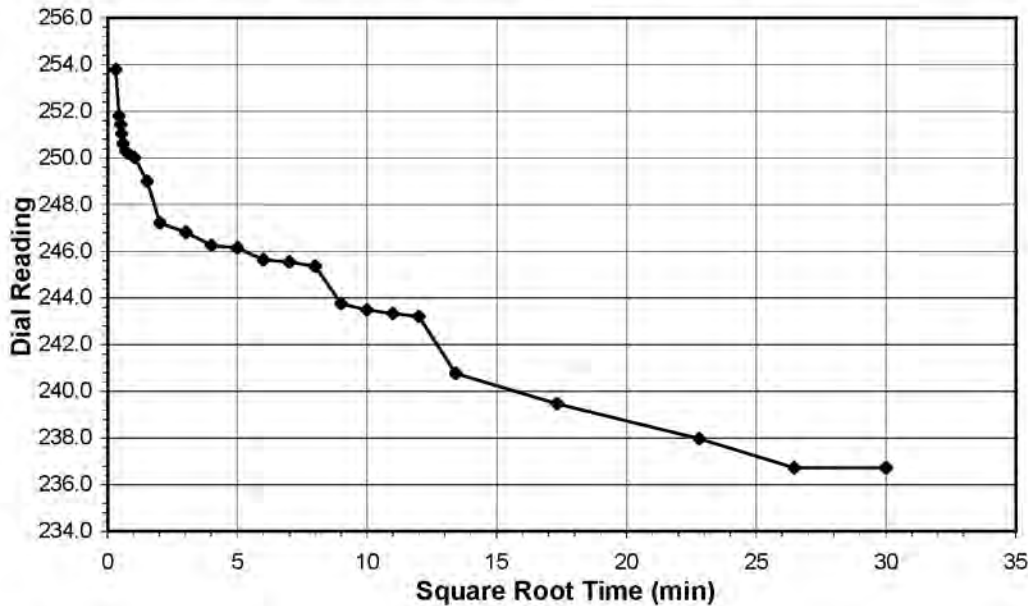
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

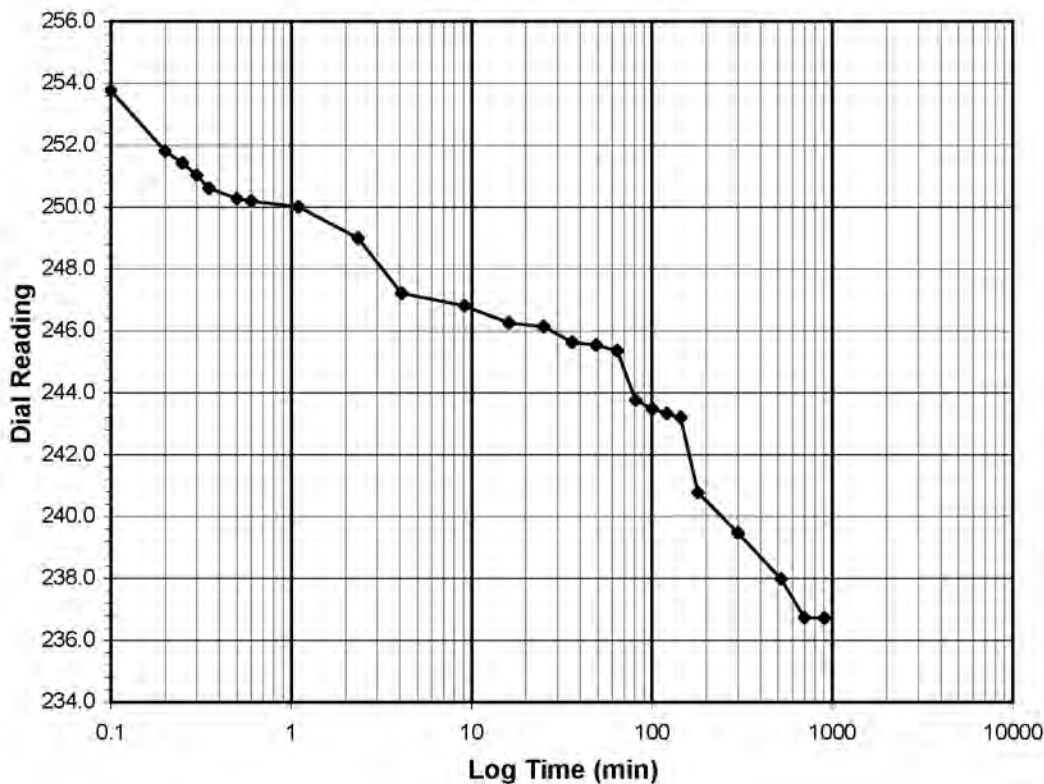
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-0.25
 Final Reading (div) 236.7
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 10/31/13
 Start Time 6:53:53

Elapsed Time (min)	Dial Reading (div)
Initial	277.9
0.10	253.8
0.20	251.8
0.25	251.4
0.30	251.0
0.35	250.6
0.50	250.3
0.60	250.2
1.10	250.0
2.35	249.0
4.10	247.2
9.10	246.8
16.10	246.3
25.10	246.1
36.10	245.6
49.10	245.5
64.10	245.4
81.10	243.8
100.10	243.5
121.12	243.3
144.12	243.2
180.12	240.8
300.12	239.5
520.12	238.0
700.12	236.7
900.40	236.7



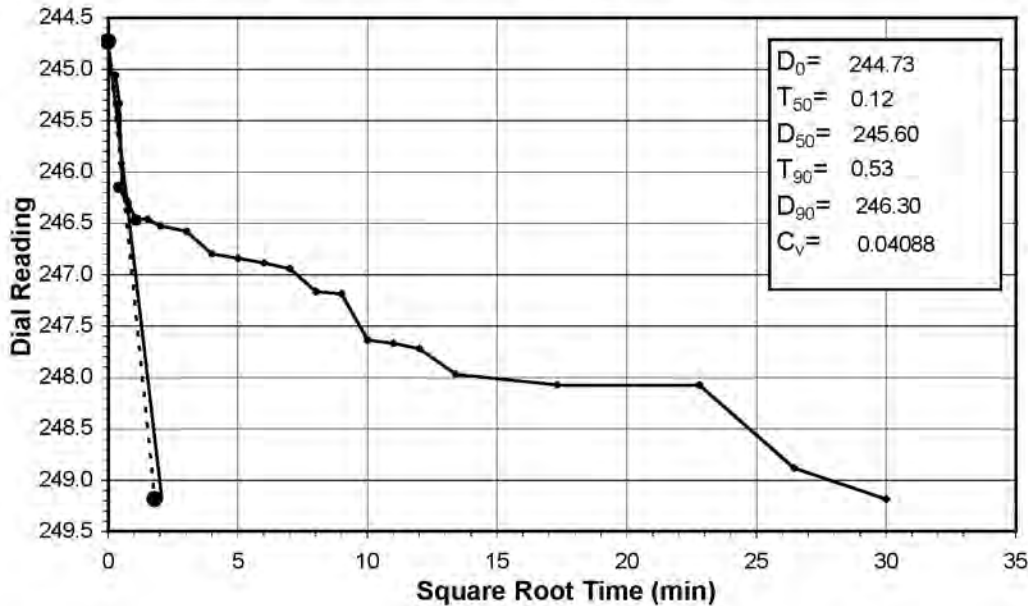
Tested By DB Date 10/31/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

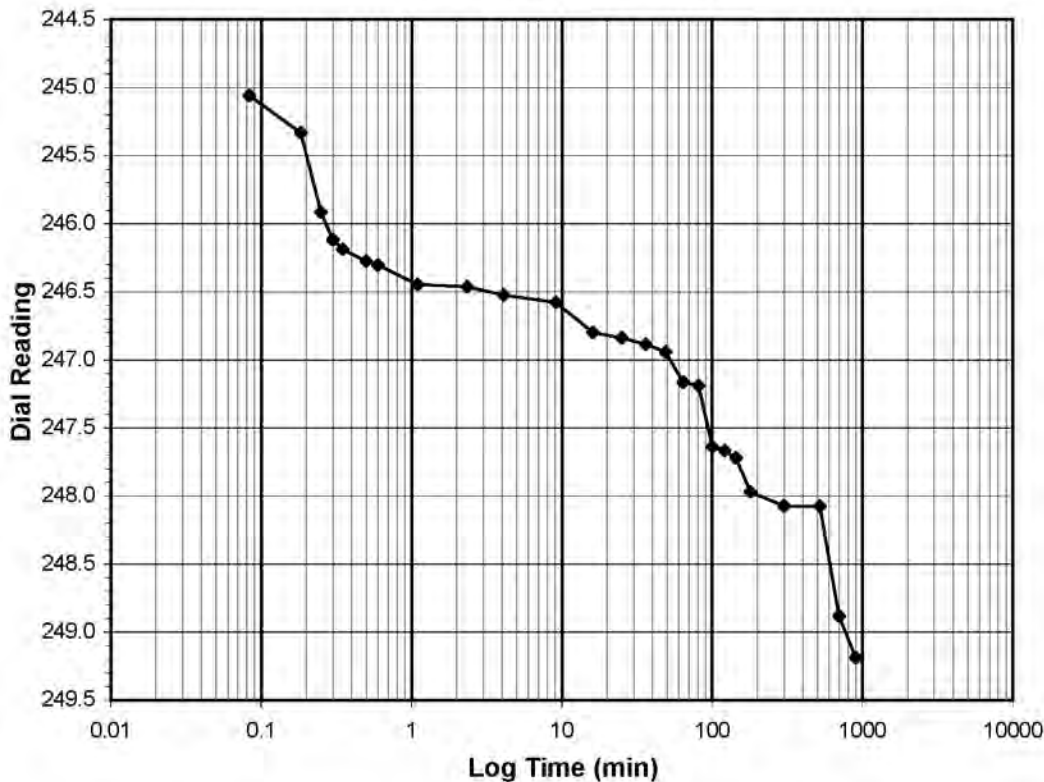
Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **249.2**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 10/31/13
 Start Time 21:54:16

Elapsed Time (min)	Dial Reading (div)
Initial	236.7
0.08	245.1
0.18	245.3
0.25	245.9
0.30	246.1
0.35	246.2
0.50	246.3
0.60	246.3
1.10	246.4
2.35	246.5
4.10	246.5
9.12	246.6
16.12	246.8
25.12	246.8
36.12	246.9
49.12	246.9
64.12	247.2
81.12	247.2
100.12	247.6
121.12	247.7
144.12	247.7
180.12	248.0
300.12	248.1
520.12	248.1
700.12	248.9
900.32	249.2



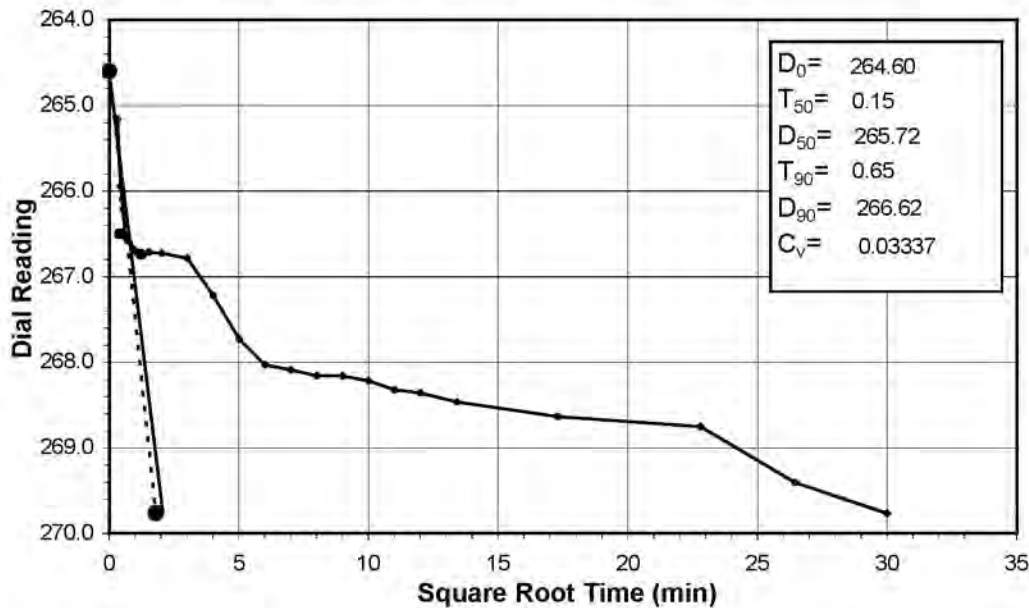
Tested By DB Date 10/31/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

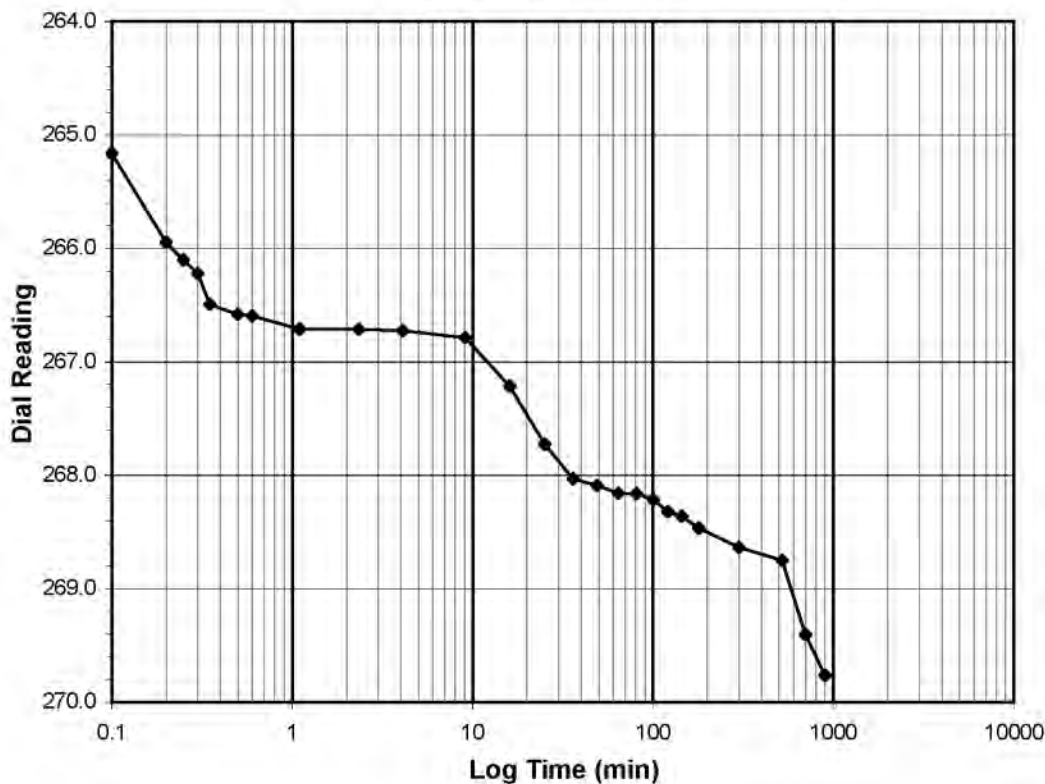
Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 269.8
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/1/13
 Start Time 12:54:36

Elapsed Time (min)	Dial Reading (div)
Initial	249.2
0.10	265.2
0.20	265.9
0.25	266.1
0.30	266.2
0.35	266.5
0.50	266.6
0.60	266.6
1.10	266.7
2.35	266.7
4.10	266.7
9.10	266.8
16.10	267.2
25.10	267.7
36.10	268.0
49.10	268.1
64.10	268.2
81.10	268.2
100.10	268.2
121.10	268.3
144.10	268.4
180.10	268.5
300.10	268.6
520.10	268.8
700.12	269.4
900.28	269.8



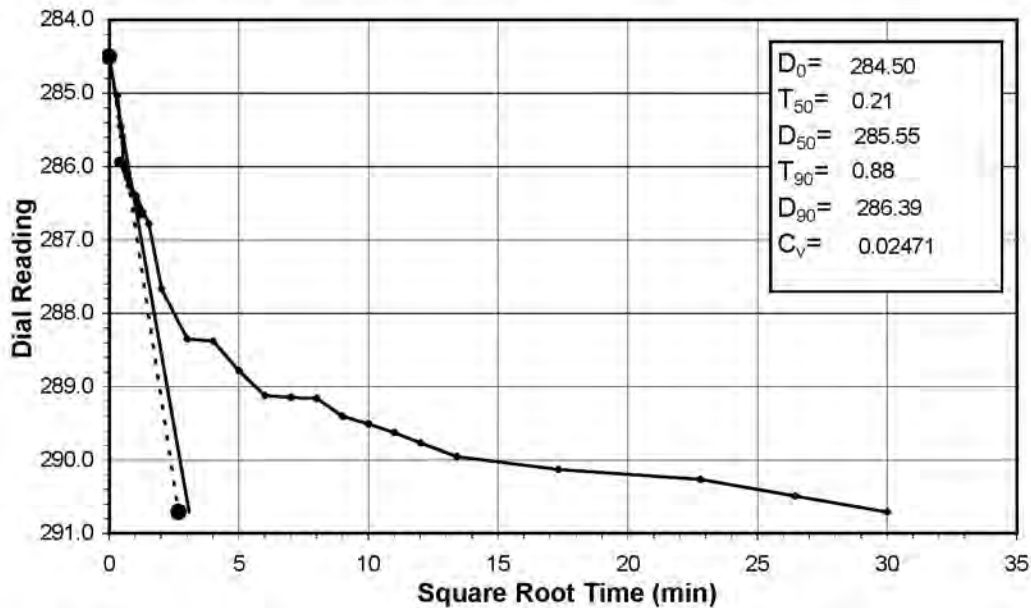
Tested By DB Date 11/1/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

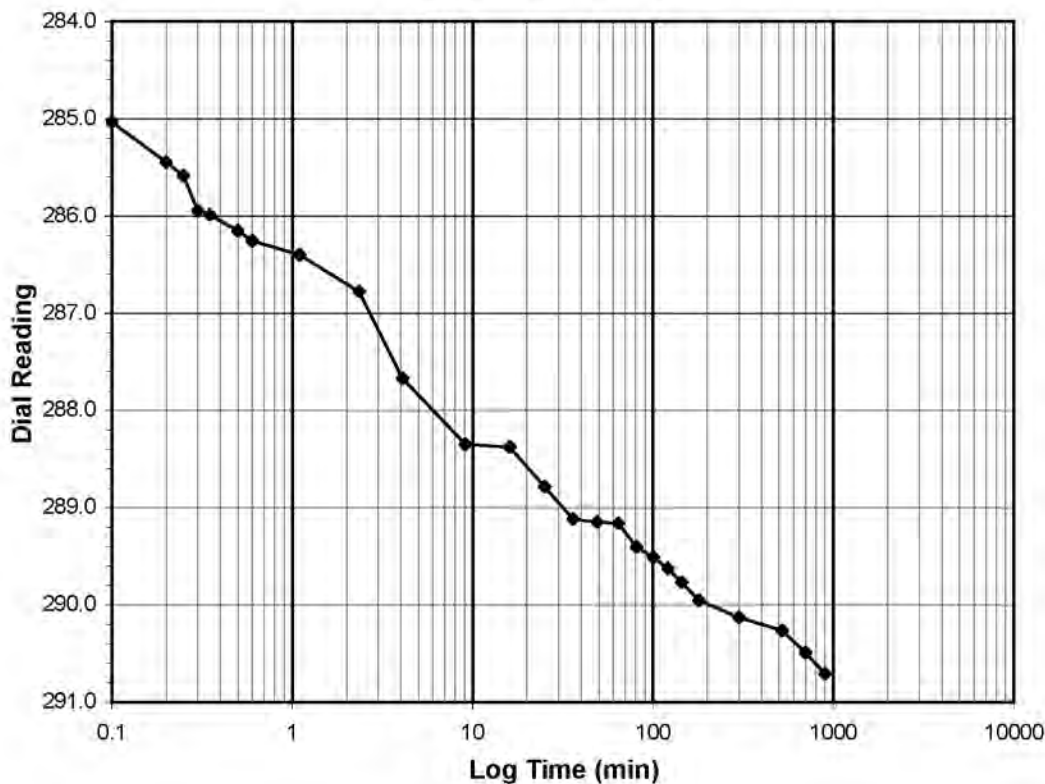
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 290.7
 Consolidometer No. G1421
 1 Division (in) 0.0001
 Start Date 11/2/13
 Start Time 3:54:53

Elapsed Time (min)	Dial Reading (div)
Initial	269.8
0.10	285.0
0.20	285.4
0.25	285.6
0.30	285.9
0.35	286.0
0.50	286.2
0.60	286.3
1.10	286.4
2.35	286.8
4.10	287.7
9.10	288.3
16.10	288.4
25.10	288.8
36.12	289.1
49.12	289.1
64.12	289.2
81.12	289.4
100.12	289.5
121.12	289.6
144.12	289.8
180.12	290.0
300.12	290.1
520.12	290.3
700.12	290.5
900.12	290.7



Tested By DB Date 11/2/13 Checked By TM Date 12/5/13



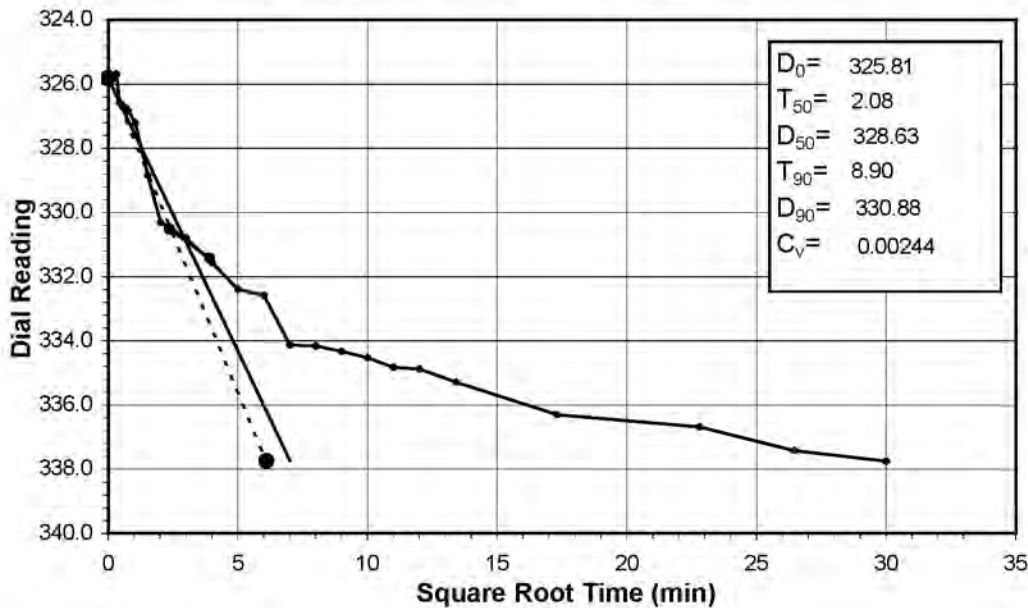
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

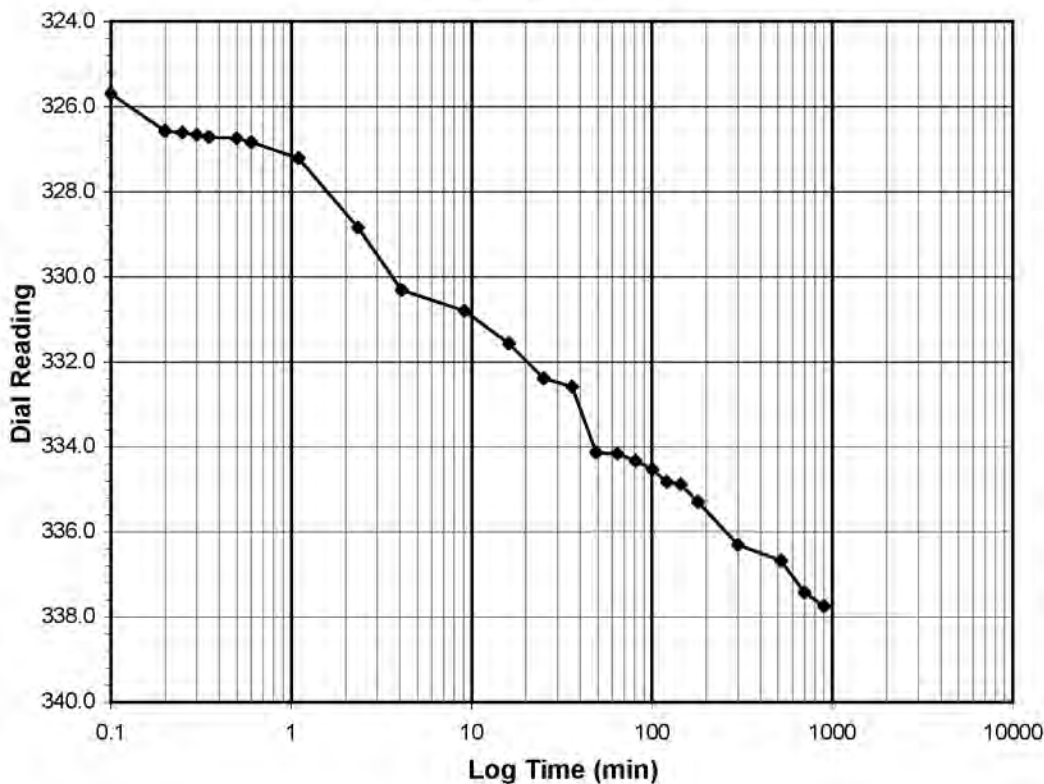
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 337.7
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/2/13
 Start Time 18:55:00

Elapsed Time (min)	Dial Reading (div)
Initial	290.7
0.10	325.7
0.20	326.6
0.25	326.6
0.30	326.7
0.35	326.7
0.50	326.7
0.60	326.8
1.10	327.2
2.35	328.8
4.10	330.3
9.10	330.8
16.12	331.6
25.12	332.4
36.12	332.6
49.12	334.1
64.12	334.2
81.12	334.3
100.12	334.5
121.12	334.8
144.12	334.9
180.12	335.3
300.12	336.3
520.12	336.7
700.12	337.4
900.10	337.7



Tested By DB Date 11/2/13 Checked By TM Date 12/5/13



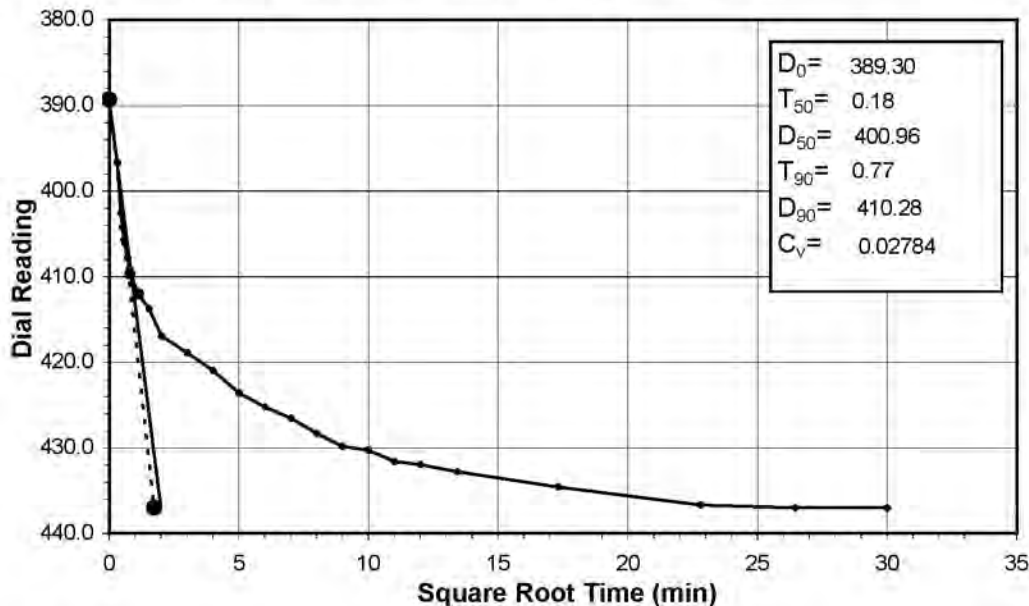
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

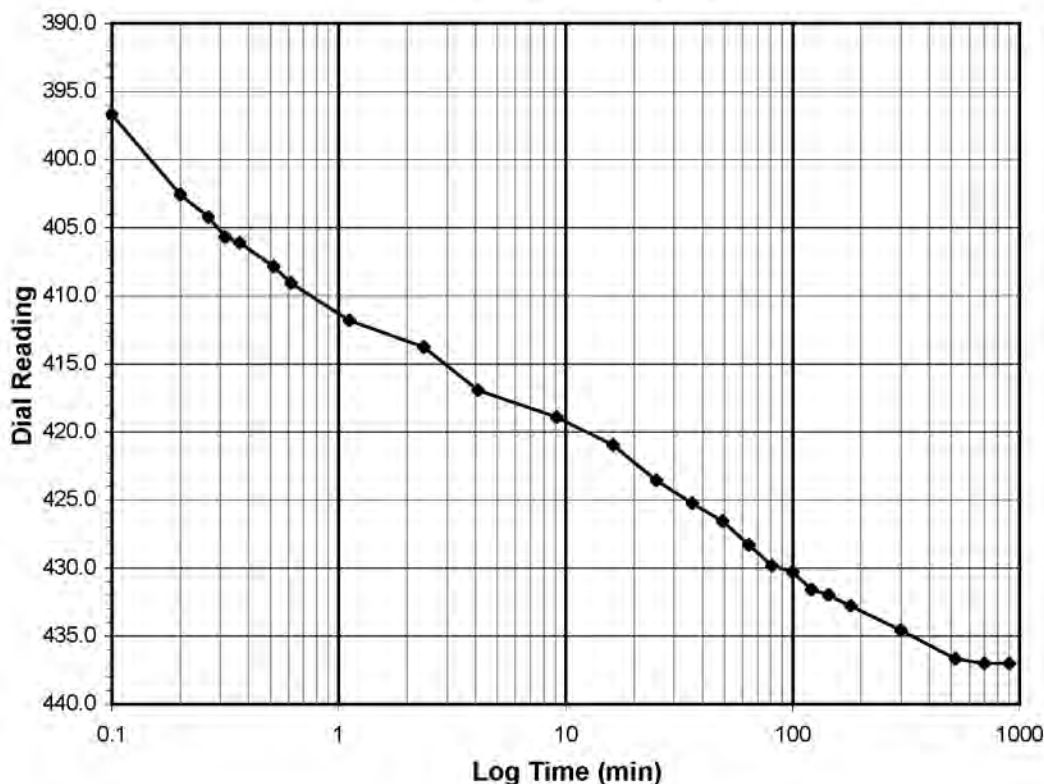
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-8.0
 Final Reading (div) 437.0
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/3/13
 Start Time 9:55:06

Elapsed Time (min)	Dial Reading (div)
Initial	337.7
0.10	396.7
0.20	402.5
0.27	404.2
0.32	405.7
0.37	406.1
0.52	407.8
0.62	409.1
1.12	411.8
2.37	413.8
4.12	416.9
9.12	418.9
16.12	421.0
25.12	423.6
36.12	425.2
49.12	426.5
64.12	428.3
81.12	429.8
100.12	430.3
121.12	431.6
144.12	432.0
180.13	432.8
300.13	434.6
520.13	436.7
700.13	437.0
900.28	437.0



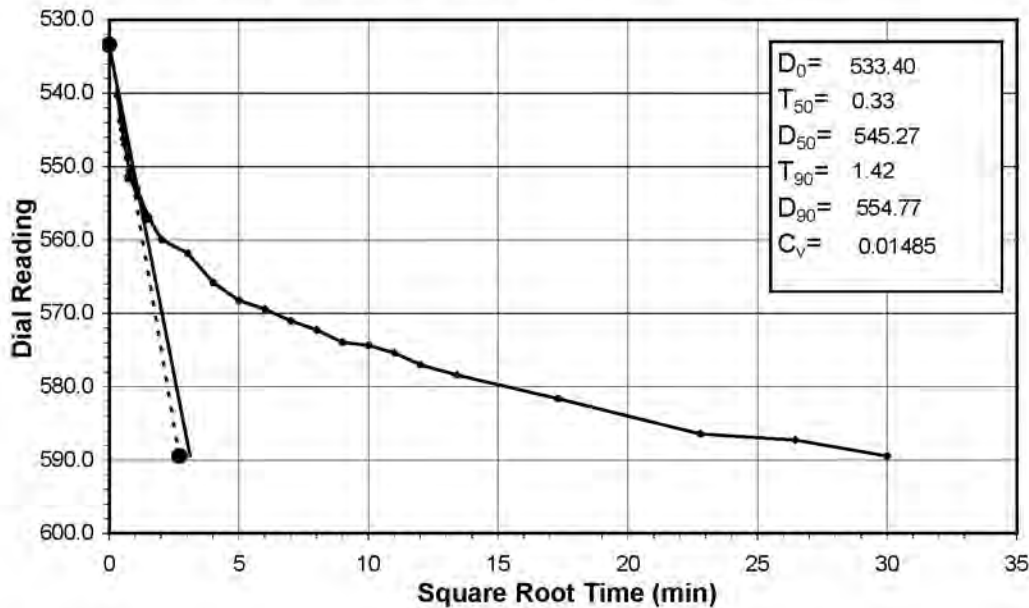
Tested By DB Date 11/3/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

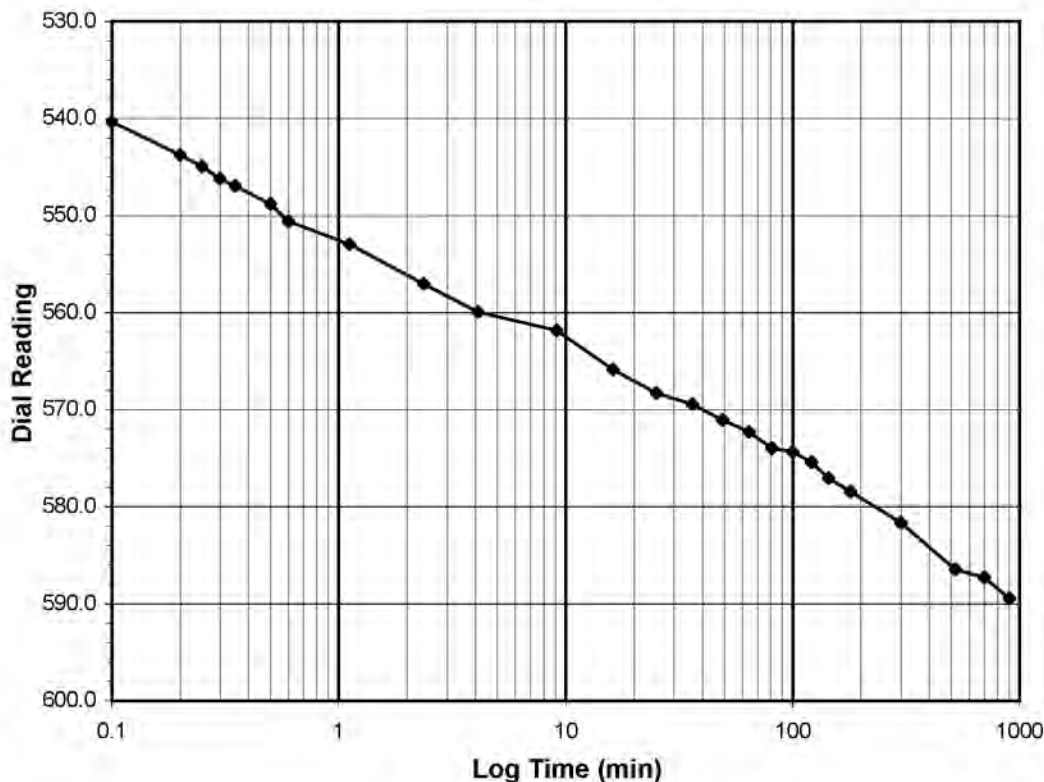
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 589.5
 Consolidometer No. G1421
 1 Division (in) 0.0001
 Start Date 11/4/13
 Start Time 0:55:23

Elapsed Time (min)	Dial Reading (div)
Initial	437.0
0.10	540.3
0.20	543.7
0.25	544.9
0.30	546.2
0.35	546.9
0.50	548.8
0.60	550.6
1.12	552.9
2.37	557.0
4.12	559.9
9.12	561.8
16.12	565.8
25.12	568.3
36.12	569.4
49.12	571.1
64.12	572.3
81.12	574.0
100.12	574.3
121.12	575.4
144.12	577.0
180.12	578.4
300.12	581.6
520.12	586.4
700.12	587.3
900.45	589.5



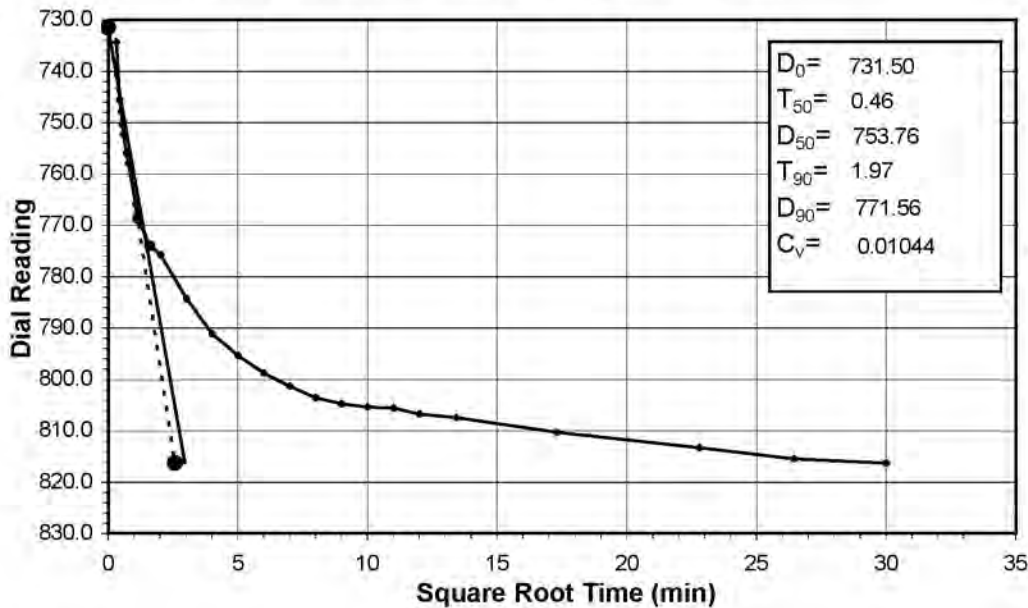
Tested By DB Date 11/4/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

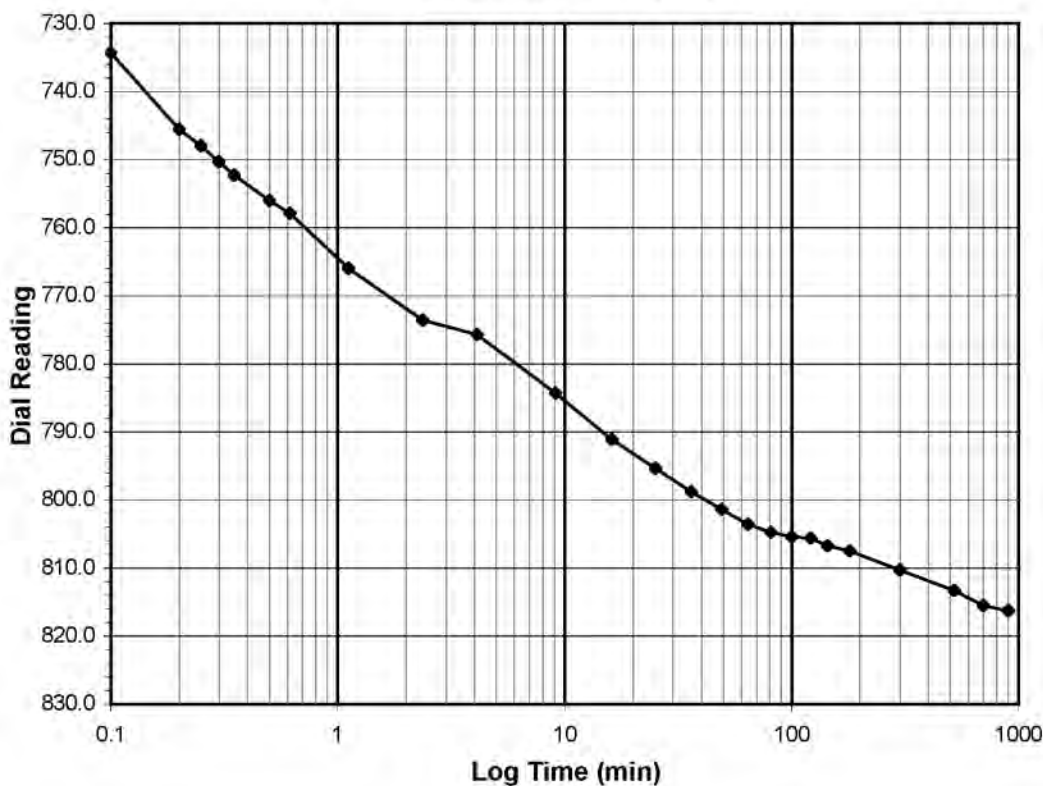
Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **16.0-32.0**
 Final Reading (div) **816.3**
 Consolidometer No. **G1421**
 1 Division (in) 0.0001

Start Date 11/4/13
 Start Time 15:55:50

Elapsed Time (min)	Dial Reading (div)
Initial	589.5
0.10	734.3
0.20	745.6
0.25	748.0
0.30	750.3
0.35	752.3
0.50	756.0
0.62	757.9
1.12	766.0
2.37	773.6
4.12	775.7
9.12	784.3
16.12	791.1
25.12	795.3
36.12	798.8
49.12	801.4
64.12	803.6
81.13	804.8
100.13	805.4
121.13	805.6
144.13	806.7
180.13	807.5
300.13	810.3
520.13	813.3
700.13	815.5
900.22	816.3



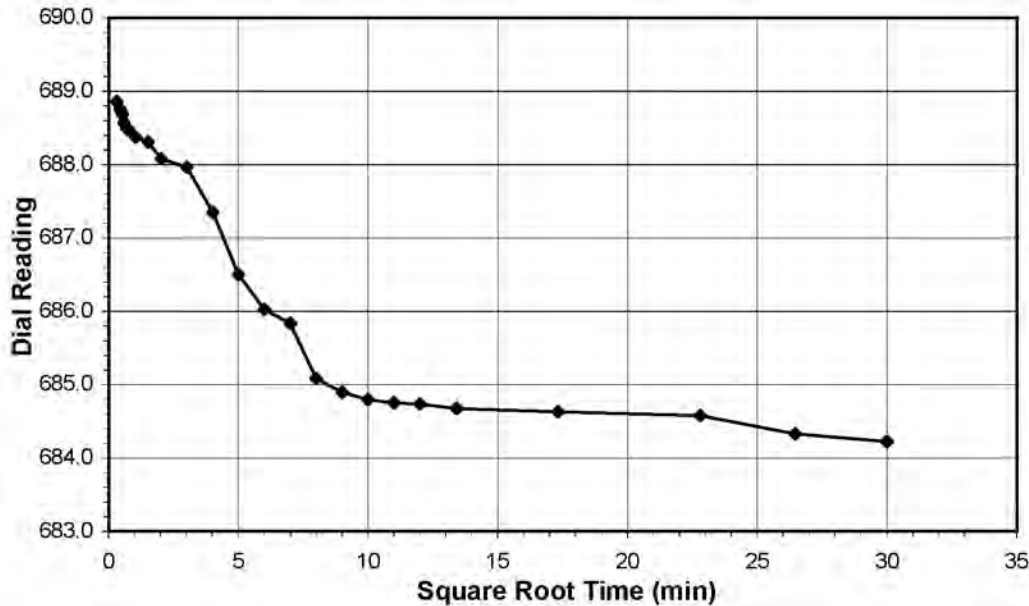
Tested By DB Date 11/4/13 Checked By TM Date 12/5/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

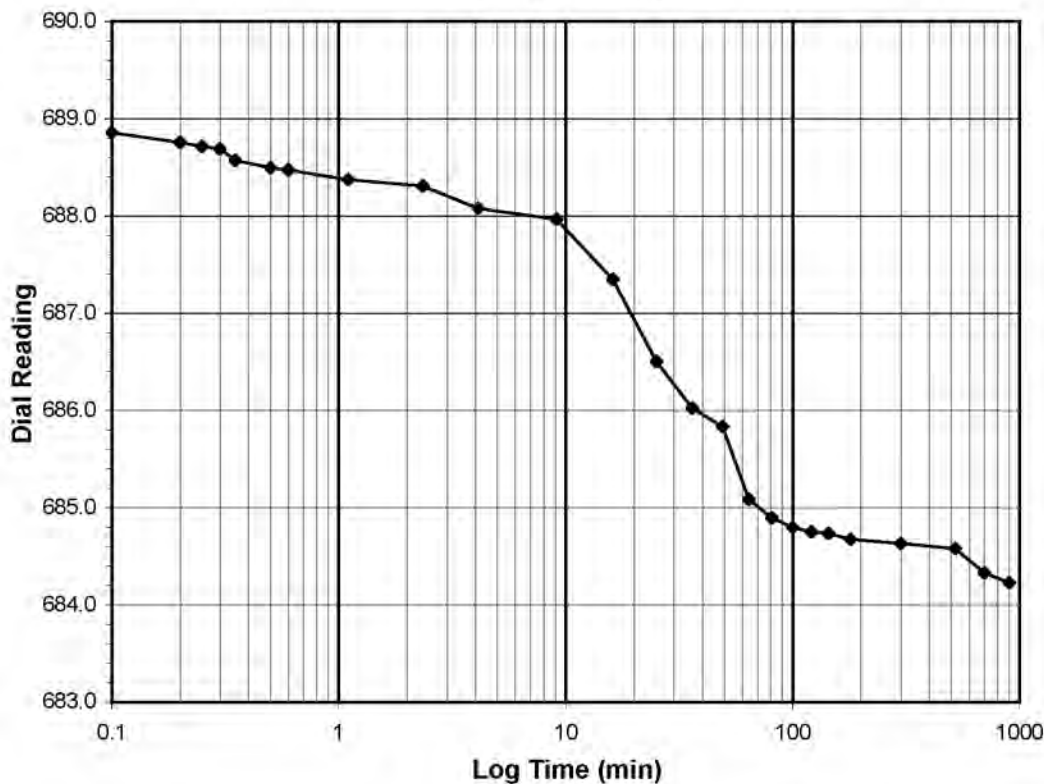
Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 32.0-8.0
 Final Reading (div) 684.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/5/13
 Start Time 6:56:03

Elapsed Time (min)	Dial Reading (div)
Initial	816.3
0.10	688.9
0.20	688.8
0.25	688.7
0.30	688.7
0.35	688.6
0.50	688.5
0.60	688.5
1.10	688.4
2.35	688.3
4.12	688.1
9.12	688.0
16.12	687.3
25.12	686.5
36.12	686.0
49.12	685.8
64.12	685.1
81.12	684.9
100.12	684.8
121.12	684.8
144.12	684.7
180.12	684.7
300.13	684.6
520.13	684.6
700.13	684.3
900.27	684.2



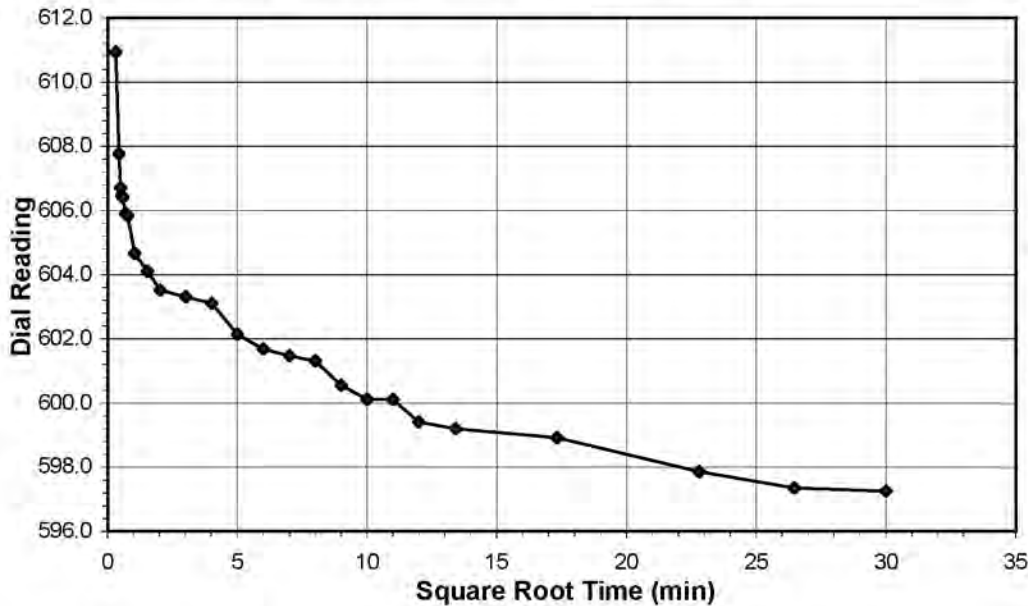
Tested By DB Date 11/5/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

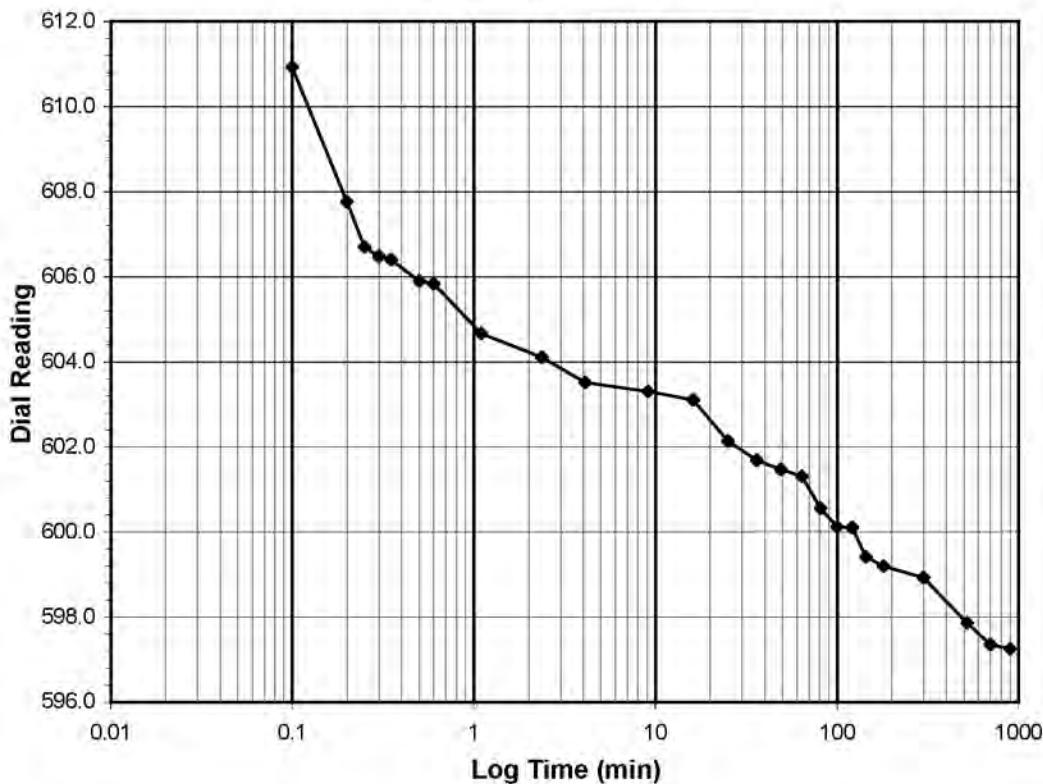
Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-2.0
 Final Reading (div) 597.3
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/5/13
 Start Time 21:56:19

Elapsed Time (min)	Dial Reading (div)
Initial	684.2
0.10	610.9
0.20	607.8
0.25	606.7
0.30	606.5
0.35	606.4
0.50	605.9
0.60	605.8
1.10	604.7
2.37	604.1
4.12	603.5
9.12	603.3
16.12	603.1
25.12	602.1
36.12	601.7
49.12	601.5
64.12	601.3
81.12	600.6
100.12	600.1
121.12	600.1
144.12	599.4
180.12	599.2
300.12	598.9
520.12	597.9
700.13	597.4
900.32	597.3



Tested By DB Date 11/5/13 Checked By TM Date 12/5/13



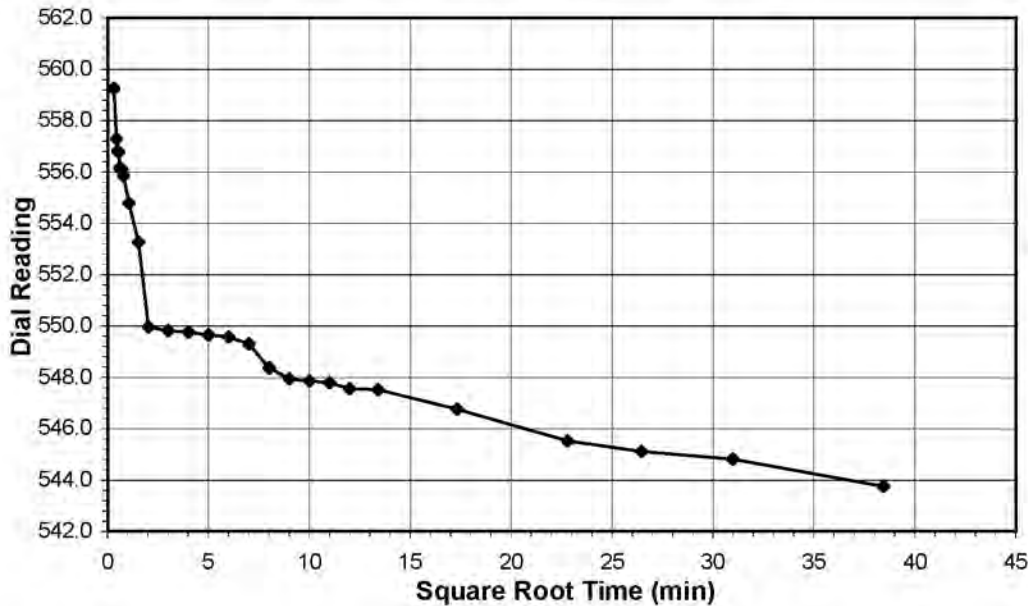
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

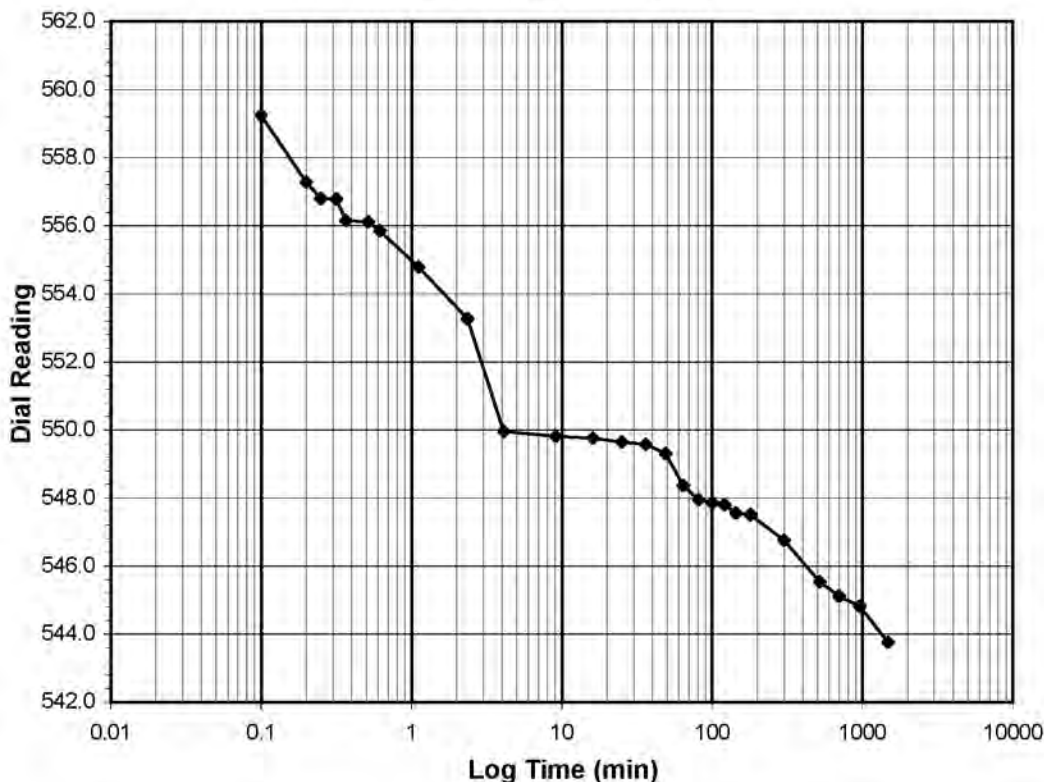
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-0.5
 Final Reading (div) 543.8
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/6/13
 Start Time 12:56:38

Elapsed Time (min)	Dial Reading (div)
Initial	597.3
0.10	559.2
0.20	557.3
0.25	556.8
0.32	556.8
0.37	556.2
0.52	556.1
0.62	555.8
1.12	554.8
2.37	553.3
4.12	550.0
9.12	549.8
16.12	549.8
25.12	549.6
36.13	549.6
49.13	549.3
64.13	548.4
81.13	547.9
100.13	547.9
121.13	547.8
144.13	547.6
180.13	547.5
300.13	546.8
520.13	545.5
700.13	545.1
960.13	544.8
1478.50	543.8



Tested By DB Date 11/6/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1421

1 Division = 0.0001 (in)

Sample Properties**Initial Final***Water Content*

Tare Number	2513	2752
Wt. Tare & WS (g)	186.21	160.82
Wt. Tare & DS (g)	153.33	131.69
Wt. Water (g)	32.88	29.13
Wt. Tare (g)	8.45	6.90
Wt. DS (g)	144.88	124.79
Water Content (%)	22.69	23.34

Sample Parameters

Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9493
Sample Volume (cm ³)	80.44	76.36
Wt. Wet Sample + Ring (g)	369.64	370.46
Wt. of Ring (g)	215.07	215.07
Wt. of Wet Sample (g)	154.57	155.39
Wet Density (pcf)	119.91	126.98
Wet Density (g/cm ³)	1.92	2.03
Water Content (%)	22.69	23.34
Wt. of Dry Sample (g)	125.98	125.98
Dry Density (pcf)	97.73	102.94
Dry Density (g/cm ³)	1.57	1.65
Void Ratio	0.6793	0.5942
Saturation (%)	87.87	103.32
Specific Gravity	2.63	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.56613	0.67930
0.25	70.2	17.7	52.5	25.267	80.018	1.57440	0.67048
0.5	110.9	26.9	84.0	25.187	79.764	1.57940	0.66519
1	171.8	36.4	135.3	25.056	79.351	1.58761	0.65657
2	238.8	63.4	175.4	24.954	79.029	1.59410	0.64983
4	329.2	93.2	236.1	24.800	78.541	1.60400	0.63965
1	277.9	48.6	229.4	24.817	78.595	1.60290	0.64078
0.25	236.7	26.1	210.6	24.865	78.746	1.59983	0.64393
0.5	249.2	31.3	217.9	24.847	78.687	1.60102	0.64270
1	269.8	45.2	224.6	24.830	78.633	1.60211	0.64158
2	290.7	64.7	226.0	24.826	78.622	1.60235	0.64134
4	337.7	93.4	244.3	24.779	78.475	1.60535	0.63827
8	437.0	126.0	311.0	24.610	77.938	1.61640	0.62707
16	589.5	170.6	418.8	24.336	77.071	1.63460	0.60896
32	816.3	241.5	574.8	23.940	75.816	1.66165	0.58277
8	684.2	140.4	543.9	24.019	76.065	1.65621	0.58797
2	597.3	80.8	516.5	24.088	76.285	1.65142	0.59257
0.5	543.8	36.9	506.9	24.113	76.362	1.64976	0.59418

Tested By DB Date 10/25/13 Input Checked By TM Date 12/5/13

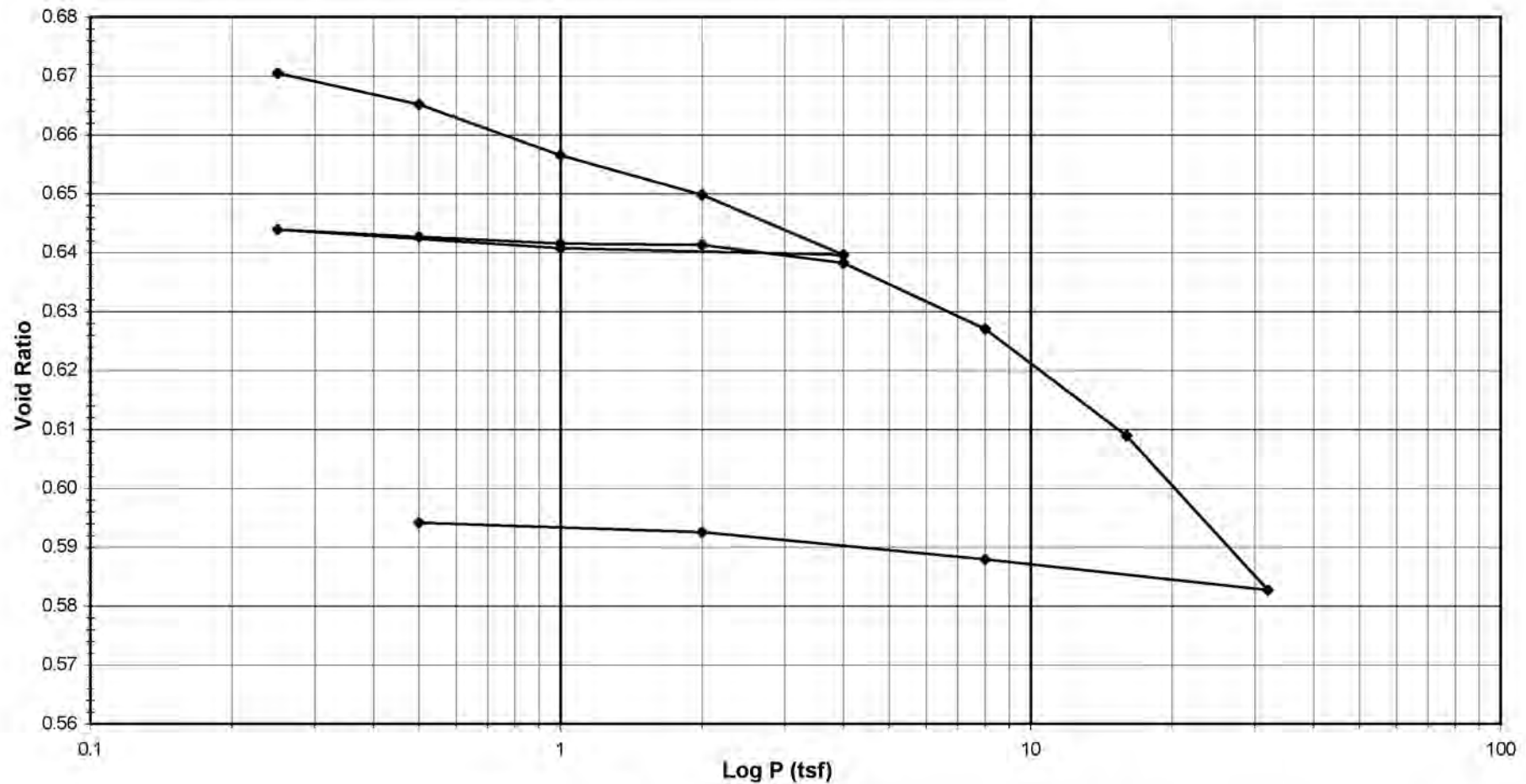
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 10/25/13

Approved By RJO Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1421

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final	Load Increment	Dial Reading @ t₅₀	Machine Deflection	Corrected Dial Reading @ t₅₀	Sample Height @ t₅₀	Time t₅₀	C_v
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
<i>Water Content</i>									
Tare Number	2513	2752							
Wt. Tare & WS (g)	186.21	160.82							
Wt. Tare & DS (g)	153.33	131.69							
Wt. Water (g)	32.88	29.13							
Wt. Tare (g)	8.45	6.9							
Wt. DS (g)	144.88	124.79							
Water Content (%)	22.69	23.34							
<i>Sample Parameters</i>									
Sample Diameter (in)	2.5	2.5							
Sample Height (in)	1.0000	0.9493							
Sample Volume (cm ³)	80.44	76.36							
Wt. Wet Sample + Ring (g)	369.64	370.46							
Wt. of Ring (g)	215.07	215.07							
Wt. of Wet Sample (g)	154.57	155.39							
Wet Density (pcf)	119.91	126.98							
Wet Density (g/cm ³)	1.92	2.03							
Water Content (%)	22.69	23.34							
Wt. of Dry Sample (g)	125.98	125.98							
Dry Density (pcf)	97.73	102.94							
Dry Density (g/cm ³)	1.57	1.65							
Void Ratio	0.6793	0.5942							
Saturation (%)	87.87	103.32							
Specific Gravity	2.63	Measured							

Tested By DB Date 10/25/13 Input Checked By TM Date 12/5/13

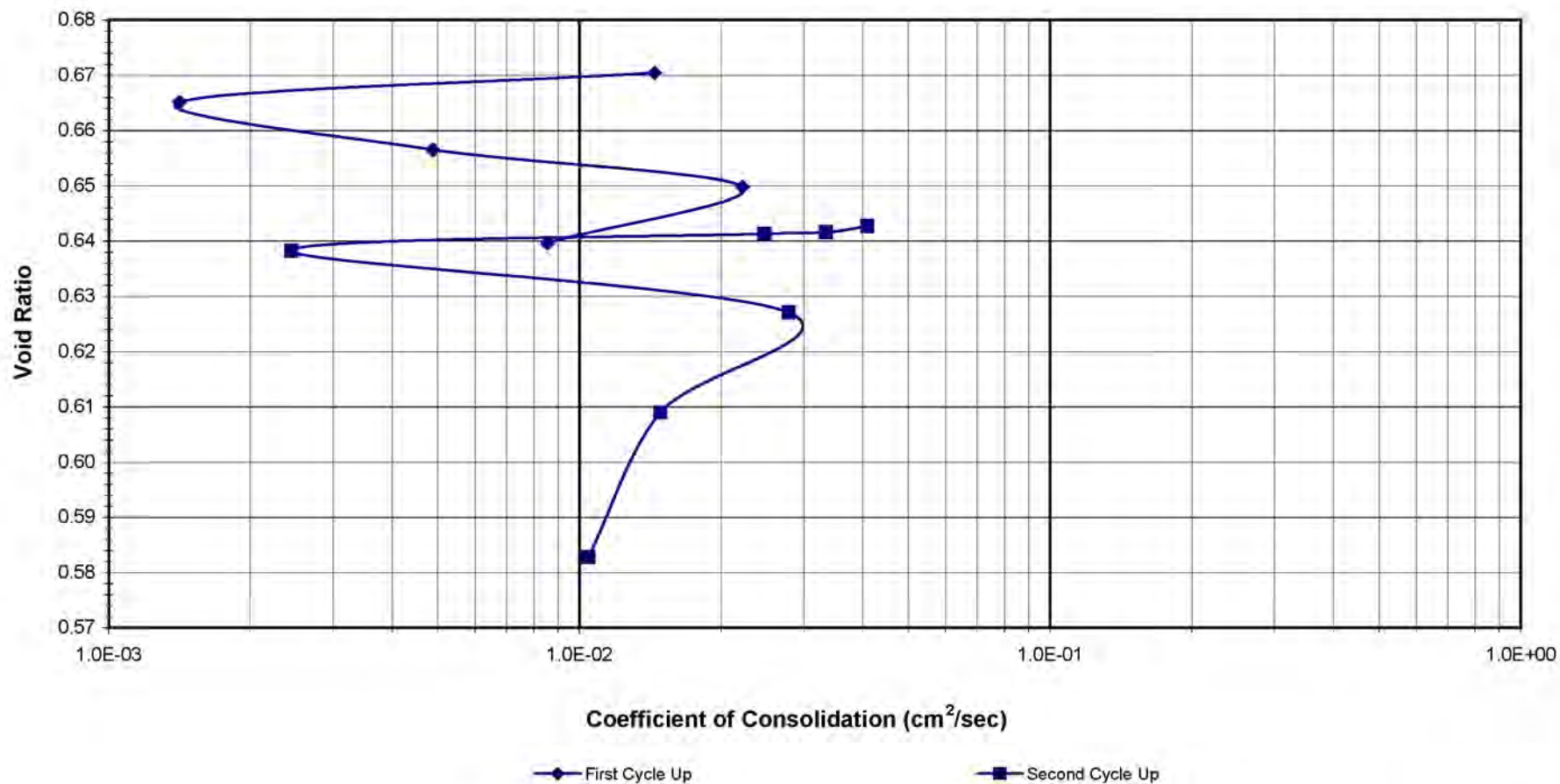
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-006

Boring No. R-7-1
 Depth (ft) 246.0-246.5
 Sample No. ST-8
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 10/25/13

Approved By RJO Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	246.0-246.5
Project No.	2013-465-001	Sample No.	ST-8
Lab ID #	2013-465-001-006		

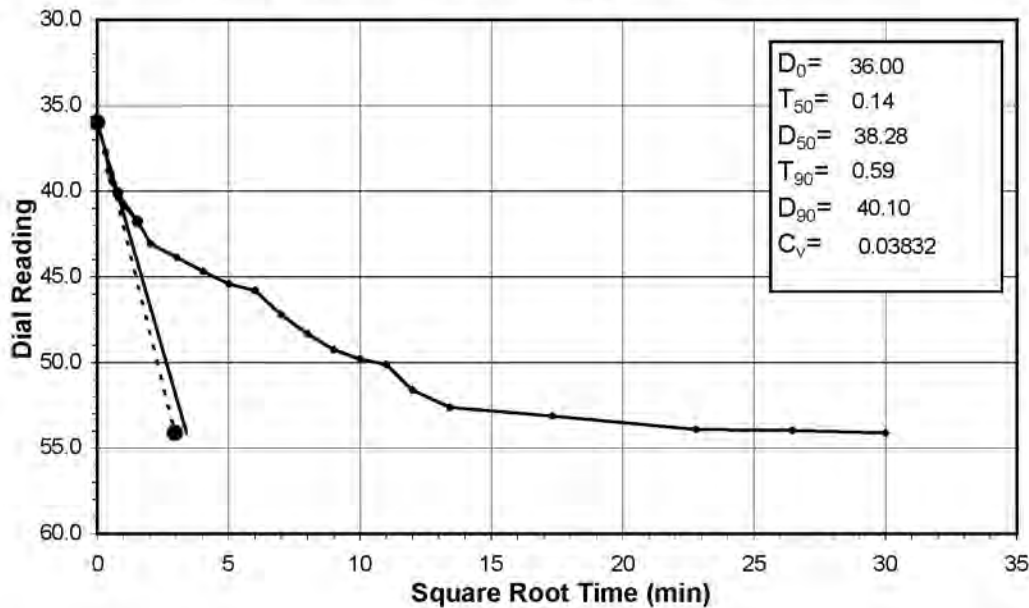
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1393	5/13/14
Oven	G624	11/9/13
Consolidometer	G1421	1/9/14
Load Cell	G1422	1/9/14
LVDT	G1423	1/9/14

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

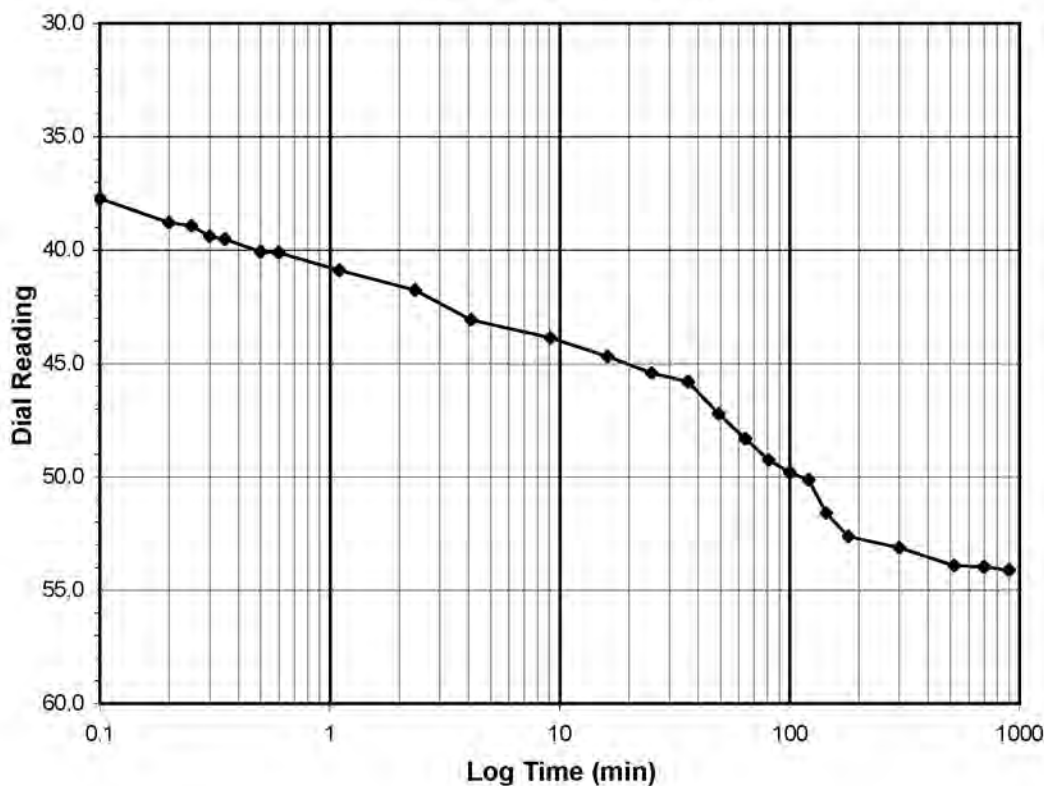
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 54.1
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/19/13
 Start Time 13:09:30

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.10	37.7
0.20	38.8
0.25	38.9
0.30	39.4
0.35	39.5
0.50	40.1
0.60	40.1
1.10	40.9
2.35	41.8
4.12	43.1
9.12	43.9
16.12	44.7
25.12	45.4
36.12	45.8
49.12	47.2
64.12	48.3
81.12	49.3
100.12	49.8
121.12	50.1
144.12	51.6
180.12	52.6
300.12	53.1
520.12	53.9
700.12	54.0
900.07	54.1



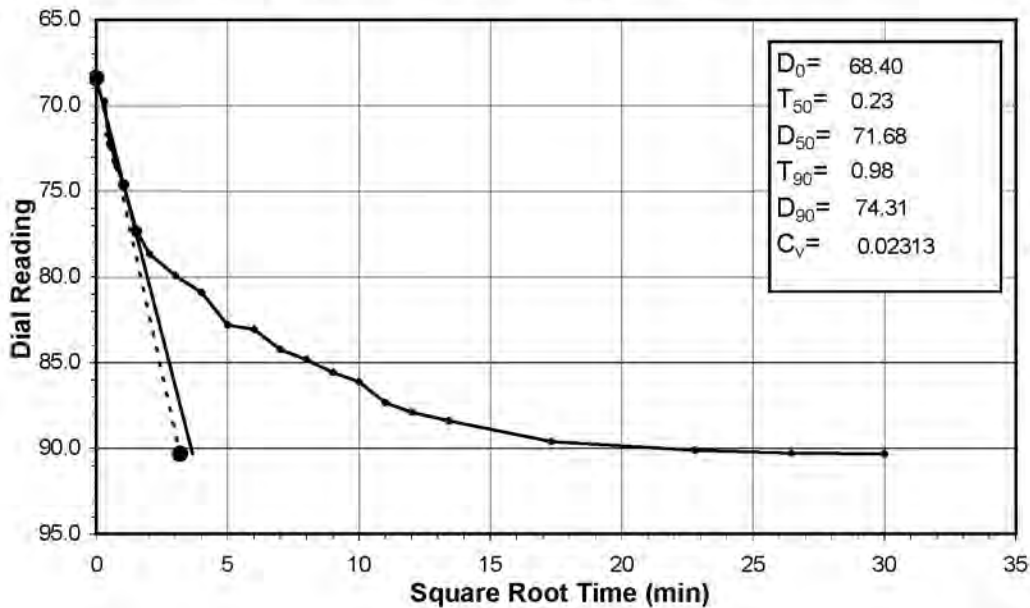
Tested By DB Date 11/19/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

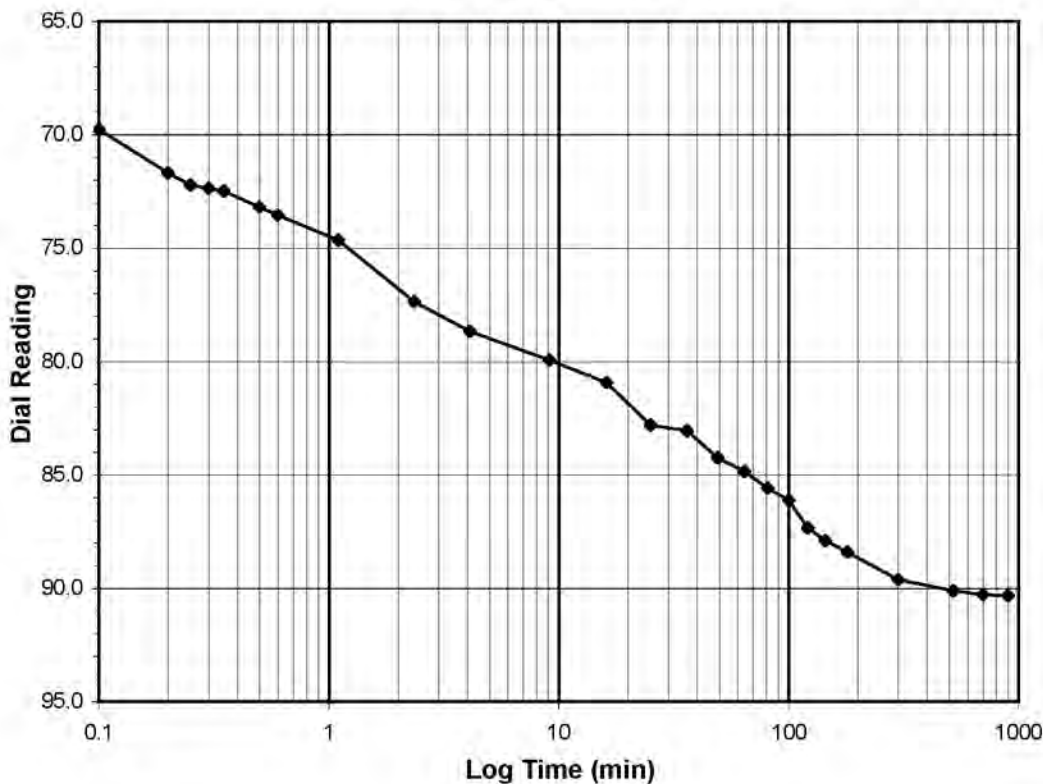
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **90.3**
 Consolidometer No. **G1427**
 1 Division (in) **0.0001**

Start Date 11/20/13
 Start Time 4:09:34

Elapsed Time (min)	Dial Reading (div)
Initial	54.1
0.10	69.8
0.20	71.7
0.25	72.2
0.30	72.4
0.35	72.5
0.50	73.2
0.60	73.5
1.10	74.6
2.35	77.3
4.10	78.7
9.10	79.9
16.10	80.9
25.10	82.8
36.10	83.0
49.10	84.2
64.10	84.8
81.10	85.6
100.12	86.1
121.12	87.3
144.12	87.9
180.12	88.4
300.12	89.6
520.12	90.1
700.12	90.3
900.50	90.3



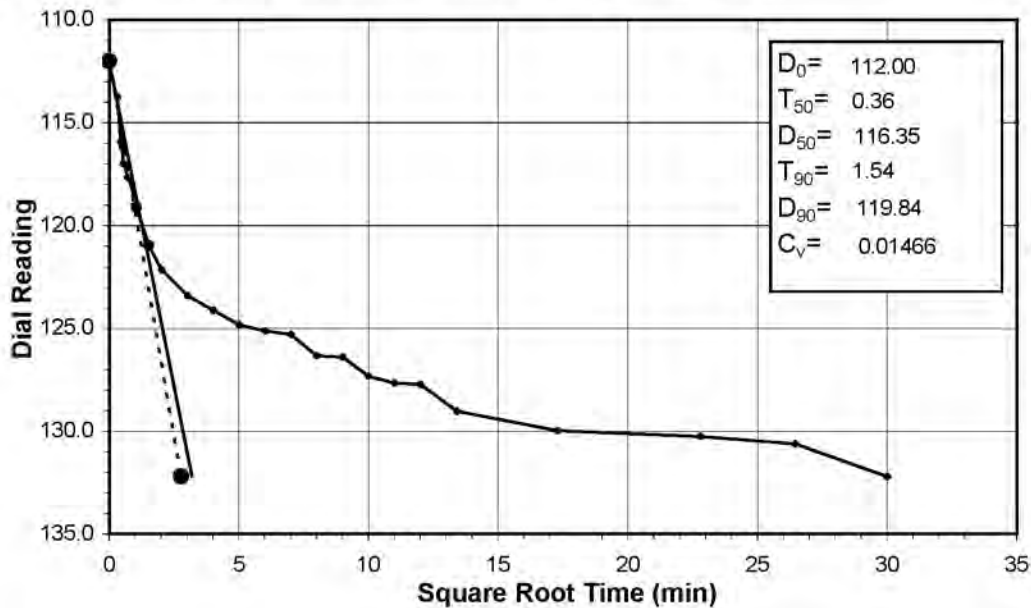
Tested By DB Date 11/20/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

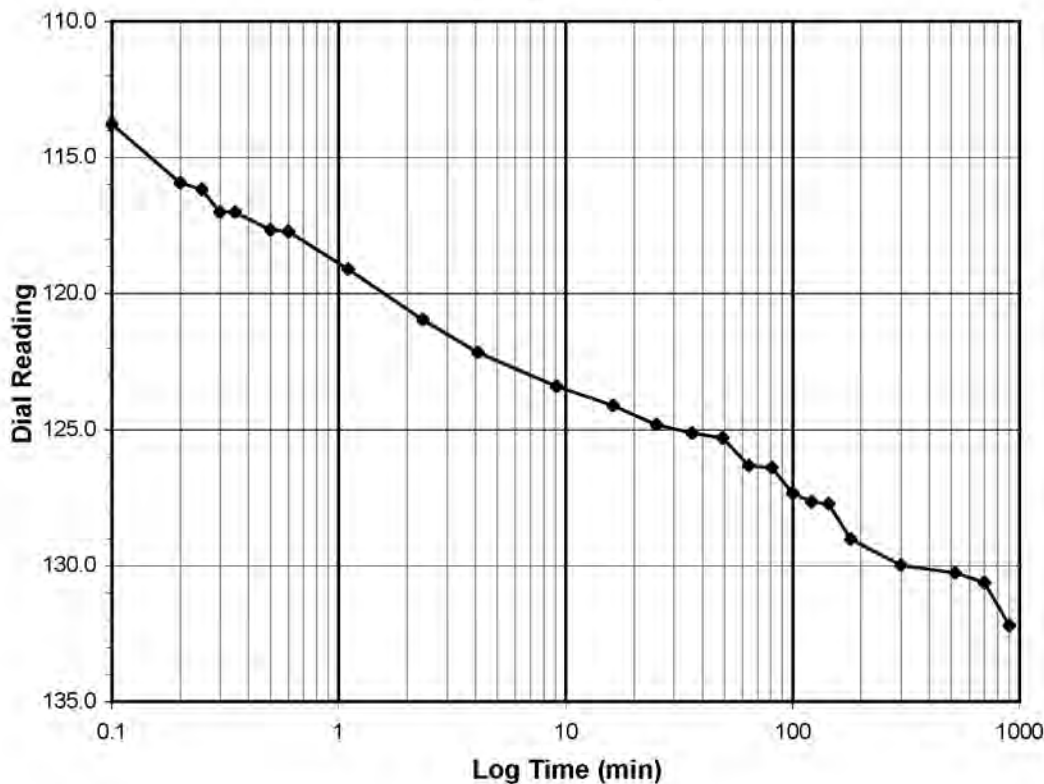
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 132.2
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/20/13
 Start Time 19:10:04

Elapsed Time (min)	Dial Reading (div)
Initial	90.3
0.10	113.8
0.20	115.9
0.25	116.2
0.30	117.0
0.35	117.0
0.50	117.7
0.60	117.7
1.10	119.1
2.35	121.0
4.10	122.2
9.12	123.4
16.12	124.1
25.12	124.8
36.12	125.1
49.12	125.3
64.12	126.3
81.12	126.4
100.12	127.3
121.12	127.6
144.12	127.7
180.12	129.0
300.12	130.0
520.12	130.3
700.12	130.6
900.28	132.2



Tested By DB Date 11/20/13 Checked By TM Date 12/6/13



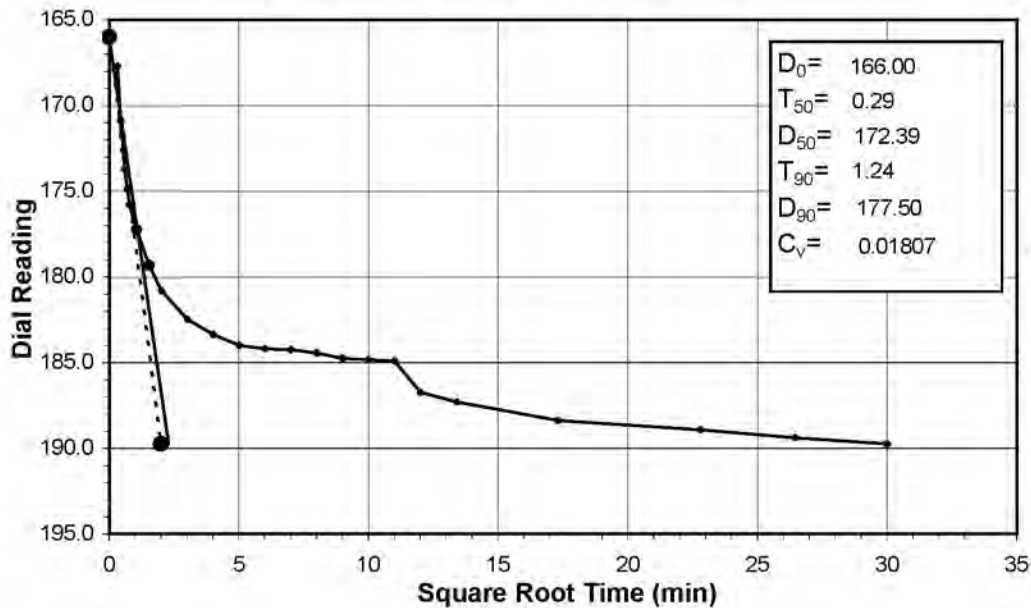
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

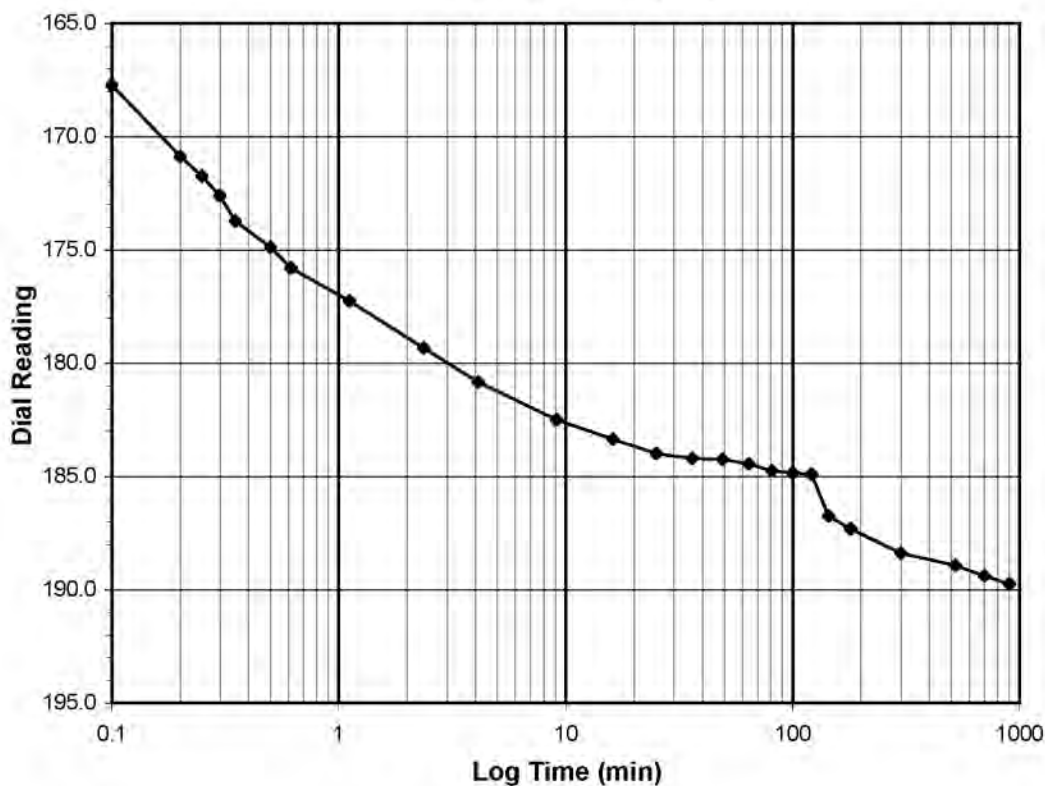
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 189.7
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/21/13
 Start Time 10:10:21

Elapsed Time (min)	Dial Reading (div)
Initial	132.2
0.10	167.7
0.20	170.9
0.25	171.7
0.30	172.6
0.35	173.7
0.50	174.9
0.62	175.8
1.12	177.3
2.37	179.3
4.12	180.8
9.12	182.5
16.12	183.4
25.12	184.0
36.12	184.2
49.12	184.2
64.12	184.4
81.12	184.7
100.12	184.8
121.12	184.9
144.12	186.7
180.12	187.3
300.12	188.4
520.12	188.9
700.12	189.4
900.02	189.7



Tested By DB Date 11/21/13 Checked By TM Date 12/6/13



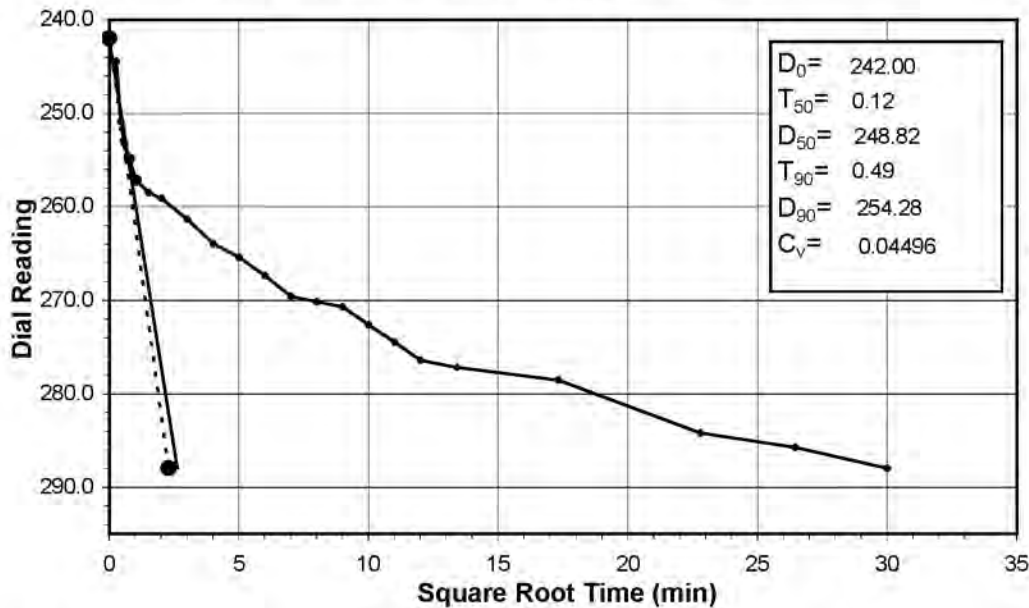
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

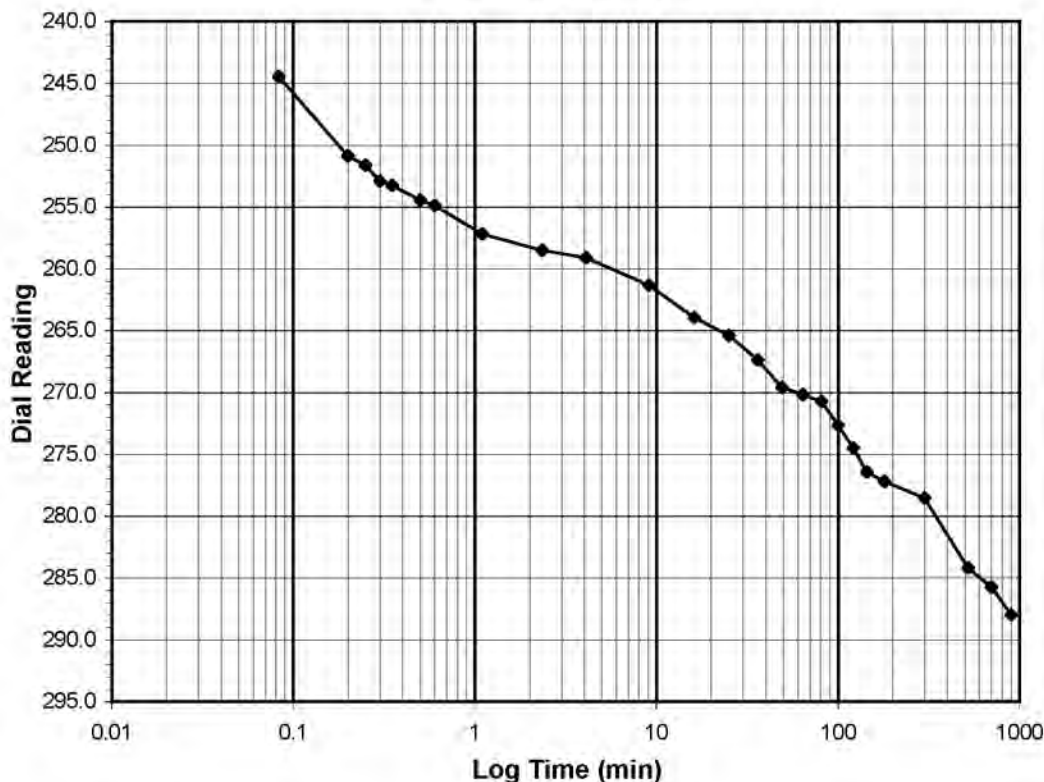
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 288.0
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 1:10:22

Elapsed Time (min)	Dial Reading (div)
Initial	189.7
0.08	244.4
0.20	250.9
0.25	251.6
0.30	252.9
0.35	253.2
0.50	254.4
0.60	254.9
1.10	257.2
2.35	258.5
4.10	259.1
9.10	261.3
16.10	263.9
25.10	265.4
36.12	267.4
49.12	269.6
64.12	270.2
81.12	270.7
100.12	272.6
121.12	274.5
144.12	276.4
180.12	277.2
300.12	278.5
520.12	284.2
700.12	285.7
900.25	288.0



Tested By DB Date 11/22/13 Checked By TM Date 12/6/13



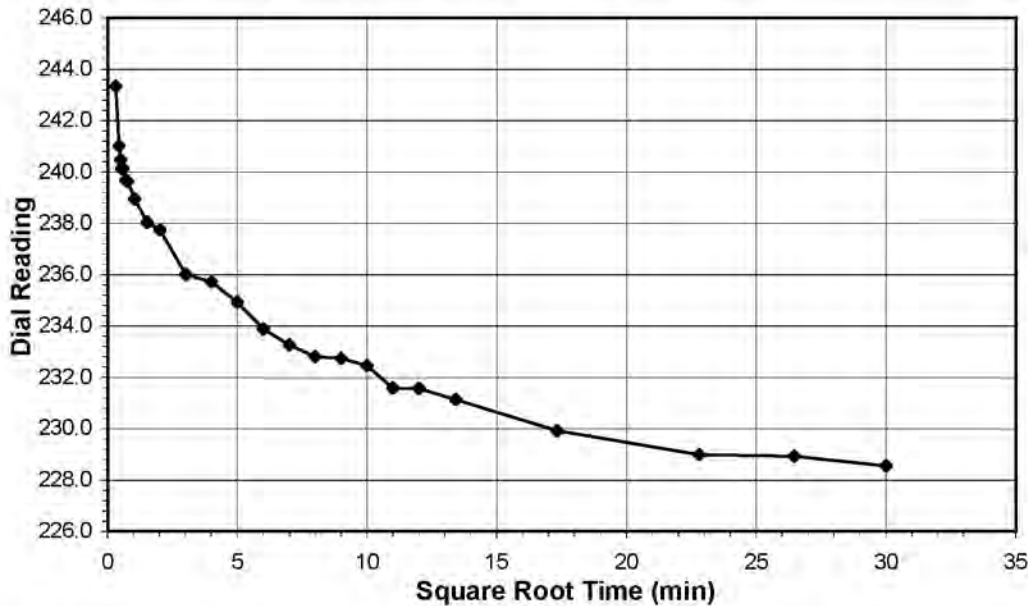
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

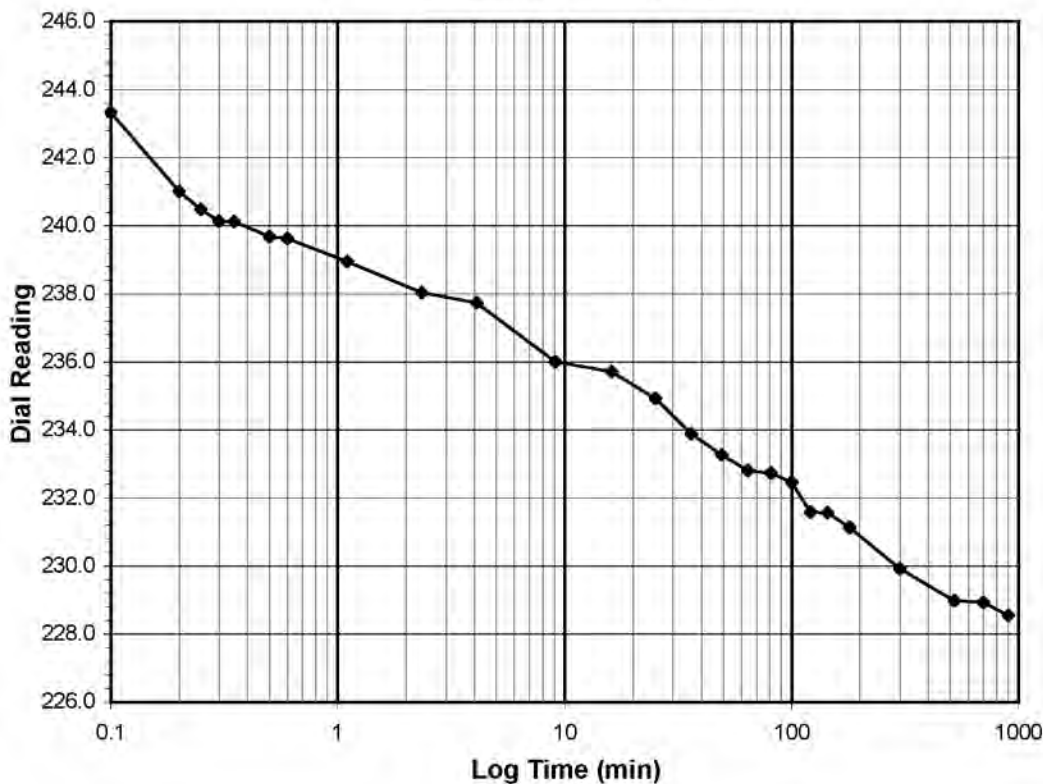
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 228.6
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 16:10:39

Elapsed Time (min)	Dial Reading (div)
Initial	288.0
0.10	243.3
0.20	241.0
0.25	240.5
0.30	240.1
0.35	240.1
0.50	239.7
0.60	239.6
1.10	238.9
2.35	238.0
4.10	237.7
9.10	236.0
16.10	235.7
25.10	234.9
36.10	233.9
49.12	233.3
64.12	232.8
81.12	232.7
100.12	232.5
121.12	231.6
144.12	231.6
180.12	231.1
300.12	229.9
520.12	229.0
700.12	228.9
900.27	228.6



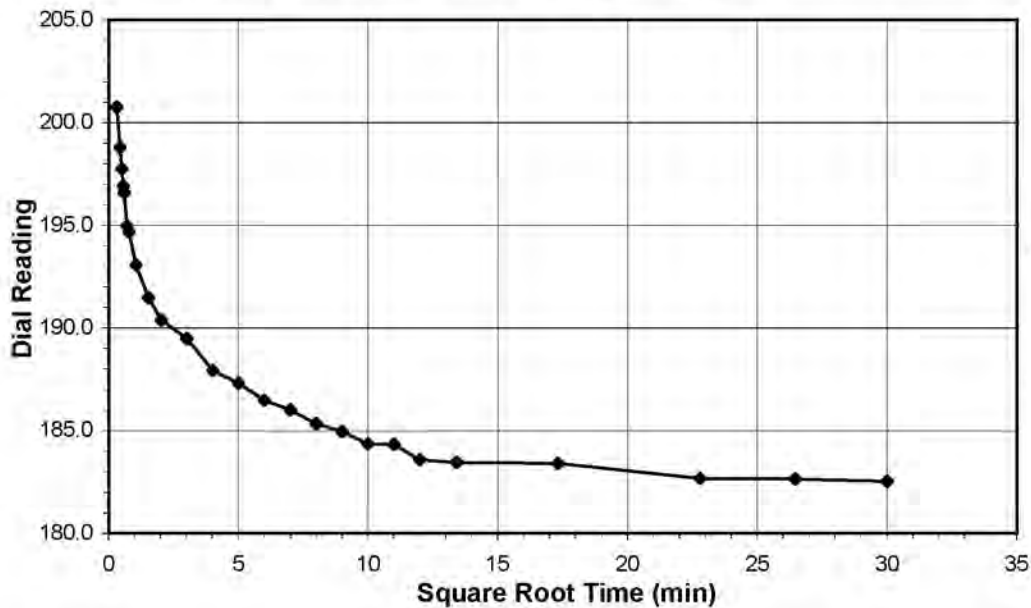
Tested By DB Date 11/22/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

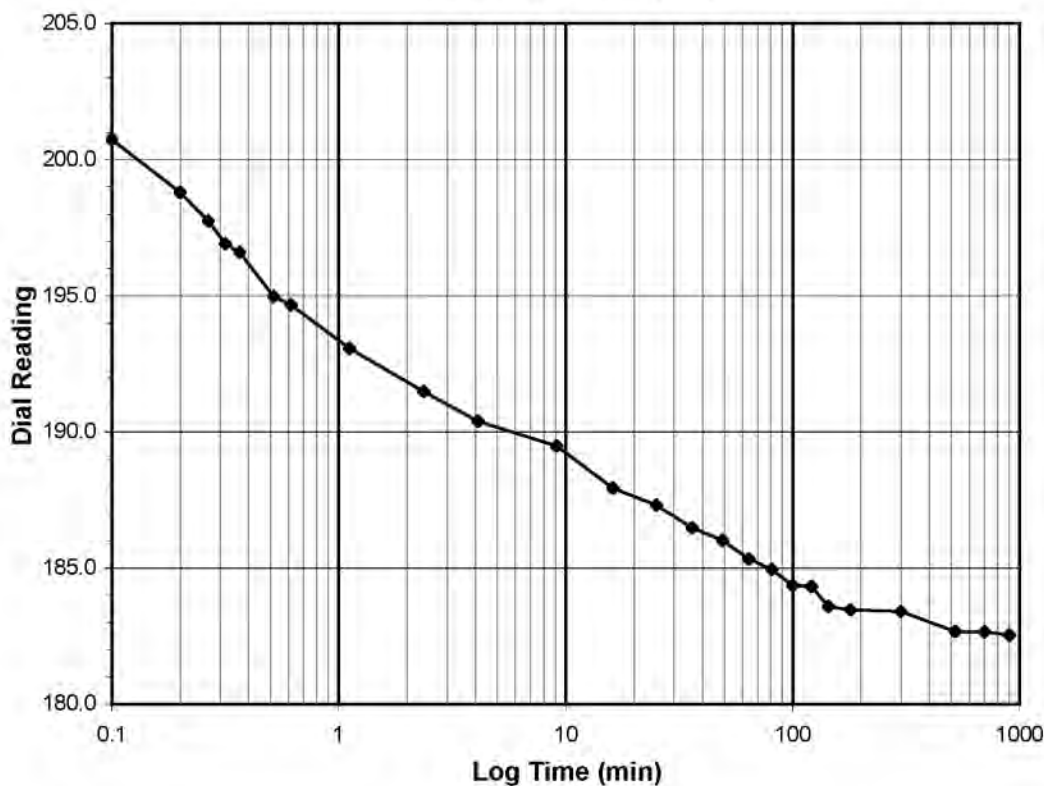
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 182.5
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/23/13
 Start Time 7:10:55

Elapsed Time (min)	Dial Reading (div)
Initial	228.6
0.10	200.7
0.20	198.8
0.27	197.7
0.32	196.9
0.37	196.6
0.52	195.0
0.62	194.7
1.12	193.1
2.37	191.5
4.12	190.4
9.12	189.5
16.12	187.9
25.12	187.3
36.12	186.5
49.12	186.0
64.12	185.3
81.12	184.9
100.12	184.4
121.12	184.3
144.12	183.6
180.13	183.5
300.13	183.4
520.13	182.7
700.13	182.7
900.17	182.5



Tested By DB Date 11/23/13 Checked By TM Date 12/6/13



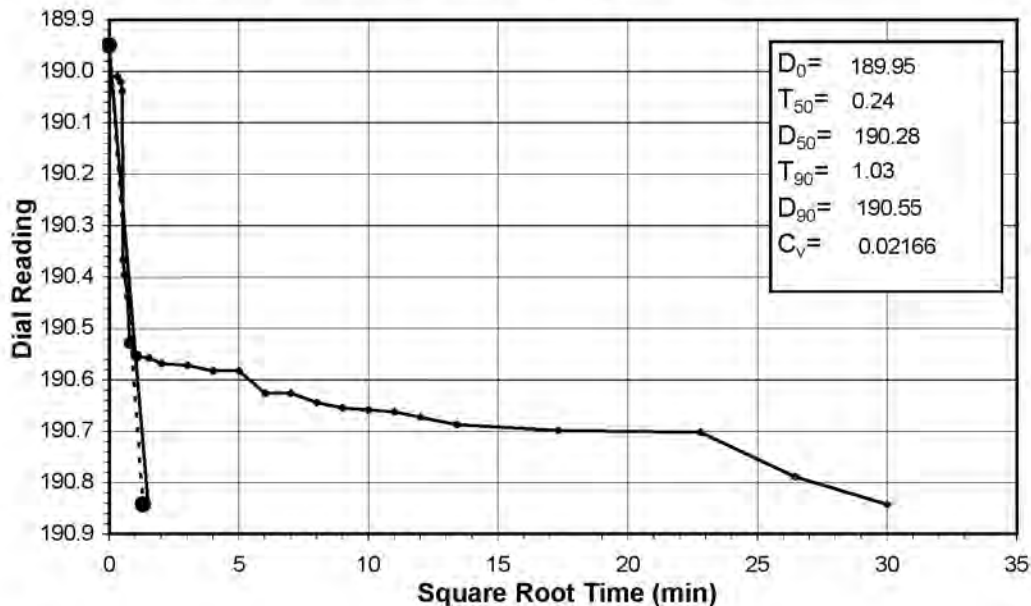
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

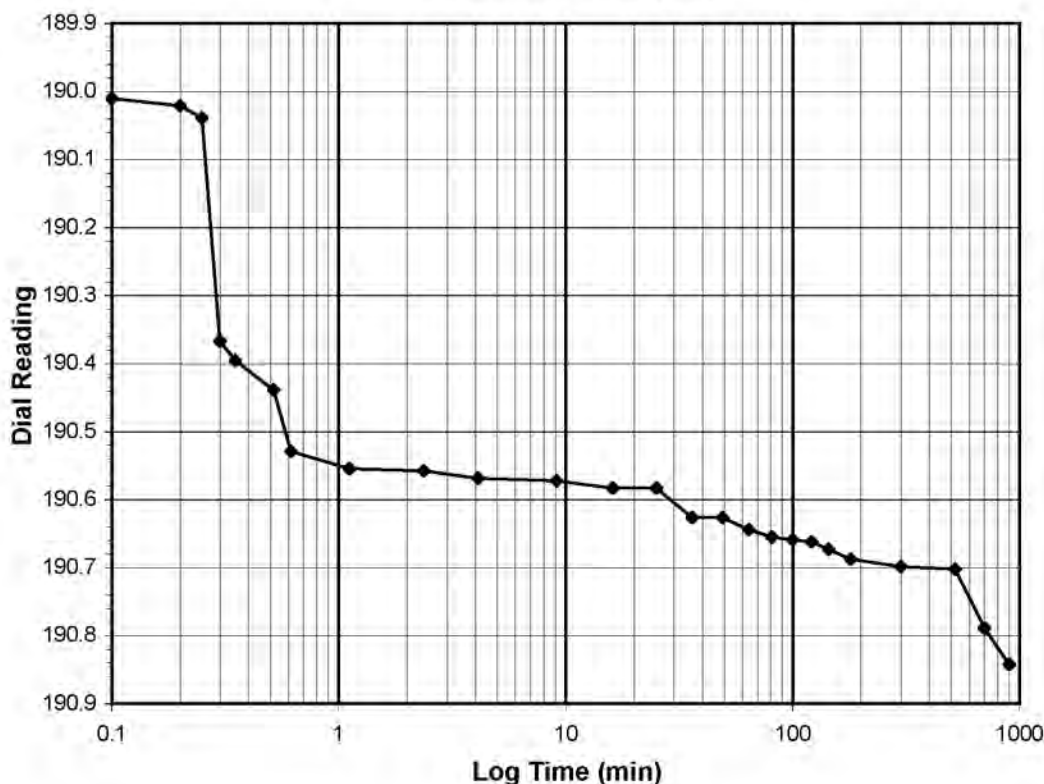
Sample Conditions: Undisturbed, Inundated And Double Drained



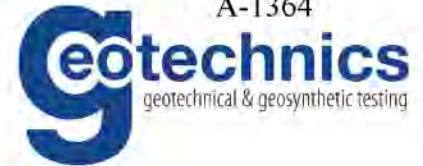
Test Load (tsf) 0.25-0.5
 Final Reading (div) 190.8
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/23/13
 Start Time 22:11:05

Elapsed Time (min)	Dial Reading (div)
Initial	182.5
0.10	190.0
0.20	190.0
0.25	190.0
0.30	190.4
0.35	190.4
0.52	190.4
0.62	190.5
1.12	190.6
2.37	190.6
4.12	190.6
9.12	190.6
16.12	190.6
25.12	190.6
36.12	190.6
49.12	190.6
64.12	190.6
81.12	190.7
100.12	190.7
121.12	190.7
144.12	190.7
180.12	190.7
300.13	190.7
520.13	190.7
700.13	190.8
900.45	190.8



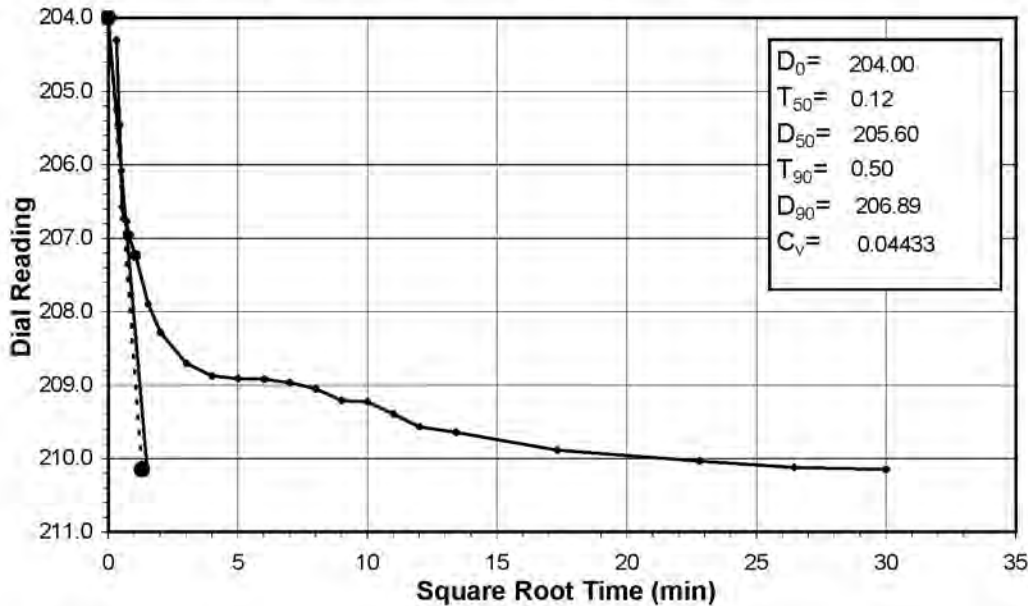
Tested By DB Date 11/23/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

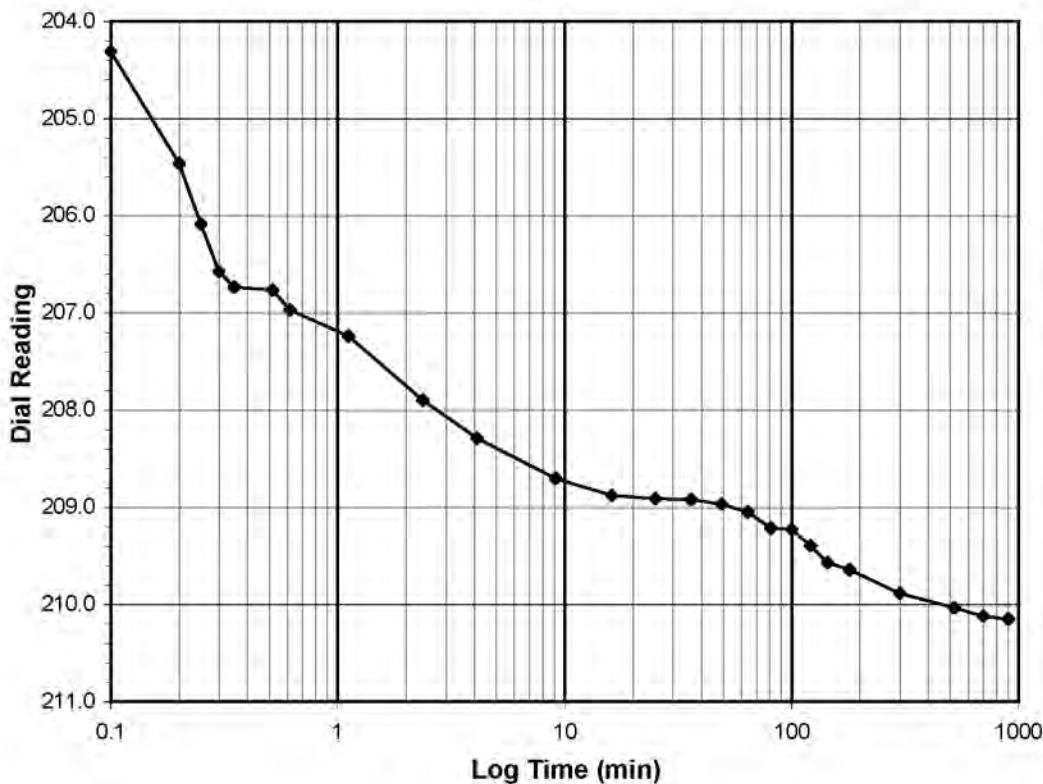
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 210.1
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/24/13
 Start Time 13:11:32

Elapsed Time (min)	Dial Reading (div)
Initial	190.8
0.10	204.3
0.20	205.5
0.25	206.1
0.30	206.6
0.35	206.7
0.52	206.8
0.62	207.0
1.12	207.2
2.37	207.9
4.12	208.3
9.12	208.7
16.12	208.9
25.12	208.9
36.12	208.9
49.12	209.0
64.12	209.0
81.12	209.2
100.12	209.2
121.12	209.4
144.12	209.6
180.12	209.6
300.12	209.9
520.12	210.0
700.12	210.1
900.13	210.1



Tested By DB Date 11/24/13 Checked By TM Date 12/6/13



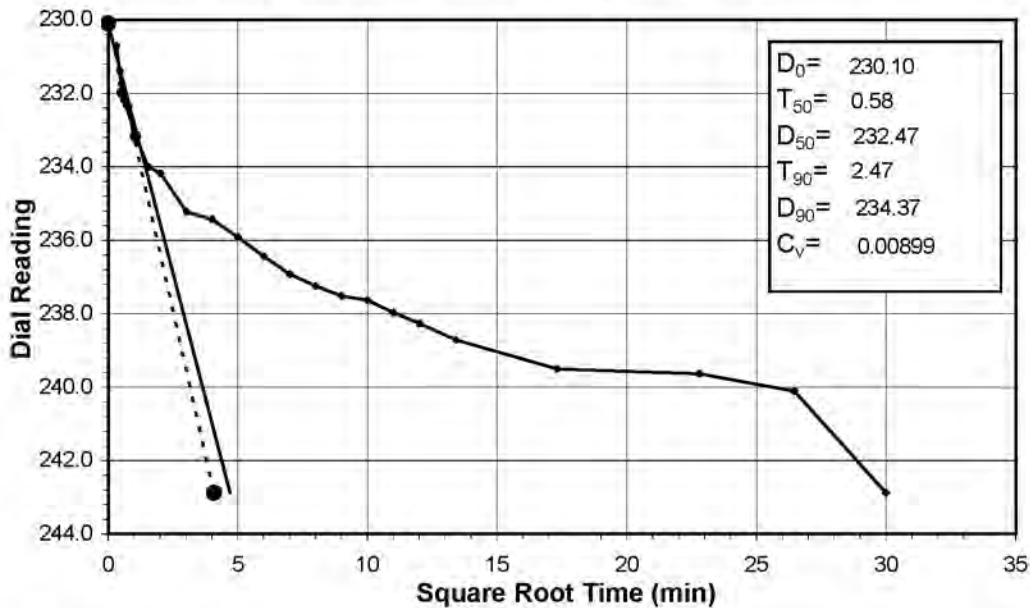
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

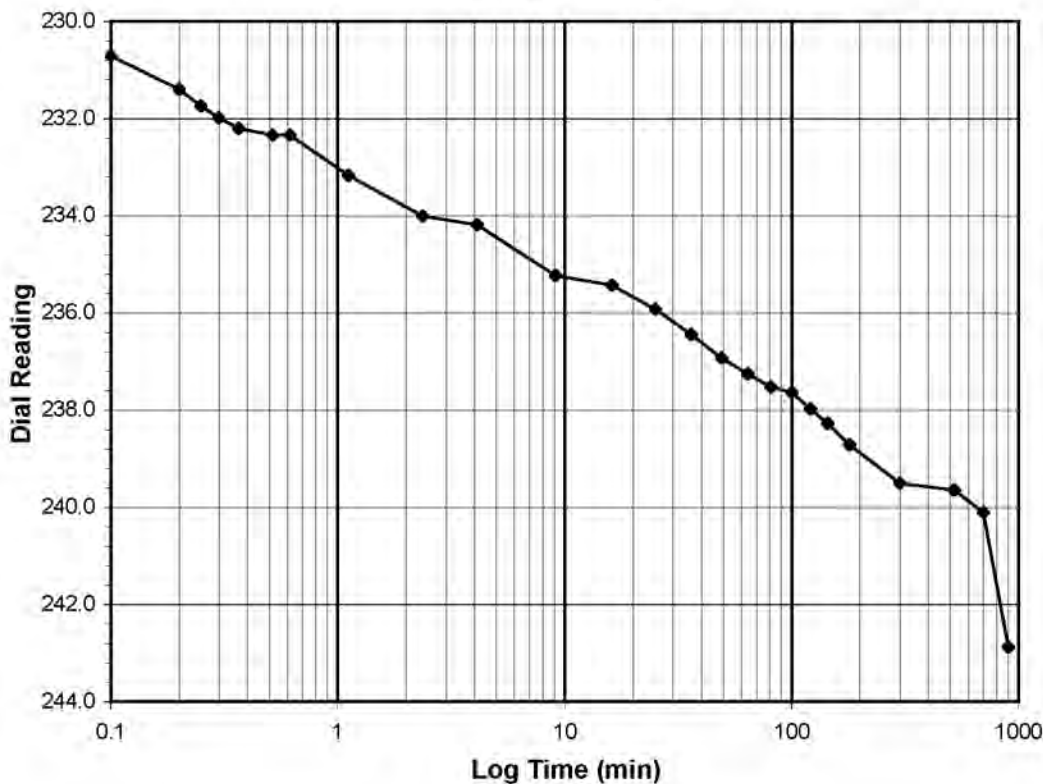
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 242.9
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/25/13
 Start Time 4:11:40

Elapsed Time (min)	Dial Reading (div)
Initial	210.1
0.10	230.7
0.20	231.4
0.25	231.7
0.30	232.0
0.37	232.2
0.52	232.3
0.62	232.3
1.12	233.2
2.37	234.0
4.12	234.2
9.12	235.2
16.12	235.4
25.12	235.9
36.12	236.4
49.12	236.9
64.12	237.3
81.12	237.5
100.12	237.6
121.12	238.0
144.12	238.3
180.12	238.7
300.12	239.5
520.12	239.6
700.12	240.1
900.27	242.9



Tested By DB Date 11/25/13 Checked By TM Date 12/6/13



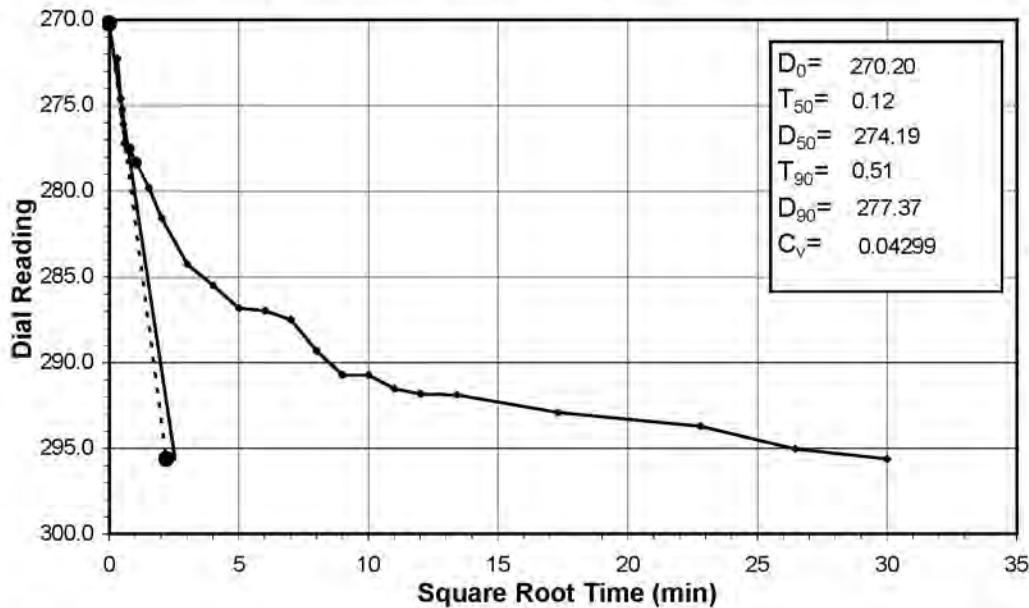
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

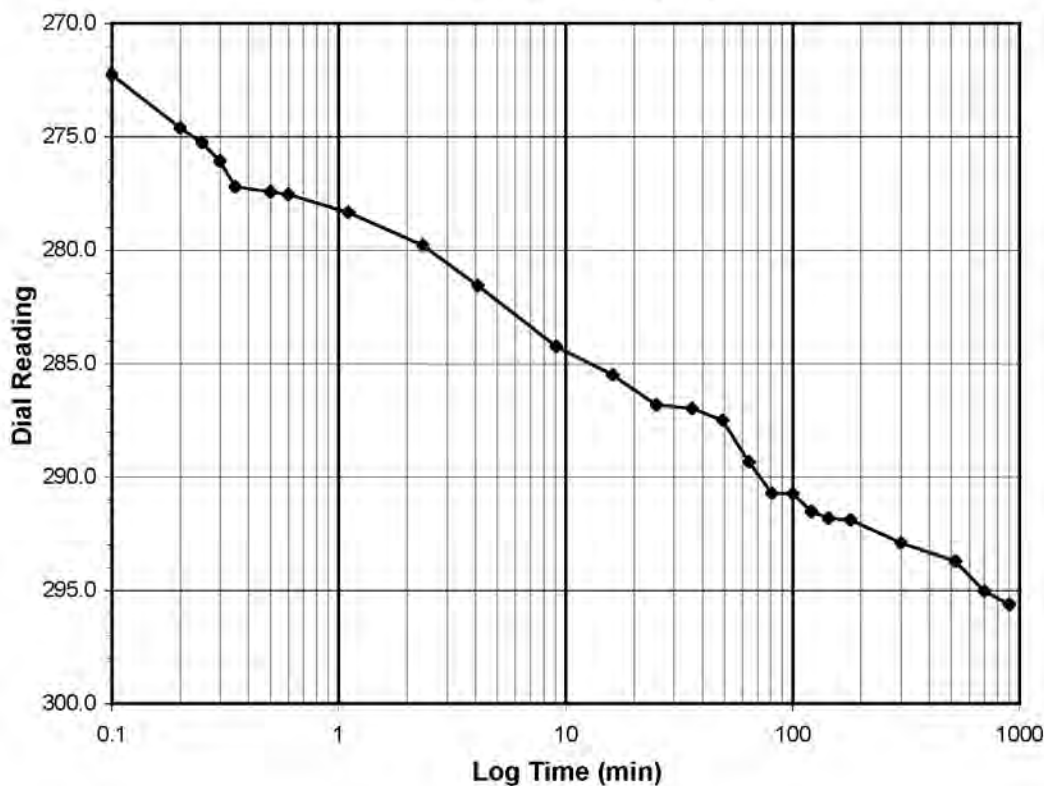
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 295.6
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/25/13
 Start Time 19:11:56

Elapsed Time (min)	Dial Reading (div)
Initial	242.9
0.10	272.3
0.20	274.6
0.25	275.2
0.30	276.1
0.35	277.2
0.50	277.4
0.60	277.5
1.10	278.3
2.35	279.8
4.10	281.6
9.10	284.2
16.10	285.5
25.10	286.8
36.12	287.0
49.12	287.5
64.12	289.3
81.12	290.7
100.12	290.7
121.12	291.5
144.12	291.8
180.12	291.9
300.12	292.9
520.12	293.7
700.12	295.0
900.35	295.6



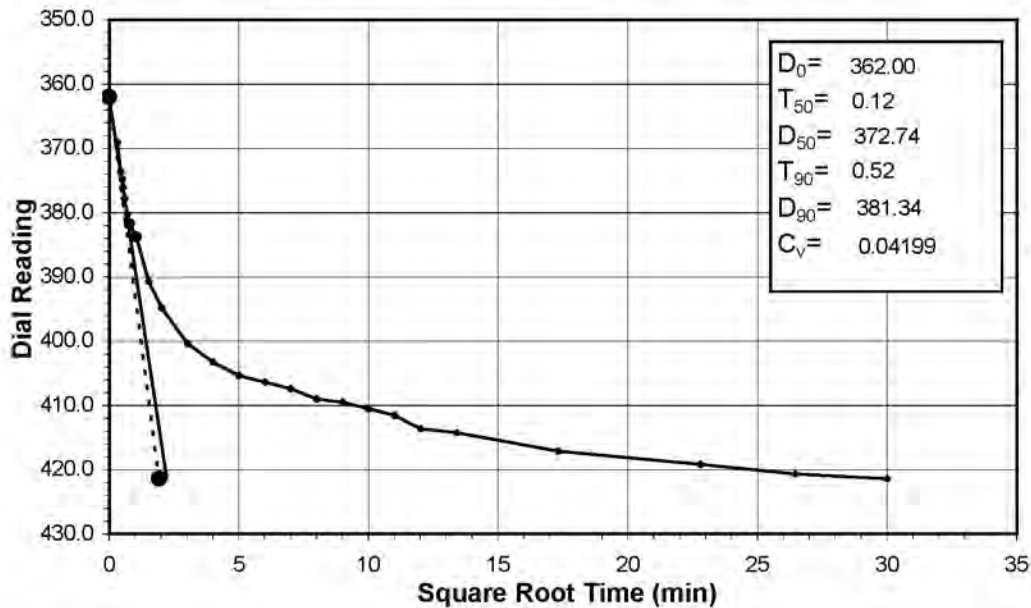
Tested By DB Date 11/25/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

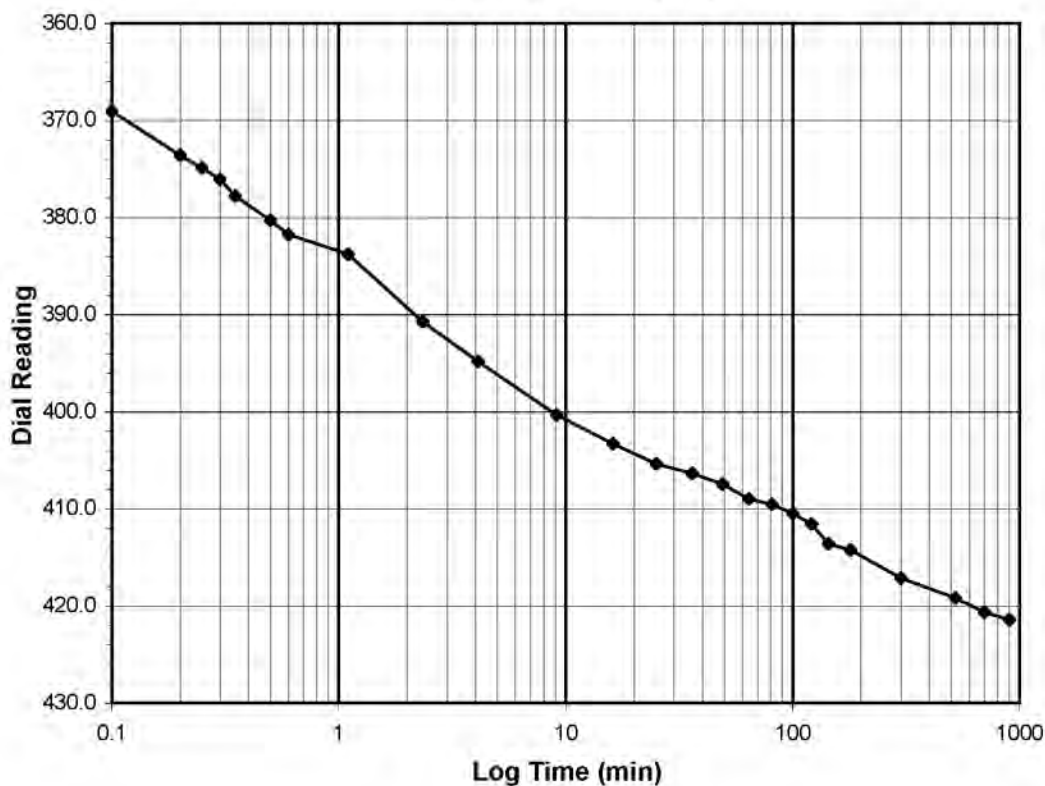
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **421.4**
 Consolidometer No. **G1427**
 1 Division (in) 0.0001

Start Date 11/26/13
 Start Time 10:12:17

Elapsed Time (min)	Dial Reading (div)
Initial	295.6
0.10	369.0
0.20	373.6
0.25	374.9
0.30	376.0
0.35	377.8
0.50	380.3
0.60	381.7
1.10	383.7
2.35	390.7
4.12	394.8
9.12	400.3
16.12	403.3
25.12	405.3
36.12	406.4
49.12	407.4
64.12	409.0
81.12	409.5
100.12	410.5
121.12	411.5
144.12	413.6
180.12	414.2
300.12	417.1
520.12	419.2
700.13	420.6
900.22	421.4



Tested By DB Date 11/26/13 Checked By TM Date 12/6/13



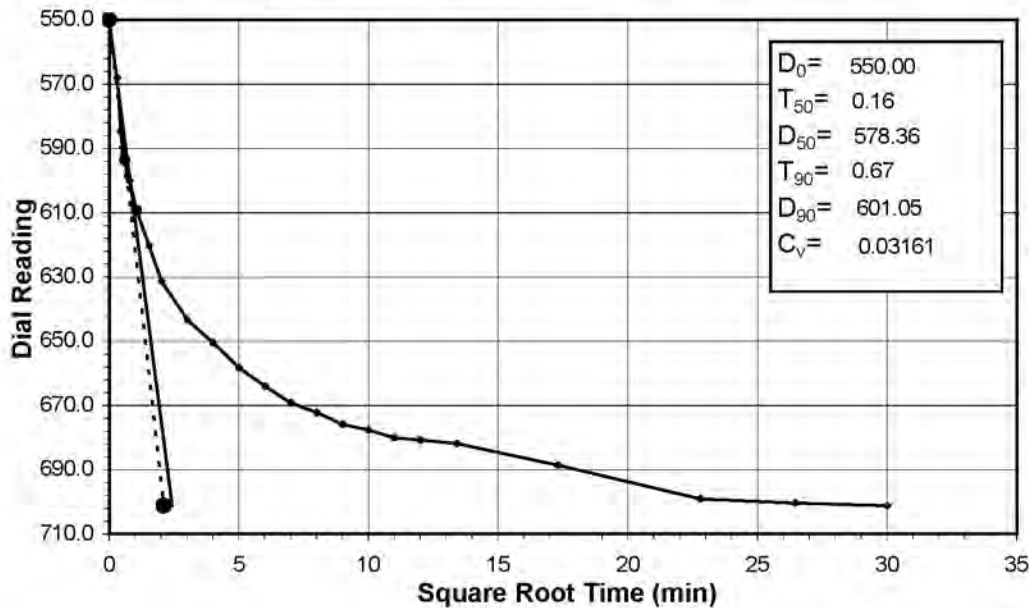
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

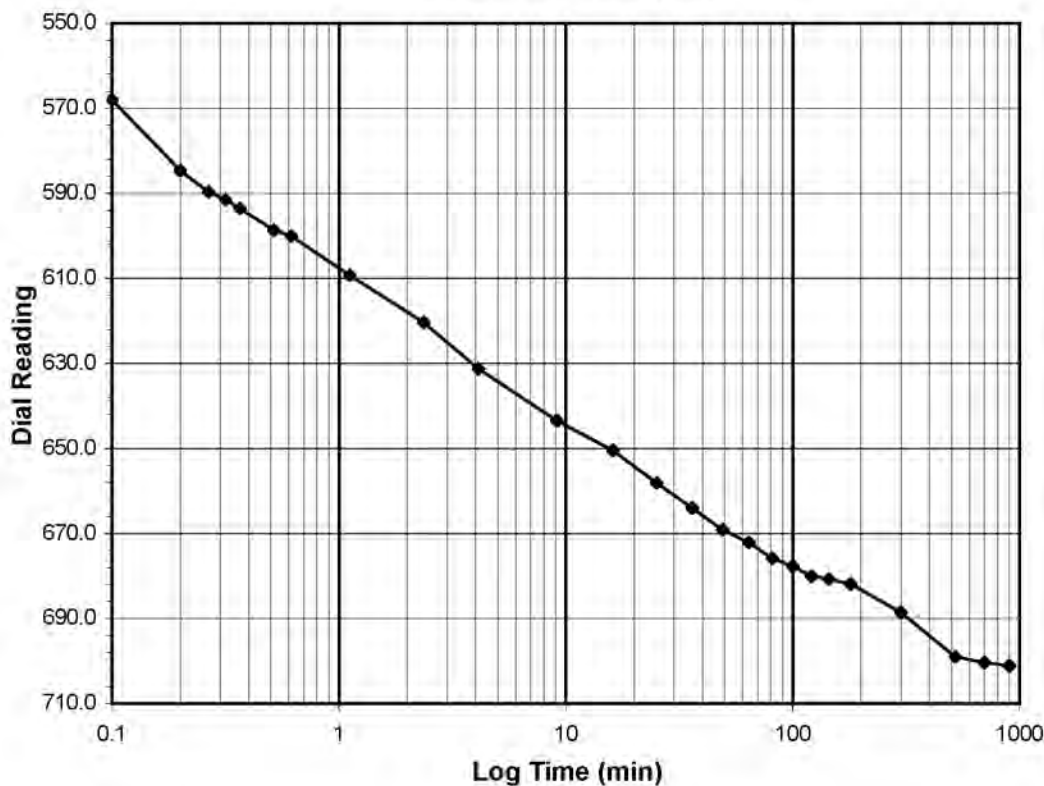
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-16.0
 Final Reading (div) 701.1
 Consolidometer No. G1427
 1 Division (in) 0.0001
 Start Date 11/27/13
 Start Time 1:12:30

Elapsed Time (min)	Dial Reading (div)
Initial	421.4
0.10	568.0
0.20	584.7
0.27	589.7
0.32	591.6
0.37	593.6
0.52	598.7
0.62	600.0
1.12	609.3
2.37	620.3
4.12	631.3
9.12	643.4
16.12	650.5
25.12	658.2
36.12	664.0
49.12	669.2
64.12	672.1
81.12	675.8
100.12	677.7
121.12	680.1
144.12	680.7
180.12	681.9
300.13	688.6
520.13	699.0
700.13	700.3
900.43	701.1



Tested By DB Date 11/27/13 Checked By TM Date 12/6/13



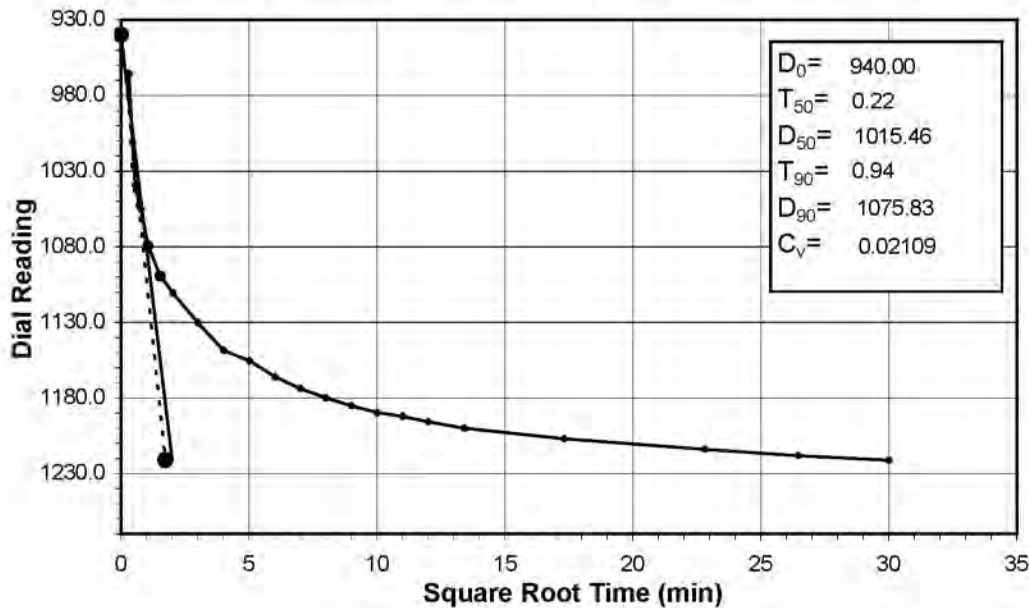
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

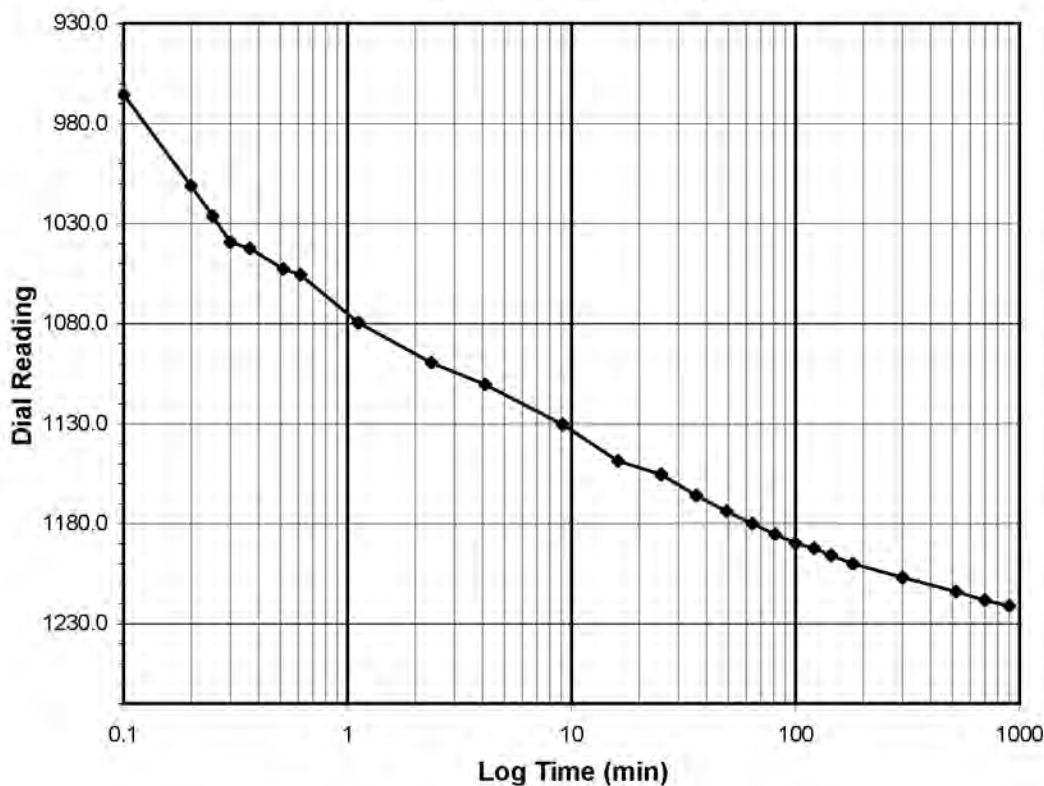
Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 16.0-32.0
 Final Reading (div) 1221.1
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/27/13
 Start Time 16:12:56



Elapsed Time (min)	Dial Reading (div)
Initial	701.1
0.10	965.5
0.20	1011.1
0.25	1026.3
0.30	1039.2
0.37	1042.4
0.52	1052.7
0.62	1055.6
1.12	1079.6
2.37	1099.5
4.12	1110.4
9.12	1130.3
16.12	1148.6
25.12	1155.3
36.12	1166.0
49.12	1173.7
64.12	1180.0
81.12	1185.2
100.12	1189.7
121.12	1192.2
144.12	1195.8
180.13	1199.9
300.13	1206.9
520.13	1213.9
700.13	1218.1
900.10	1221.1

Tested By DB Date 11/27/13 Checked By TM Date 12/6/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv



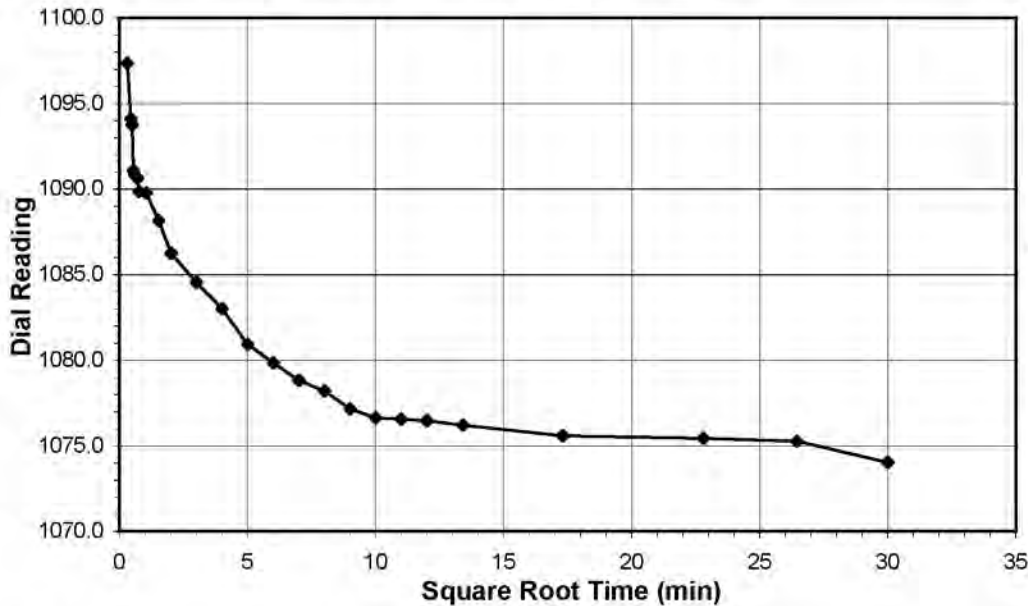
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

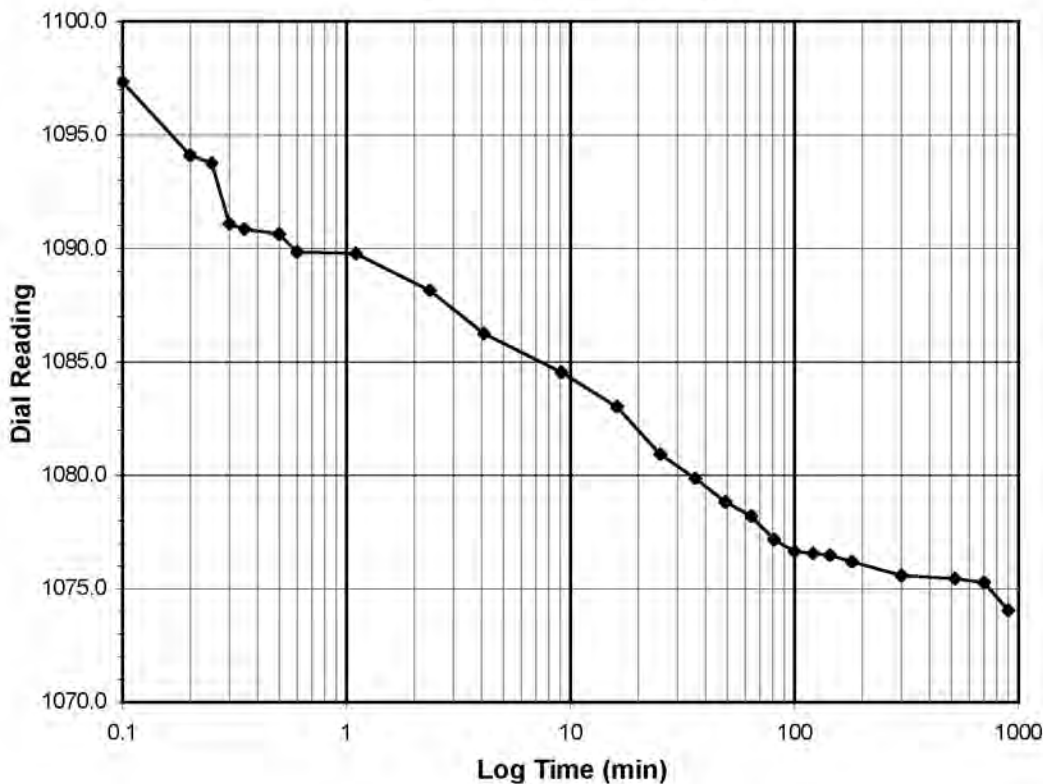
Sample Conditions: Undisturbed, Inundated And Double Drained



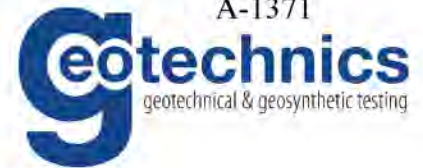
Test Load (tsf) 32.0-8.0
 Final Reading (div) 1074.0
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/28/13
 Start Time 7:13:02

Elapsed Time (min)	Dial Reading (div)
Initial	1221.1
0.10	1097.4
0.20	1094.1
0.25	1093.8
0.30	1091.1
0.35	1090.9
0.50	1090.6
0.60	1089.8
1.10	1089.8
2.35	1088.2
4.10	1086.2
9.10	1084.5
16.10	1083.0
25.10	1080.9
36.12	1079.9
49.12	1078.8
64.12	1078.2
81.12	1077.2
100.12	1076.6
121.12	1076.6
144.12	1076.5
180.12	1076.2
300.12	1075.6
520.12	1075.4
700.12	1075.3
900.05	1074.0



Tested By DB Date 11/28/13 Checked By TM Date 12/6/13



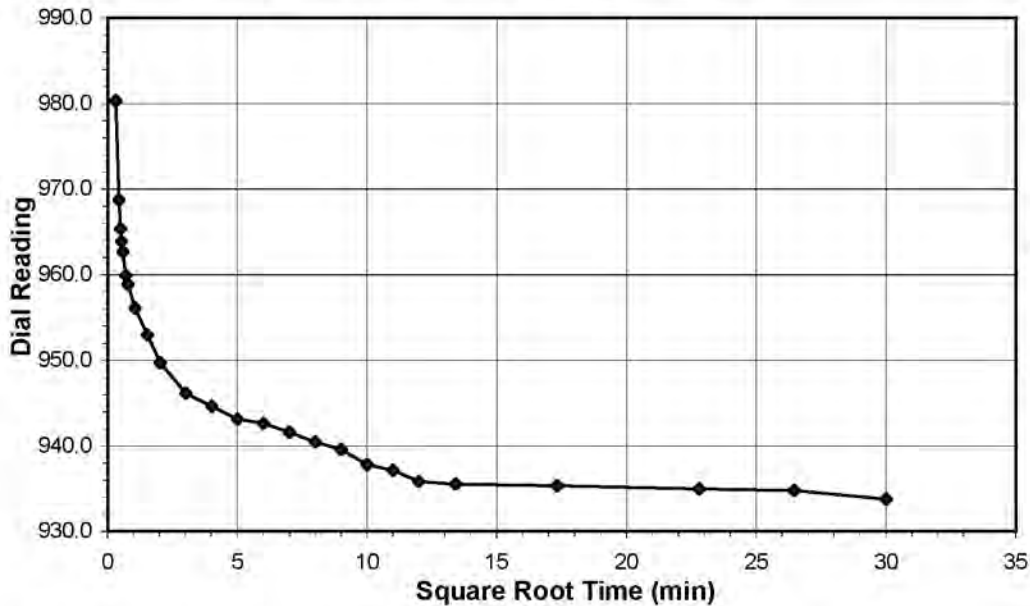
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

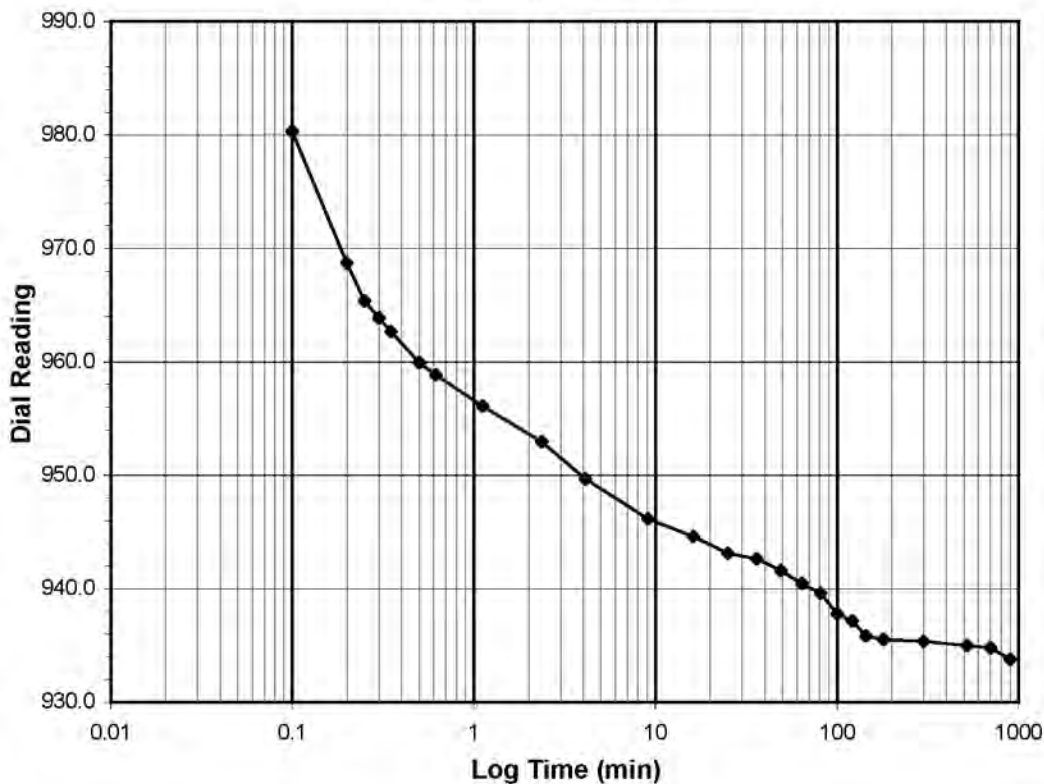
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-2.0
 Final Reading (div) 933.8
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/28/13
 Start Time 22:13:05

Elapsed Time (min)	Dial Reading (div)
Initial	1074.0
0.10	980.3
0.20	968.7
0.25	965.4
0.30	963.9
0.35	962.7
0.50	959.9
0.62	958.9
1.12	956.1
2.37	953.0
4.12	949.7
9.12	946.2
16.12	944.6
25.12	943.1
36.12	942.7
49.12	941.6
64.12	940.5
81.12	939.6
100.12	937.8
121.12	937.2
144.12	935.8
180.13	935.5
300.13	935.3
520.13	935.0
700.13	934.8
900.20	933.8



Tested By DB Date 11/28/13 Checked By TM Date 12/6/13



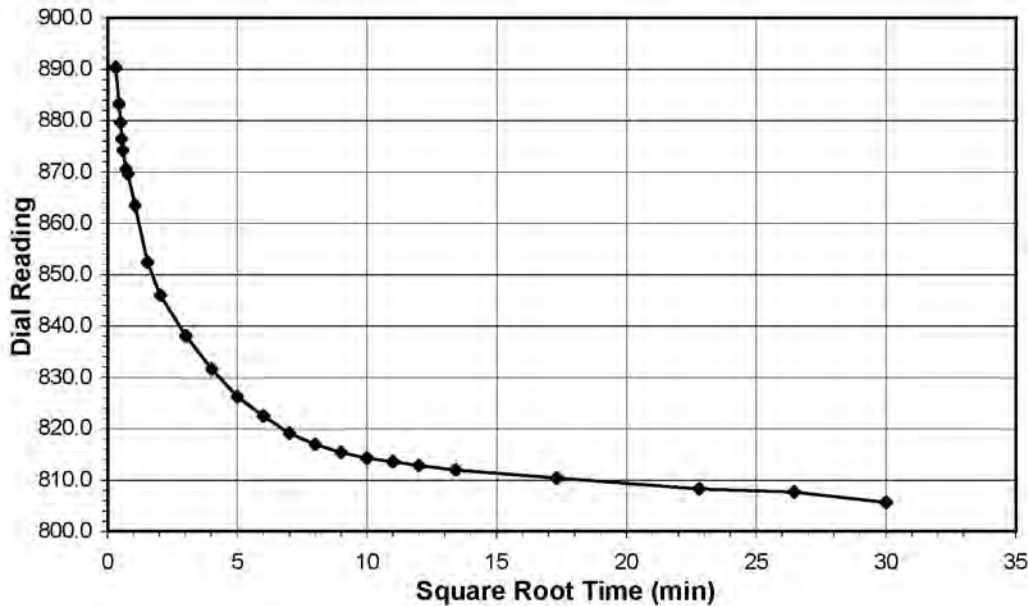
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

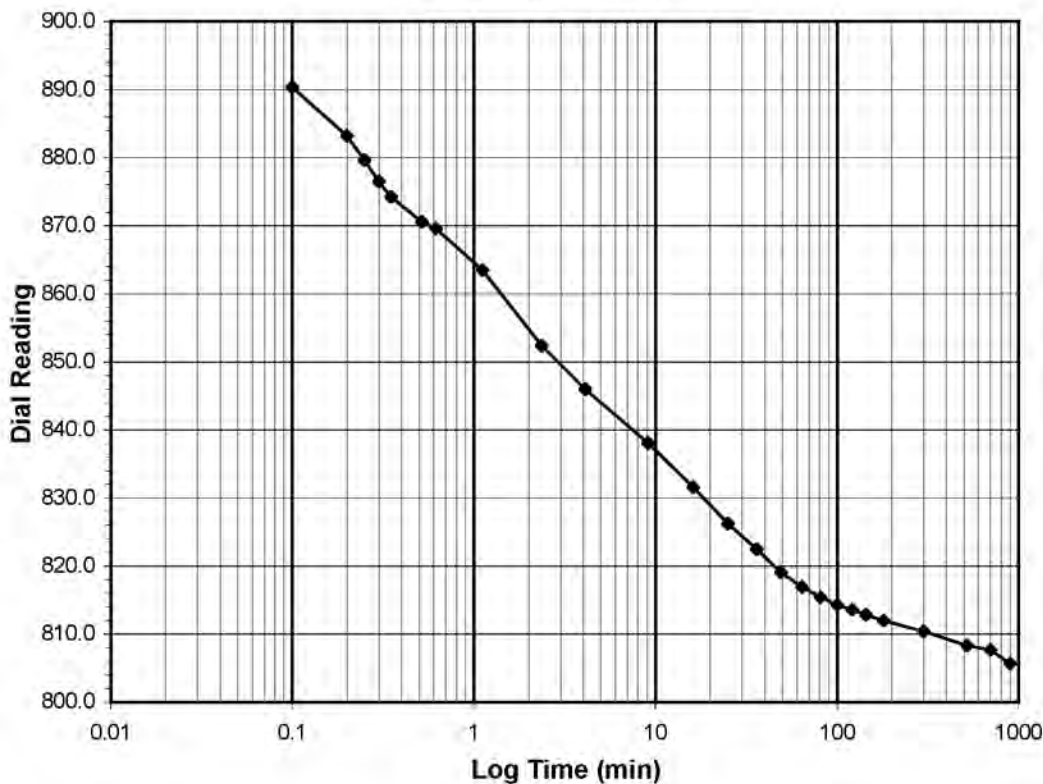
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-0.5
 Final Reading (div) 805.7
 Consolidometer No. G1427
 1 Division (in) 0.0001

Start Date 11/29/13
 Start Time 13:13:17

Elapsed Time (min)	Dial Reading (div)
Initial	933.8
0.10	890.4
0.20	883.2
0.25	879.6
0.30	876.5
0.35	874.2
0.52	870.6
0.62	869.6
1.12	863.5
2.37	852.4
4.12	846.0
9.12	838.1
16.12	831.6
25.12	826.2
36.12	822.5
49.12	819.1
64.12	816.9
81.12	815.4
100.12	814.3
121.12	813.6
144.12	812.8
180.12	812.0
300.12	810.4
520.12	808.3
700.12	807.7
900.18	805.7



Tested By DB Date 11/29/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1427

1 Division = 0.0001 (in)

Sample Properties

Initial **Final**

Water Content

	Initial	Final
Tare Number	2569	2683
Wt. Tare & WS (g)	82.33	153.58
Wt. Tare & DS (g)	65.80	122.20
Wt. Water (g)	16.53	31.38
Wt. Tare (g)	6.67	6.56
Wt. DS (g)	59.13	115.64
Water Content (%)	27.96	27.14

Sample Parameters

	Initial	Final
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9303
Sample Volume (cm ³)	80.44	74.83
Wt. Wet Sample + Ring (g)	362.94	361.99
Wt. of Ring (g)	214.72	214.72
Wt. of Wet Sample (g)	148.22	147.27
Wet Density (pcf)	114.98	122.81
Wet Density (g/cm ³)	1.84	1.97
Water Content (%)	27.96	27.14
Wt. of Dry Sample (g)	115.84	115.84
Dry Density (pcf)	89.86	96.59
Dry Density (g/cm ³)	1.44	1.55
Void Ratio	0.8541	0.7248
Saturation (%)	87.39	99.96
Specific Gravity	2.67	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.44005	0.85410
0.25	54.1	23.9	30.2	25.323	80.197	1.44441	0.84850
0.5	90.3	40.1	50.2	25.273	80.036	1.44731	0.84480
1	132.2	62.7	69.5	25.223	79.881	1.45013	0.84122
2	189.7	95.7	94.0	25.161	79.684	1.45371	0.83667
4	288.0	128.7	159.3	24.995	79.159	1.46335	0.82457
1	228.6	87.7	140.9	25.042	79.306	1.46063	0.82798
0.25	182.5	53.7	128.8	25.073	79.404	1.45884	0.83022
0.5	190.8	64.2	126.6	25.078	79.421	1.45851	0.83063
1	210.1	76.5	133.6	25.061	79.365	1.45956	0.82932
2	242.9	100.1	142.8	25.037	79.291	1.46091	0.82763
4	295.6	126.6	169.0	24.971	79.080	1.46480	0.82277
8	421.4	178.9	242.5	24.784	78.489	1.47583	0.80915
16	701.1	232.8	468.3	24.210	76.673	1.51080	0.76727
32	1221.1	317.3	903.7	23.105	73.170	1.58312	0.68654
8	1074.0	217.5	856.6	23.224	73.550	1.57495	0.69529
2	933.8	157.0	776.7	23.427	74.192	1.56132	0.71009
0.5	805.7	108.4	697.3	23.629	74.831	1.54799	0.72482

Tested By DB Date 11/19/13 Input Checked By TM Date 12/6/13

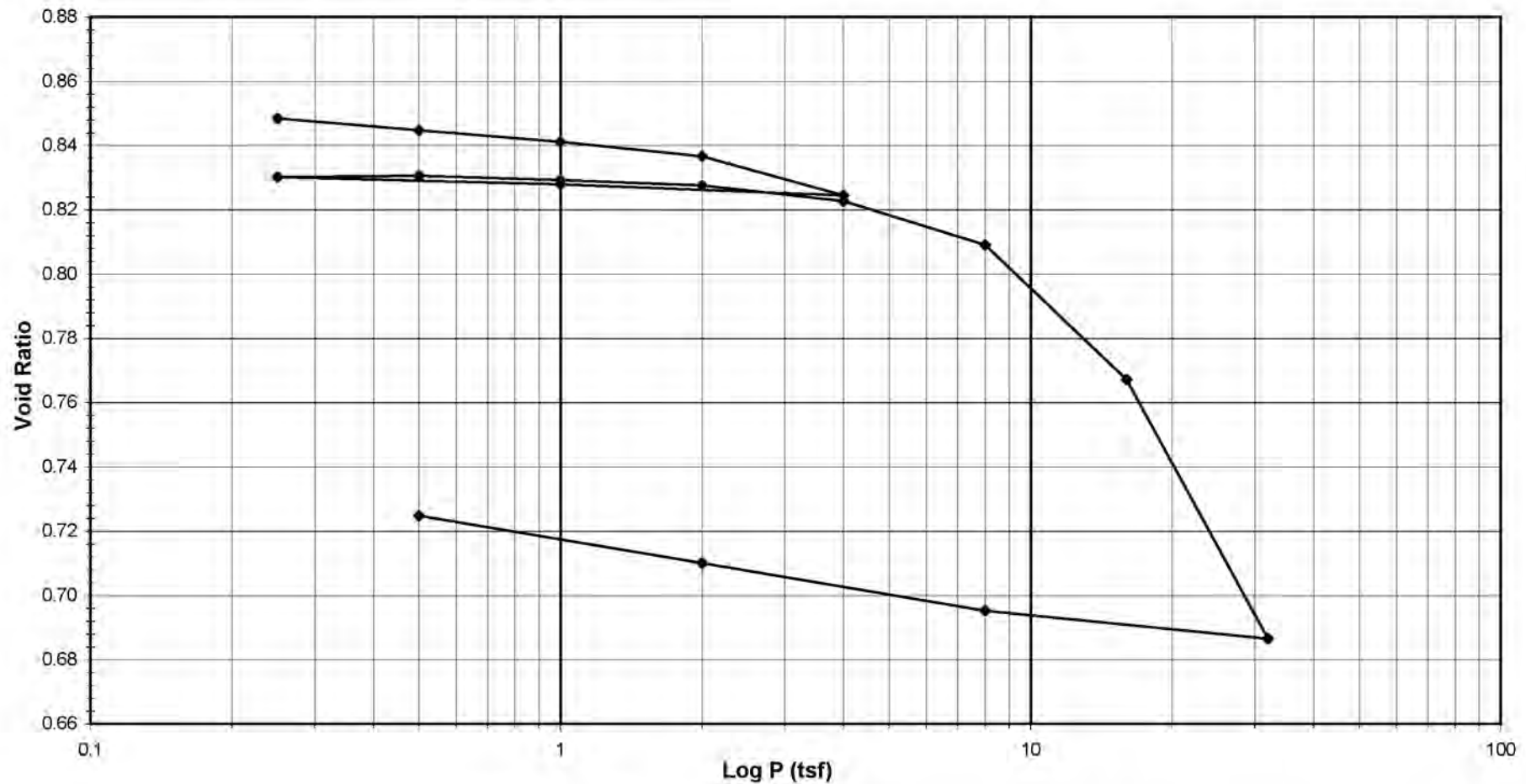
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-008

Boring No. R-7-1
Depth (ft) 266.9-267.1
Sample No. ST-10
Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/19/13

Approved By RJO Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1427

1 Division = 0.0001 (in)

C_v Test Data Summary

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>						
			Load	Dial	Machine	Corrected	Sample	Time
			Increment	Reading	Deflection	Dial Reading	Height	t₅₀
				@ t₅₀		@ t₅₀	@ t₅₀	
			(tsf)	(div)	(div)	(div)	(mm)	(min)
								C_v
								(cm²/sec)
<i>Water Content</i>								
Tare Number	2569	2683						
Wt. Tare & WS (g)	82.33	153.58						
Wt. Tare & DS (g)	65.8	122.2						
Wt. Water (g)	16.53	31.38						
Wt. Tare (g)	6.67	6.56						
Wt. DS (g)	59.13	115.64						
Water Content (%)	27.96	27.14						
<u>Sample Parameters</u>								
Sample Diameter (in)	2.5	2.5						
Sample Height (in)	1.0000	0.9303						
Sample Volume (cm ³)	80.44	74.83						
Wt. Wet Sample + Ring (g)	362.94	361.99						
Wt. of Ring (g)	214.72	214.72						
Wt. of Wet Sample (g)	148.22	147.27						
Wet Density (pcf)	114.98	122.81						
Wet Density (g/cm ³)	1.84	1.97						
Water Content (%)	27.96	27.14						
Wt. of Dry Sample (g)	115.84	115.84						
Dry Density (pcf)	89.86	96.59						
Dry Density (g/cm ³)	1.44	1.55						
Void Ratio	0.8541	0.7248						
Saturation (%)	87.39	99.96						
Specific Gravity	2.67	Measured						

Tested By DB **Date** 11/19/13 **Input Checked By** TM **Date** 12/6/13

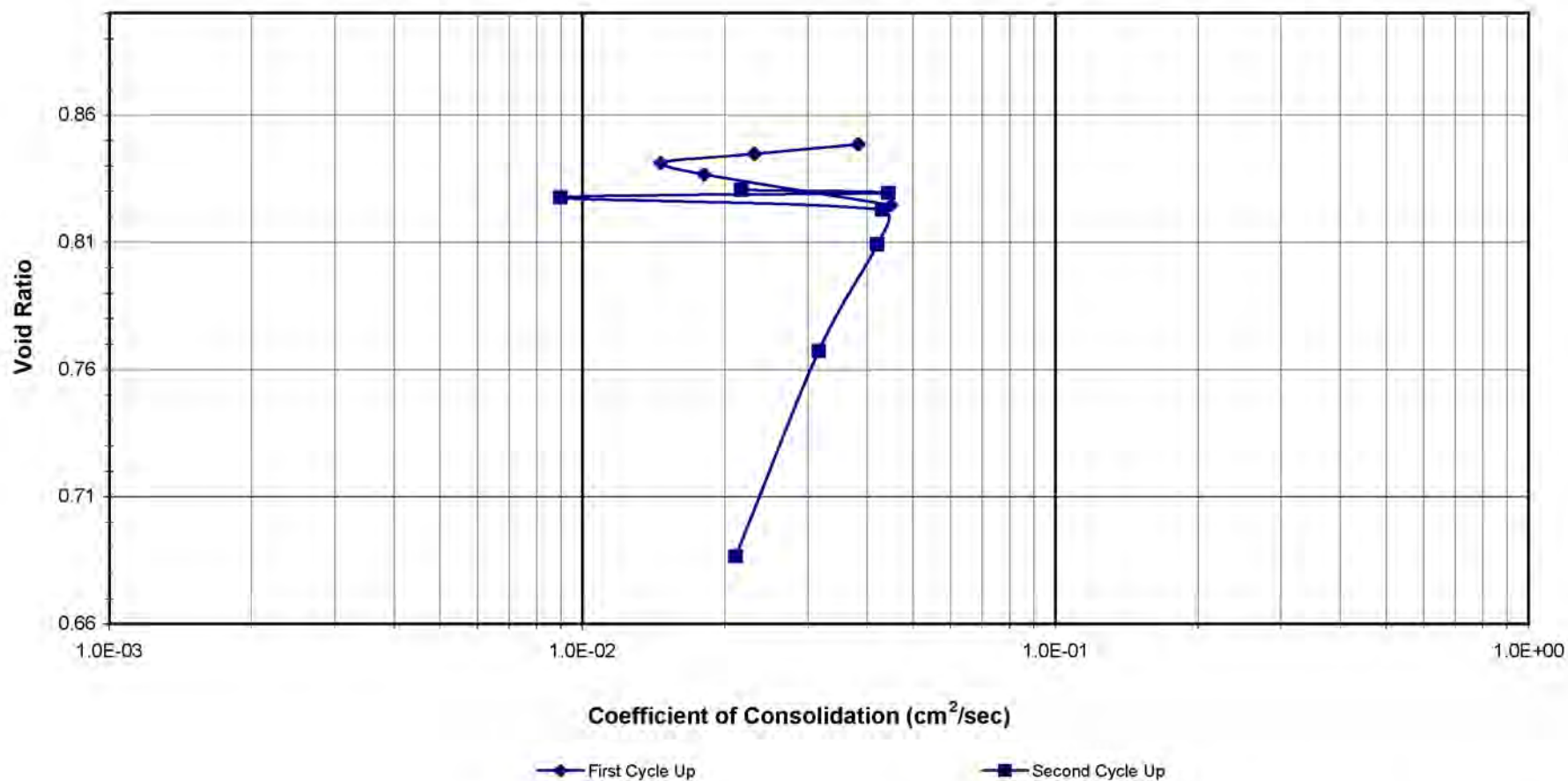
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-008

Boring No. R-7-1
 Depth (ft) 266.9-267.1
 Sample No. ST-10
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/19/13

Approved By RJO Date 12/6/13

**One Dimensional Consolidation**

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	266.9-267.1
Project No.	2013-465-001	Sample No.	ST-10
Lab ID #	2013-465-001-008		

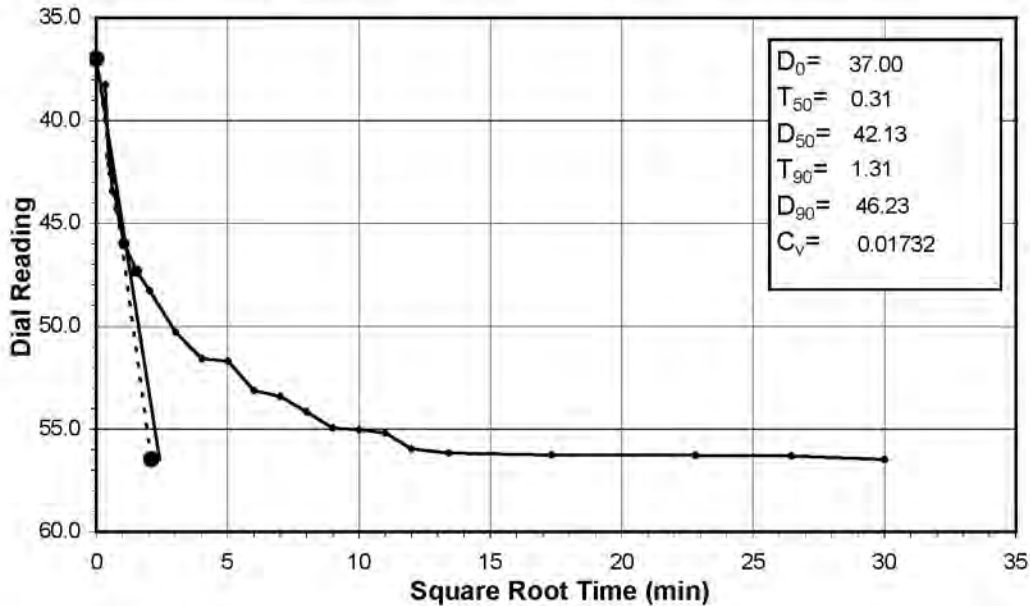
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1427	1/9/14
Load Cell	G1428	1/9/14
LVDT	G1429	1/9/14

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

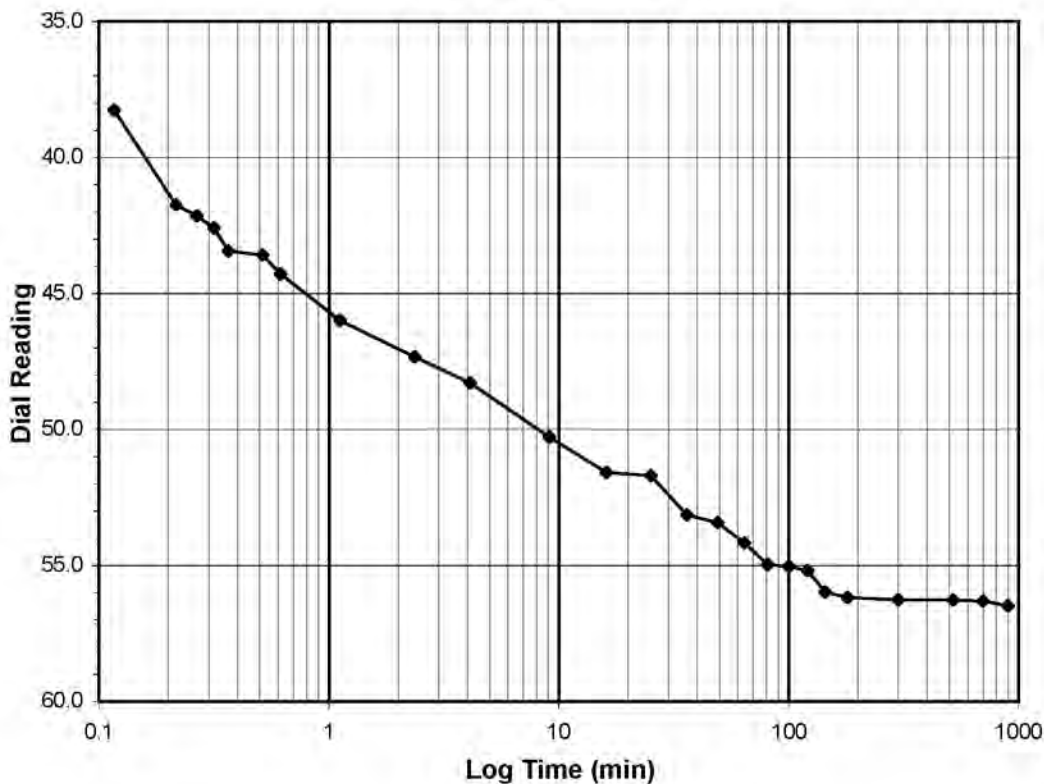
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 56.5
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/18/13
 Start Time 12:24:13

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.12	38.3
0.22	41.7
0.27	42.1
0.32	42.6
0.37	43.4
0.52	43.6
0.62	44.3
1.12	46.0
2.37	47.3
4.12	48.3
9.12	50.3
16.13	51.6
25.13	51.7
36.13	53.1
49.13	53.4
64.13	54.2
81.13	55.0
100.13	55.0
121.13	55.2
144.13	56.0
180.13	56.2
300.13	56.3
520.13	56.3
700.13	56.3
900.07	56.5



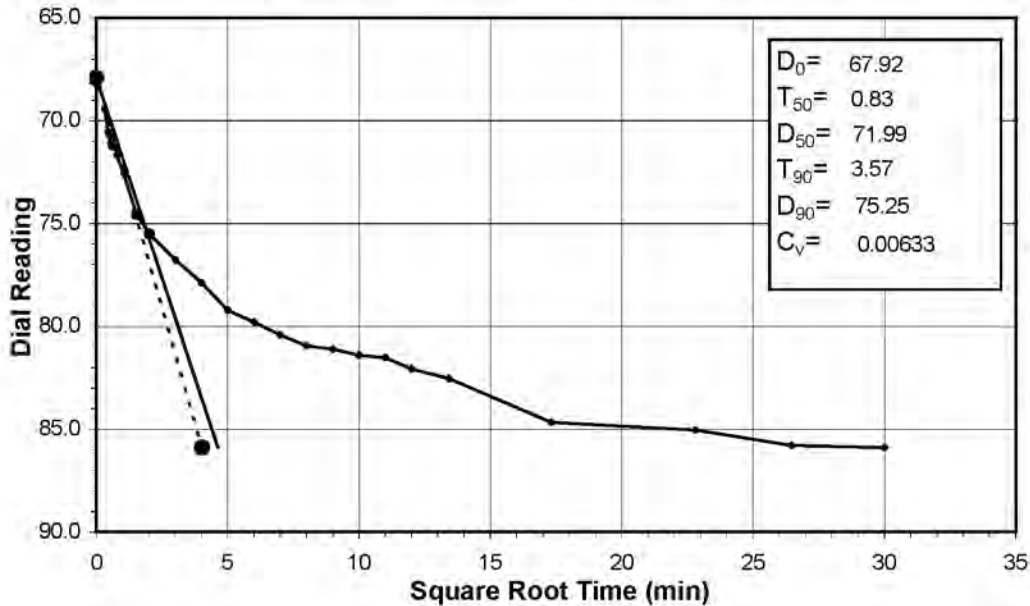
Tested By DB Date 11/18/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

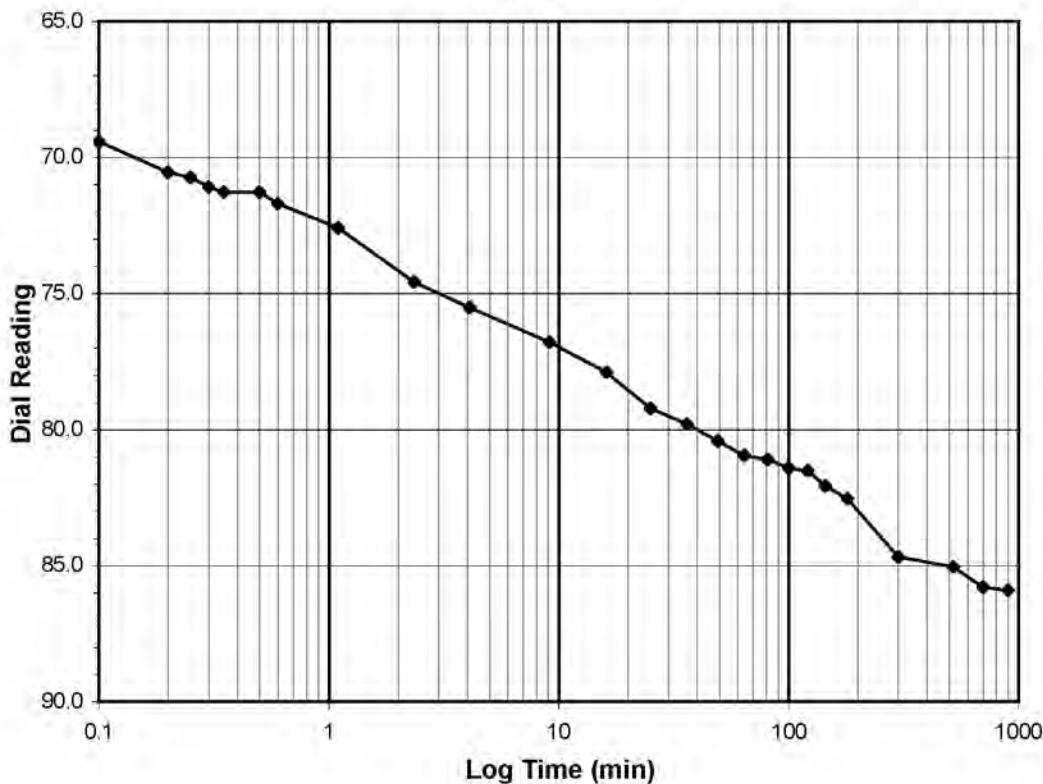
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **85.9**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/19/13
 Start Time 3:24:16

Elapsed Time (min)	Dial Reading (div)
Initial	56.5
0.10	69.4
0.20	70.5
0.25	70.7
0.30	71.1
0.35	71.3
0.50	71.3
0.60	71.7
1.10	72.6
2.35	74.6
4.10	75.5
9.10	76.8
16.10	77.9
25.10	79.2
36.10	79.8
49.10	80.4
64.10	81.0
81.10	81.1
100.10	81.4
121.10	81.5
144.12	82.1
180.12	82.5
300.12	84.7
520.12	85.0
700.12	85.8
900.08	85.9



Tested By DB Date 11/19/13 Checked By TM Date 12/6/13



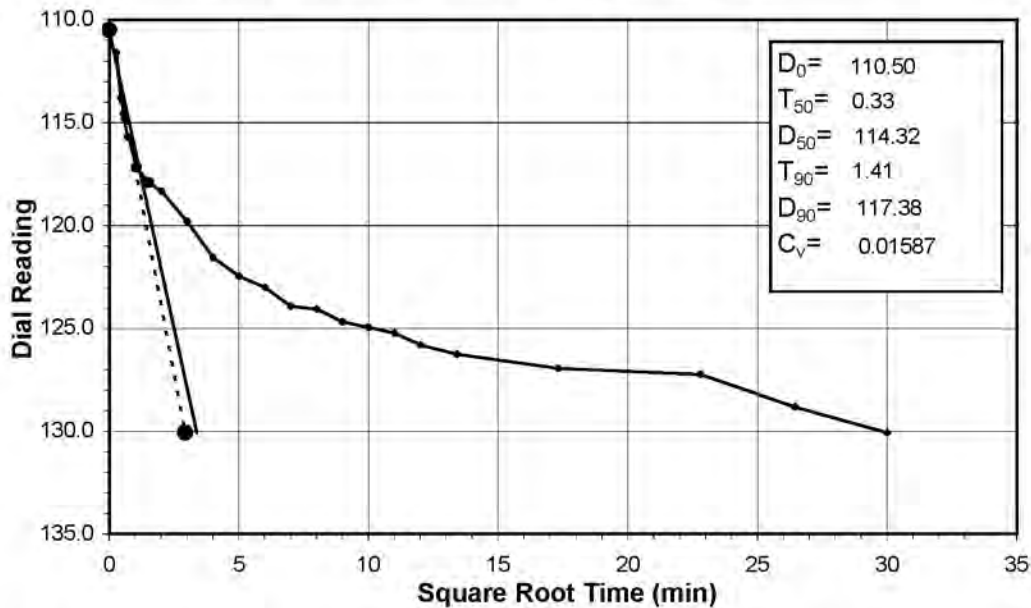
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

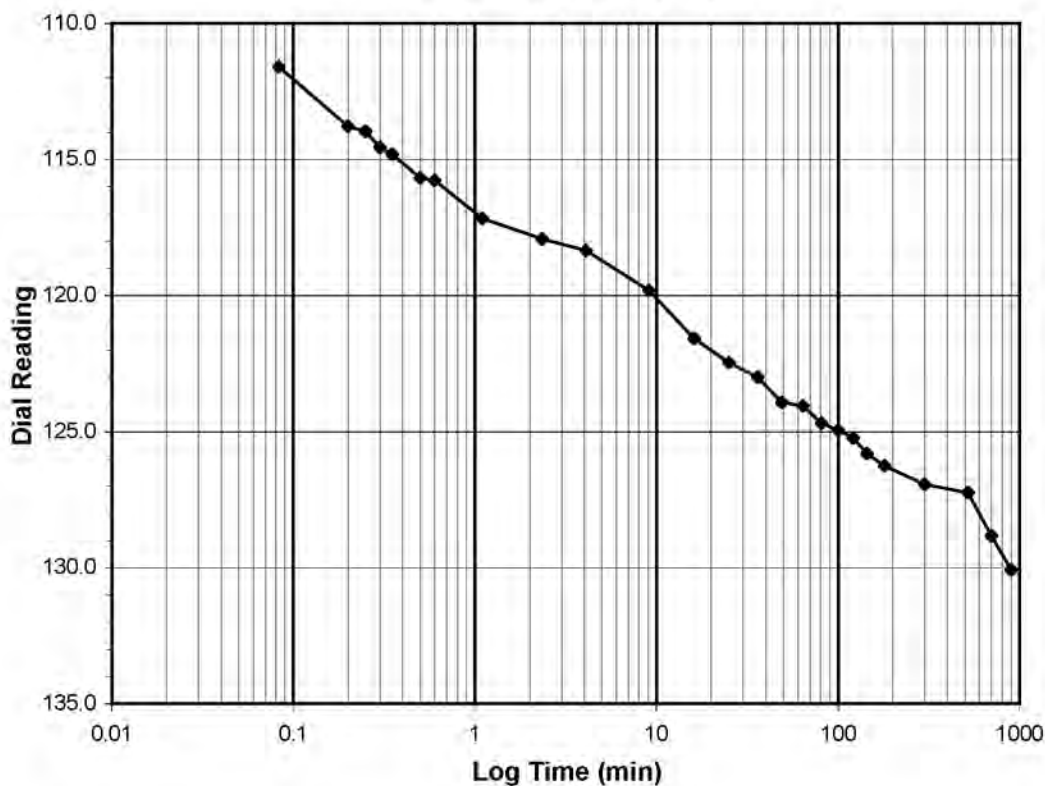
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 130.1
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/19/13
 Start Time 18:24:21

Elapsed Time (min)	Dial Reading (div)
Initial	85.9
0.08	111.6
0.20	113.8
0.25	114.0
0.30	114.5
0.35	114.8
0.50	115.7
0.60	115.8
1.10	117.2
2.35	117.9
4.10	118.3
9.10	119.8
16.10	121.6
25.10	122.5
36.10	123.0
49.10	123.9
64.10	124.1
81.12	124.7
100.12	124.9
121.12	125.2
144.12	125.8
180.12	126.3
300.12	126.9
520.12	127.2
700.12	128.8
900.07	130.1



Tested By DB Date 11/19/13 Checked By TM Date 12/6/13



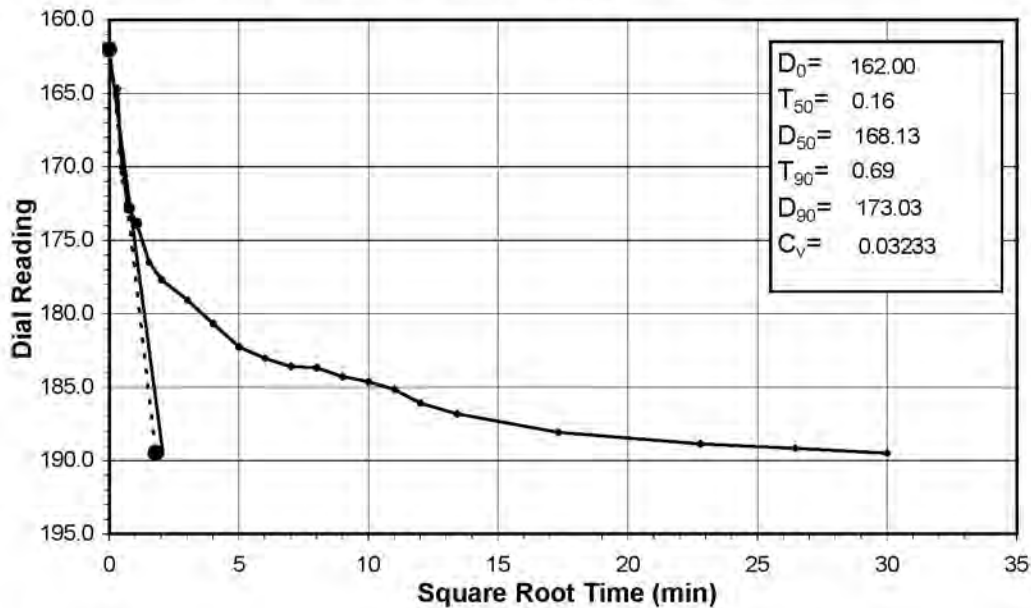
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

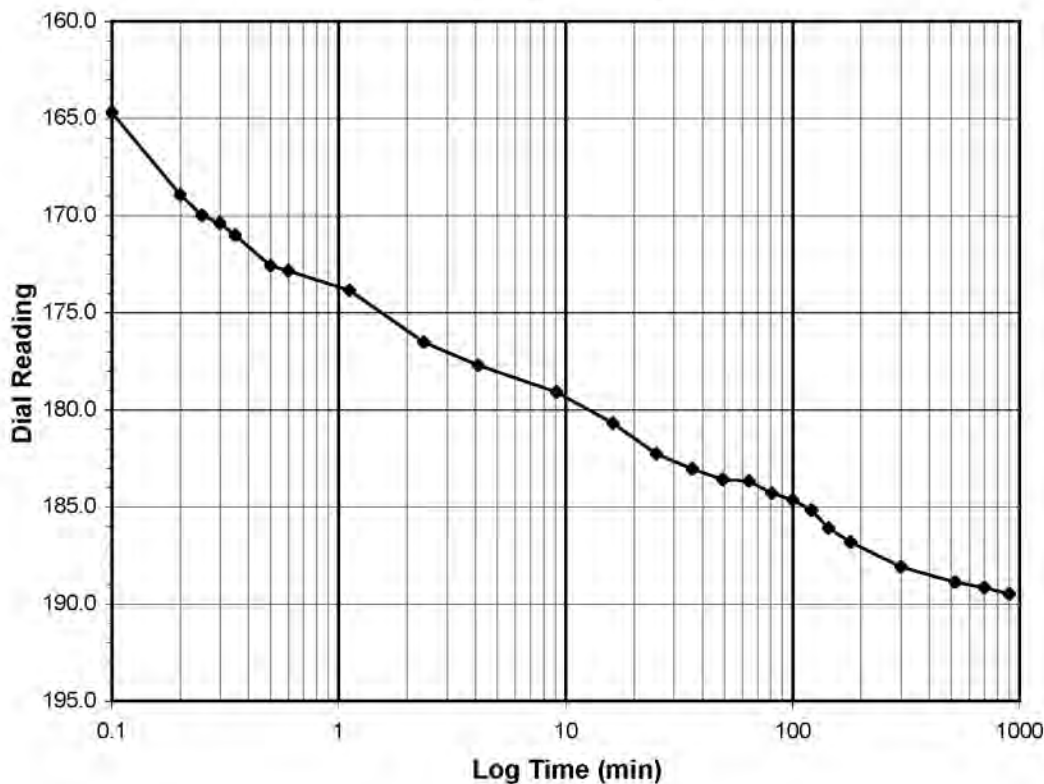
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 189.5
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/20/13
 Start Time 11:45:12

Elapsed Time (min)	Dial Reading (div)
Initial	130.1
0.10	164.7
0.20	168.9
0.25	170.0
0.30	170.4
0.35	171.0
0.50	172.6
0.60	172.8
1.12	173.8
2.37	176.5
4.12	177.7
9.12	179.1
16.12	180.7
25.12	182.3
36.12	183.0
49.12	183.6
64.12	183.7
81.12	184.3
100.12	184.6
121.12	185.2
144.12	186.1
180.12	186.8
300.12	188.1
520.12	188.9
700.12	189.2
900.20	189.5



Tested By DB Date 11/20/13 Checked By TM Date 12/6/13



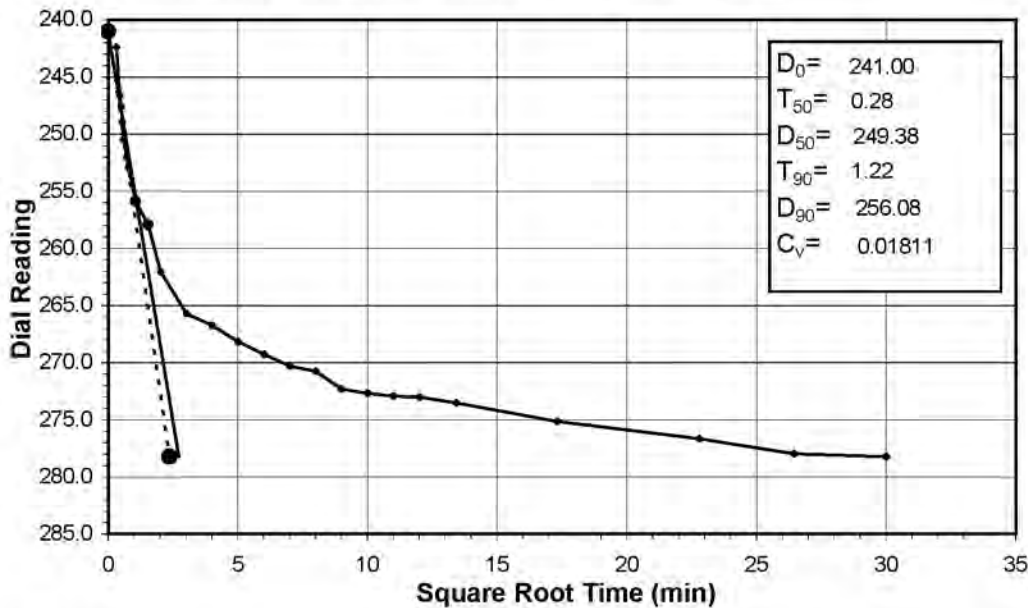
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

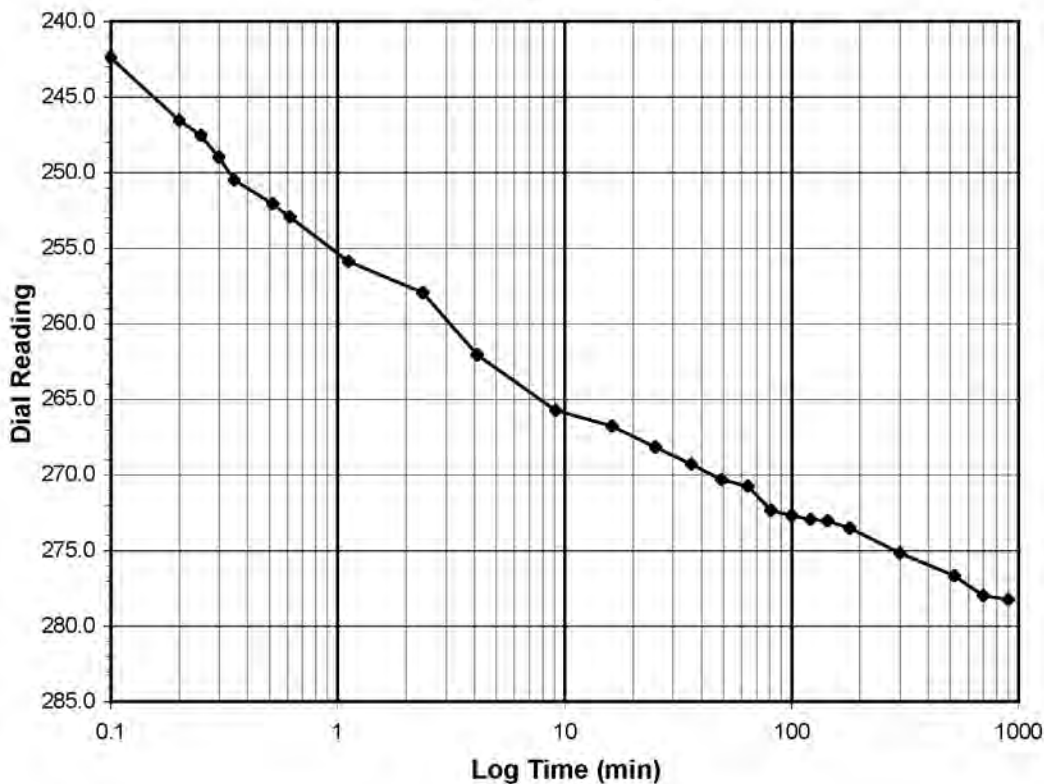
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 278.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/21/13
 Start Time 2:45:24

Elapsed Time (min)	Dial Reading (div)
Initial	189.5
0.10	242.4
0.20	246.5
0.25	247.5
0.30	249.0
0.35	250.5
0.52	252.1
0.62	252.9
1.12	255.9
2.37	257.9
4.12	262.0
9.12	265.7
16.12	266.8
25.12	268.2
36.12	269.3
49.12	270.3
64.12	270.7
81.12	272.3
100.12	272.7
121.12	272.9
144.12	273.0
180.13	273.5
300.13	275.2
520.13	276.7
700.13	278.0
900.20	278.2



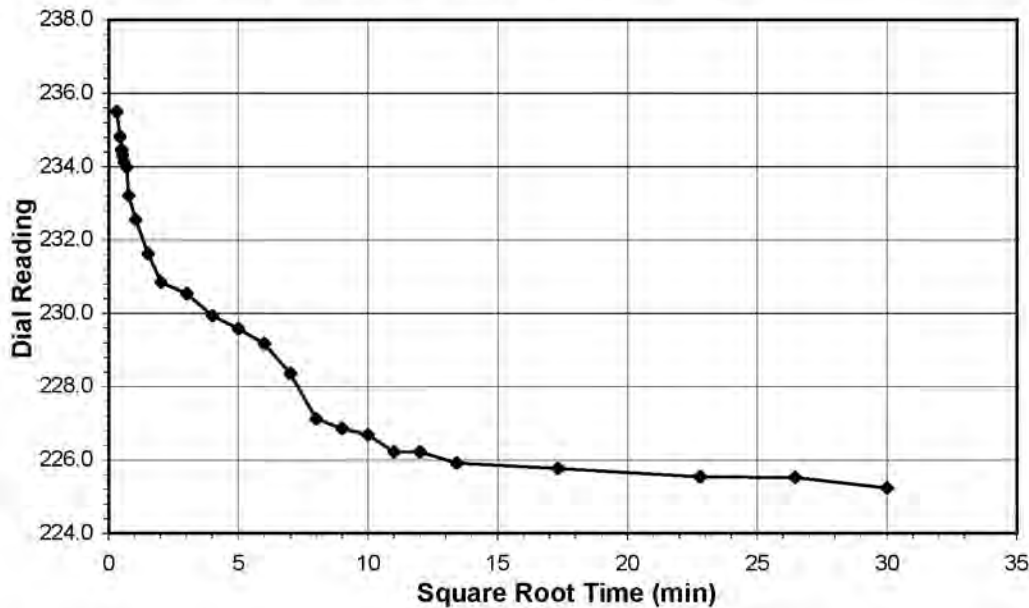
Tested By DB Date 11/21/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

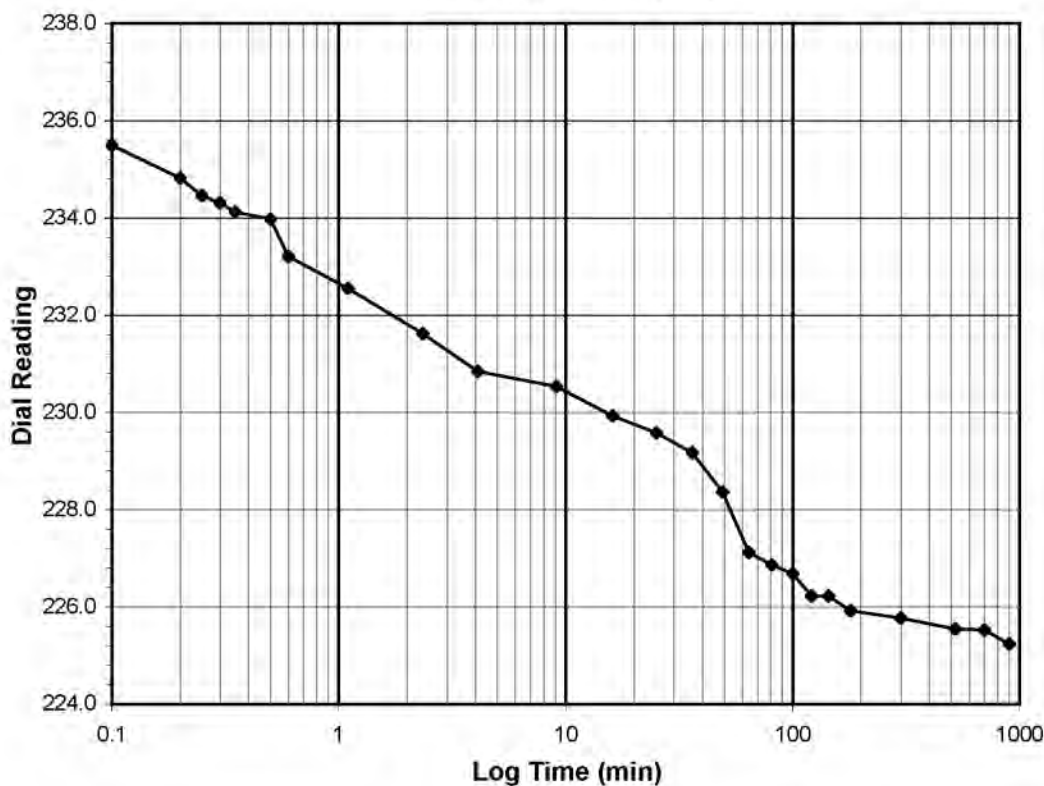
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 4.0-1.0
 Final Reading (div) 225.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/21/13
 Start Time 17:45:37

Elapsed Time (min)	Dial Reading (div)
Initial	278.2
0.10	235.5
0.20	234.8
0.25	234.5
0.30	234.3
0.35	234.1
0.50	234.0
0.60	233.2
1.10	232.5
2.35	231.6
4.10	230.8
9.10	230.5
16.10	229.9
25.10	229.6
36.10	229.2
49.10	228.4
64.12	227.1
81.12	226.9
100.12	226.7
121.12	226.2
144.12	226.2
180.12	225.9
300.12	225.8
520.12	225.5
700.12	225.5
900.20	225.2



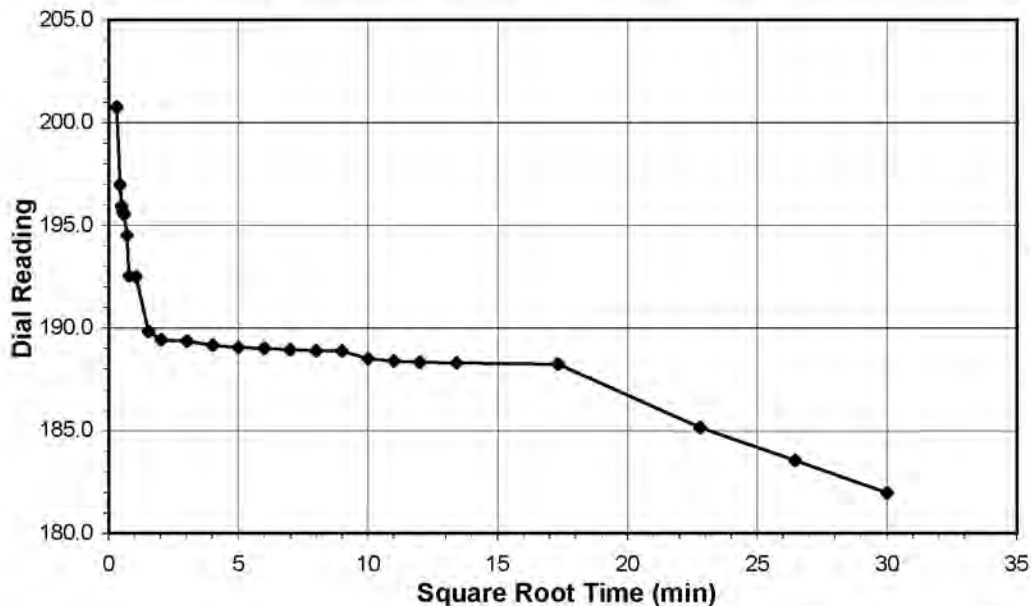
Tested By DB Date 11/21/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

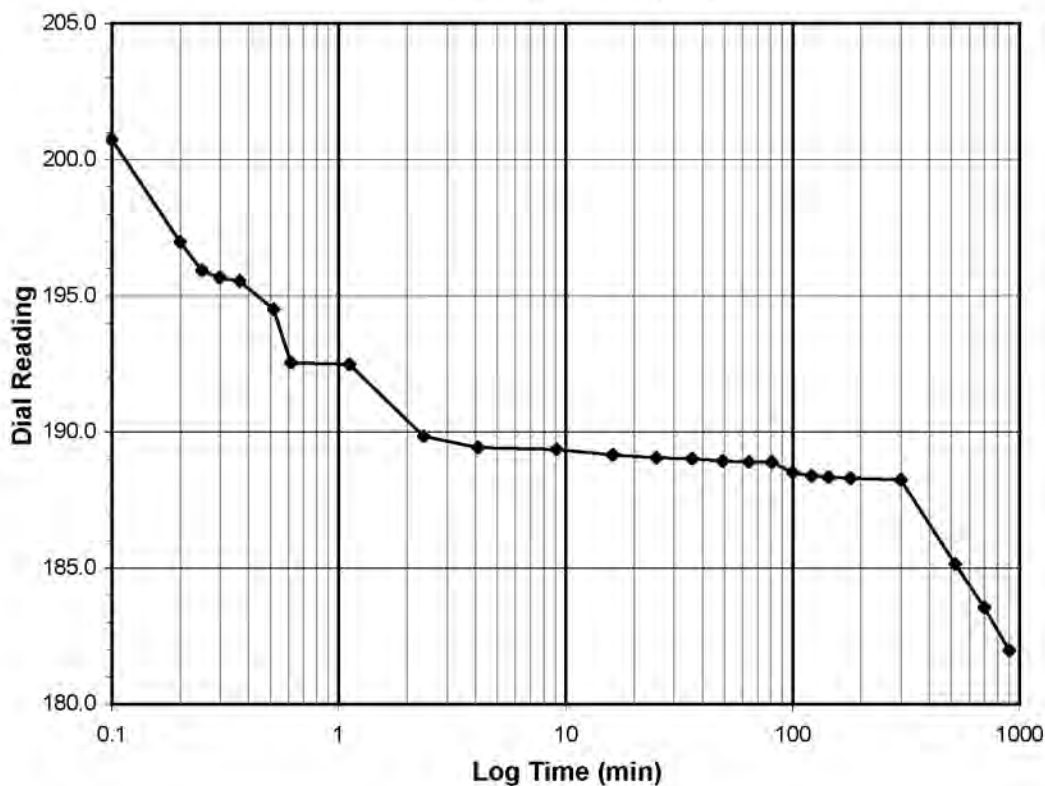
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-0.25
 Final Reading (div) 182.0
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 8:45:49

Elapsed Time (min)	Dial Reading (div)
Initial	225.2
0.10	200.8
0.20	197.0
0.25	195.9
0.30	195.7
0.37	195.5
0.52	194.5
0.62	192.5
1.12	192.5
2.37	189.8
4.12	189.4
9.12	189.4
16.12	189.2
25.12	189.1
36.12	189.0
49.12	188.9
64.13	188.9
81.13	188.9
100.13	188.5
121.13	188.4
144.13	188.3
180.13	188.3
300.13	188.2
520.13	185.1
700.13	183.6
900.18	182.0



Tested By DB Date 11/22/13 Checked By TM Date 12/6/13



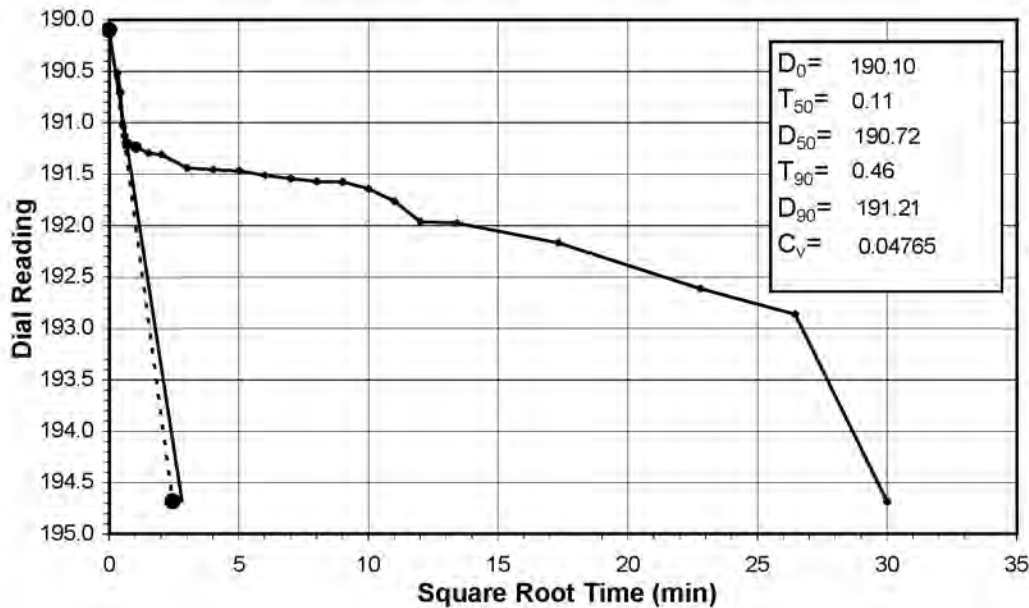
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

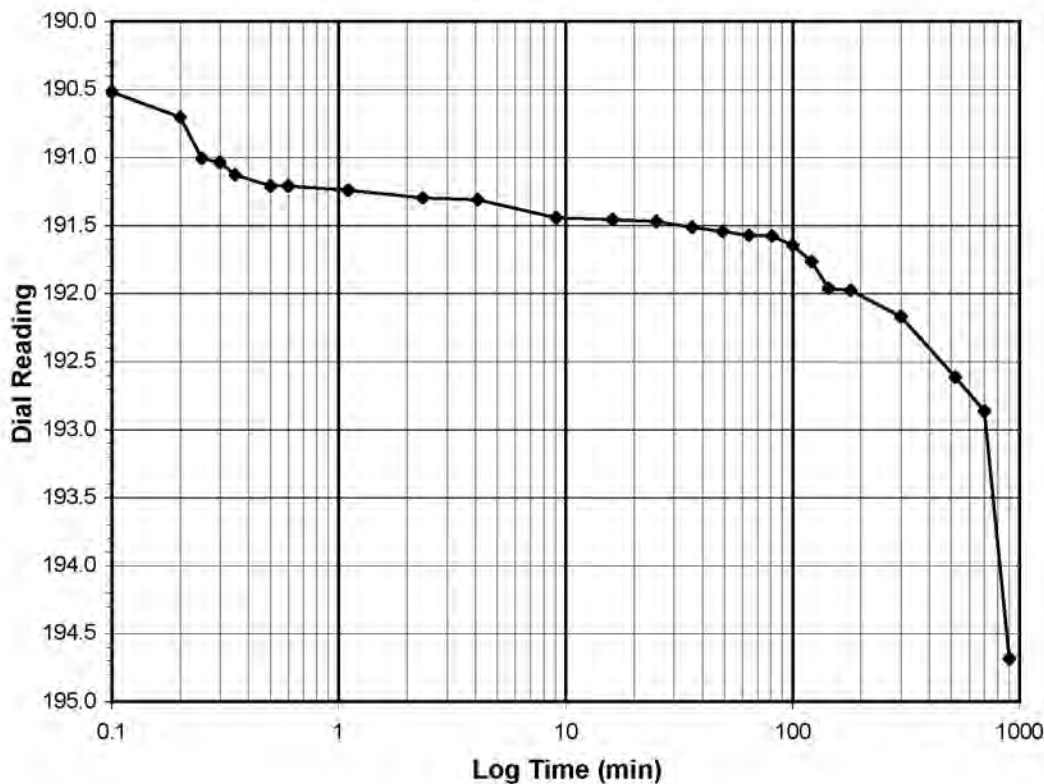
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.25-0.5
 Final Reading (div) 194.7
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 23:46:01

Elapsed Time (min)	Dial Reading (div)
Initial	182.0
0.10	190.5
0.20	190.7
0.25	191.0
0.30	191.0
0.35	191.1
0.50	191.2
0.60	191.2
1.10	191.2
2.35	191.3
4.10	191.3
9.10	191.4
16.10	191.5
25.10	191.5
36.10	191.5
49.10	191.5
64.10	191.6
81.10	191.6
100.10	191.6
121.12	191.8
144.12	192.0
180.12	192.0
300.12	192.2
520.12	192.6
700.12	192.9
900.18	194.7



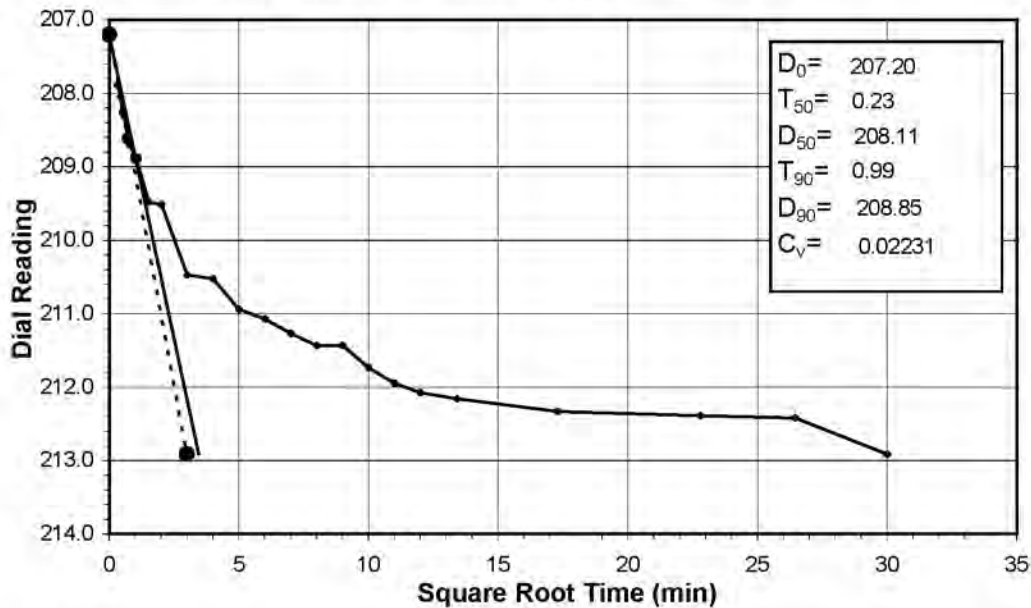
Tested By DB Date 11/22/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

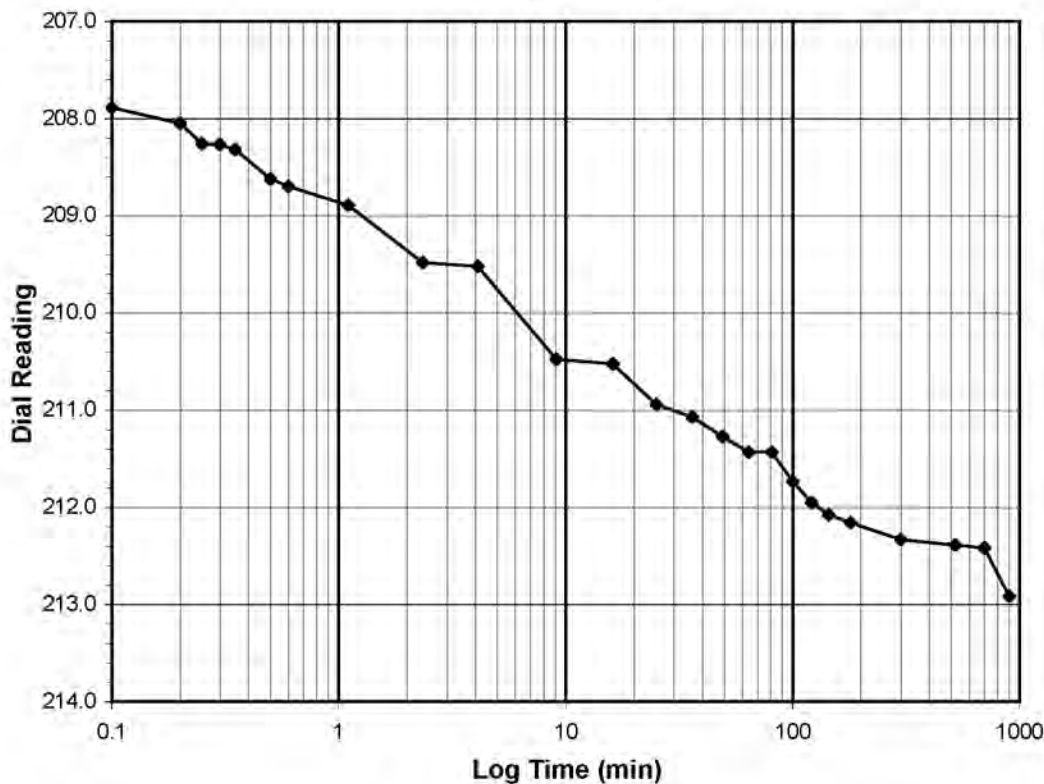
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 212.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/23/13
 Start Time 14:46:12

Elapsed Time (min)	Dial Reading (div)
Initial	194.7
0.10	207.9
0.20	208.0
0.25	208.3
0.30	208.3
0.35	208.3
0.50	208.6
0.60	208.7
1.10	208.9
2.35	209.5
4.10	209.5
9.10	210.5
16.12	210.5
25.12	210.9
36.12	211.1
49.12	211.3
64.12	211.4
81.12	211.4
100.12	211.7
121.12	211.9
144.12	212.1
180.12	212.2
300.12	212.3
520.12	212.4
700.12	212.4
900.28	212.9



Tested By DB Date 11/23/13 Checked By TM Date 12/6/13



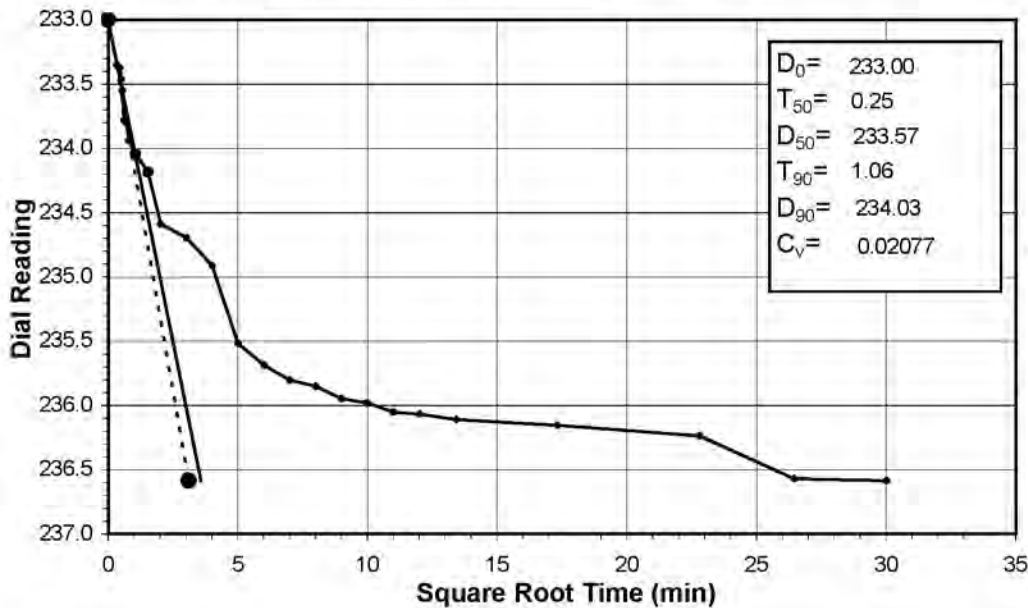
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

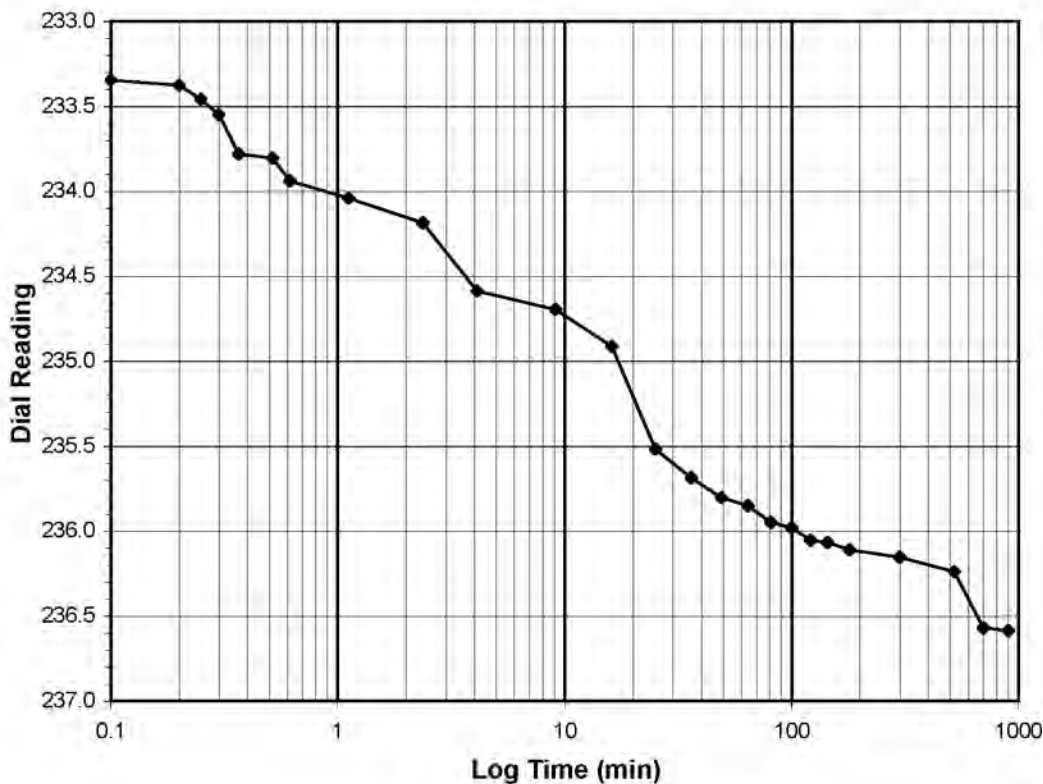
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 236.6
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/24/13
 Start Time 5:46:29

Elapsed Time (min)	Dial Reading (div)
Initial	212.9
0.10	233.3
0.20	233.4
0.25	233.5
0.30	233.5
0.37	233.8
0.52	233.8
0.62	233.9
1.12	234.0
2.37	234.2
4.12	234.6
9.12	234.7
16.12	234.9
25.12	235.5
36.12	235.7
49.12	235.8
64.12	235.8
81.13	235.9
100.13	236.0
121.13	236.1
144.13	236.1
180.13	236.1
300.13	236.2
520.13	236.2
700.13	236.6
900.48	236.6



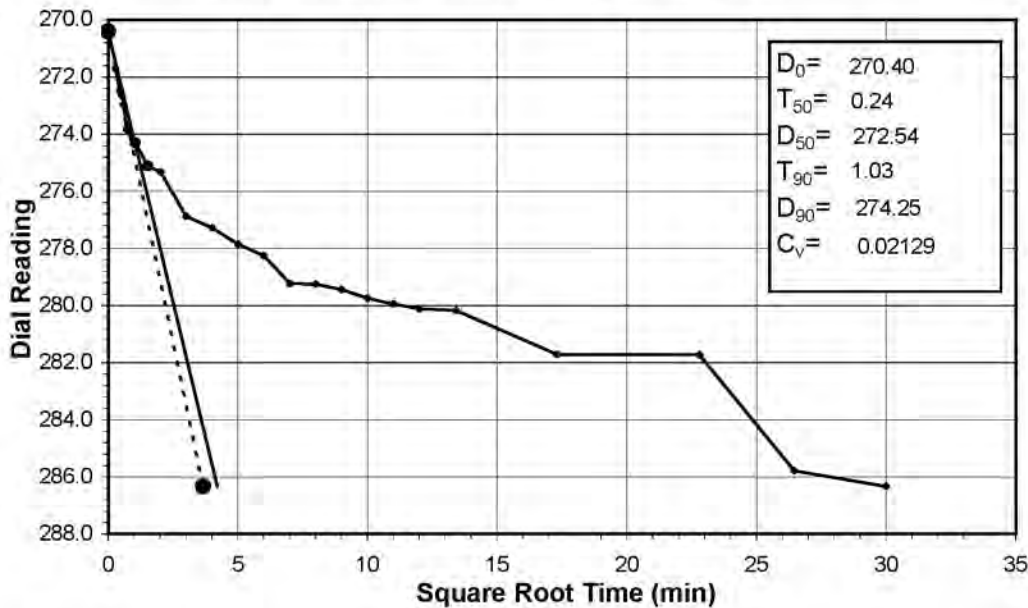
Tested By DB Date 11/24/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

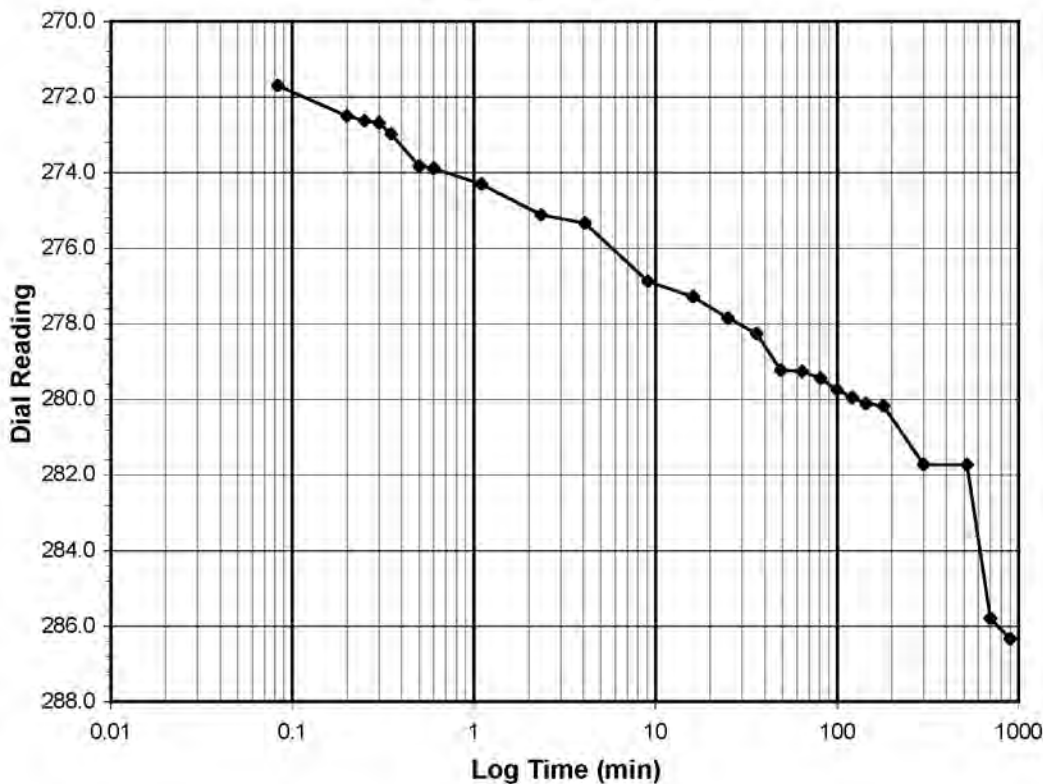
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **286.3**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/24/13
 Start Time 20:46:58

Elapsed Time (min)	Dial Reading (div)
Initial	236.6
0.08	271.7
0.20	272.5
0.25	272.6
0.30	272.7
0.35	273.0
0.50	273.8
0.60	273.9
1.10	274.3
2.35	275.1
4.10	275.3
9.10	276.9
16.10	277.3
25.10	277.8
36.10	278.3
49.10	279.2
64.10	279.3
81.10	279.4
100.10	279.7
121.10	279.9
144.10	280.1
180.10	280.2
300.10	281.7
520.10	281.7
700.10	285.8
900.38	286.3



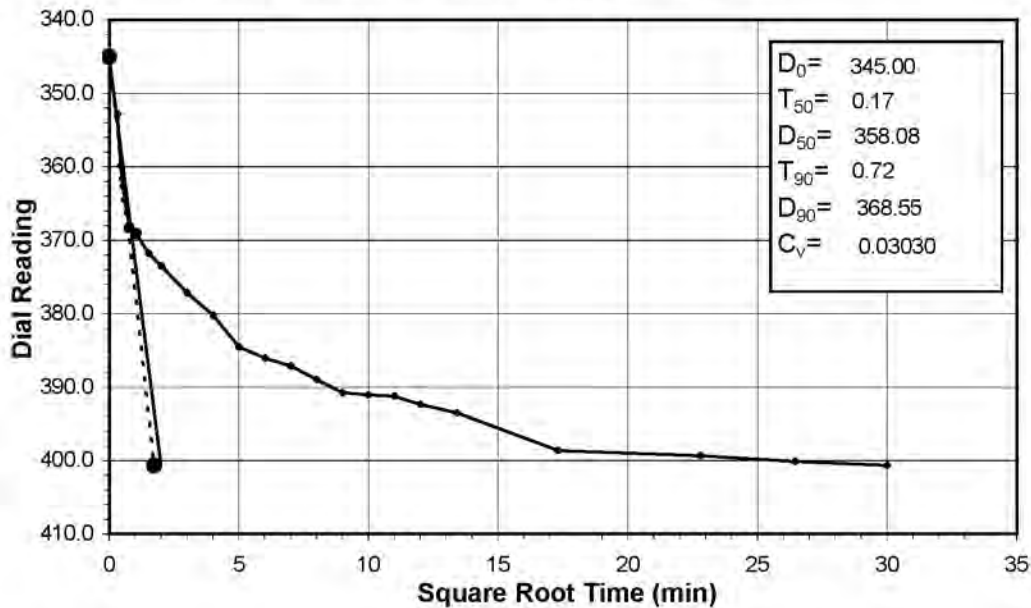
Tested By DB Date 11/24/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

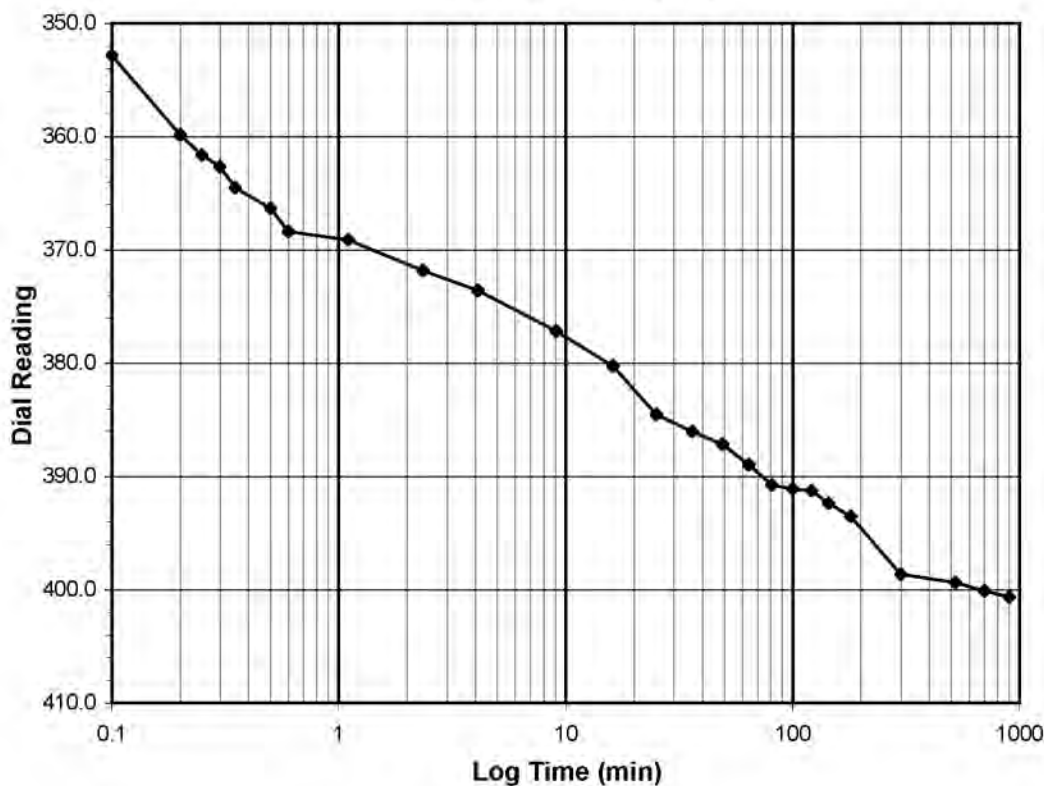
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **400.6**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/25/13
 Start Time 11:47:22

Elapsed Time (min)	Dial Reading (div)
Initial	286.3
0.10	352.8
0.20	359.8
0.25	361.6
0.30	362.6
0.35	364.5
0.50	366.3
0.60	368.4
1.10	369.1
2.35	371.8
4.10	373.6
9.10	377.1
16.12	380.2
25.12	384.5
36.12	386.0
49.12	387.2
64.12	388.9
81.12	390.7
100.12	391.1
121.12	391.2
144.12	392.4
180.12	393.5
300.12	398.6
520.12	399.3
700.13	400.1
900.17	400.6



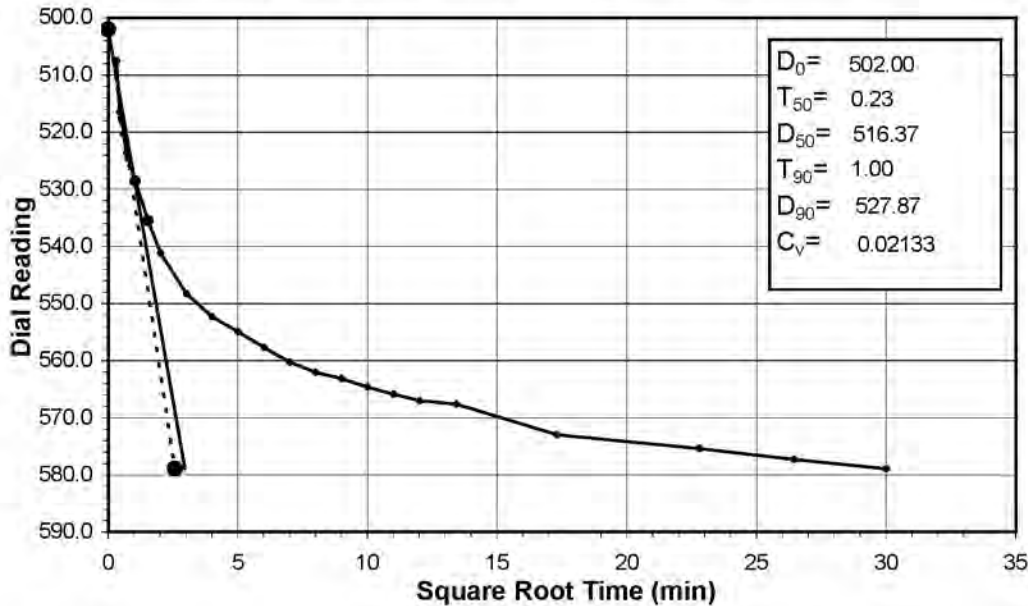
Tested By DB Date 11/25/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

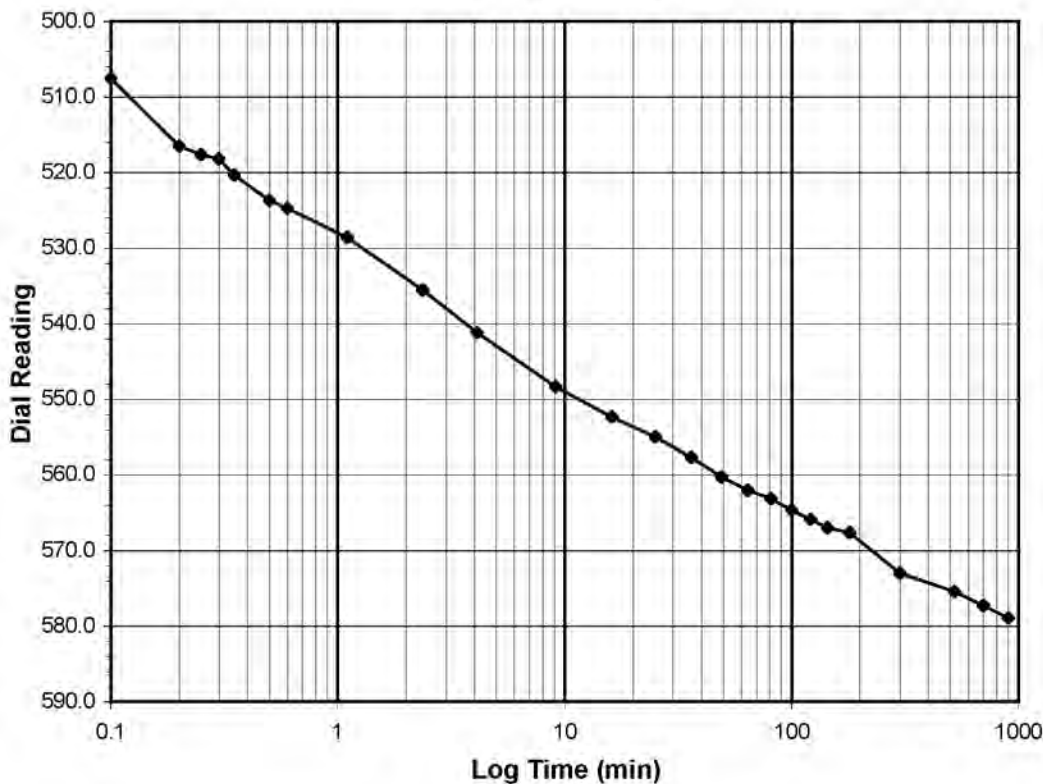
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 578.9
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/26/13
 Start Time 2:47:32

Elapsed Time (min)	Dial Reading (div)
Initial	400.6
0.10	507.5
0.20	516.5
0.25	517.6
0.30	518.2
0.35	520.3
0.50	523.7
0.60	524.7
1.10	528.6
2.37	535.5
4.12	541.2
9.12	548.3
16.12	552.3
25.12	554.9
36.12	557.7
49.12	560.2
64.12	562.0
81.13	563.1
100.13	564.6
121.13	565.9
144.13	567.0
180.13	567.6
300.13	573.0
520.13	575.4
700.13	577.3
900.37	578.9



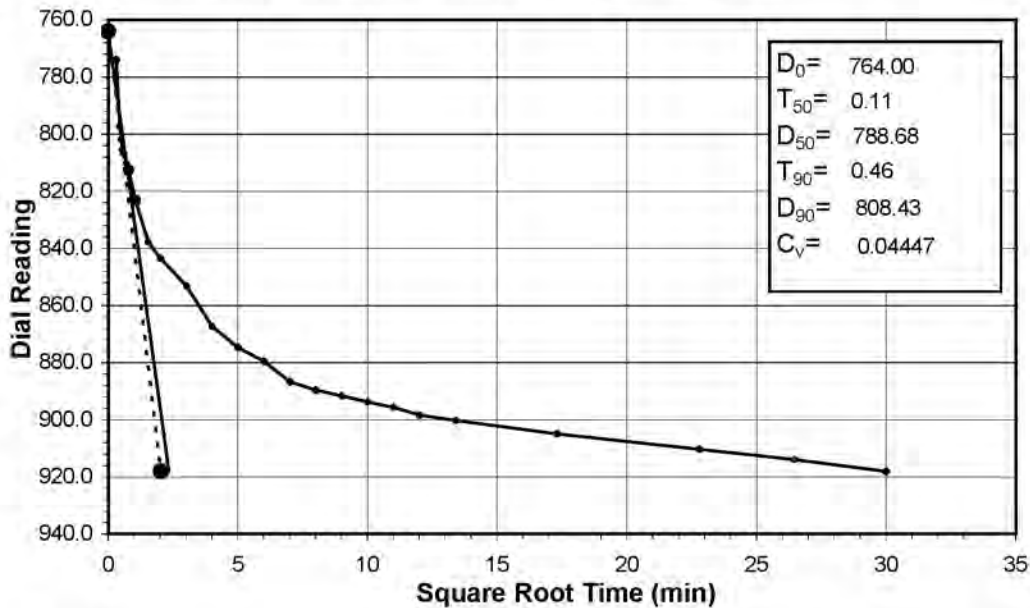
Tested By DB Date 11/26/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

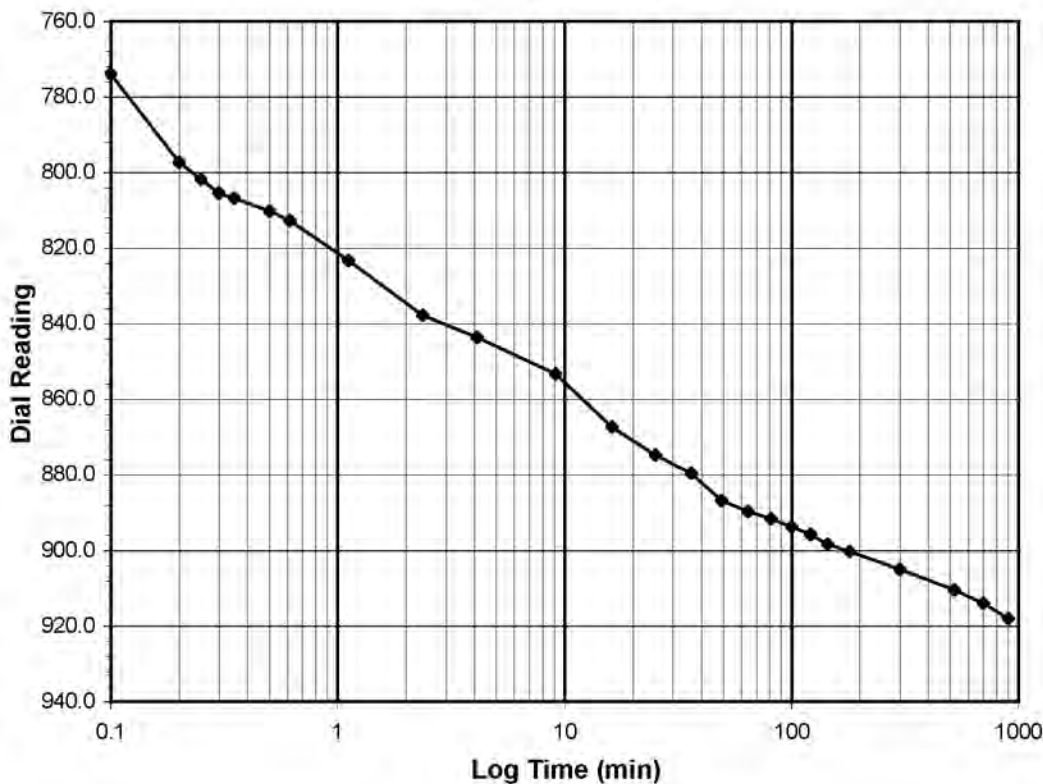
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

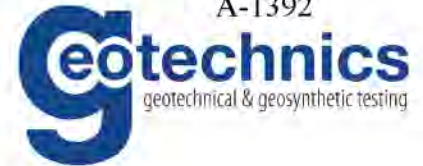
Test Load (tsf) 16.0-32.0
 Final Reading (div) 918.0
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/26/13
 Start Time 17:47:54

Elapsed Time (min)	Dial Reading (div)
Initial	578.9
0.10	773.9
0.20	797.3
0.25	801.7
0.30	805.4
0.35	806.7
0.50	810.1
0.62	812.7
1.12	823.2
2.37	837.7
4.12	843.6
9.12	853.2
16.12	867.3
25.12	874.8
36.12	879.5
49.12	886.7
64.12	889.6
81.12	891.6
100.12	893.7
121.12	895.7
144.12	898.3
180.12	900.2
300.13	904.9
520.13	910.4
700.13	913.9
900.40	918.0



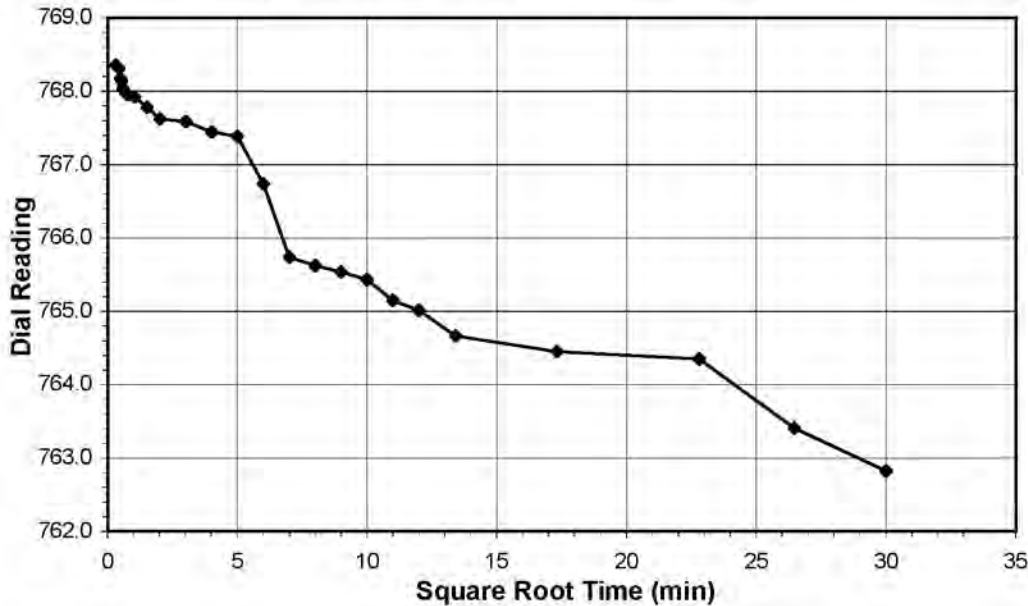
Tested By DB Date 11/26/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

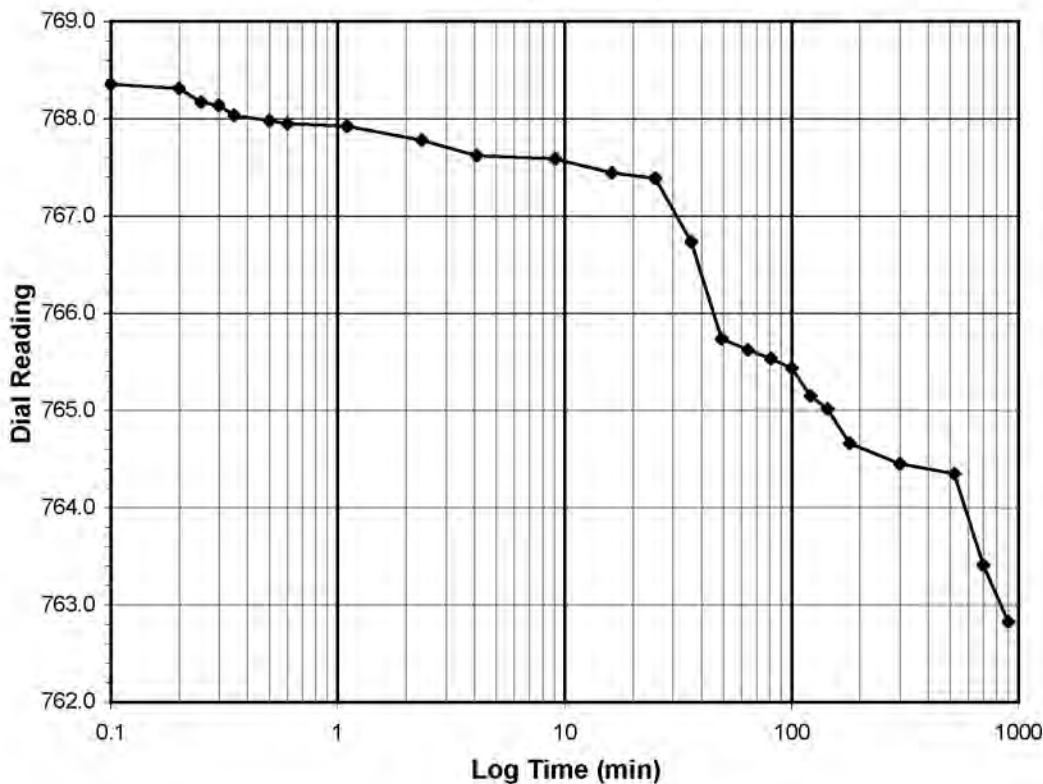
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

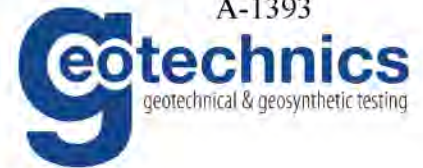
Test Load (tsf) 32.0-8.0
 Final Reading (div) 762.8
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/27/13
 Start Time 8:48:18

Elapsed Time (min)	Dial Reading (div)
Initial	918.0
0.10	768.4
0.20	768.3
0.25	768.2
0.30	768.1
0.35	768.0
0.50	768.0
0.60	767.9
1.10	767.9
2.35	767.8
4.10	767.6
9.10	767.6
16.12	767.4
25.12	767.4
36.12	766.7
49.12	765.7
64.12	765.6
81.12	765.5
100.12	765.4
121.12	765.1
144.12	765.0
180.12	764.7
300.12	764.5
520.12	764.3
700.12	763.4
900.32	762.8



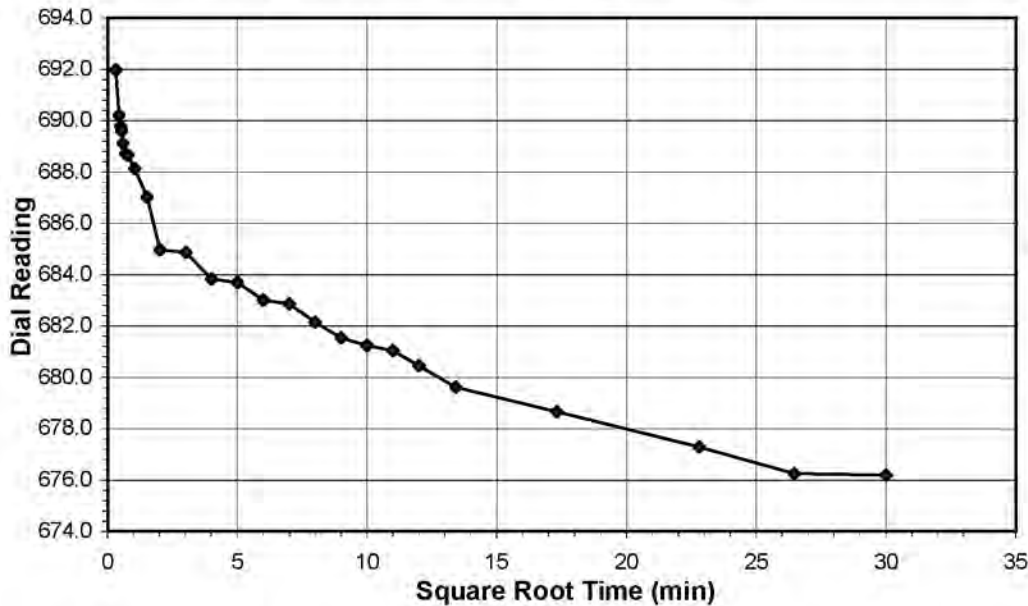
Tested By DB Date 11/27/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

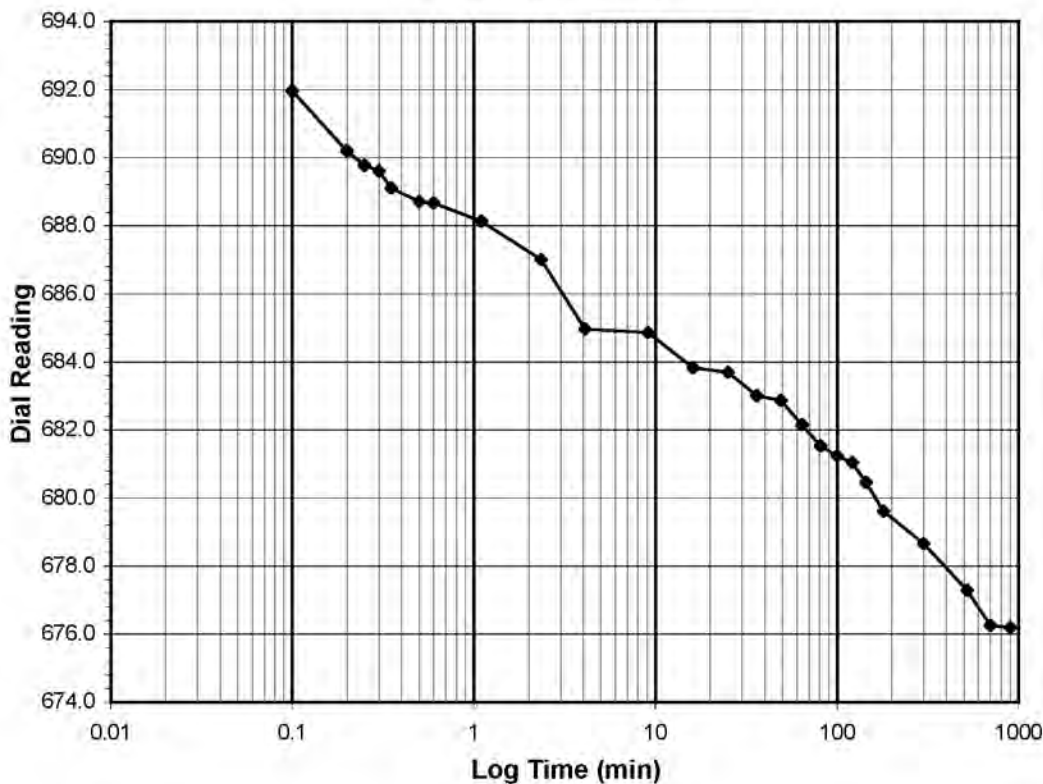
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-2.0
 Final Reading (div) 676.2
 Consolidometer No. G1421
 1 Division (in) 0.0001

Start Date 11/27/13
 Start Time 23:48:37

Elapsed Time (min)	Dial Reading (div)
Initial	762.8
0.10	692.0
0.20	690.2
0.25	689.8
0.30	689.6
0.35	689.1
0.50	688.7
0.60	688.7
1.10	688.1
2.35	687.0
4.10	685.0
9.10	684.9
16.10	683.8
25.10	683.7
36.10	683.0
49.10	682.9
64.10	682.2
81.10	681.5
100.12	681.2
121.12	681.0
144.12	680.5
180.12	679.6
300.12	678.7
520.12	677.3
700.12	676.3
900.47	676.2



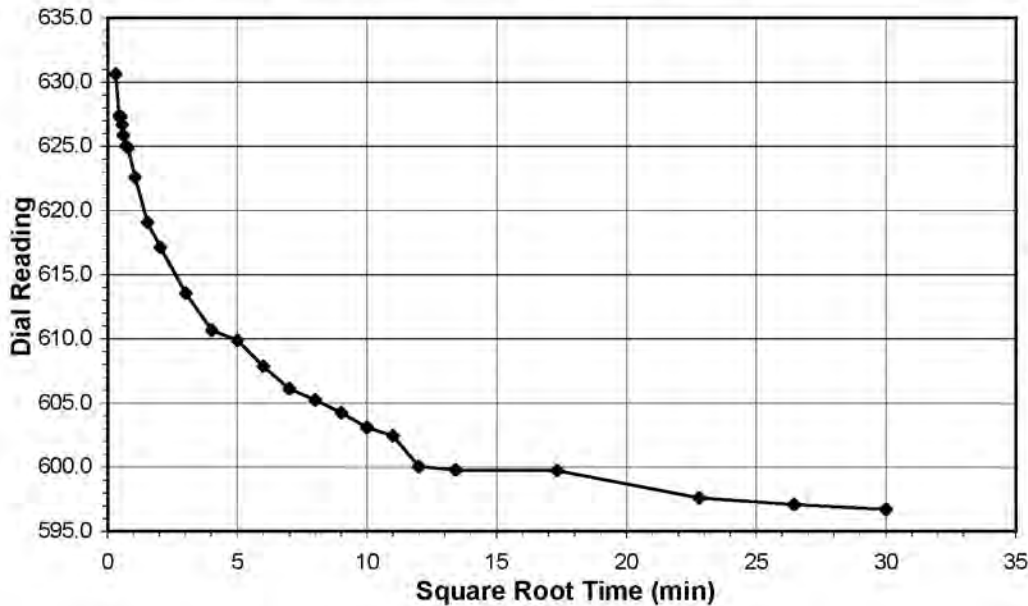
Tested By DB Date 11/27/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

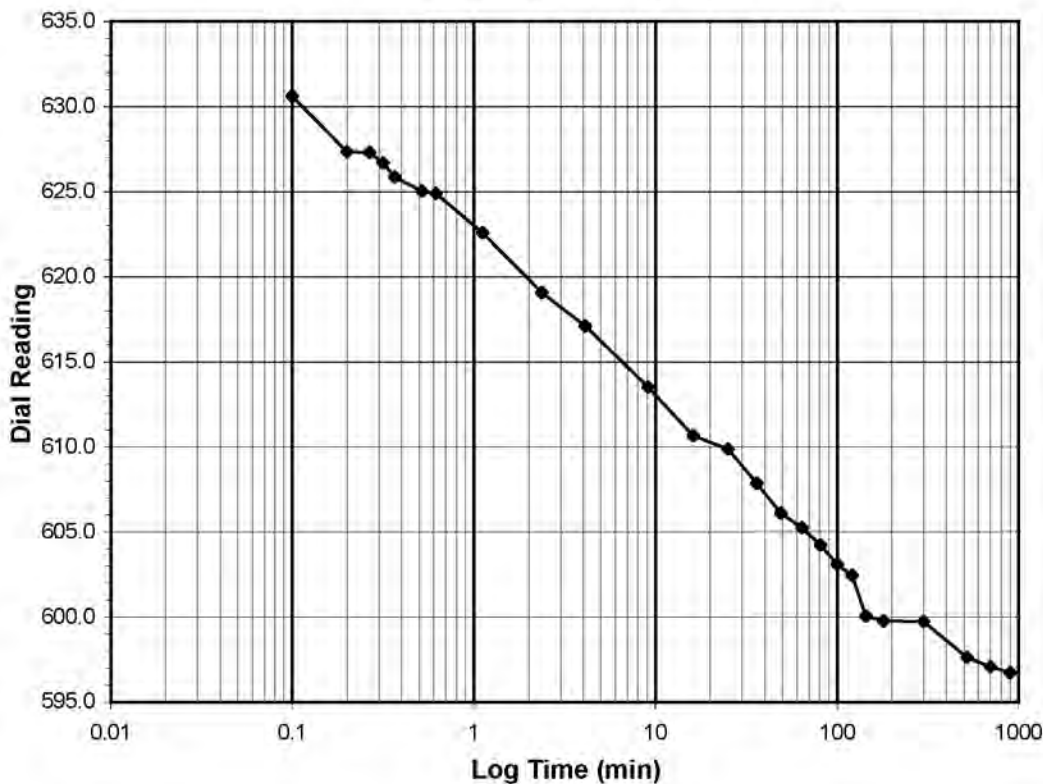
Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-0.5**
 Final Reading (div) **596.7**
 Consolidometer No. **G1421**
 1 Division (in) **0.0001**

Start Date 11/28/13
 Start Time 14:49:05

Elapsed Time (min)	Dial Reading (div)
Initial	676.2
0.10	630.6
0.20	627.3
0.27	627.3
0.32	626.7
0.37	625.9
0.52	625.0
0.62	624.9
1.12	622.6
2.37	619.1
4.12	617.1
9.12	613.5
16.12	610.7
25.12	609.9
36.12	607.9
49.12	606.1
64.12	605.3
81.12	604.2
100.12	603.1
121.12	602.4
144.13	600.1
180.13	599.8
300.13	599.7
520.13	597.6
700.13	597.1
900.27	596.7



Tested By DB Date 11/28/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1421

1 Division = 0.0001 (in)

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Test Data Summary</u>							
<i>Water Content</i>			Applied	Final Dial	Machine	Corrected	Height of	Volume	Dry	Void
Tare Number	2659	2707	Pressure	Reading	Deflection	Reading	Sample		Density	Ratio
			(tsf)	(div)	(div)	(div)	(mm)	(cm ³)	(g/cm ³)	
Wt. Tare & WS (g)	118.05	155.19								
Wt. Tare & DS (g)	92.50	121.90								
Wt. Water (g)	25.55	33.29	Seating	0	0	0	25.400	80.440	1.43557	0.83203
Wt. Tare (g)	6.59	6.65	0.25	56.5	17.7	38.8	25.301	80.128	1.44116	0.82492
Wt. DS (g)	85.91	115.25	0.5	85.9	26.9	59.0	25.250	79.965	1.44409	0.82122
Water Content (%)	29.74	28.89	1	130.1	36.4	93.6	25.162	79.687	1.44913	0.81488
			2	189.5	63.4	126.1	25.080	79.425	1.45390	0.80893
			4	278.2	93.2	185.1	24.930	78.951	1.46264	0.79812
<u><i>Sample Parameters</i></u>			1	225.2	48.6	176.7	24.951	79.019	1.46139	0.79966
Sample Diameter (in)	2.5	2.5	0.25	182.0	26.1	155.9	25.004	79.186	1.45830	0.80347
Sample Height (in)	1.0000	0.9440	0.5	194.7	31.3	163.4	24.985	79.125	1.45941	0.80209
Sample Volume (cm ³)	80.44	75.94	1	212.9	41.0	171.9	24.963	79.057	1.46067	0.80054
Wt. Wet Sample + Ring (g)	364.91	363.92	2	236.6	64.7	171.9	24.963	79.057	1.46068	0.80053
Wt. of Ring (g)	215.09	215.09	4	286.3	93.4	192.9	24.910	78.888	1.46380	0.79669
Wt. of Wet Sample (g)	149.82	148.83	8	400.6	126.0	274.6	24.702	78.231	1.47610	0.78172
Wet Density (pcf)	116.22	122.30	16	578.9	170.6	408.3	24.363	77.156	1.49667	0.75723
Wet Density (g/cm ³)	1.86	1.96	32	918.0	241.5	676.5	23.682	74.998	1.53974	0.70808
Water Content (%)	29.74	28.89	8	762.8	140.4	622.5	23.819	75.433	1.53086	0.71799
Wt. of Dry Sample (g)	115.48	115.48	2	676.2	80.8	595.4	23.888	75.651	1.52645	0.72295
Dry Density (pcf)	89.58	94.89	0.5	596.7	36.9	559.9	23.978	75.936	1.52070	0.72946
Dry Density (g/cm ³)	1.44	1.52								
Void Ratio	0.8320	0.7295								
Saturation (%)	94.01	104.14								
Specific Gravity	2.63	Measured								

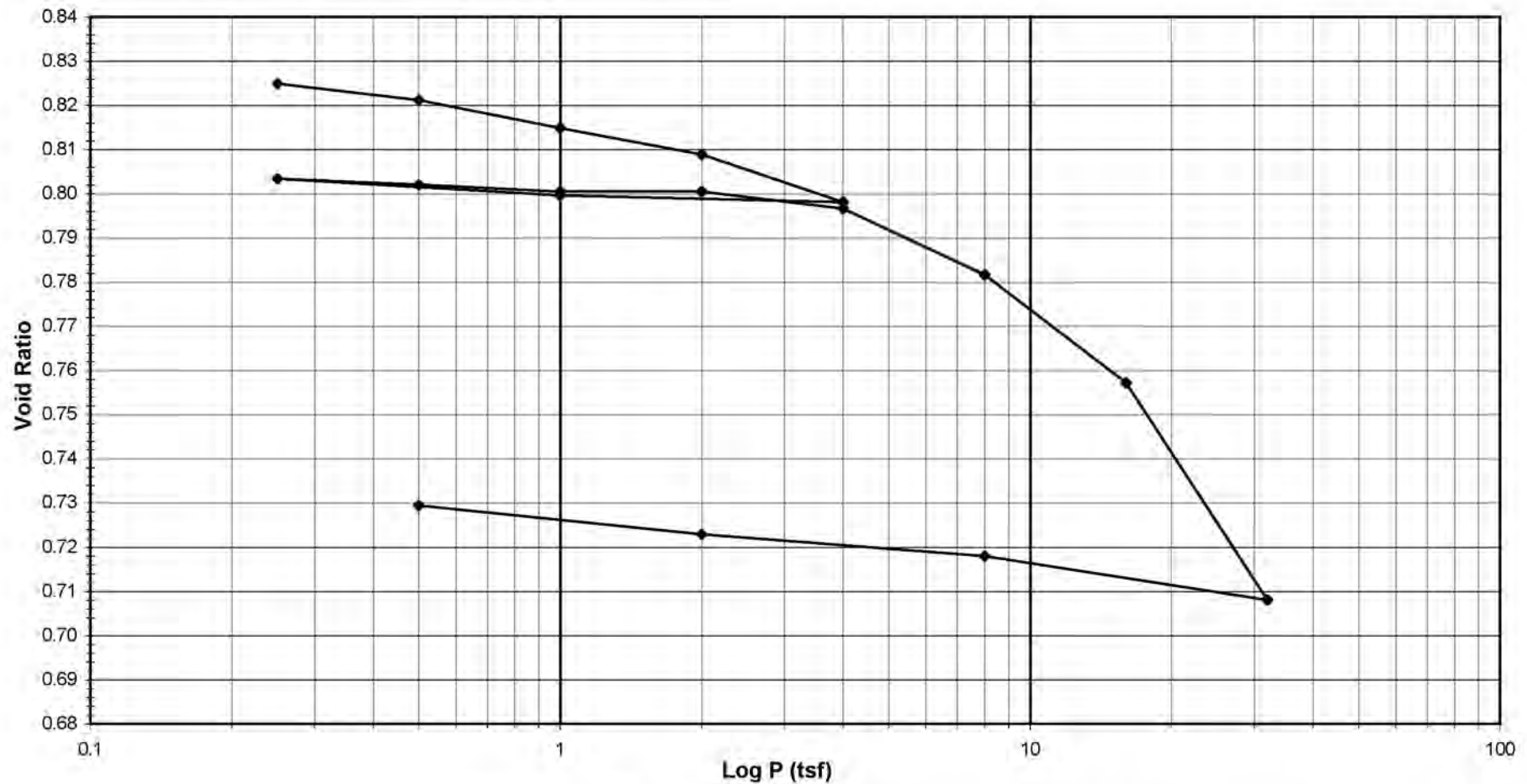
Tested By DB Date 11/18/13 Input Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-009

Boring No. R-7-1
Depth (ft) 277.9-278.1
Sample No. ST-11
Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Tested By DB Date 11/18/13

Approved By RJO

Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1421

1 Division = 0.0001 (in)

C_v Test Data Summary

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>							
<i>Water Content</i>			Load	Dial	Machine	Corrected	Sample	Time	C_v
Tare Number	2659	2707	Increment	Reading	Deflection	Dial Reading	Height	t₅₀	
				@ t₅₀		@ t₅₀	@ t₅₀		
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
Wt. Tare & WS (g)	118.05	155.19	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare & DS (g)	92.5	121.9	0.25	42.1	17.7	24.4	25.34	0.31	0.01732
Wt. Water (g)	25.55	33.29	0.5	72.0	26.9	45.1	25.29	0.83	0.00633
Wt. Tare (g)	6.59	6.65	1	114.3	36.4	77.9	25.20	0.33	0.01587
Wt. DS (g)	85.91	115.25	2	168.1	63.4	104.8	25.13	0.16	0.03233
Water Content (%)	29.74	28.89	4	249.4	93.2	156.2	25.00	0.28	0.01811
<i>Sample Parameters</i>			1	NA	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.25	NA	NA	NA	NA	NA	NA
Sample Height (in)	1.0000	0.9440	0.5	190.7	31.3	159.4	25.00	0.11	0.04765
Sample Volume (cm ³)	80.44	75.94	1	208.1	41.0	167.1	24.98	0.23	0.02231
Wt. Wet Sample + Ring (g)	364.91	363.92	2	233.6	64.7	168.9	24.97	0.25	0.02077
Wt. of Ring (g)	215.09	215.09	4	272.5	93.4	179.1	24.95	0.24	0.02129
Wt. of Wet Sample (g)	149.82	148.83	8	358.1	126.0	232.1	24.81	0.17	0.03030
Wet Density (pcf)	116.22	122.30	16	516.4	170.6	345.8	24.52	0.23	0.02133
Wet Density (g/cm ³)	1.86	1.96	32	788.7	241.5	547.2	24.01	0.11	0.04447
Water Content (%)	29.74	28.89	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	115.48	115.48	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	89.58	94.89	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm ³)	1.44	1.52							
Void Ratio	0.8320	0.7295							
Saturation (%)	94.01	104.14							
Specific Gravity	2.63	Measured							

Tested By DB Date 11/18/13 Input Checked By TM Date 12/6/13

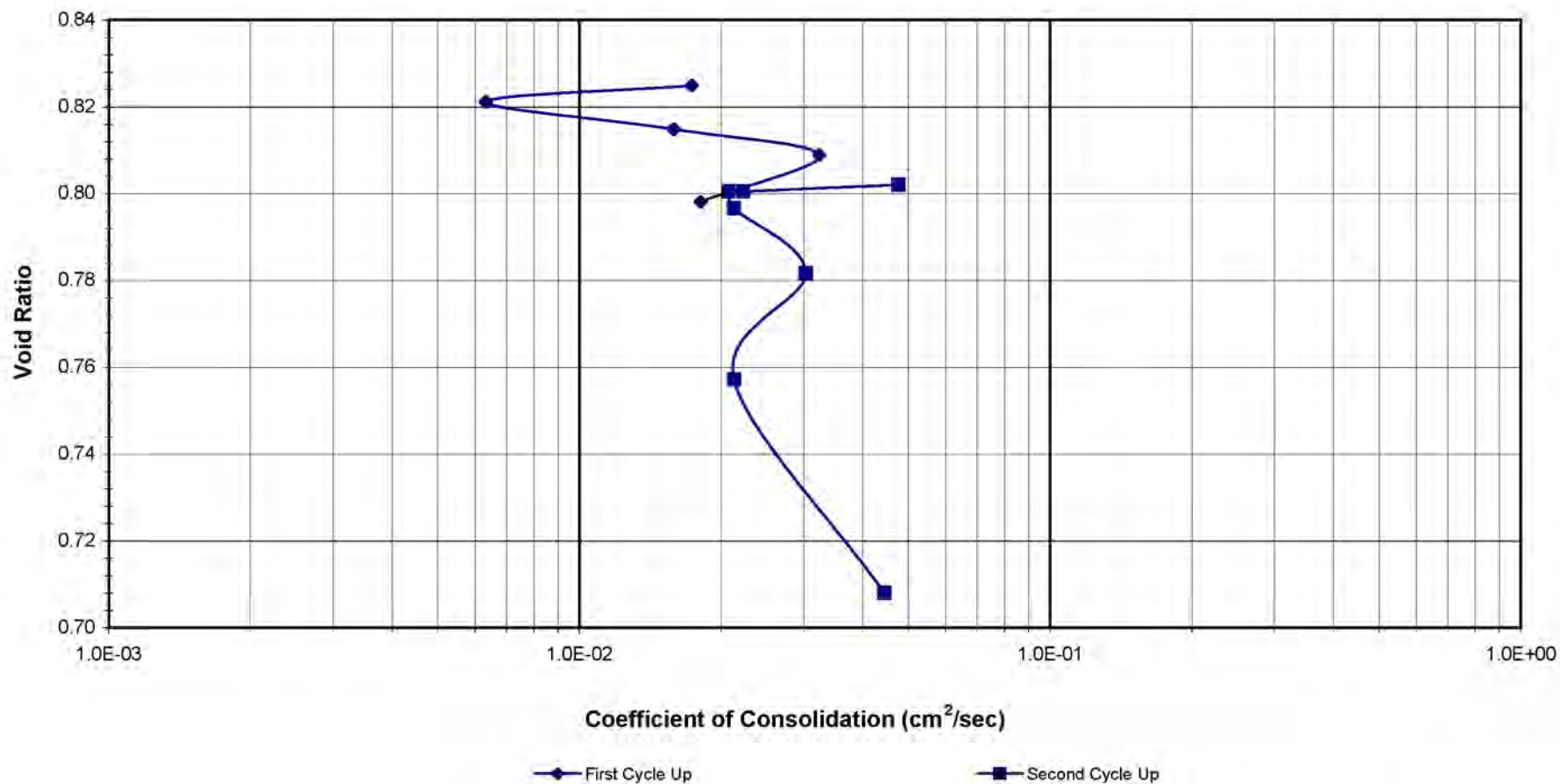
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-009

Boring No. R-7-1
 Depth (ft) 277.9-278.1
 Sample No. ST-11
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/18/13

Approved By RJO Date 12/6/13

DCN: CT-24 AutoT50-CV, Date: 11/27/13, Revision: 0

CONSOL-Auto T50-Cv

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	277.9-278.1
Project No.	2013-465-001	Sample No.	ST-11
Lab ID #	2013-465-001-009		

Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1421	1/9/14
Load Cell	G1422	1/9/14
LVDT	G1423	1/9/14



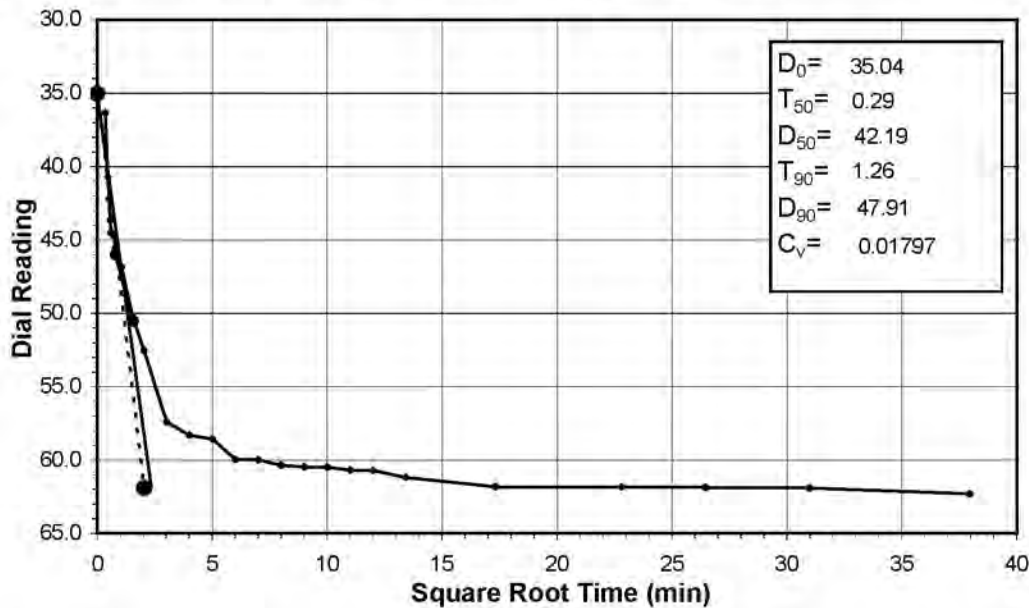
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

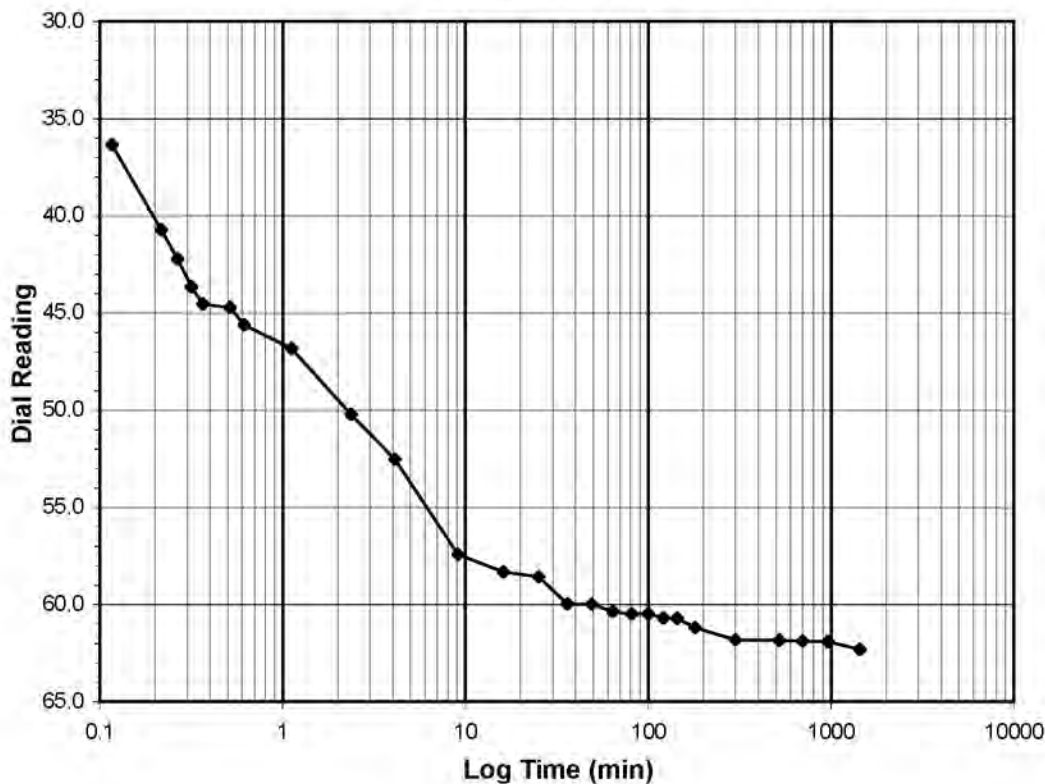
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

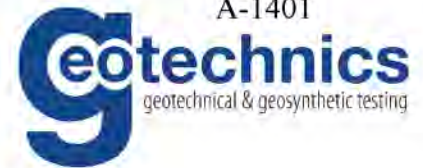


Test Load (tsf) 0.0-0.25
 Final Reading (div) 62.3
 Consolidometer No. G1424
 1 Division (in) 0.0001
 Start Date 10/25/13
 Start Time 16:27:04

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.12	36.3
0.22	40.7
0.27	42.2
0.32	43.6
0.37	44.5
0.52	44.7
0.62	45.6
1.12	46.8
2.37	50.2
4.12	52.5
9.12	57.4
16.12	58.3
25.12	58.6
36.12	60.0
49.13	60.0
64.13	60.4
81.13	60.5
100.13	60.5
121.13	60.7
144.13	60.7
180.13	61.2
300.13	61.8
520.13	61.8
700.13	61.9
960.13	61.9
1440.22	62.3



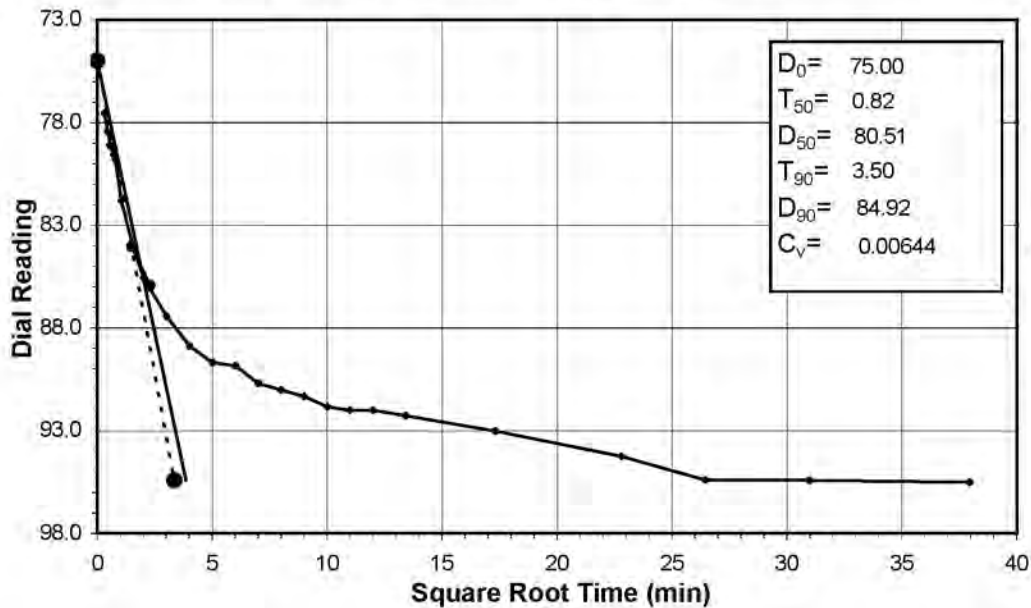
Tested By DB Date 10/25/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

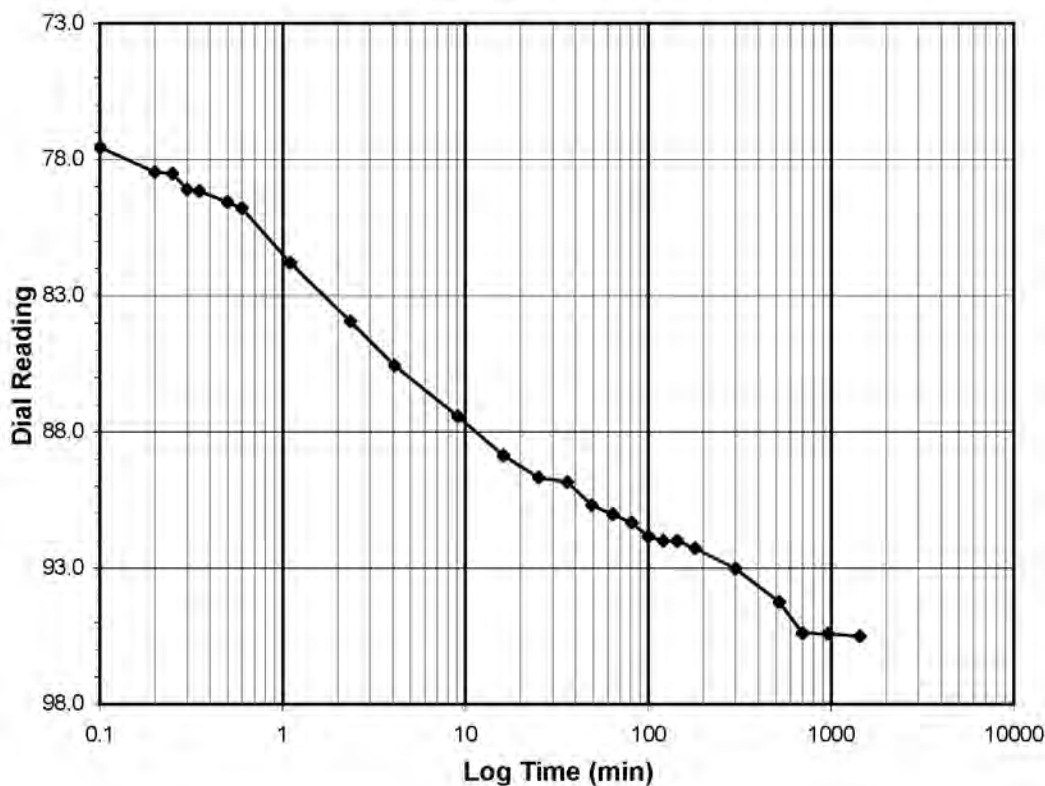
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

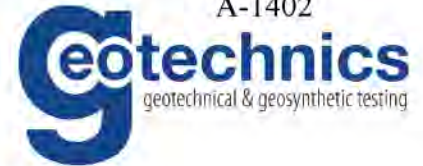
Test Load (tsf) **0.25-0.5**
 Final Reading (div) **95.5**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 10/26/13
 Start Time 16:27:16

Elapsed Time (min)	Dial Reading (div)
Initial	62.3
0.10	77.5
0.20	78.4
0.25	78.5
0.30	79.1
0.35	79.2
0.50	79.6
0.60	79.8
1.10	81.8
2.35	83.9
4.10	85.6
9.12	87.4
16.12	88.9
25.12	89.7
36.12	89.8
49.12	90.7
64.12	91.0
81.12	91.3
100.12	91.8
121.12	92.0
144.12	92.0
180.12	92.3
300.12	93.0
520.12	94.2
700.12	95.4
960.12	95.4
1440.37	95.5



Tested By DB Date 10/26/13 Checked By TM Date 12/5/13



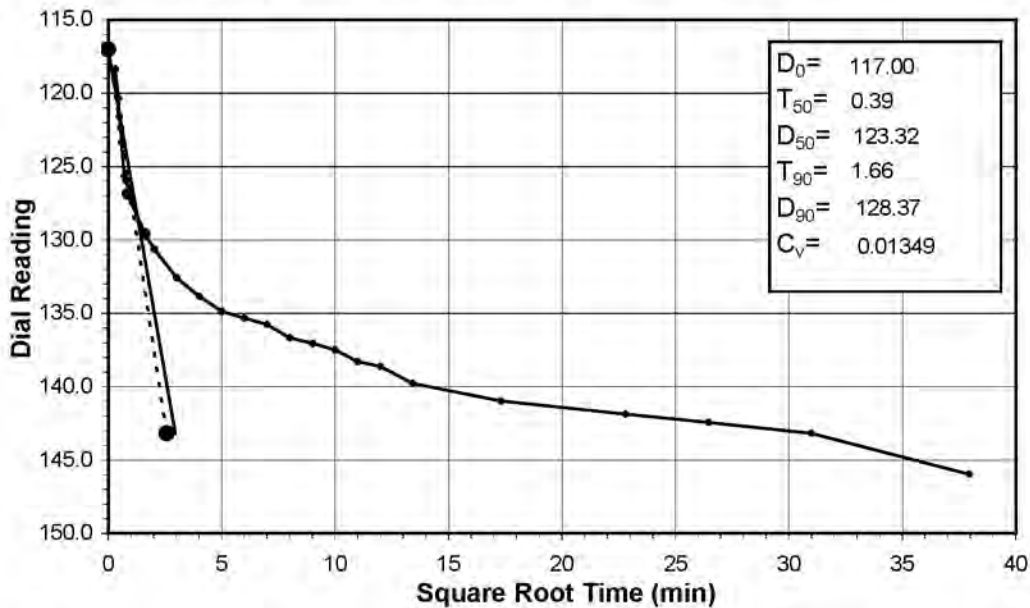
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

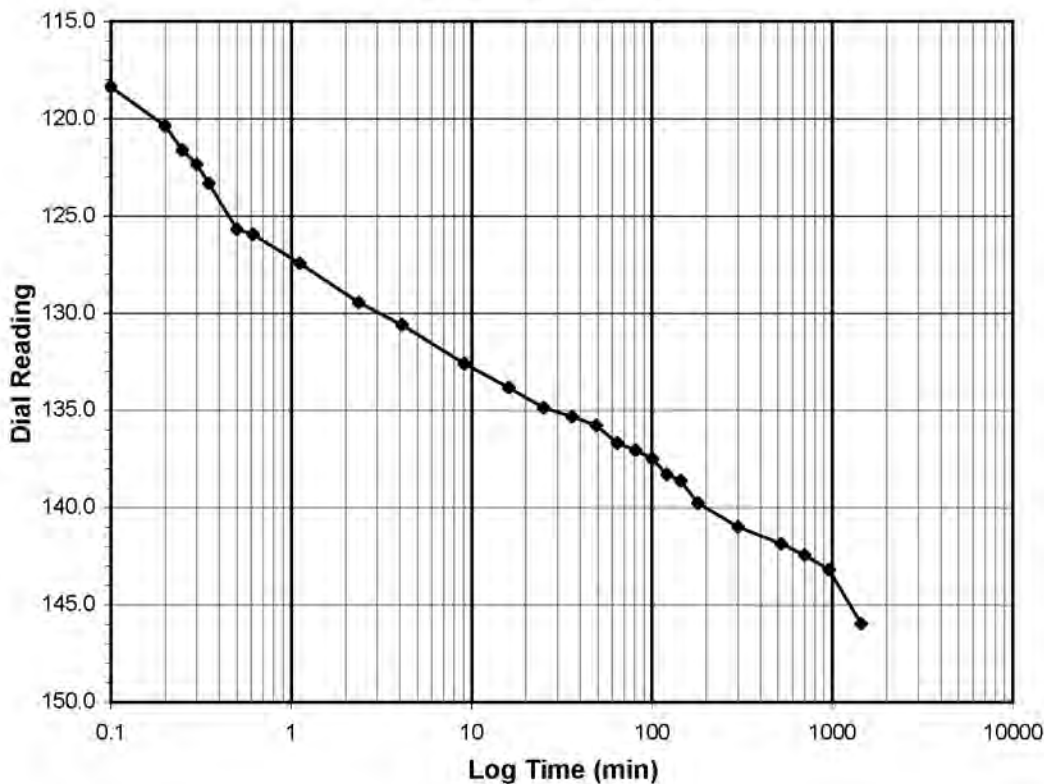
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 146.0
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 10/27/13
 Start Time 16:27:38

Elapsed Time (min)	Dial Reading (div)
Initial	95.5
0.10	118.4
0.20	120.4
0.25	121.6
0.30	122.3
0.35	123.3
0.50	125.7
0.62	125.9
1.12	127.4
2.37	129.4
4.12	130.6
9.12	132.6
16.12	133.8
25.12	134.9
36.12	135.3
49.12	135.8
64.12	136.7
81.12	137.1
100.12	137.5
121.12	138.3
144.12	138.6
180.12	139.8
300.12	141.0
520.12	141.9
700.12	142.4
960.12	143.2
1440.15	146.0



Tested By DB Date 10/27/13 Checked By TM Date 12/5/13



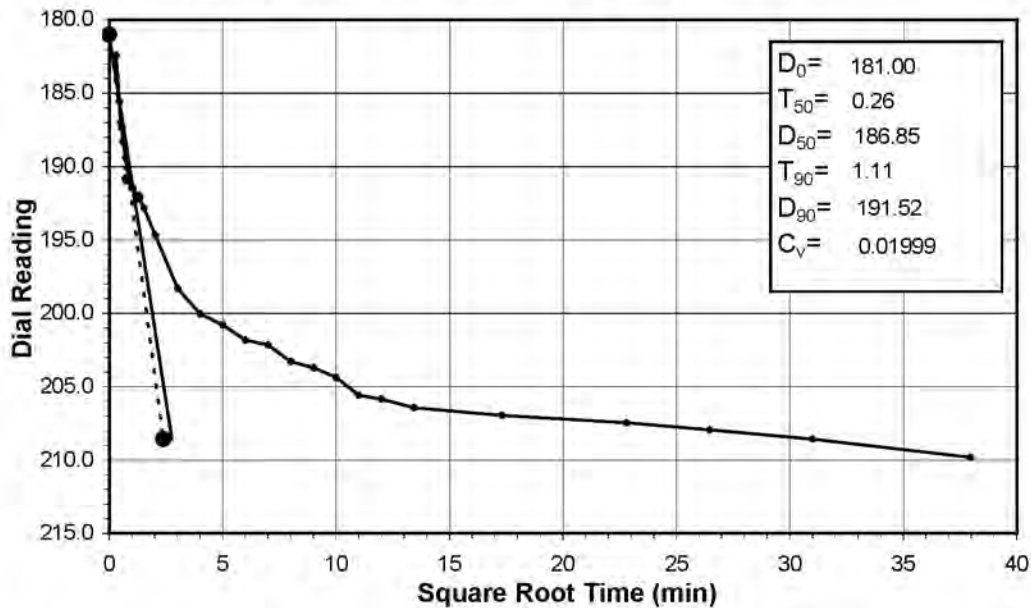
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

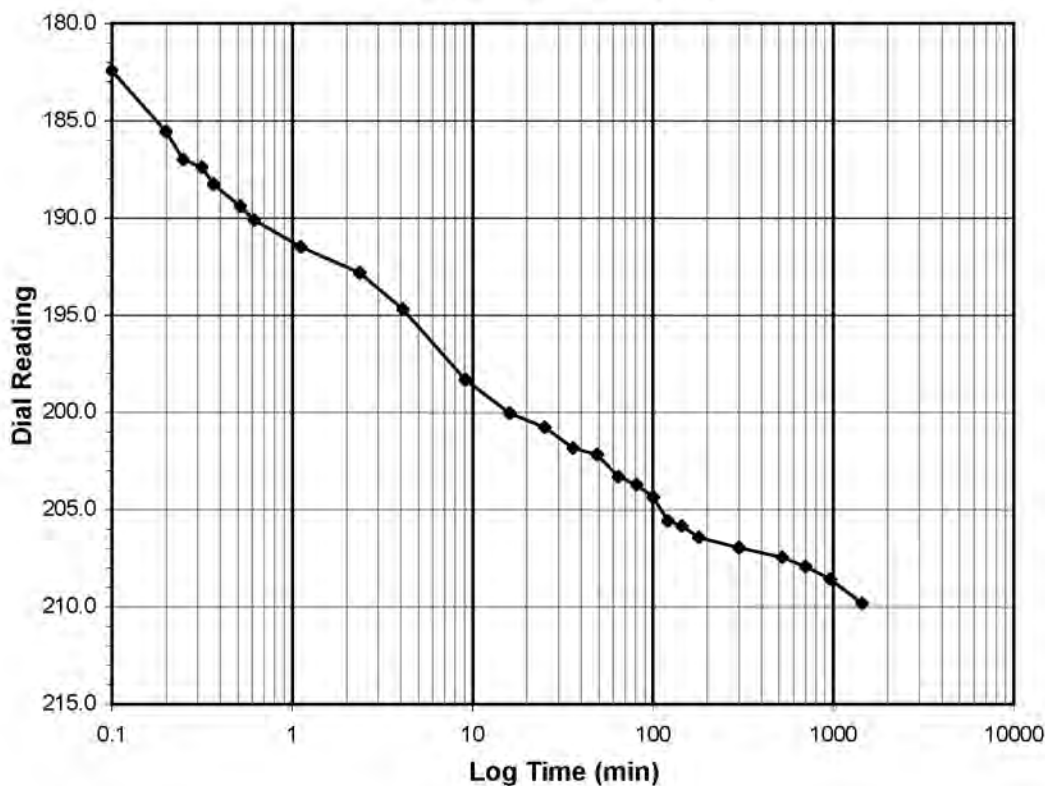
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 209.8
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 10/28/13
 Start Time 16:27:47

Elapsed Time (min)	Dial Reading (div)
Initial	146.0
0.10	182.4
0.20	185.6
0.25	187.0
0.32	187.4
0.37	188.3
0.52	189.4
0.62	190.1
1.12	191.5
2.37	192.8
4.12	194.7
9.12	198.3
16.12	200.0
25.12	200.8
36.12	201.8
49.12	202.2
64.12	203.3
81.12	203.7
100.12	204.4
121.12	205.6
144.12	205.8
180.12	206.4
300.12	207.0
520.12	207.5
700.12	207.9
960.12	208.6
1440.28	209.8



Tested By DB Date 10/28/13 Checked By TM Date 12/5/13



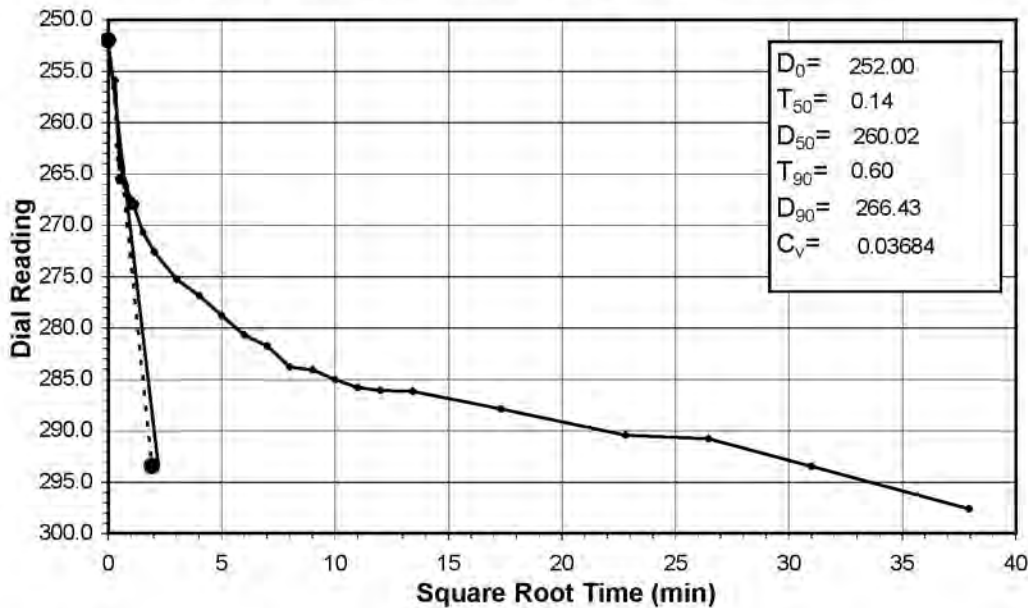
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

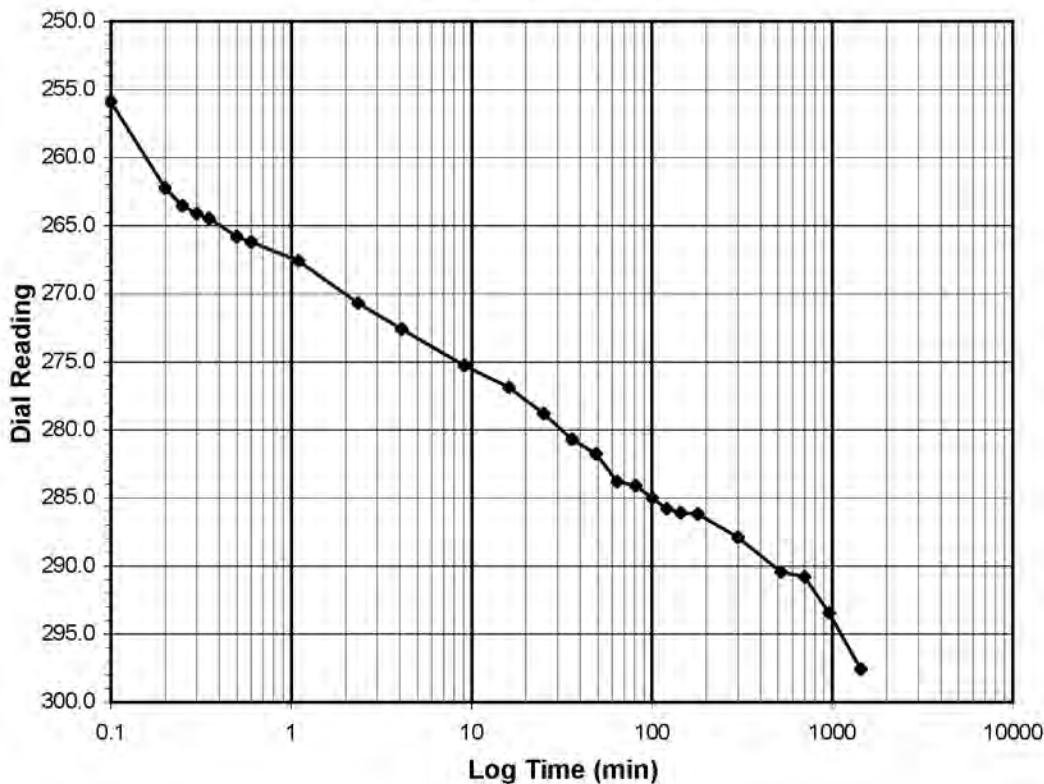
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 297.6
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 10/29/13
 Start Time 16:28:04

Elapsed Time (min)	Dial Reading (div)
Initial	209.8
0.10	255.9
0.20	262.2
0.25	263.5
0.30	264.1
0.35	264.5
0.50	265.8
0.60	266.2
1.10	267.6
2.35	270.7
4.10	272.6
9.12	275.3
16.12	276.9
25.12	278.8
36.12	280.7
49.12	281.8
64.12	283.8
81.12	284.1
100.12	285.0
121.12	285.8
144.12	286.1
180.12	286.2
300.12	287.9
520.12	290.4
700.13	290.8
960.13	293.4
1440.00	297.6



Tested By DB Date 10/29/13 Checked By TM Date 12/5/13



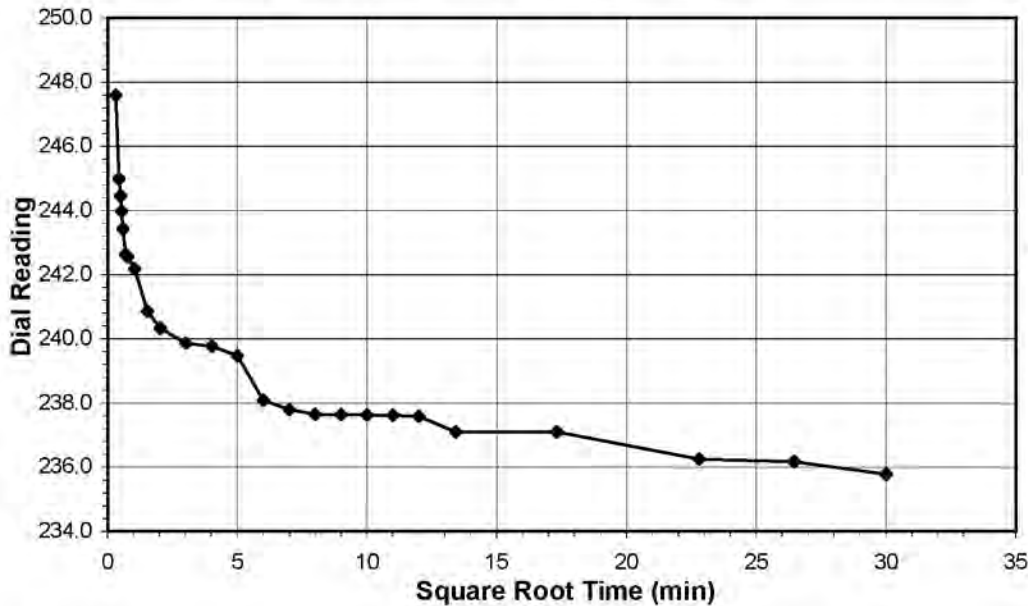
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

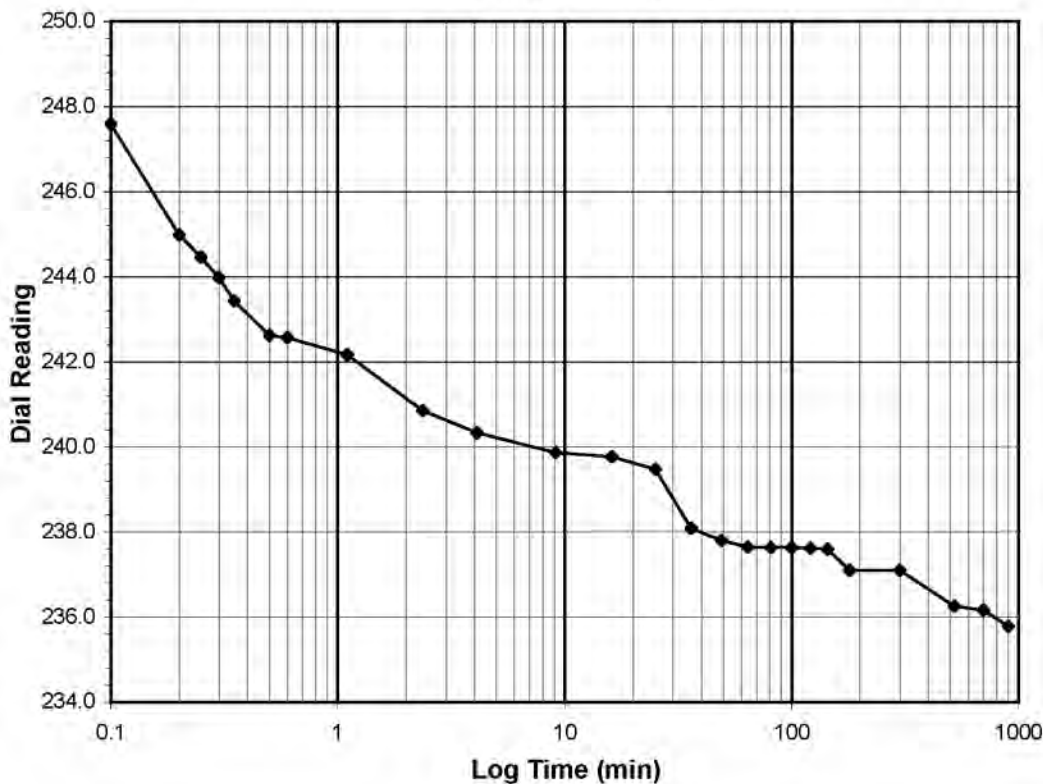
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 235.8
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 10/30/13
 Start Time 16:28:05

Elapsed Time (min)	Dial Reading (div)
Initial	297.6
0.10	247.6
0.20	245.0
0.25	244.5
0.30	244.0
0.35	243.4
0.50	242.6
0.60	242.6
1.10	242.2
2.37	240.9
4.12	240.3
9.12	239.9
16.12	239.8
25.12	239.5
36.12	238.1
49.12	237.8
64.12	237.6
81.12	237.6
100.12	237.6
121.12	237.6
144.12	237.6
180.12	237.1
300.12	237.1
520.12	236.3
700.12	236.2
900.30	235.8



Tested By DB Date 10/30/13 Checked By TM Date 12/5/13



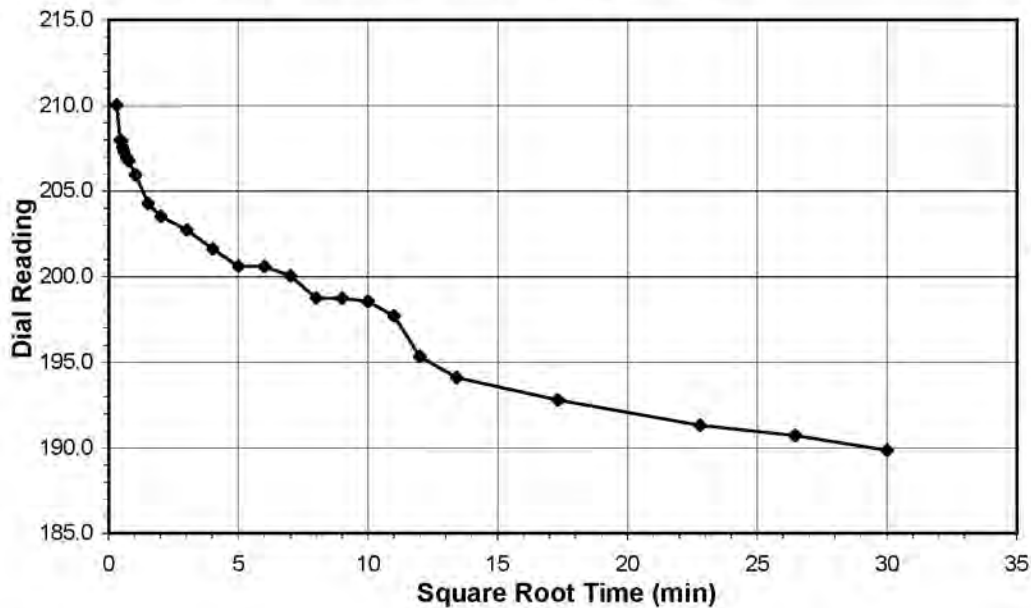
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

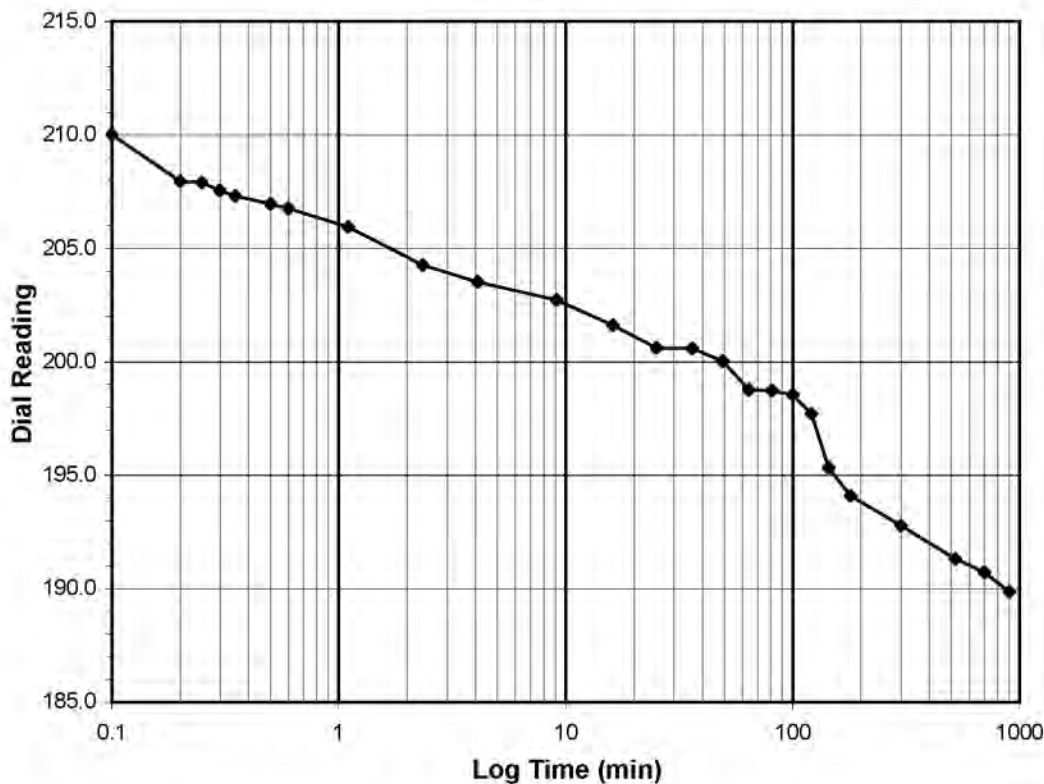
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-0.25
 Final Reading (div) 189.9
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 10/31/13
 Start Time 7:28:23

Elapsed Time (min)	Dial Reading (div)
<i>Initial</i>	<i>235.8</i>
0.10	210.0
0.20	208.0
0.25	207.9
0.30	207.6
0.35	207.3
0.50	207.0
0.60	206.8
1.10	205.9
2.35	204.3
4.10	203.5
9.12	202.7
16.12	201.6
25.12	200.6
36.12	200.6
49.12	200.0
64.12	198.8
81.12	198.7
100.12	198.6
121.12	197.7
144.12	195.3
180.12	194.1
300.12	192.8
520.12	191.3
700.12	190.7
900.33	189.9



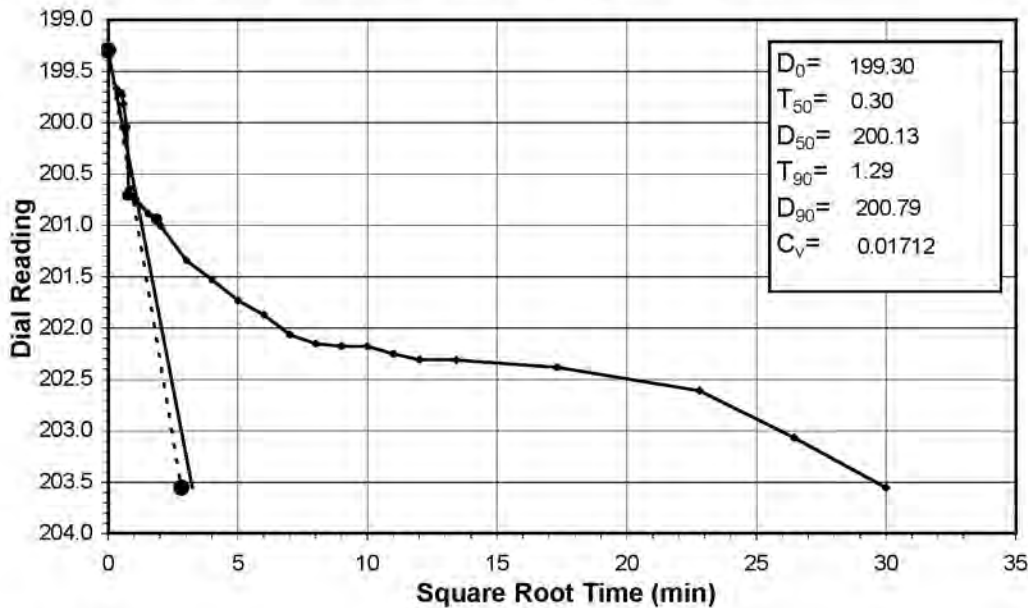
Tested By DB Date 10/31/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

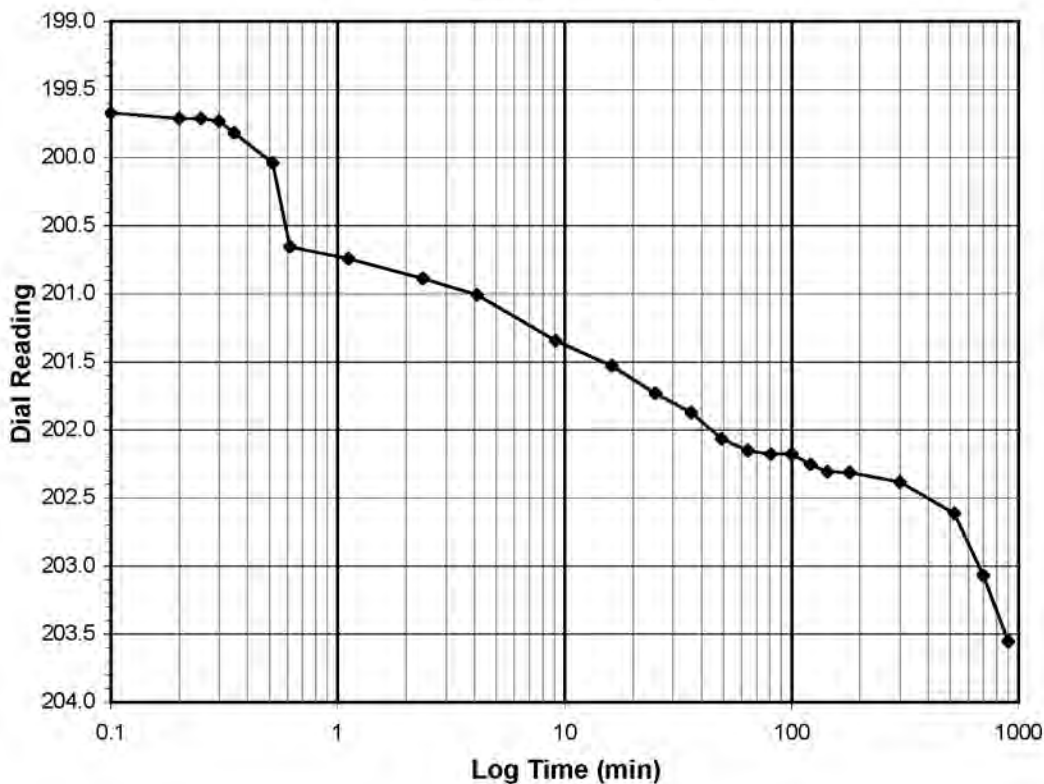
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **203.6**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 10/31/13
 Start Time 22:28:43

Elapsed Time (min)	Dial Reading (div)
Initial	189.9
0.10	199.7
0.20	199.7
0.25	199.7
0.30	199.7
0.35	199.8
0.52	200.0
0.62	200.7
1.12	200.7
2.37	200.9
4.12	201.0
9.12	201.3
16.12	201.5
25.12	201.7
36.12	201.9
49.12	202.1
64.12	202.2
81.12	202.2
100.12	202.2
121.12	202.3
144.12	202.3
180.13	202.3
300.13	202.4
520.13	202.6
700.13	203.1
900.42	203.6



Tested By DB Date 10/31/13 Checked By TM Date 12/5/13



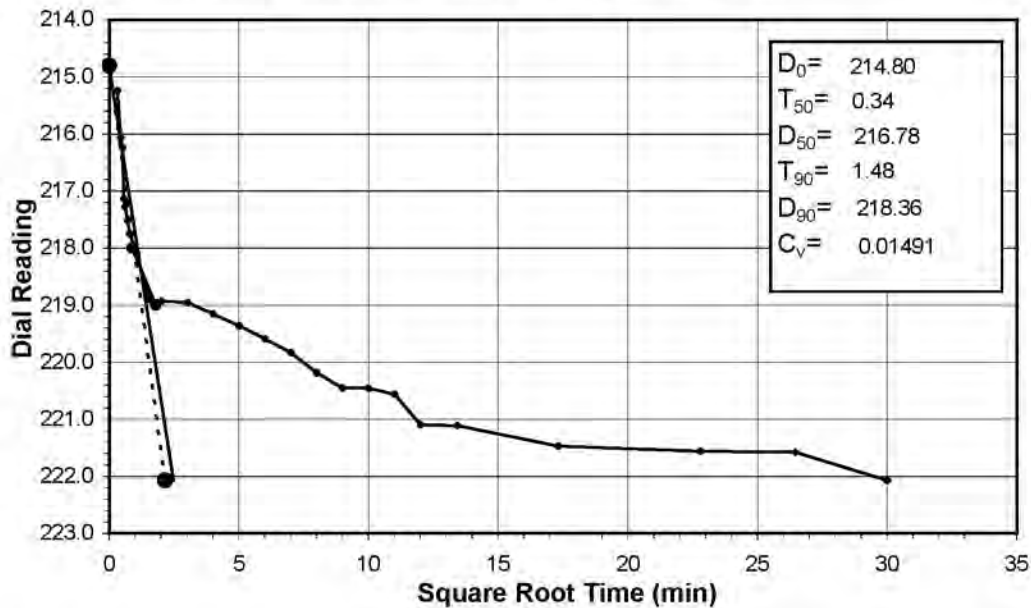
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

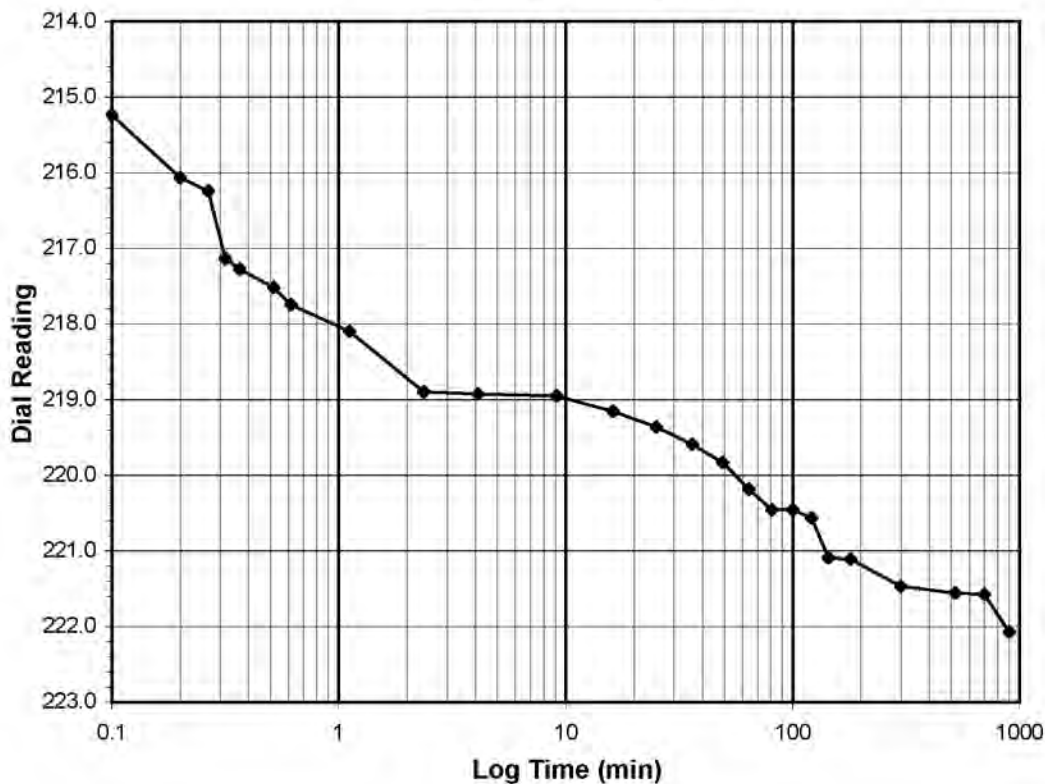
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 222.1
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/1/13
 Start Time 13:29:08

Elapsed Time (min)	Dial Reading (div)
Initial	203.6
0.10	215.2
0.20	216.1
0.27	216.2
0.32	217.1
0.37	217.3
0.52	217.5
0.62	217.7
1.12	218.1
2.37	218.9
4.12	218.9
9.12	219.0
16.12	219.2
25.12	219.4
36.12	219.6
49.12	219.8
64.12	220.2
81.12	220.5
100.13	220.5
121.13	220.6
144.13	221.1
180.13	221.1
300.13	221.5
520.13	221.6
700.13	221.6
900.02	222.1



Tested By DB Date 11/1/13 Checked By TM Date 12/5/13



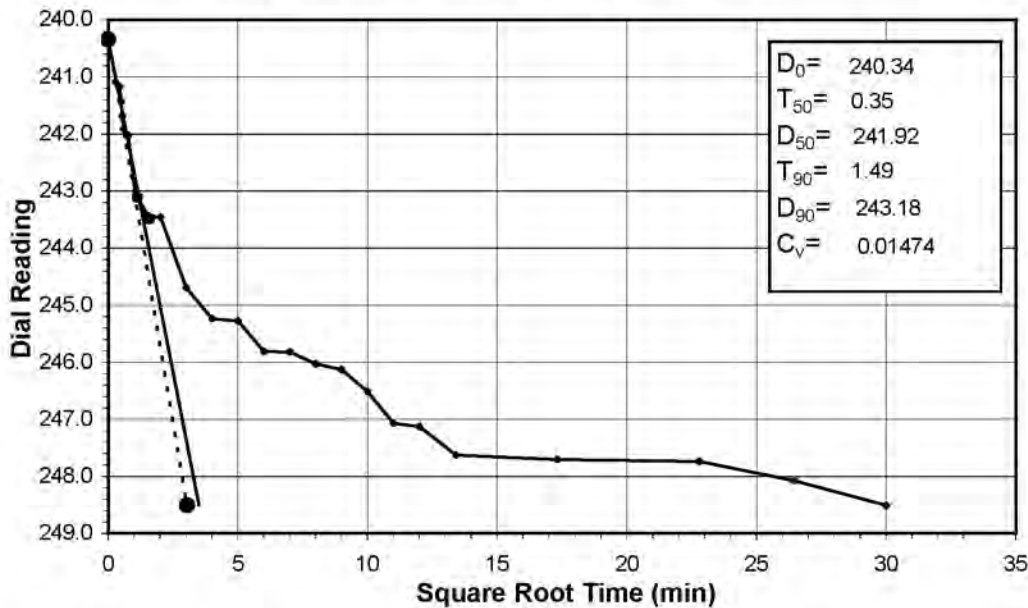
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

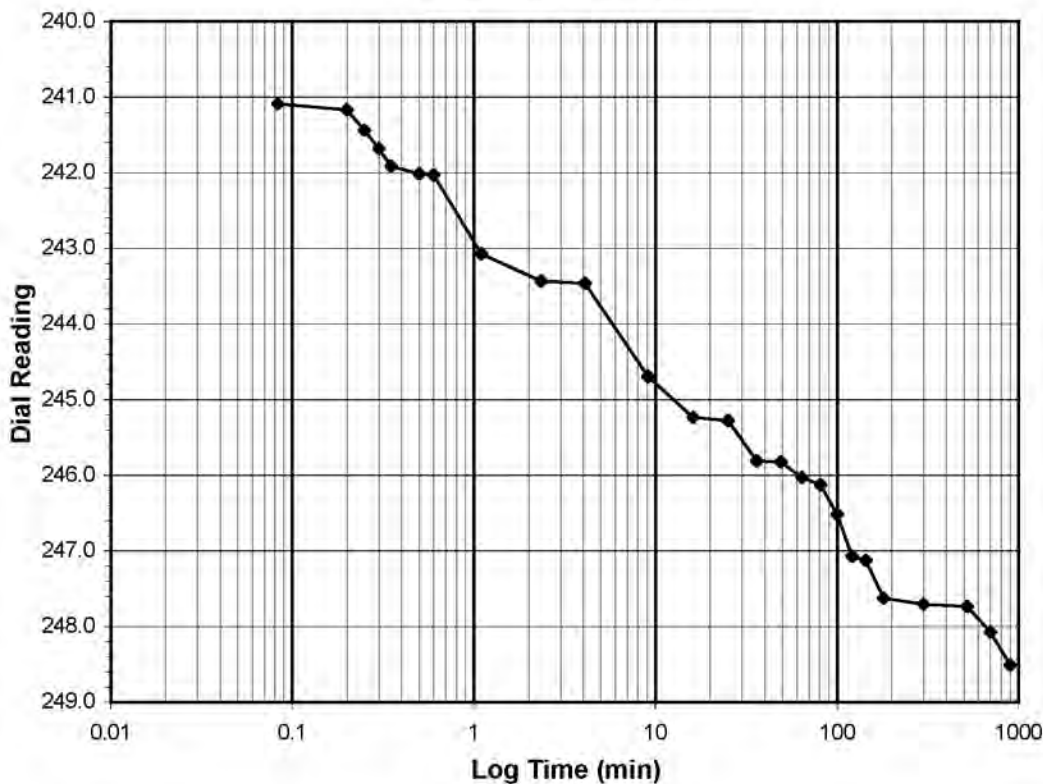
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 248.5
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/2/13
 Start Time 4:29:09

Elapsed Time (min)	Dial Reading (div)
Initial	222.1
0.08	241.1
0.20	241.2
0.25	241.4
0.30	241.7
0.35	241.9
0.50	242.0
0.60	242.0
1.10	243.1
2.35	243.4
4.10	243.5
9.10	244.7
16.10	245.2
25.10	245.3
36.10	245.8
49.10	245.8
64.10	246.0
81.10	246.1
100.10	246.5
121.10	247.1
144.10	247.1
180.10	247.6
300.10	247.7
520.12	247.7
700.12	248.1
900.10	248.5



Tested By DB Date 11/2/13 Checked By TM Date 12/5/13



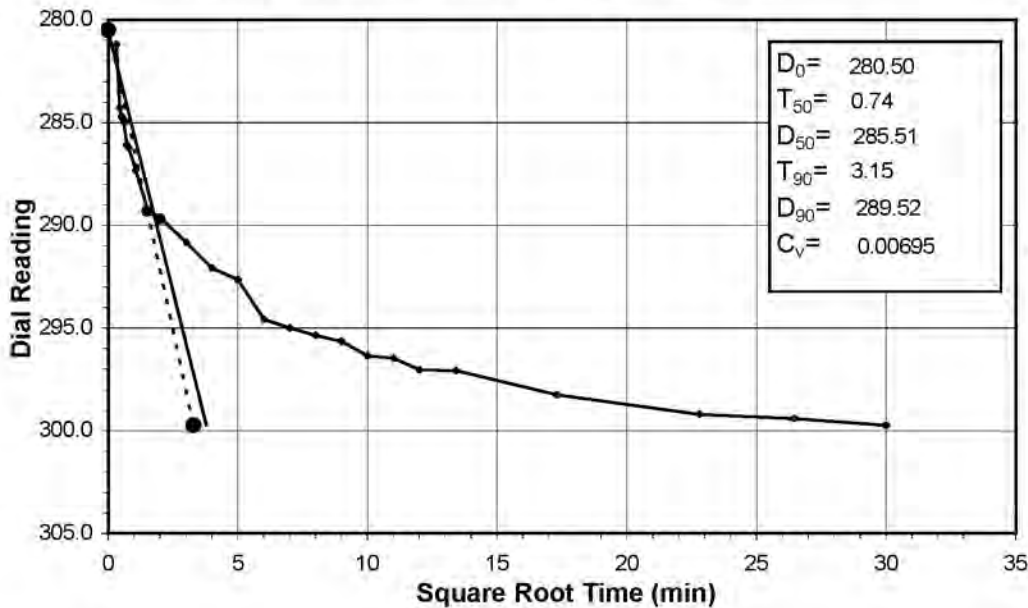
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

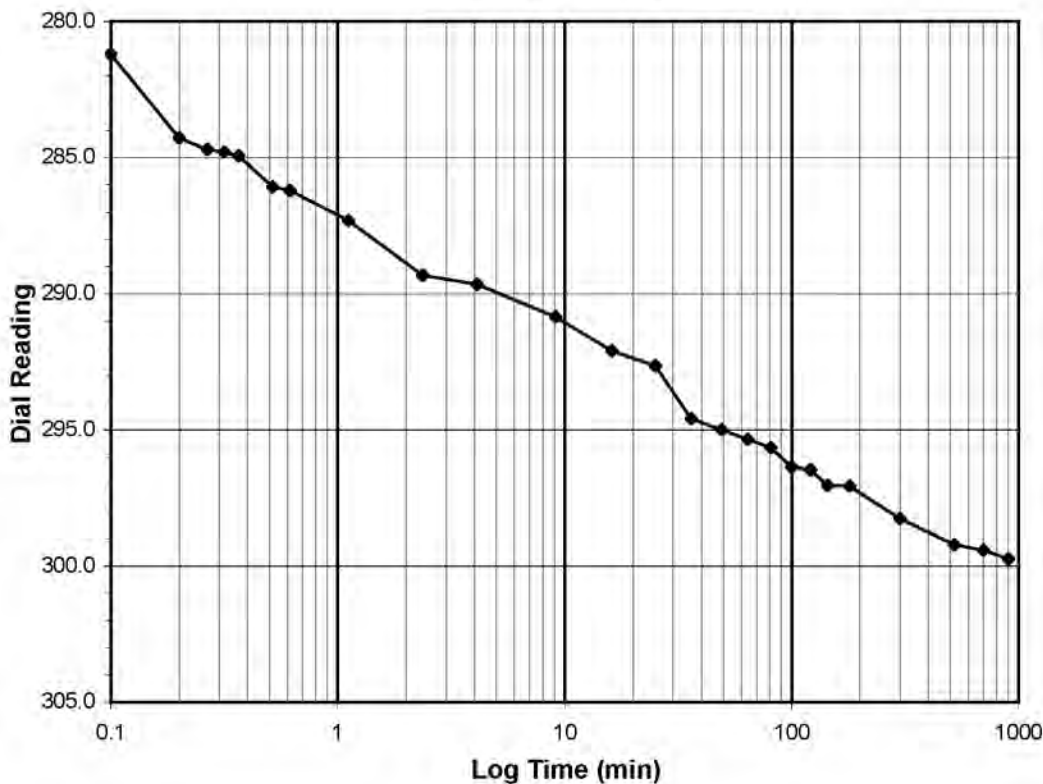
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 299.7
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/2/13
 Start Time 19:29:16

Elapsed Time (min)	Dial Reading (div)
Initial	248.5
0.10	281.2
0.20	284.3
0.27	284.7
0.32	284.8
0.37	284.9
0.52	286.1
0.62	286.2
1.12	287.3
2.37	289.3
4.12	289.6
9.12	290.8
16.12	292.1
25.12	292.6
36.12	294.6
49.12	295.0
64.12	295.4
81.12	295.7
100.12	296.4
121.12	296.5
144.12	297.0
180.12	297.1
300.13	298.3
520.13	299.2
700.13	299.4
900.20	299.7



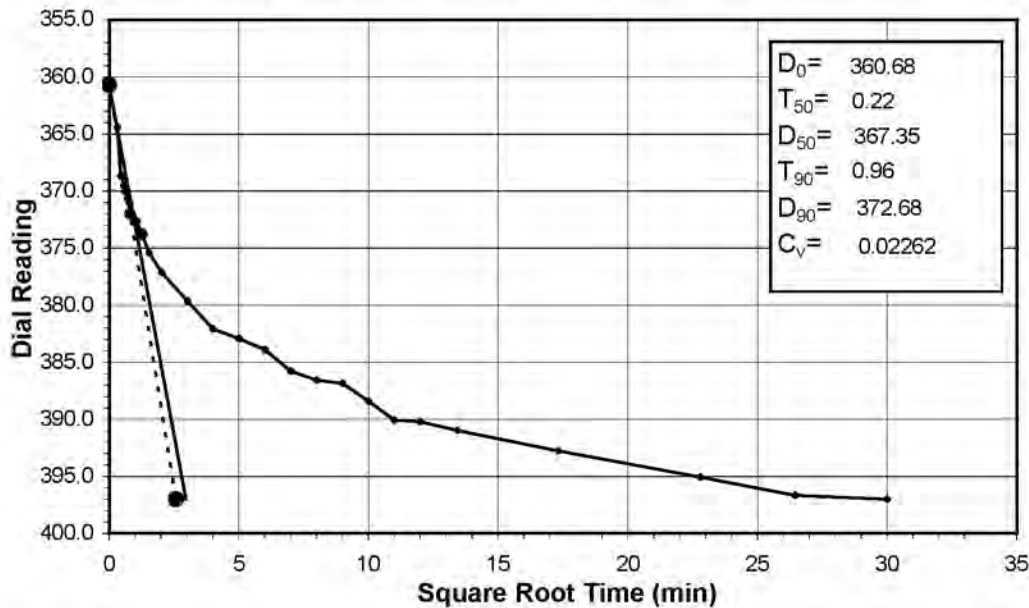
Tested By DB Date 11/2/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

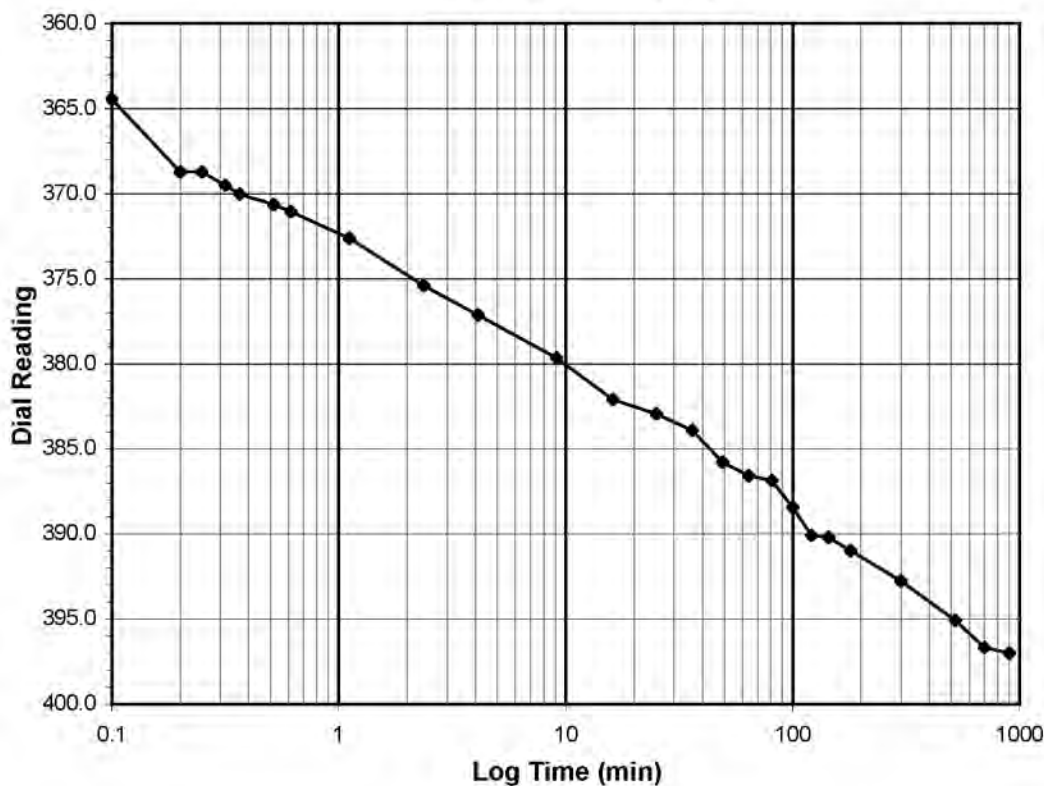
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **397.0**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001

Start Date 11/3/13
 Start Time 10:29:28

Elapsed Time (min)	Dial Reading (div)
Initial	299.7
0.10	364.4
0.20	368.7
0.25	368.7
0.32	369.5
0.37	370.0
0.52	370.6
0.62	371.1
1.12	372.6
2.37	375.4
4.12	377.1
9.12	379.6
16.12	382.1
25.12	382.9
36.12	383.9
49.12	385.8
64.12	386.6
81.12	386.8
100.13	388.4
121.13	390.1
144.13	390.2
180.13	391.0
300.13	392.8
520.13	395.1
700.13	396.7
900.07	397.0



Tested By DB Date 11/3/13 Checked By TM Date 12/5/13



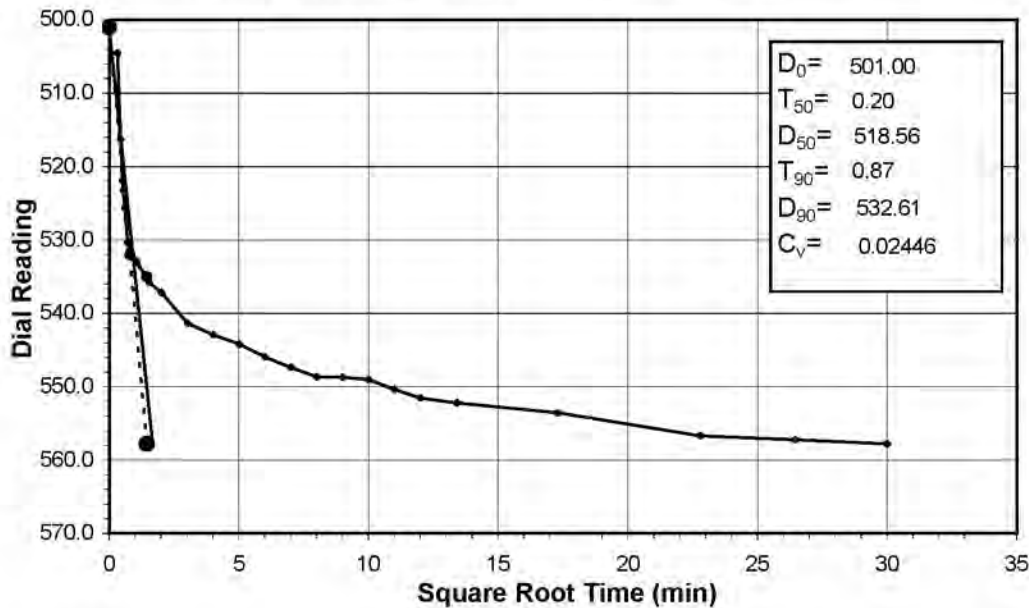
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

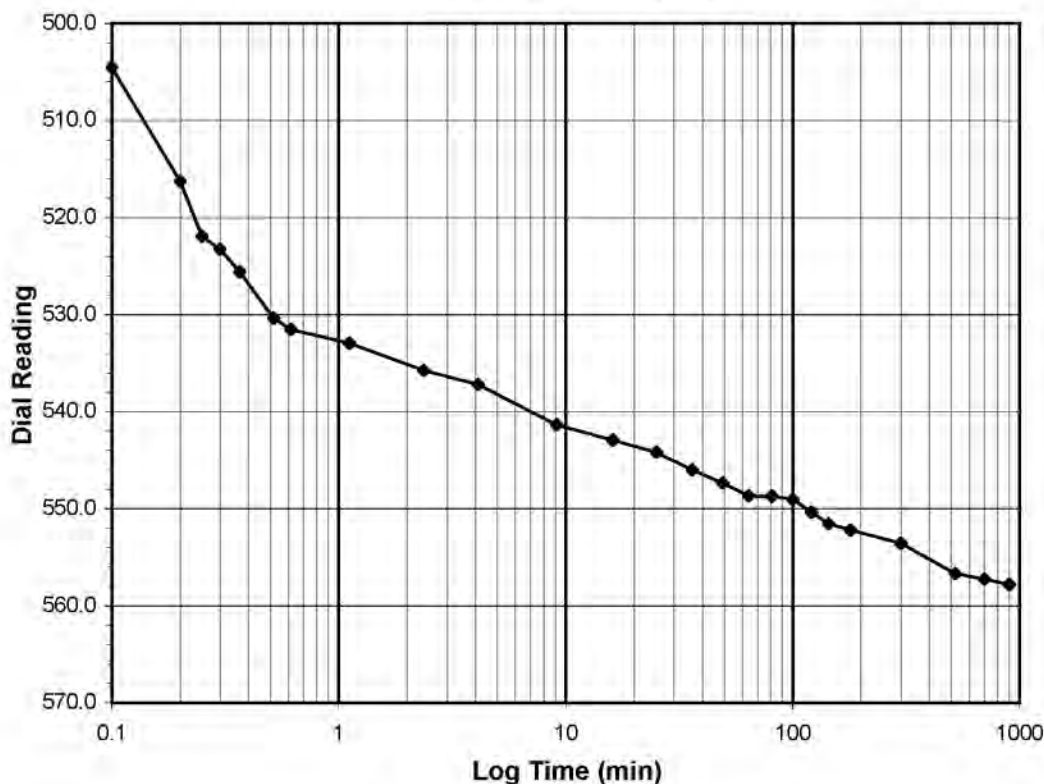
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-16.0
 Final Reading (div) 557.8
 Consolidometer No. G1424
 1 Division (in) 0.0001
 Start Date 11/4/13
 Start Time 1:29:32

Elapsed Time (min)	Dial Reading (div)
Initial	397.0
0.10	504.5
0.20	516.3
0.25	521.9
0.30	523.2
0.37	525.6
0.52	530.4
0.62	531.5
1.12	532.9
2.37	535.7
4.12	537.2
9.12	541.4
16.12	542.9
25.12	544.2
36.12	546.0
49.12	547.4
64.12	548.7
81.12	548.7
100.12	549.0
121.12	550.4
144.12	551.5
180.12	552.2
300.12	553.5
520.12	556.7
700.12	557.2
900.12	557.8



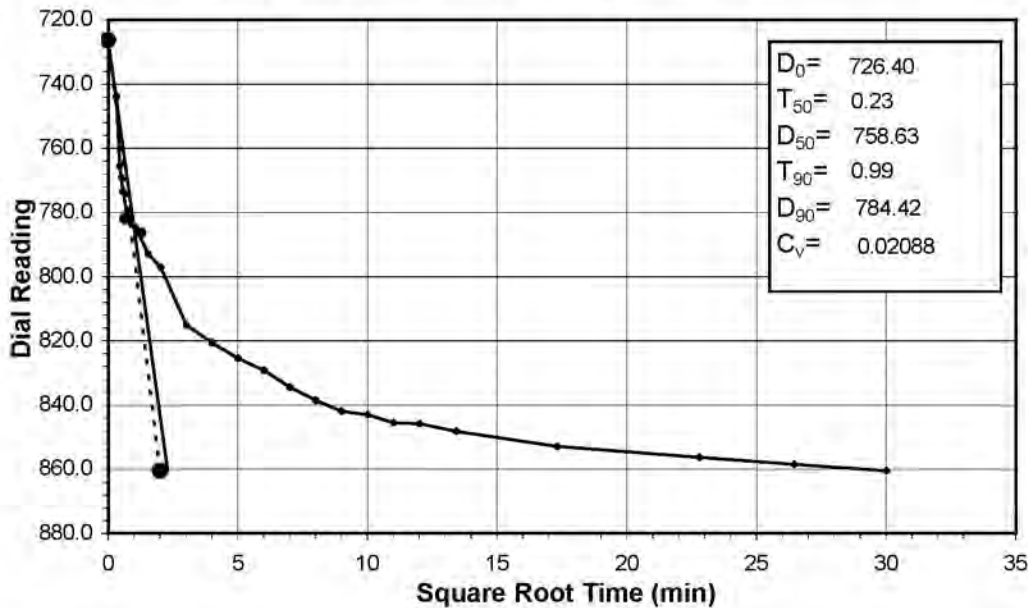
Tested By DB Date 11/4/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

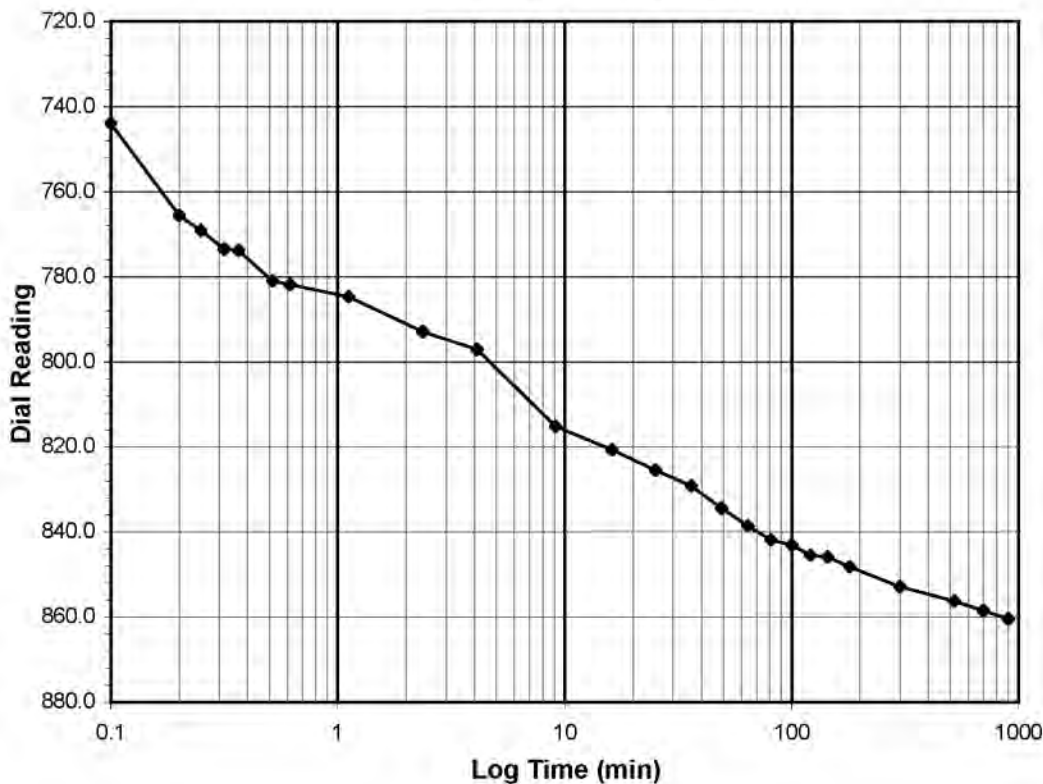
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 16.0-32.0
 Final Reading (div) 860.5
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/4/13
 Start Time 16:29:39

Elapsed Time (min)	Dial Reading (div)
Initial	557.8
0.10	743.9
0.20	765.6
0.25	769.1
0.32	773.5
0.37	773.9
0.52	781.0
0.62	781.8
1.12	784.7
2.37	792.9
4.12	797.1
9.12	815.1
16.13	820.6
25.13	825.5
36.13	829.1
49.13	834.4
64.13	838.6
81.13	841.9
100.13	843.0
121.13	845.5
144.13	845.8
180.13	848.2
300.13	852.9
520.13	856.2
700.15	858.5
900.48	860.5



Tested By DB Date 11/4/13 Checked By TM Date 12/5/13



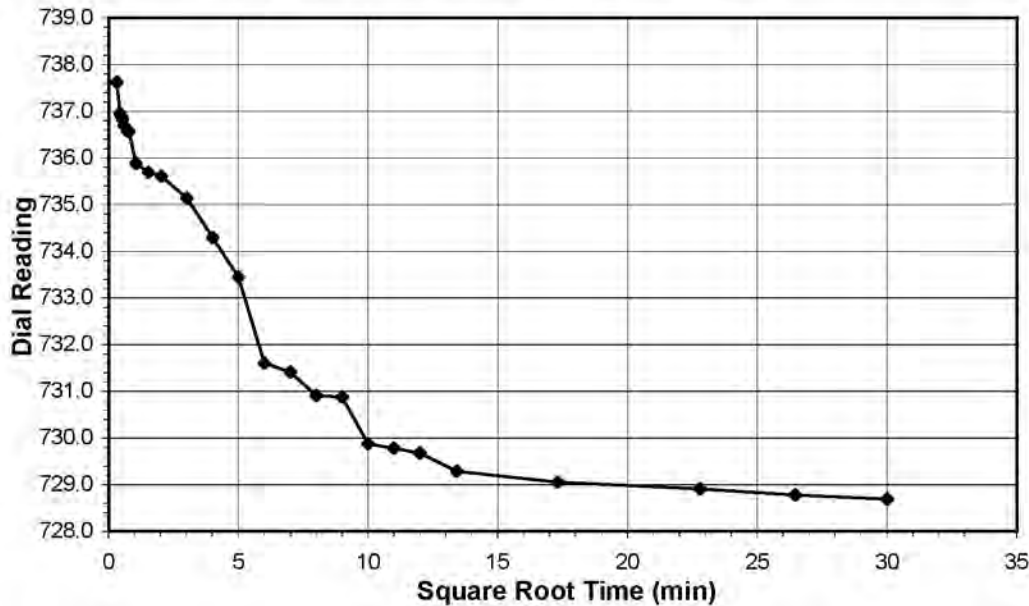
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

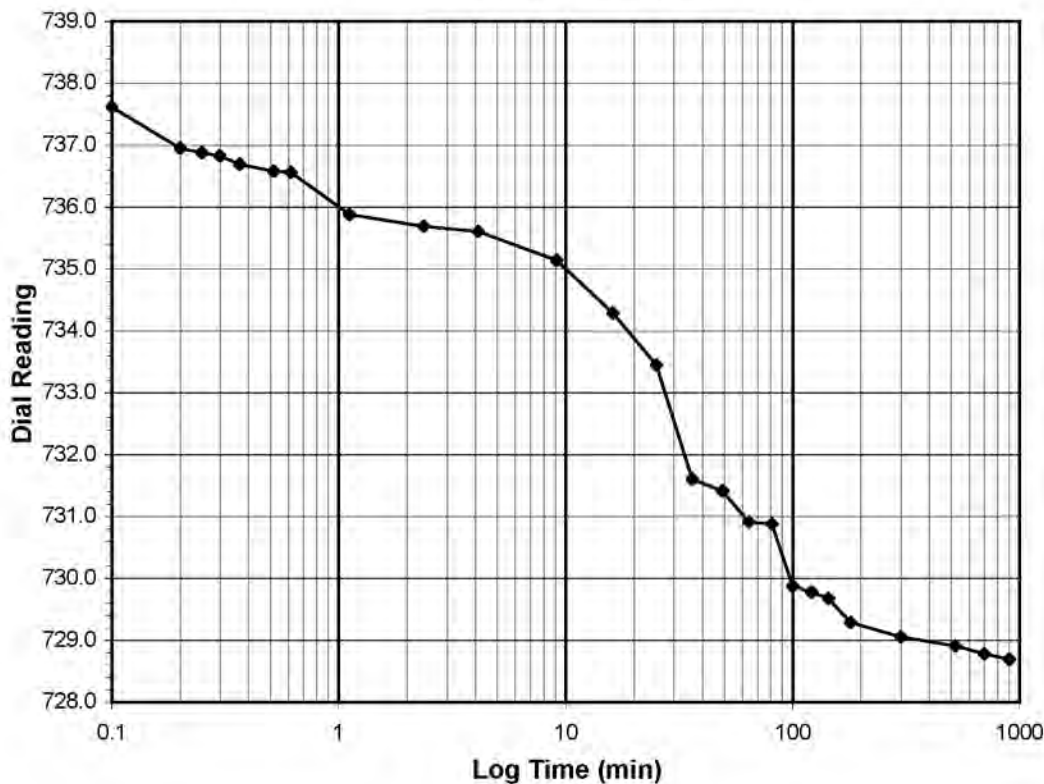
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 32.0-8.0
 Final Reading (div) 728.7
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/5/13
 Start Time 7:30:08

Elapsed Time (min)	Dial Reading (div)
Initial	860.5
0.10	737.6
0.20	737.0
0.25	736.9
0.30	736.8
0.37	736.7
0.52	736.6
0.62	736.6
1.12	735.9
2.37	735.7
4.12	735.6
9.12	735.1
16.12	734.3
25.12	733.4
36.12	731.6
49.12	731.4
64.12	730.9
81.12	730.9
100.12	729.9
121.13	729.8
144.13	729.7
180.13	729.3
300.13	729.1
520.13	728.9
700.13	728.8
900.32	728.7



Tested By DB Date 11/5/13 Checked By TM Date 12/5/13



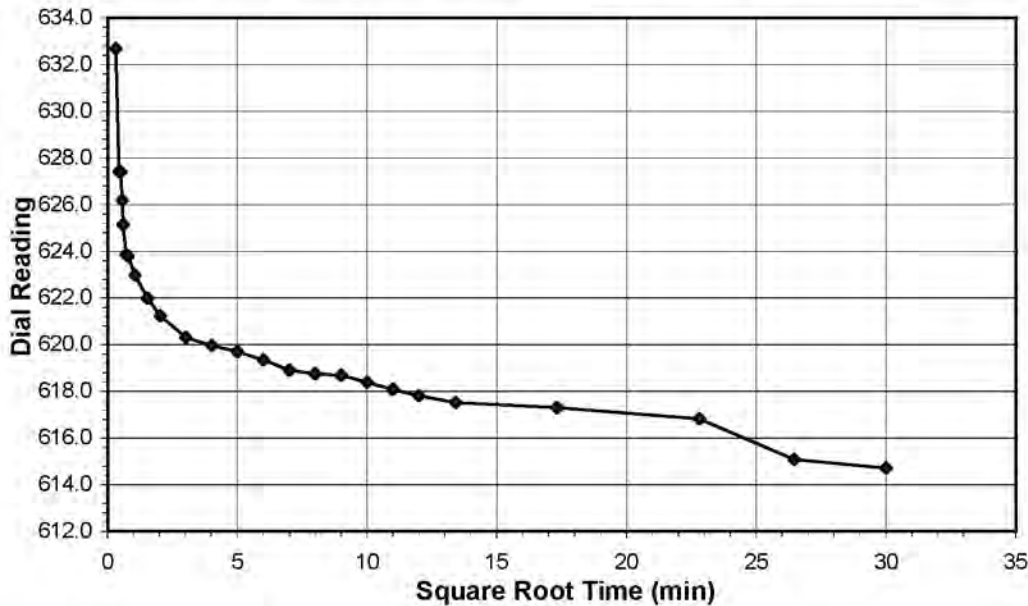
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

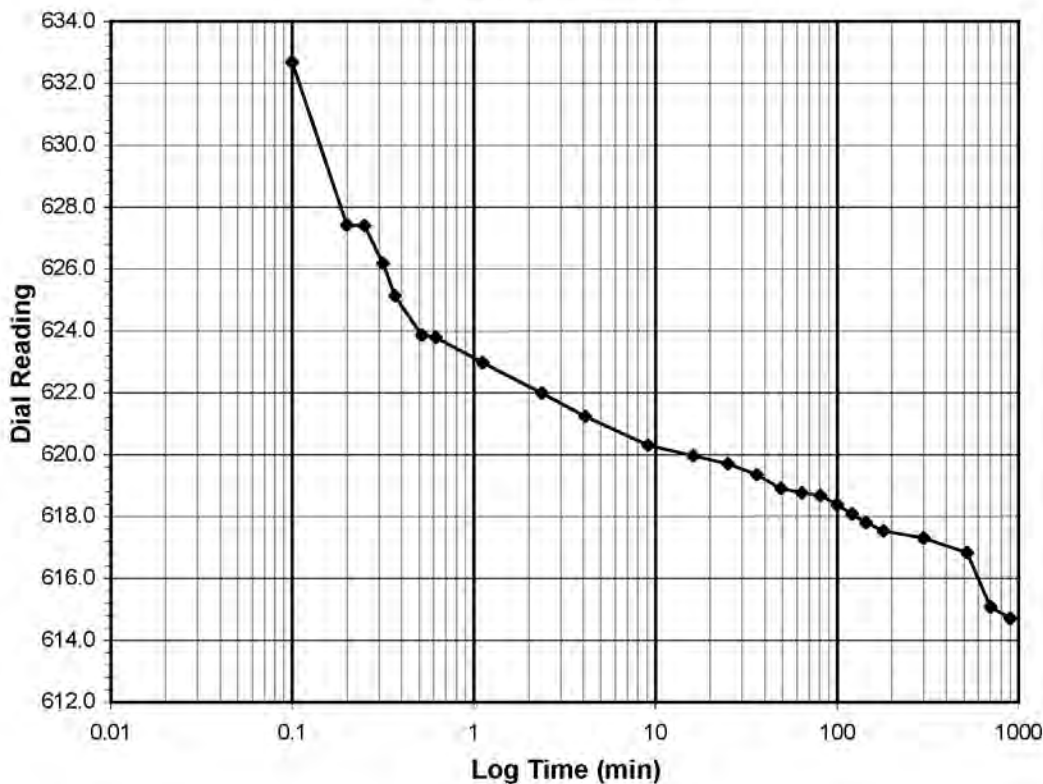
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-2.0
 Final Reading (div) 614.7
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/5/13
 Start Time 22:30:27

Elapsed Time (min)	Dial Reading (div)
Initial	728.7
0.10	632.7
0.20	627.4
0.25	627.4
0.32	626.2
0.37	625.1
0.52	623.9
0.62	623.8
1.12	623.0
2.37	622.0
4.12	621.2
9.12	620.3
16.12	620.0
25.12	619.7
36.12	619.4
49.12	618.9
64.12	618.8
81.13	618.7
100.13	618.4
121.13	618.1
144.13	617.8
180.13	617.5
300.13	617.3
520.13	616.8
700.13	615.1
900.42	614.7



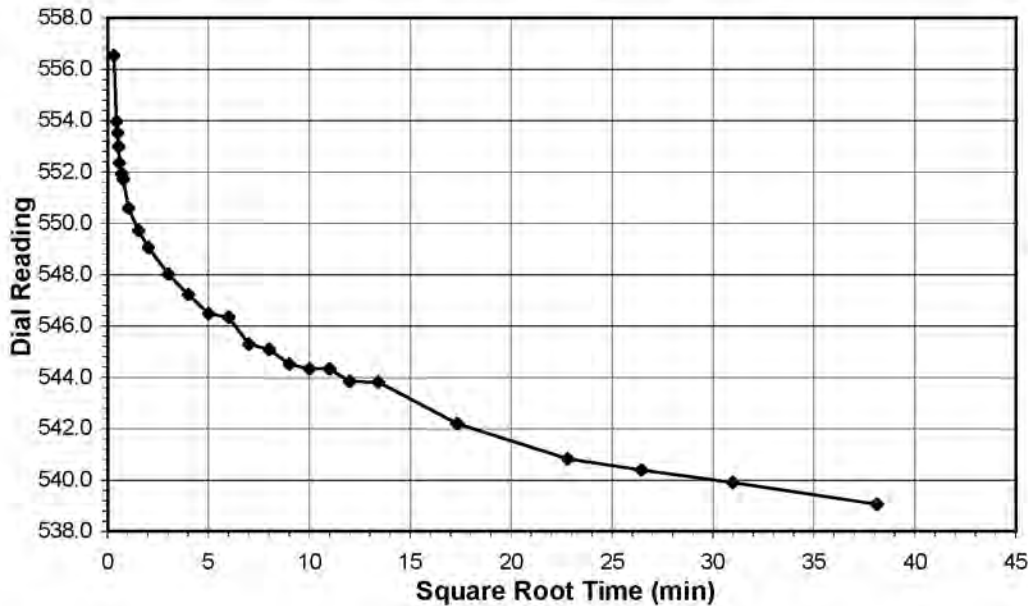
Tested By DB Date 11/5/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

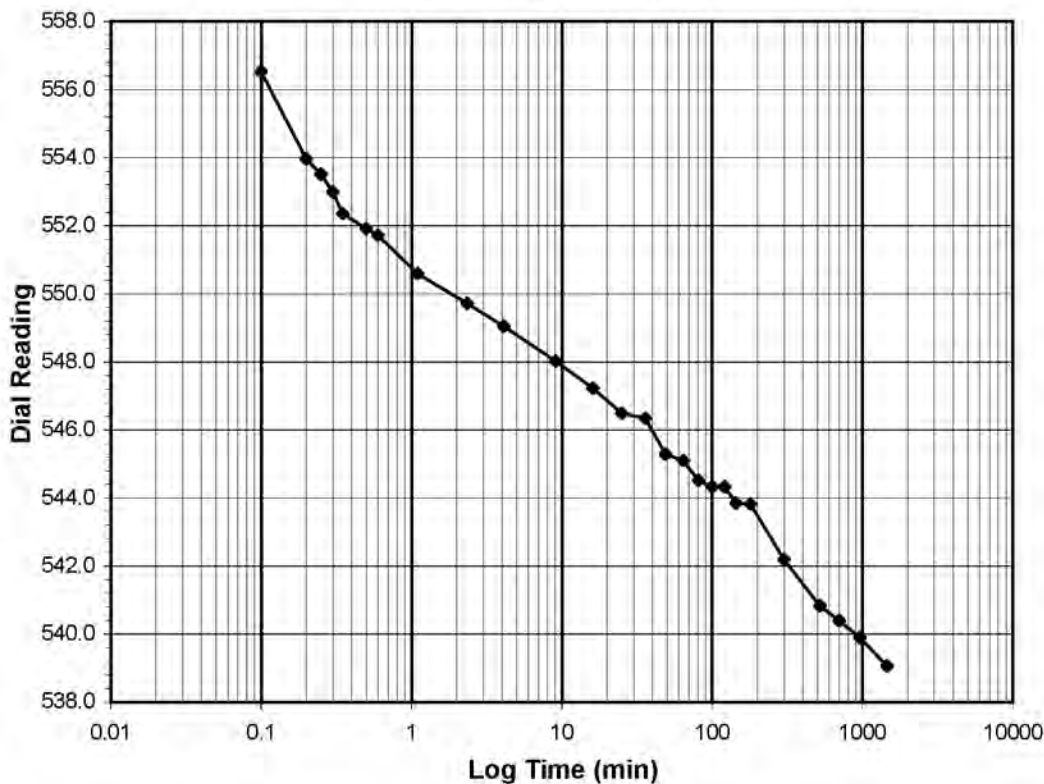
Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-0.5
 Final Reading (div) 539.1
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/6/13
 Start Time 13:30:52

Elapsed Time (min)	Dial Reading (div)
Initial	614.7
0.10	556.5
0.20	554.0
0.25	553.5
0.30	553.0
0.35	552.4
0.50	551.9
0.60	551.7
1.10	550.6
2.35	549.7
4.10	549.1
9.10	548.0
16.10	547.2
25.10	546.5
36.10	546.3
49.12	545.3
64.12	545.1
81.12	544.5
100.12	544.3
121.12	544.3
144.12	543.8
180.12	543.8
300.12	542.2
520.12	540.8
700.12	540.4
960.12	539.9
1454.10	539.1



Tested By DB Date 11/6/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1424

1 Division = 0.0001 (in)

Sample Properties

Initial **Final**

Water Content

	Initial	Final
Tare Number	2668	2726
Wt. Tare & WS (g)	135.34	159.63
Wt. Tare & DS (g)	110.46	128.24
Wt. Water (g)	24.88	31.39
Wt. Tare (g)	6.79	6.77
Wt. DS (g)	103.67	121.47
Water Content (%)	24.00	25.84

Sample Parameters

	Initial	Final
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9529
Sample Volume (cm ³)	80.44	76.65
Wt. Wet Sample + Ring (g)	366.79	369.06
Wt. of Ring (g)	214.25	214.25
Wt. of Wet Sample (g)	152.54	154.81
Wet Density (pcf)	118.33	126.02
Wet Density (g/cm ³)	1.90	2.02
Water Content (%)	24.00	25.84
Wt. of Dry Sample (g)	123.02	123.02
Dry Density (pcf)	95.43	100.14
Dry Density (g/cm ³)	1.53	1.60
Void Ratio	0.7394	0.6575
Saturation (%)	86.34	104.55
Specific Gravity	2.66	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.52930	0.73935
0.25	62.3	17.0	45.3	25.285	80.075	1.53627	0.73147
0.5	95.5	22.5	73.1	25.214	79.852	1.54056	0.72665
1	146.0	31.8	114.2	25.110	79.521	1.54697	0.71949
2	209.8	56.2	153.6	25.010	79.204	1.55316	0.71264
4	297.6	87.6	210.0	24.867	78.751	1.56210	0.70283
1	235.8	52.8	183.0	24.935	78.968	1.55781	0.70753
0.25	189.9	24.8	165.1	24.981	79.112	1.55497	0.71064
0.5	203.6	31.4	172.1	24.963	79.055	1.55609	0.70942
1	222.1	45.6	176.5	24.952	79.020	1.55677	0.70866
2	248.5	60.3	188.3	24.922	78.926	1.55865	0.70661
4	299.7	86.5	213.2	24.858	78.725	1.56263	0.70226
8	397.0	137.0	260.0	24.740	78.349	1.57012	0.69414
16	557.8	196.5	361.3	24.482	77.533	1.58663	0.67651
32	860.5	283.7	576.8	23.935	75.800	1.62291	0.63904
8	728.7	174.5	554.2	23.992	75.981	1.61904	0.64295
2	614.7	104.7	510.1	24.104	76.337	1.61150	0.65064
0.5	539.1	68.4	470.7	24.204	76.654	1.60484	0.65748

Tested By DB Date 10/25/13 Input Checked By TM Date 12/5/13

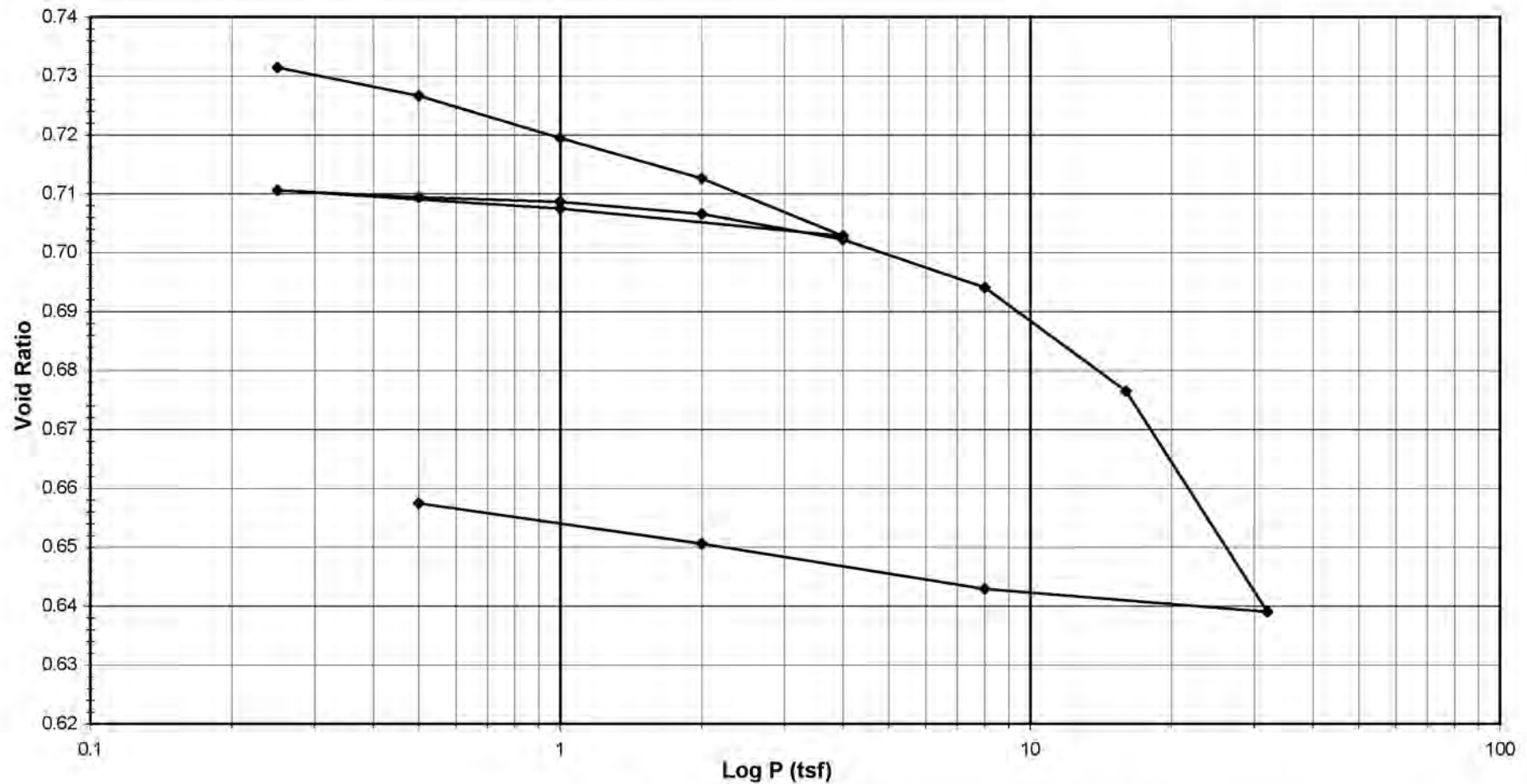
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 10/25/13

Approved By RJO Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1424

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final						
			Load	Dial	Machine	Corrected	Sample	Time
			Increment	Reading	Deflection	Dial Reading	Height	t₅₀
				@ t₅₀		@ t₅₀	@ t₅₀	
			(tsf)	(div)	(div)	(div)	(mm)	(min)
								C_v
								(cm²/sec)
<i>Water Content</i>								
Tare Number	2668	2726						
Wt. Tare & WS (g)	135.34	159.63						
Wt. Tare & DS (g)	110.46	128.24						
Wt. Water (g)	24.88	31.39						
Wt. Tare (g)	6.79	6.77						
Wt. DS (g)	103.67	121.47						
Water Content (%)	24.00	25.84						
<i>Sample Parameters</i>								
Sample Diameter (in)	2.5	2.5						
Sample Height (in)	1.0000	0.9529						
Sample Volume (cm ³)	80.44	76.65						
Wt. Wet Sample + Ring (g)	366.79	369.06						
Wt. of Ring (g)	214.25	214.25						
Wt. of Wet Sample (g)	152.54	154.81						
Wet Density (pcf)	118.33	126.02						
Wet Density (g/cm ³)	1.90	2.02						
Water Content (%)	24.00	25.84						
Wt. of Dry Sample (g)	123.02	123.02						
Dry Density (pcf)	95.43	100.14						
Dry Density (g/cm ³)	1.53	1.60						
Void Ratio	0.7394	0.6575						
Saturation (%)	86.34	104.55						
Specific Gravity	2.66	Measured						

Tested By DB **Date** 10/25/13 **Input Checked By** TM **Date** 12/5/13

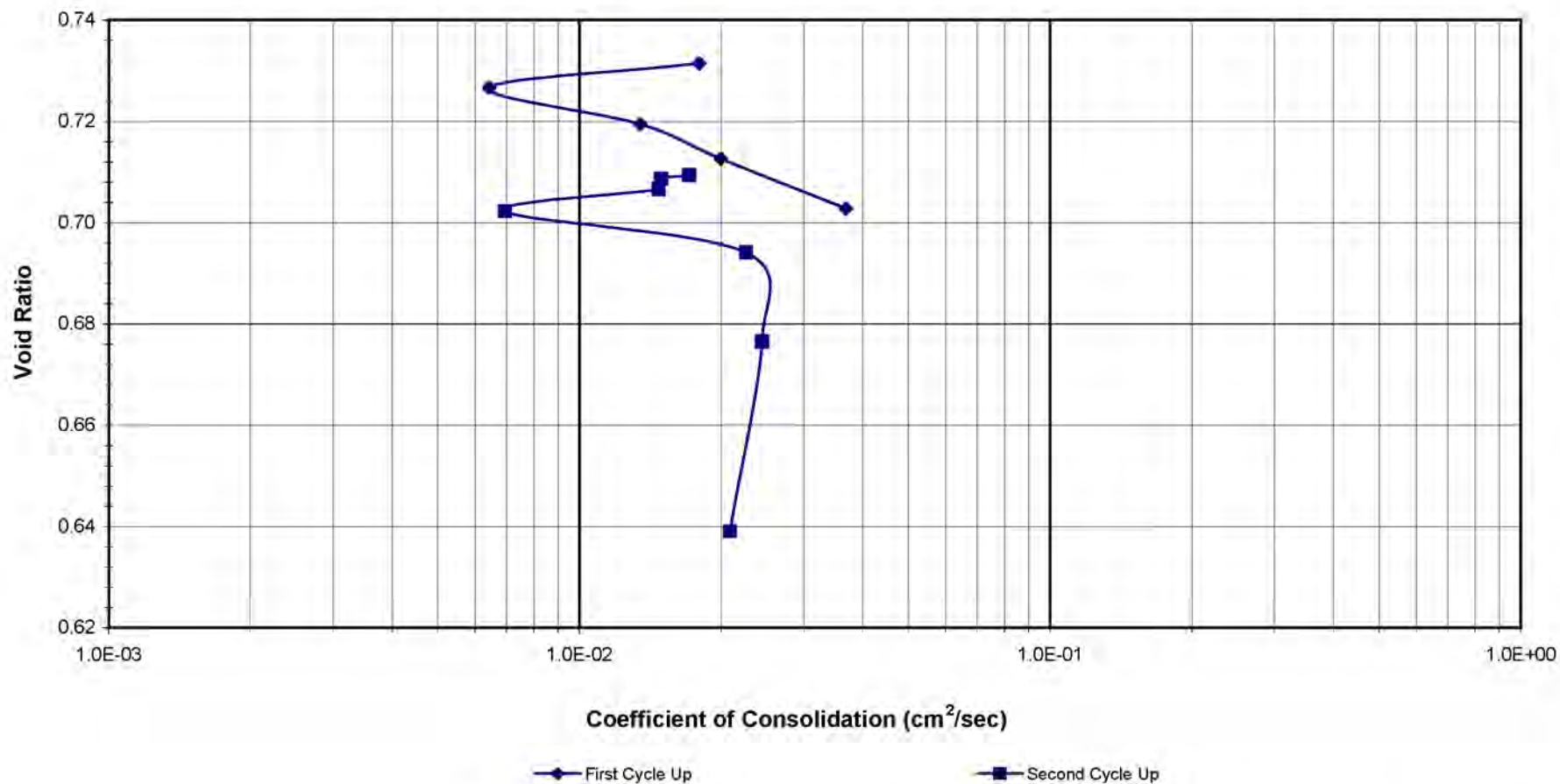
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-010

Boring No. R-7-1
 Depth (ft) 289.6-290.0
 Sample No. ST-12
 Visual Description Gray Silty Fine Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 10/25/13

Approved By RJO Date 12/5/13

**One Dimensional Consolidation**

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	289.6-290.0
Project No.	2013-465-001	Sample No.	ST-12
Lab ID #	2013-465-001-010		

Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1393	5/13/14
Oven	G624	11/9/13
Consolidometer	G1424	1/9/14
Load Cell	G1425	1/9/14
LVDT	G1426	1/9/14



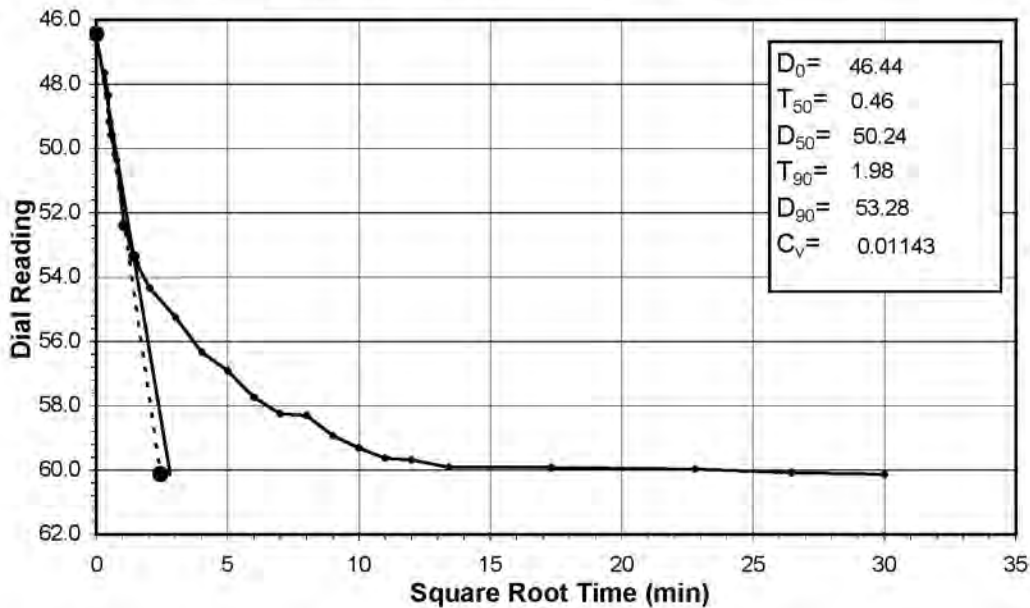
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

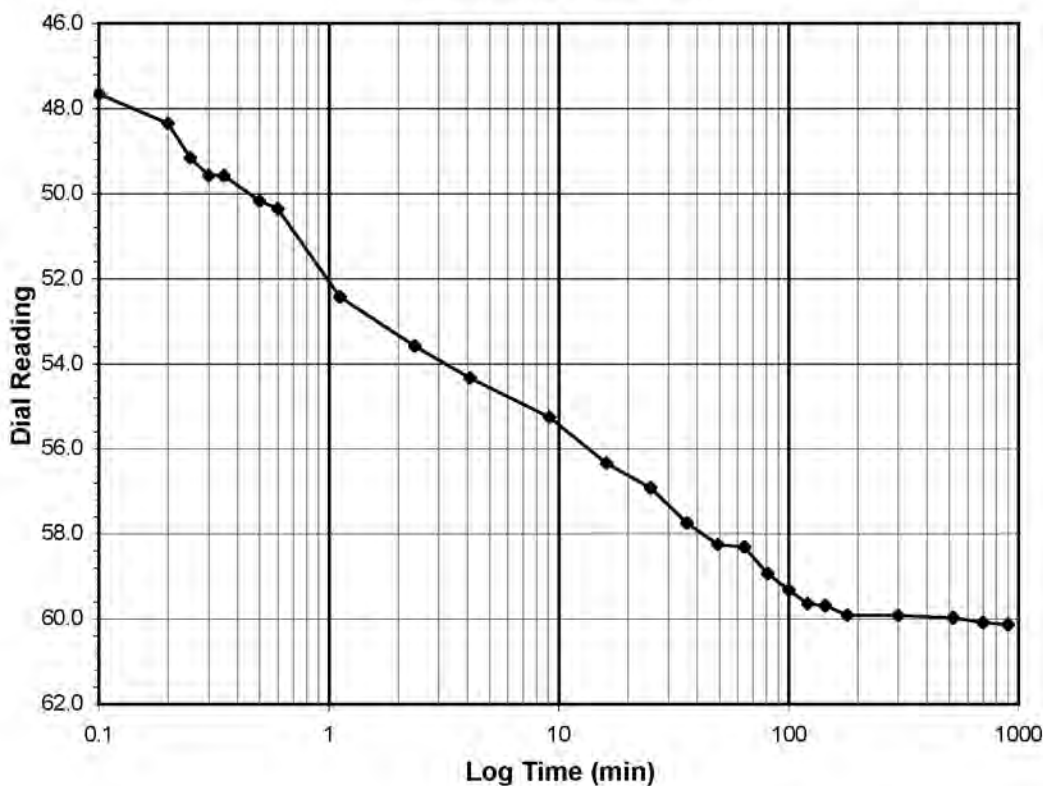
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.0-0.25
 Final Reading (div) 60.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/6/13
 Start Time 14:54:55

Elapsed Time (min)	Dial Reading (div)
<i>Initial</i>	<i>0.0</i>
0.10	47.7
0.20	48.3
0.25	49.2
0.30	49.6
0.35	49.6
0.50	50.2
0.60	50.4
1.12	52.4
2.37	53.6
4.12	54.3
9.12	55.3
16.12	56.3
25.12	56.9
36.12	57.7
49.12	58.2
64.12	58.3
81.12	58.9
100.12	59.3
121.12	59.6
144.12	59.7
180.13	59.9
300.13	59.9
520.13	60.0
700.13	60.1
900.30	60.1



Tested By CLK Date 11/6/13 Checked By TM Date 12/5/13



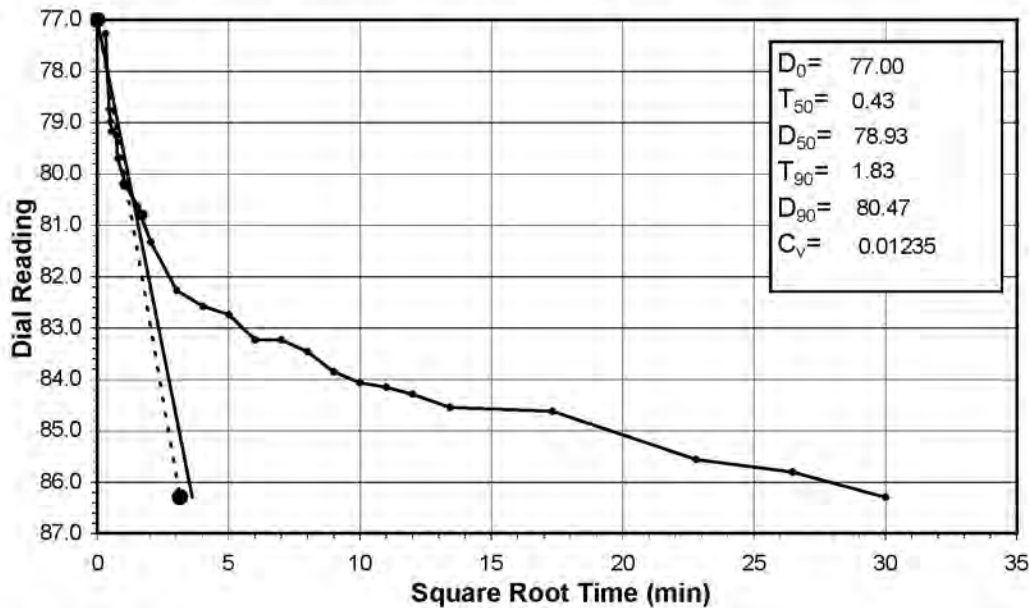
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

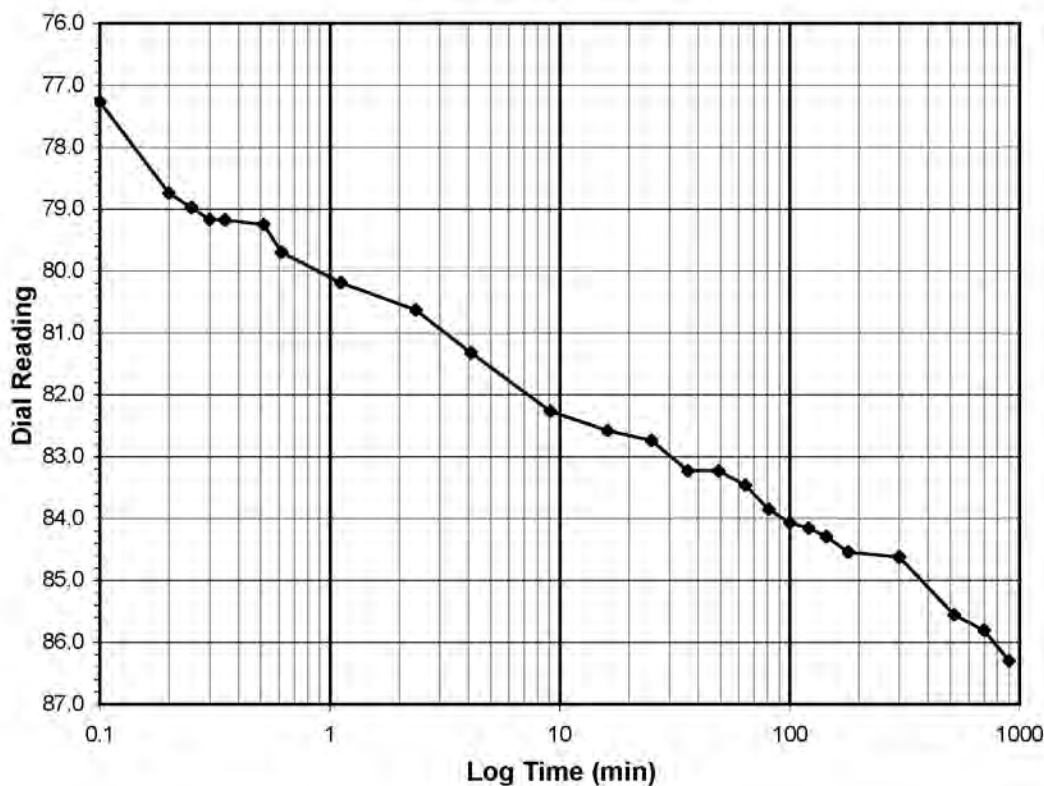
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.25-0.5
 Final Reading (div) 86.3
 Consolidometer No. G1418
 1 Division (in) 0.0001
 Start Date 11/7/13
 Start Time 5:55:13

Elapsed Time (min)	Dial Reading (div)
Initial	60.1
0.10	77.3
0.20	78.7
0.25	79.0
0.30	79.2
0.35	79.2
0.52	79.2
0.62	79.7
1.12	80.2
2.37	80.6
4.12	81.3
9.12	82.3
16.12	82.6
25.12	82.7
36.12	83.2
49.12	83.2
64.12	83.5
81.12	83.9
100.12	84.1
121.12	84.2
144.12	84.3
180.12	84.5
300.12	84.6
520.13	85.6
700.13	85.8
900.22	86.3



Tested By CLK Date 11/7/13 Checked By TM Date 12/5/13



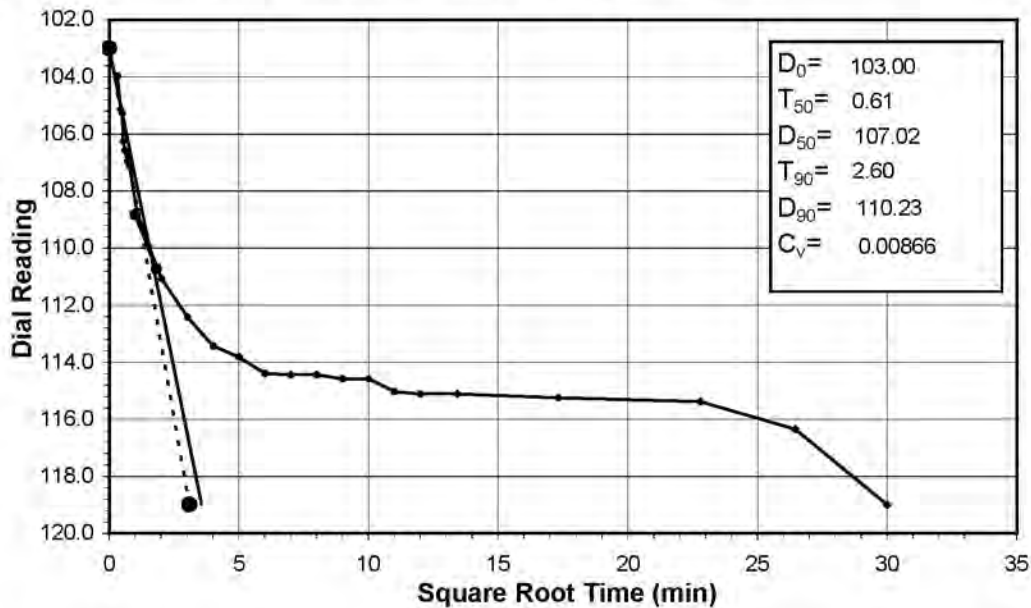
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

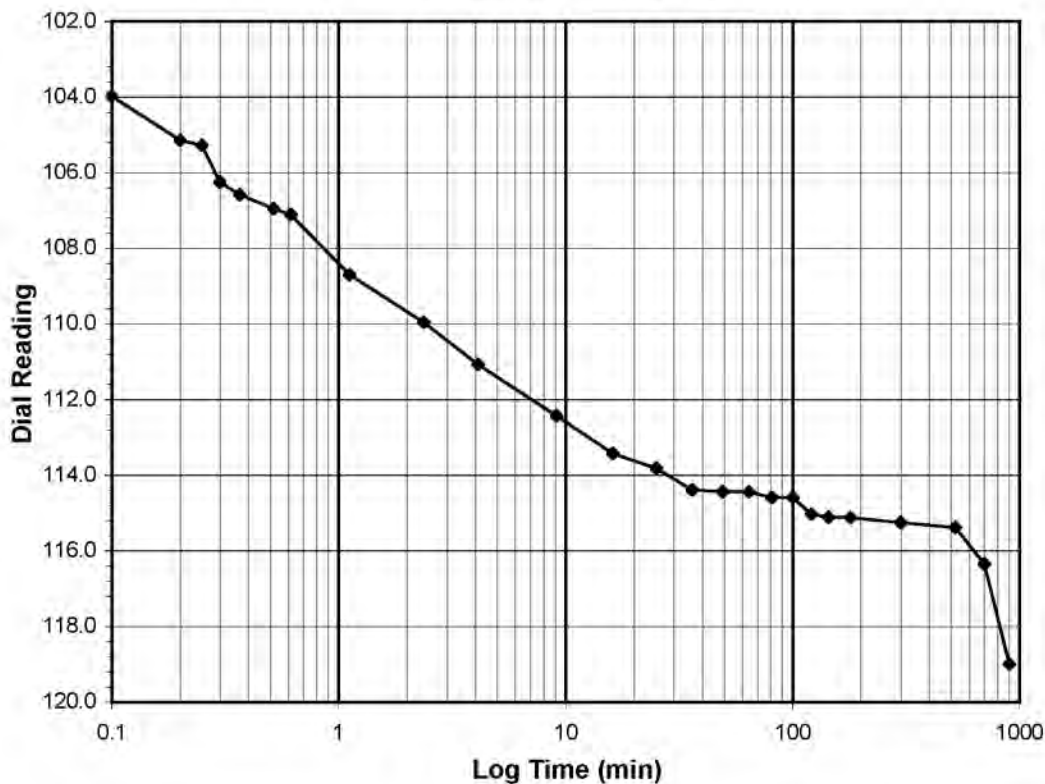
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 119.0
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/7/13
 Start Time 20:55:26

Elapsed Time (min)	Dial Reading (div)
Initial	86.3
0.10	104.0
0.20	105.1
0.25	105.3
0.30	106.2
0.37	106.6
0.52	107.0
0.62	107.1
1.12	108.7
2.37	110.0
4.12	111.1
9.12	112.4
16.12	113.4
25.12	113.8
36.12	114.4
49.12	114.4
64.12	114.4
81.12	114.6
100.13	114.6
121.13	115.0
144.13	115.1
180.13	115.1
300.13	115.2
520.13	115.4
700.13	116.3
900.23	119.0



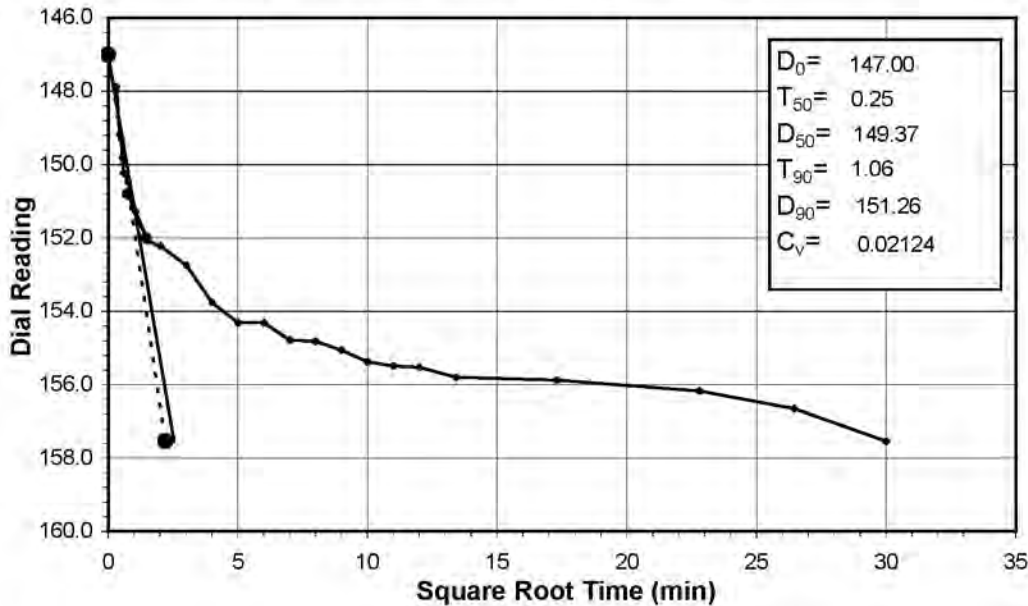
Tested By CLK Date 11/7/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

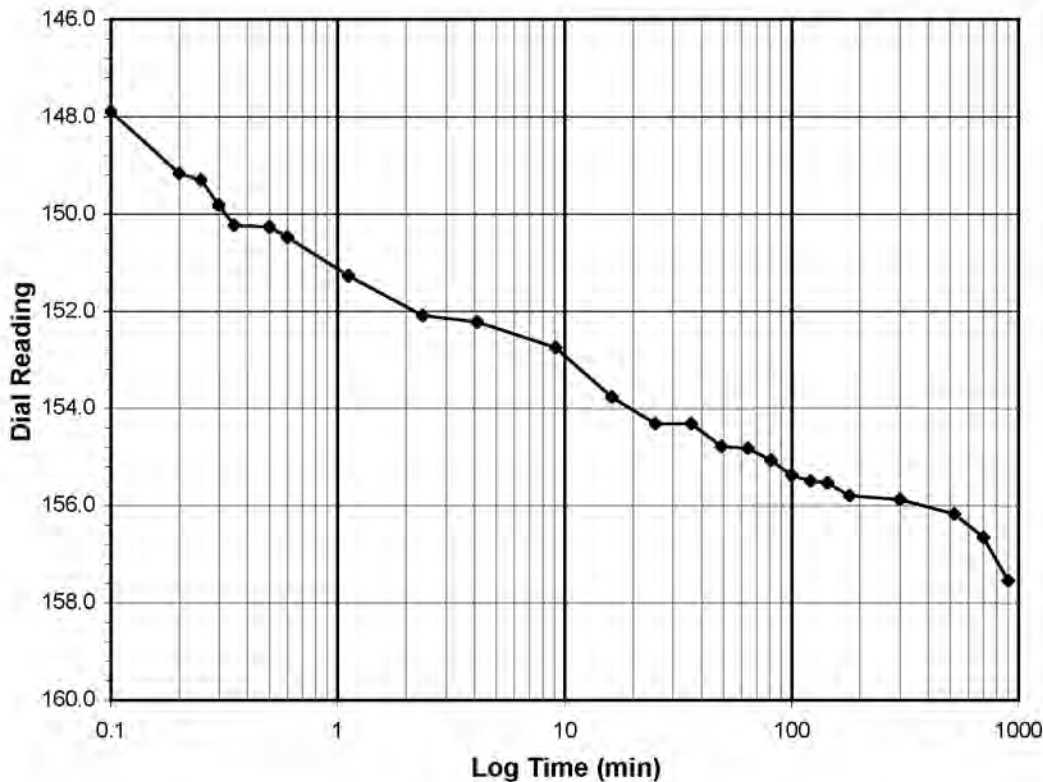
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 157.5
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/8/13
 Start Time 11:55:40

Elapsed Time (min)	Dial Reading (div)
Initial	119.0
0.10	147.9
0.20	149.2
0.25	149.3
0.30	149.8
0.35	150.2
0.50	150.3
0.60	150.5
1.12	151.3
2.37	152.1
4.12	152.2
9.12	152.7
16.12	153.8
25.12	154.3
36.12	154.3
49.12	154.8
64.12	154.8
81.12	155.1
100.12	155.4
121.12	155.5
144.12	155.5
180.12	155.8
300.12	155.9
520.12	156.2
700.13	156.7
900.03	157.5



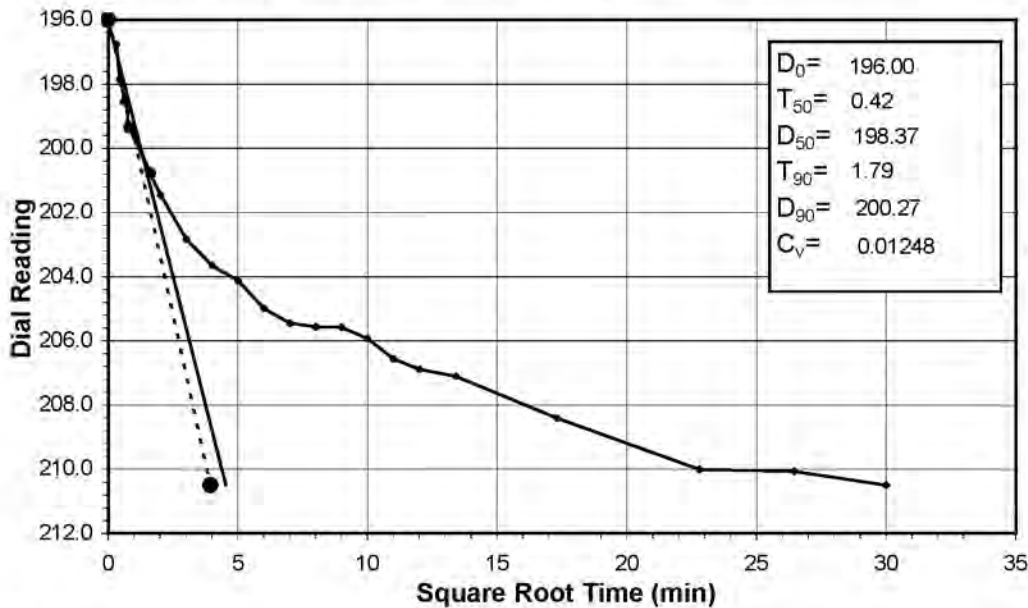
Tested By CLK Date 11/8/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

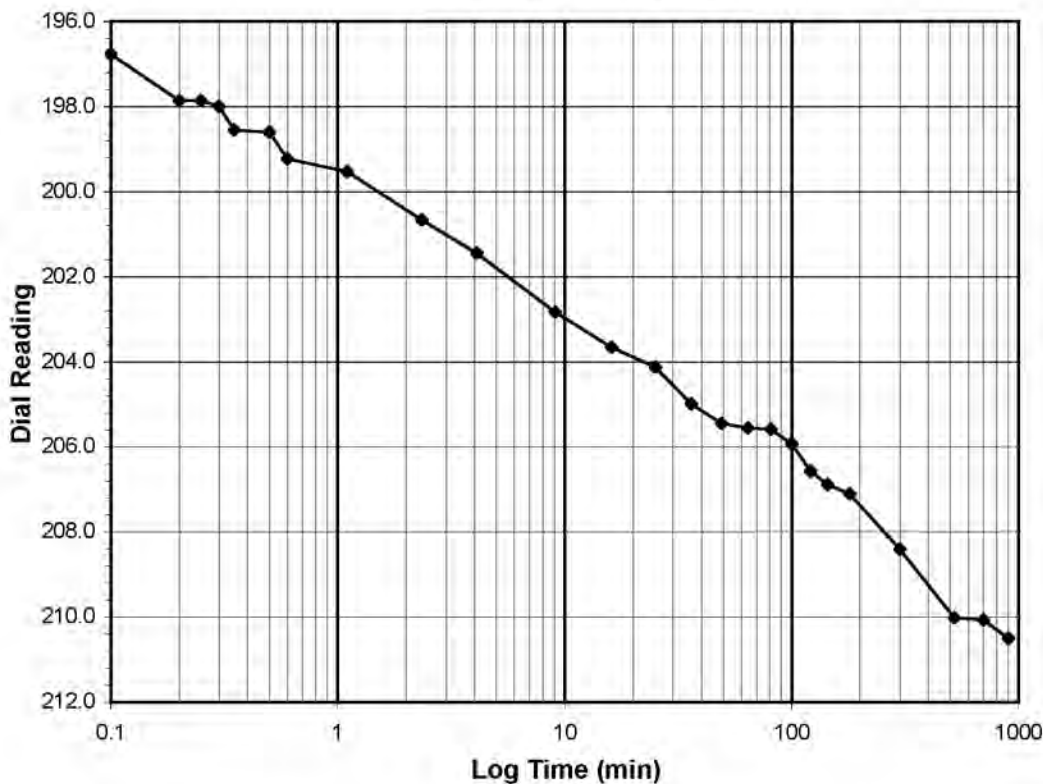
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 2.0-4.0
 Final Reading (div) 210.5
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/9/13
 Start Time 2:55:43

Elapsed Time (min)	Dial Reading (div)
Initial	157.5
0.10	196.8
0.20	197.9
0.25	197.9
0.30	198.0
0.35	198.6
0.50	198.6
0.60	199.2
1.10	199.5
2.35	200.7
4.10	201.4
9.10	202.8
16.10	203.7
25.10	204.1
36.10	205.0
49.12	205.5
64.12	205.6
81.12	205.6
100.12	205.9
121.12	206.6
144.12	206.9
180.12	207.1
300.12	208.4
520.12	210.0
700.12	210.1
900.17	210.5



Tested By CLK Date 11/9/13 Checked By TM Date 12/5/13



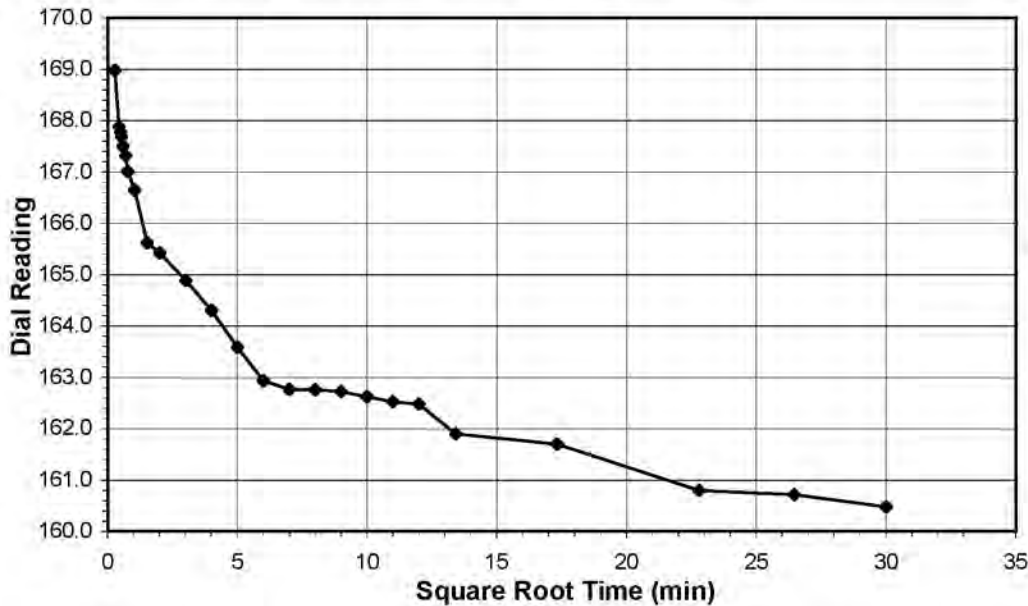
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

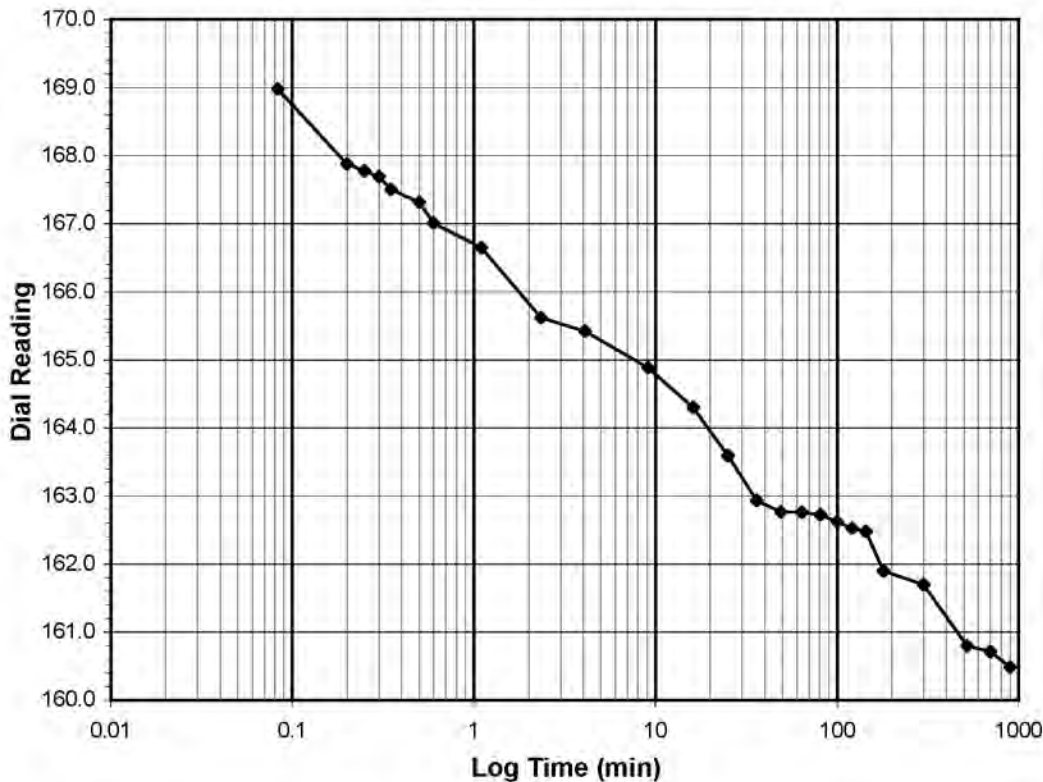
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 160.5
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/9/13
 Start Time 17:55:53

Elapsed Time (min)	Dial Reading (div)
Initial	210.5
0.08	169.0
0.20	167.9
0.25	167.8
0.30	167.7
0.35	167.5
0.50	167.3
0.60	167.0
1.10	166.6
2.35	165.6
4.10	165.4
9.10	164.9
16.10	164.3
25.10	163.6
36.10	162.9
49.10	162.8
64.10	162.8
81.10	162.7
100.10	162.6
121.10	162.5
144.10	162.5
180.12	161.9
300.12	161.7
520.12	160.8
700.12	160.7
900.12	160.5



Tested By CLK Date 11/9/13 Checked By TM Date 12/5/13



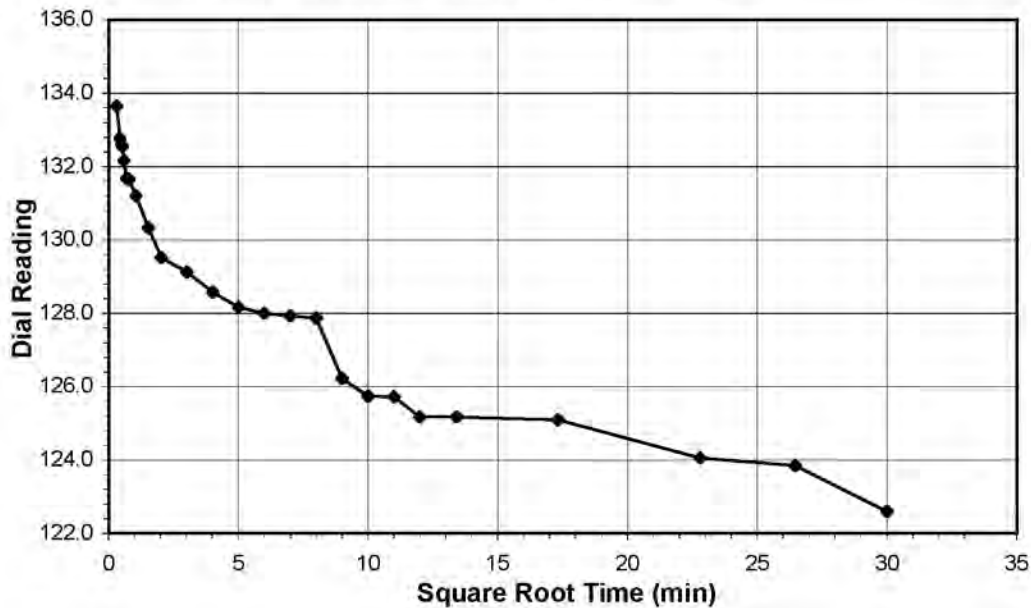
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

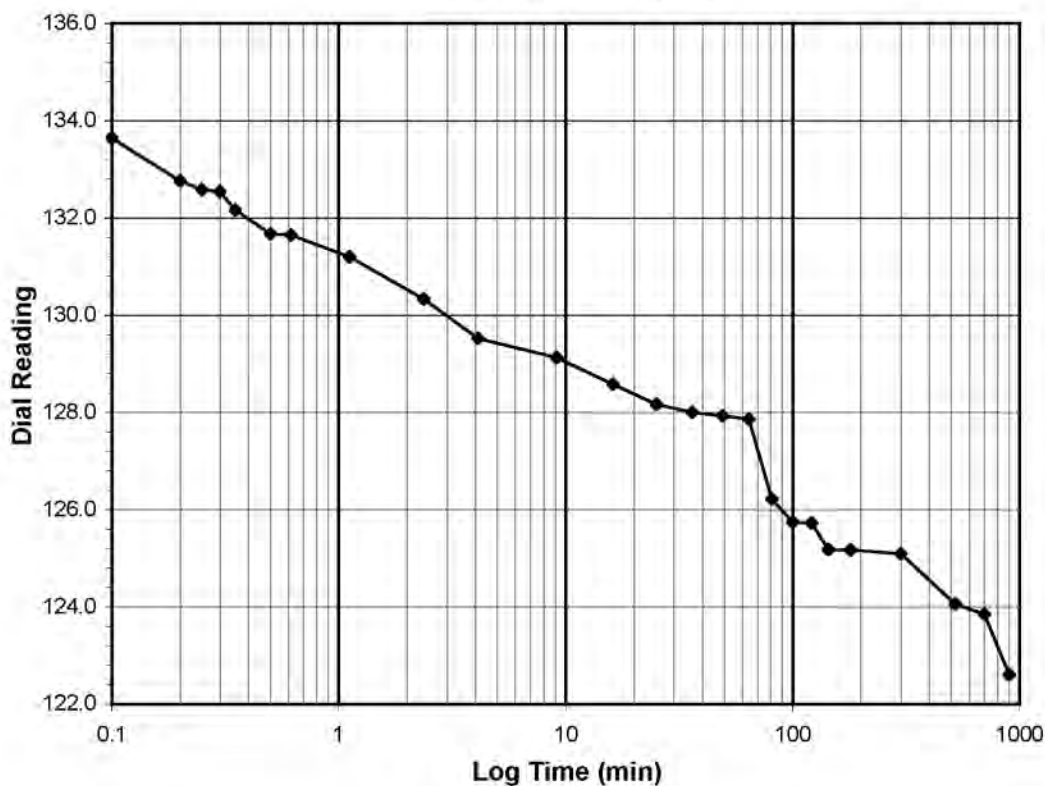
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-0.25
 Final Reading (div) 122.6
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/10/13
 Start Time 8:56:01

Elapsed Time (min)	Dial Reading (div)
Initial	160.5
0.10	133.6
0.20	132.8
0.25	132.6
0.30	132.5
0.35	132.2
0.50	131.7
0.62	131.6
1.12	131.2
2.37	130.3
4.12	129.5
9.12	129.1
16.12	128.6
25.12	128.2
36.12	128.0
49.12	127.9
64.12	127.9
81.12	126.2
100.12	125.7
121.12	125.7
144.12	125.2
180.12	125.2
300.12	125.1
520.12	124.1
700.12	123.8
900.32	122.6



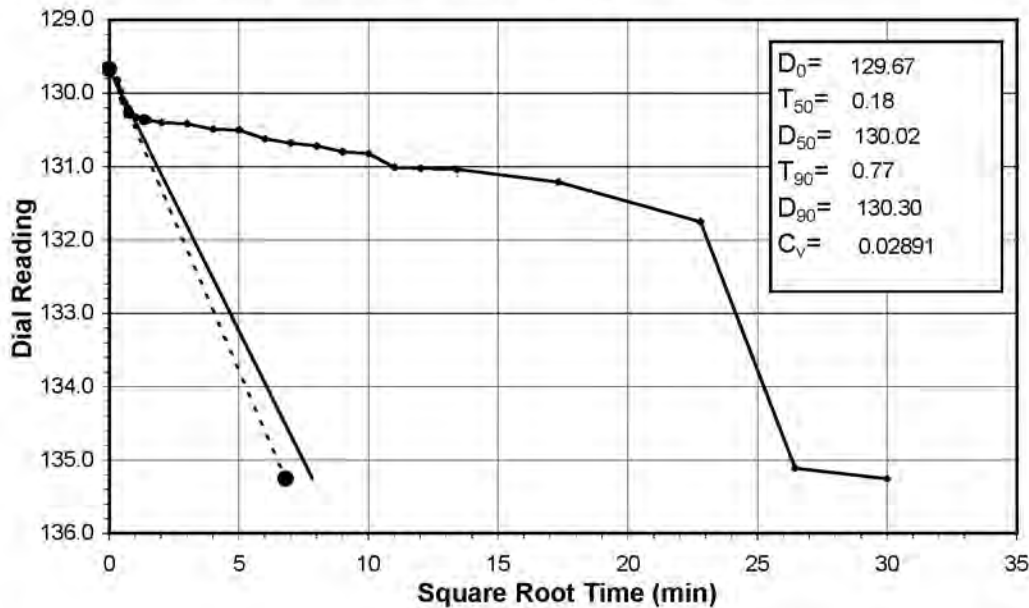
Tested By CLK Date 11/10/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

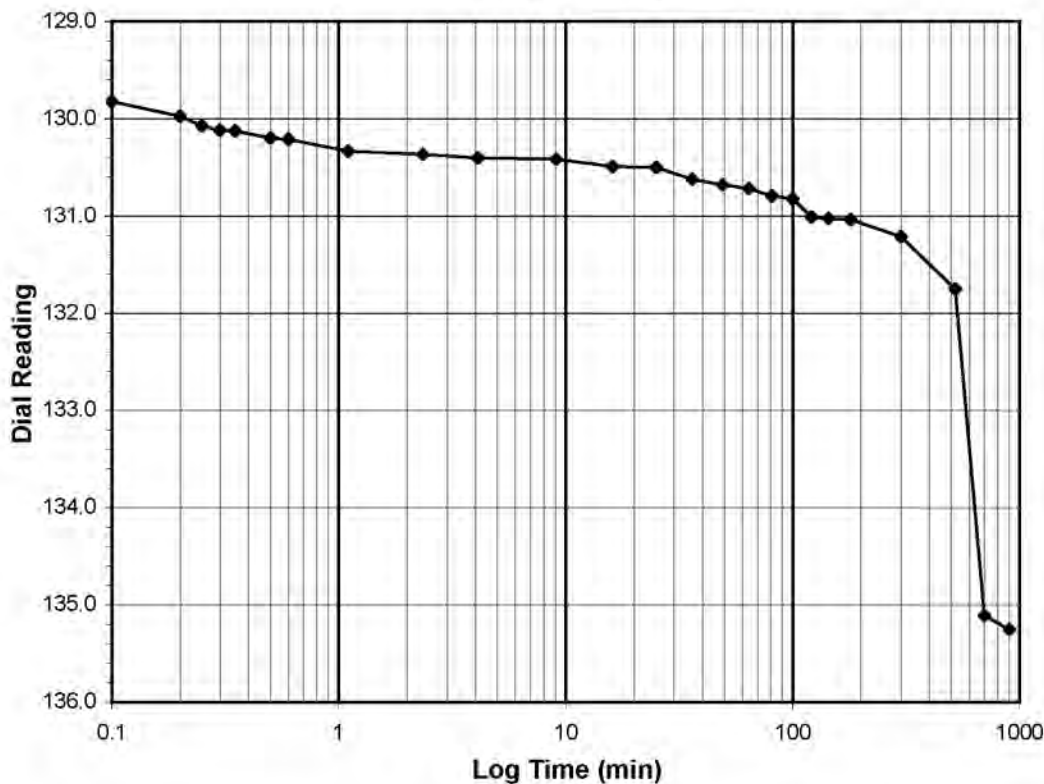
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **135.3**
 Consolidometer No. **G1418**
 1 Division (in) **0.0001**

Start Date 11/10/13
 Start Time 23:56:20

Elapsed Time (min)	Dial Reading (div)
Initial	122.6
0.10	129.8
0.20	130.0
0.25	130.1
0.30	130.1
0.35	130.1
0.50	130.2
0.60	130.2
1.10	130.3
2.35	130.4
4.10	130.4
9.10	130.4
16.10	130.5
25.10	130.5
36.10	130.6
49.10	130.7
64.12	130.7
81.12	130.8
100.12	130.8
121.12	131.0
144.12	131.0
180.12	131.0
300.12	131.2
520.12	131.8
700.12	135.1
900.00	135.3



Tested By CLK Date 11/10/13 Checked By TM Date 12/5/13



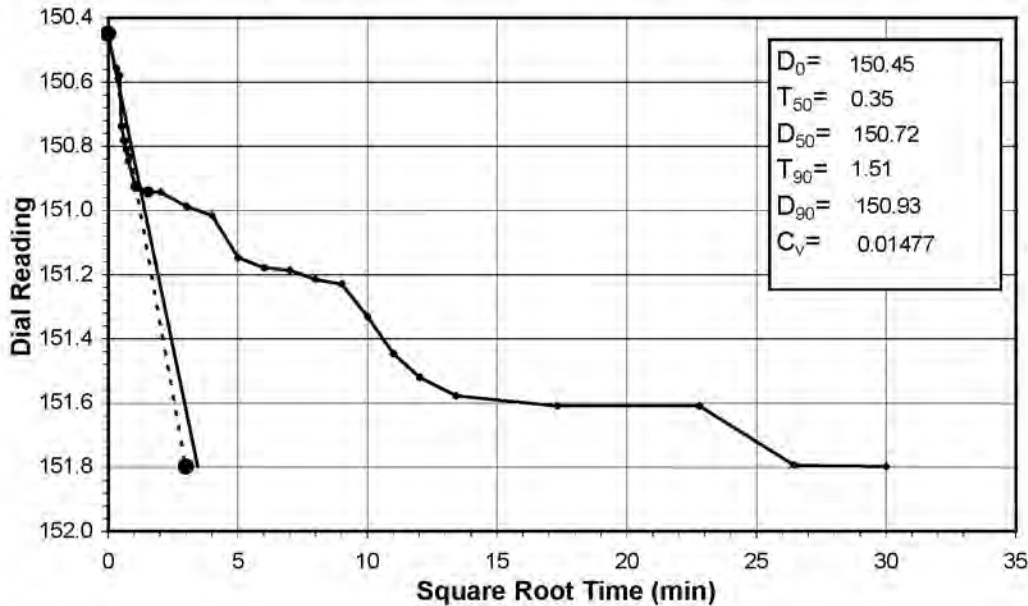
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

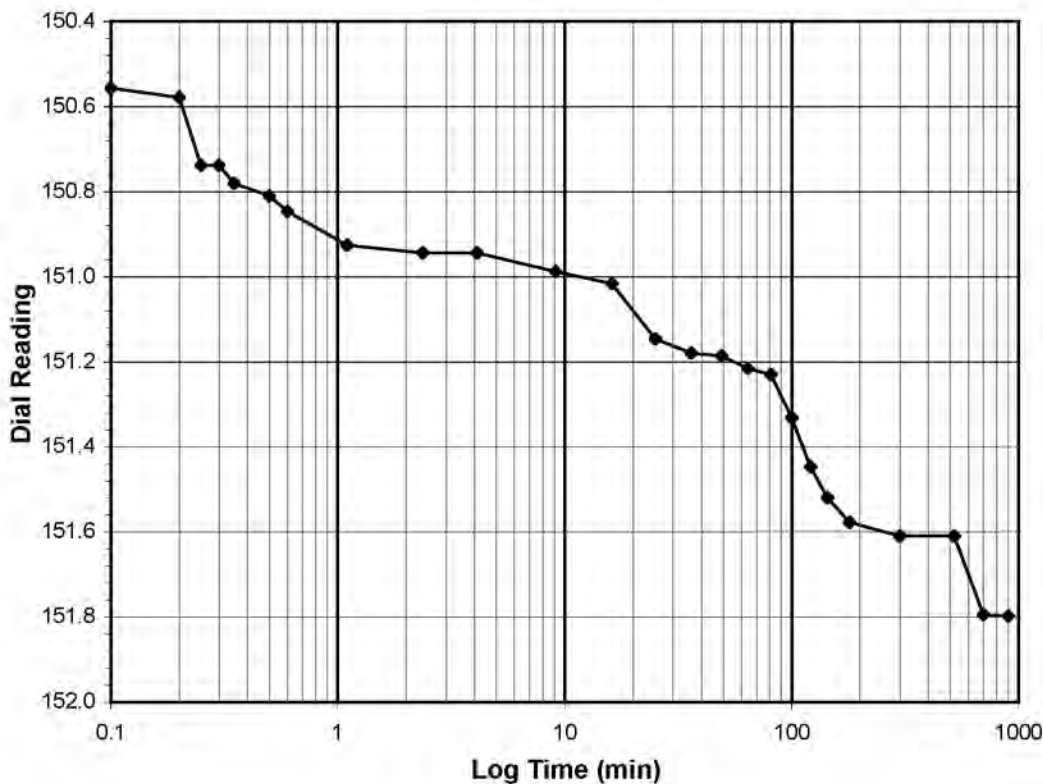
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 151.8
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/11/13
 Start Time 14:56:20

Elapsed Time (min)	Dial Reading (div)
Initial	135.3
0.10	150.6
0.20	150.6
0.25	150.7
0.30	150.7
0.35	150.8
0.50	150.8
0.60	150.8
1.10	150.9
2.37	150.9
4.12	150.9
9.12	151.0
16.12	151.0
25.12	151.1
36.12	151.2
49.12	151.2
64.12	151.2
81.12	151.2
100.12	151.3
121.12	151.4
144.12	151.5
180.12	151.6
300.12	151.6
520.12	151.6
700.12	151.8
900.22	151.8



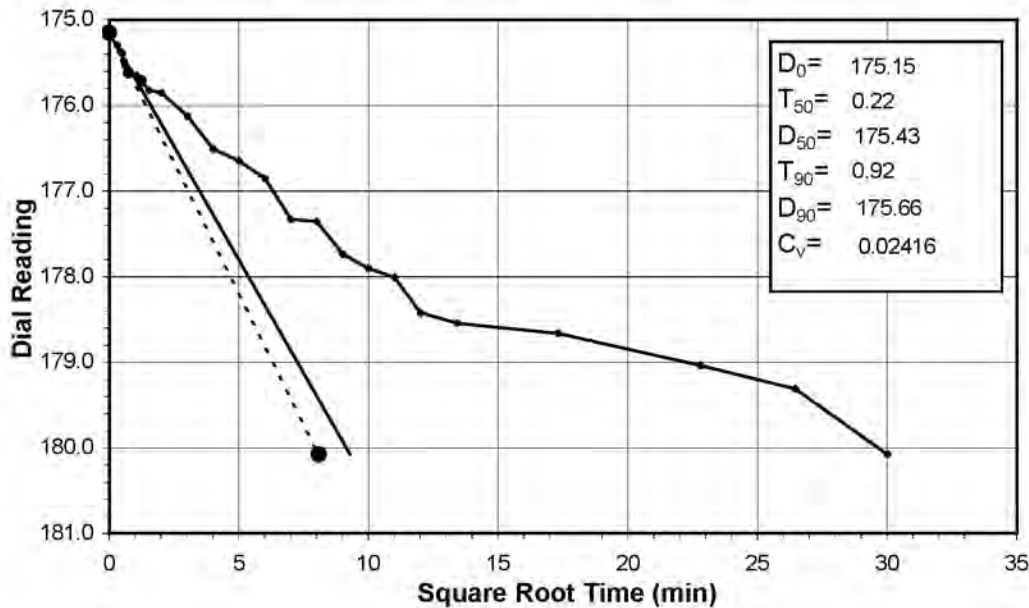
Tested By CLK Date 11/11/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

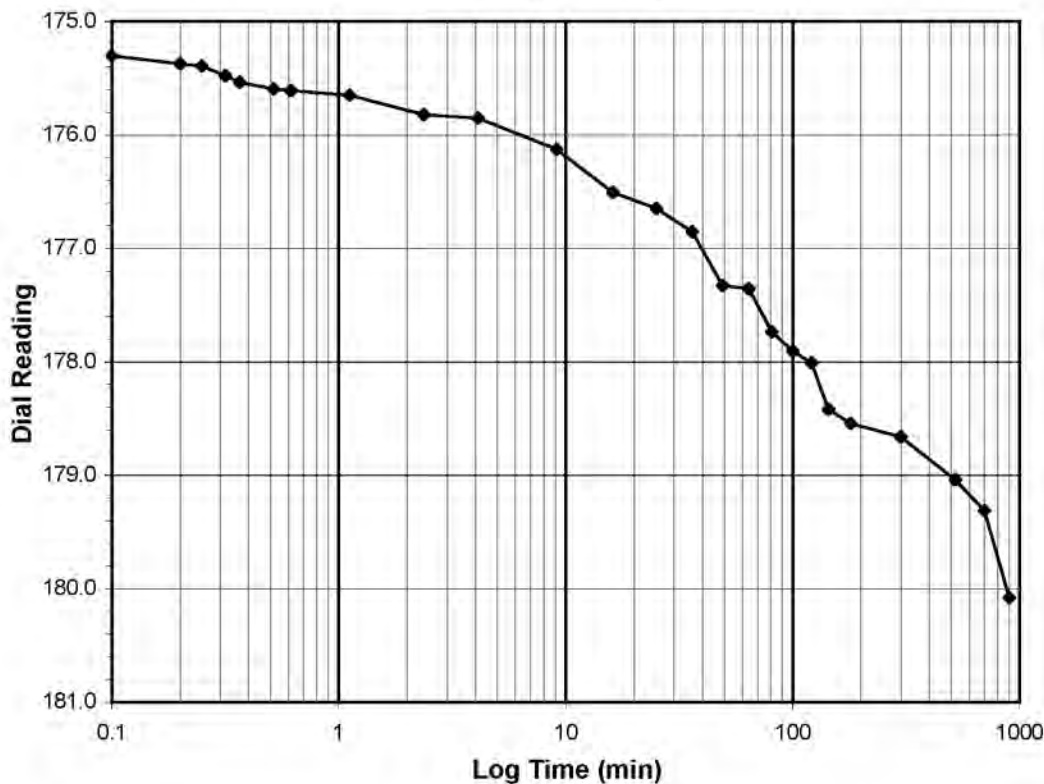
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 1.0-2.0
 Final Reading (div) 180.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/12/13
 Start Time 5:56:33

Elapsed Time (min)	Dial Reading (div)
Initial	151.8
0.10	175.3
0.20	175.4
0.25	175.4
0.32	175.5
0.37	175.5
0.52	175.6
0.62	175.6
1.12	175.6
2.37	175.8
4.12	175.9
9.12	176.1
16.12	176.5
25.12	176.6
36.13	176.9
49.13	177.3
64.13	177.4
81.13	177.7
100.13	177.9
121.13	178.0
144.13	178.4
180.13	178.5
300.13	178.7
520.13	179.0
700.13	179.3
900.50	180.1



Tested By CLK Date 11/12/13 Checked By TM Date 12/5/13



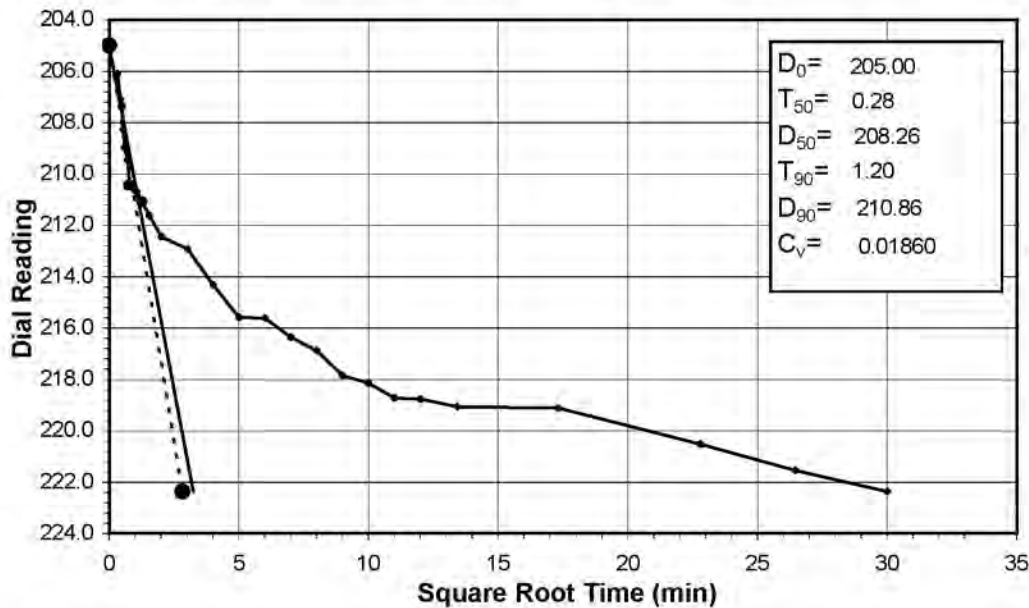
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

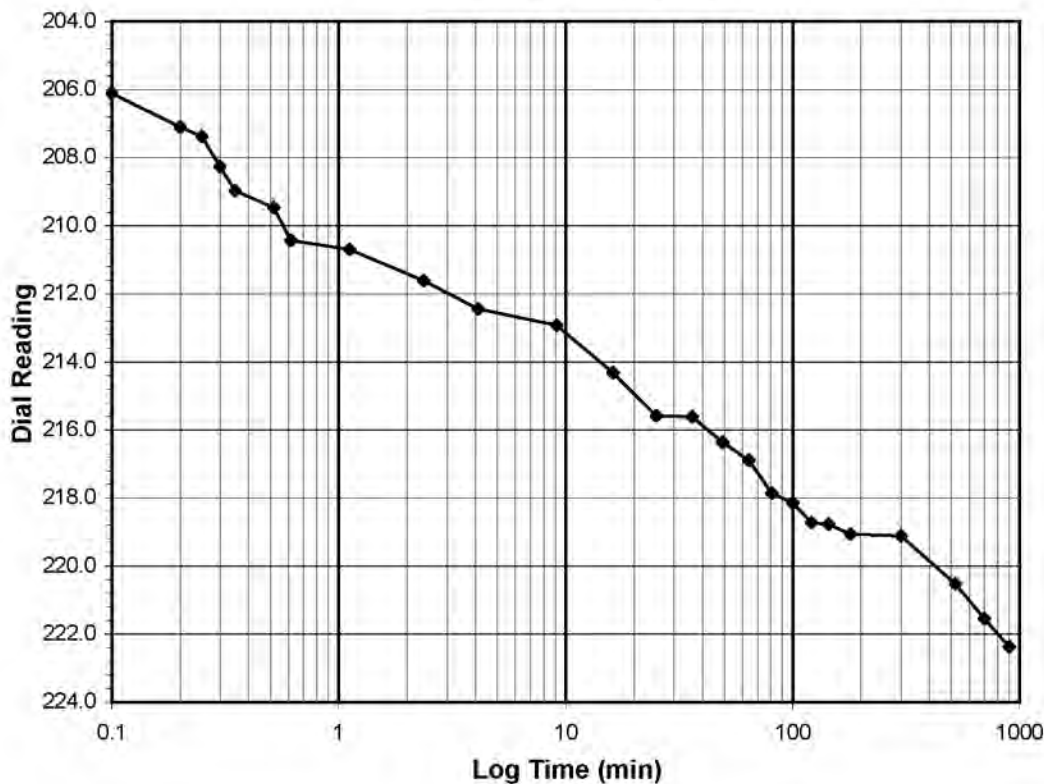
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 222.4
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/12/13
 Start Time 20:57:03

Elapsed Time (min)	Dial Reading (div)
Initial	180.1
0.10	206.1
0.20	207.1
0.25	207.4
0.30	208.3
0.35	209.0
0.52	209.5
0.62	210.4
1.12	210.7
2.37	211.6
4.12	212.4
9.12	212.9
16.12	214.3
25.12	215.6
36.12	215.6
49.12	216.4
64.12	216.9
81.12	217.9
100.12	218.1
121.12	218.7
144.12	218.8
180.13	219.1
300.13	219.1
520.13	220.5
700.13	221.5
900.30	222.4



Tested By CLK Date 11/12/13 Checked By TM Date 12/5/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

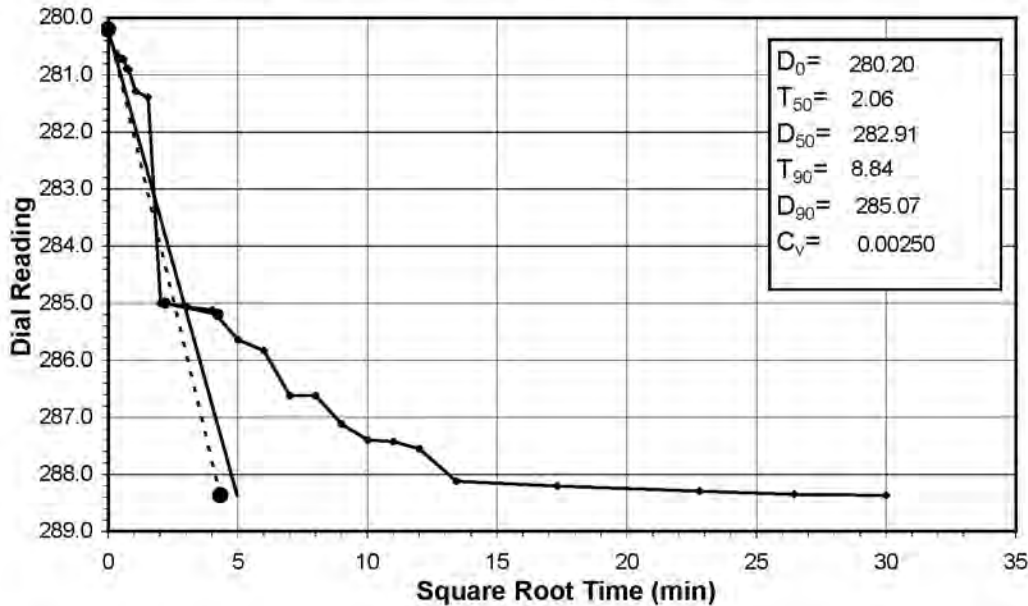
CONSOL-Auto T50-Cv

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

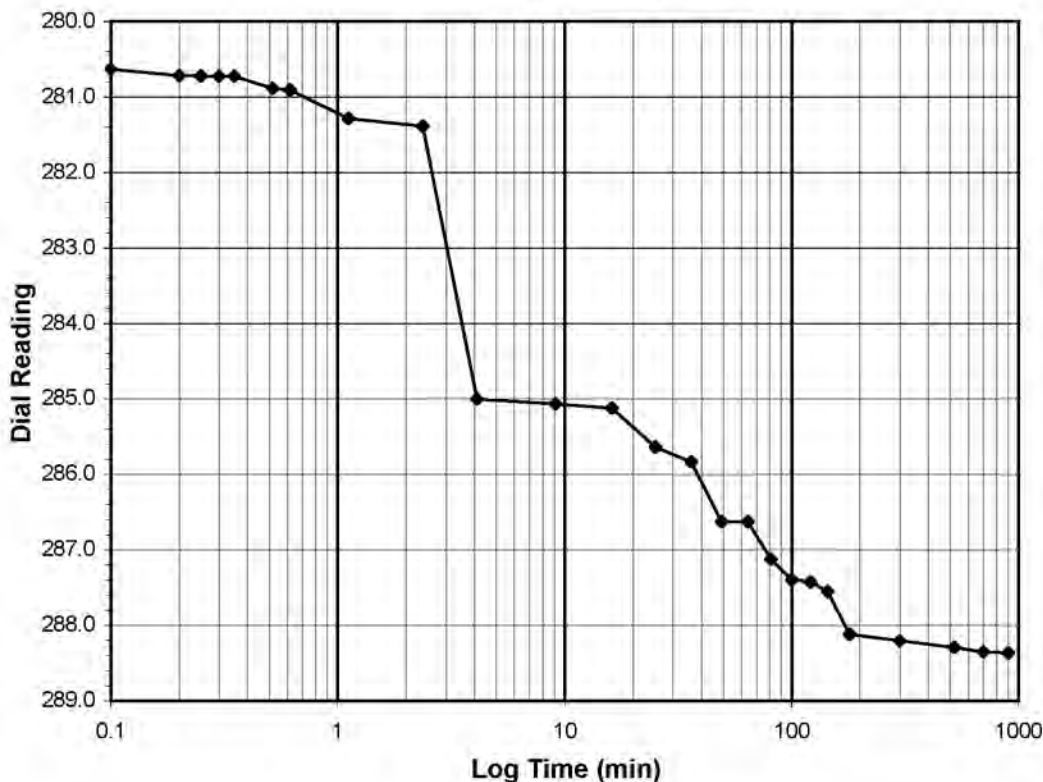
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **288.4**
 Consolidometer No. **G1418**
 1 Division (in) 0.0001

Start Date 11/13/13
 Start Time 11:57:21

Elapsed Time (min)	Dial Reading (div)
Initial	222.4
0.10	280.6
0.20	280.7
0.25	280.7
0.30	280.7
0.35	280.7
0.52	280.9
0.62	280.9
1.12	281.3
2.37	281.4
4.12	285.0
9.12	285.1
16.12	285.1
25.12	285.6
36.12	285.8
49.12	286.6
64.12	286.6
81.12	287.1
100.12	287.4
121.12	287.4
144.13	287.6
180.13	288.1
300.13	288.2
520.13	288.3
700.13	288.4
900.10	288.4



Tested By CLK Date 11/13/13 Checked By TM Date 12/5/13



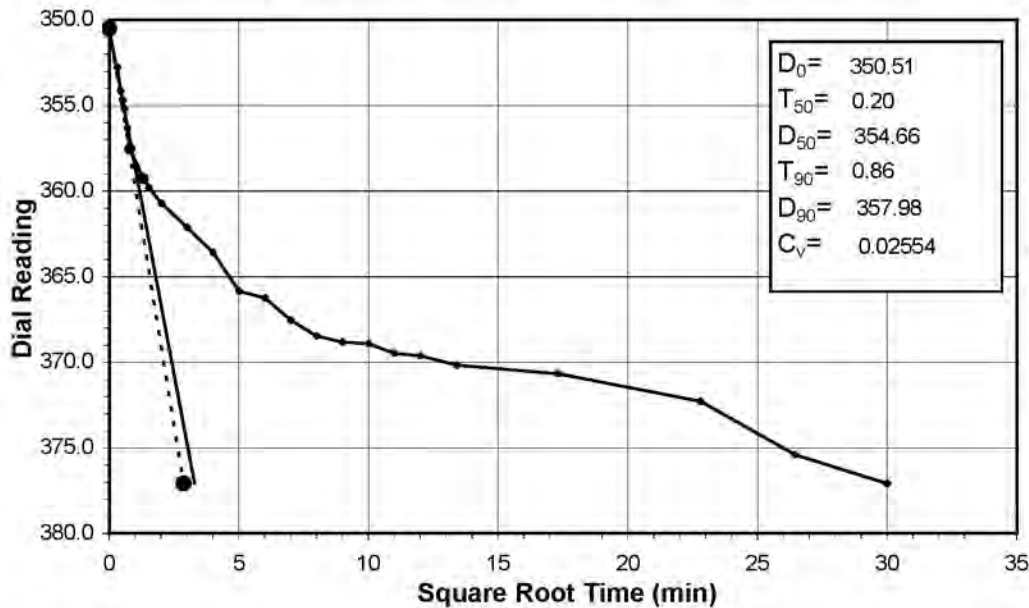
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

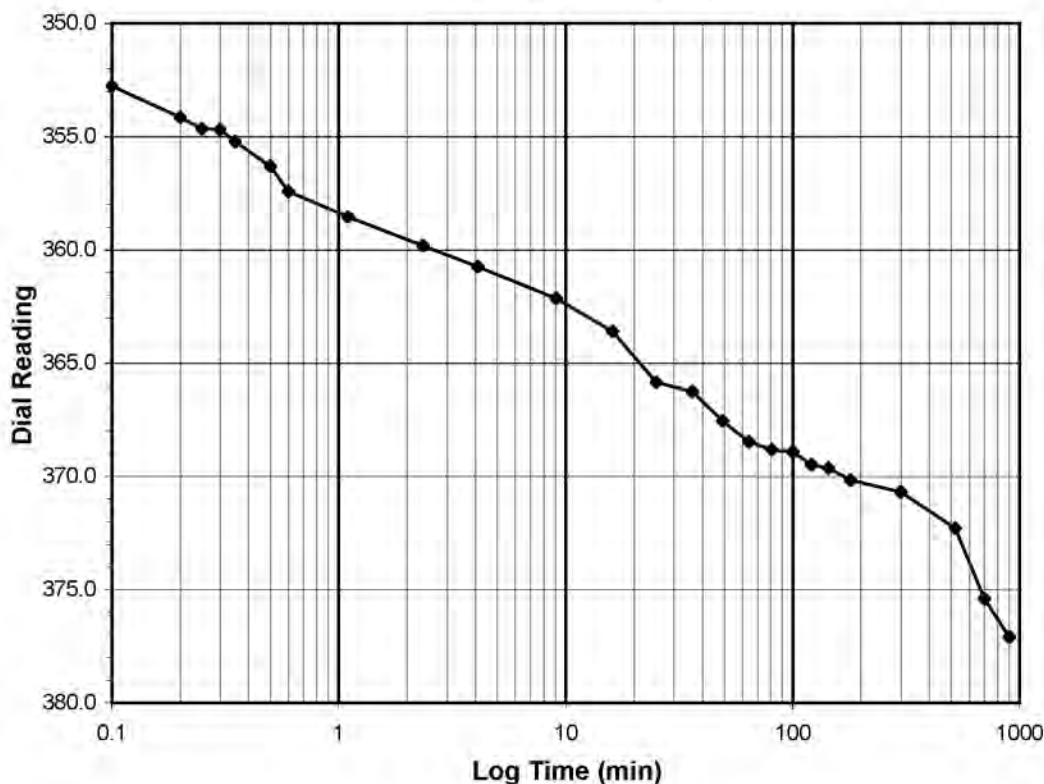
Sample Conditions: Undisturbed, Inundated And Double Drained



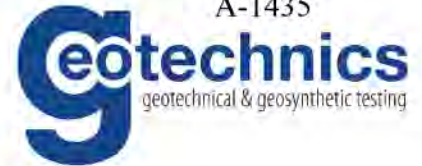
Test Load (tsf) 8.0-16.0
 Final Reading (div) 377.1
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/14/13
 Start Time 2:57:27

Elapsed Time (min)	Dial Reading (div)
Initial	288.4
0.10	352.8
0.20	354.1
0.25	354.6
0.30	354.7
0.35	355.2
0.50	356.3
0.60	357.4
1.10	358.5
2.35	359.8
4.10	360.7
9.10	362.1
16.10	363.6
25.10	365.8
36.10	366.3
49.10	367.5
64.10	368.5
81.10	368.8
100.12	368.9
121.12	369.5
144.12	369.6
180.12	370.2
300.12	370.7
520.12	372.3
700.12	375.4
900.15	377.1



Tested By CLK Date 11/14/13 Checked By TM Date 12/5/13



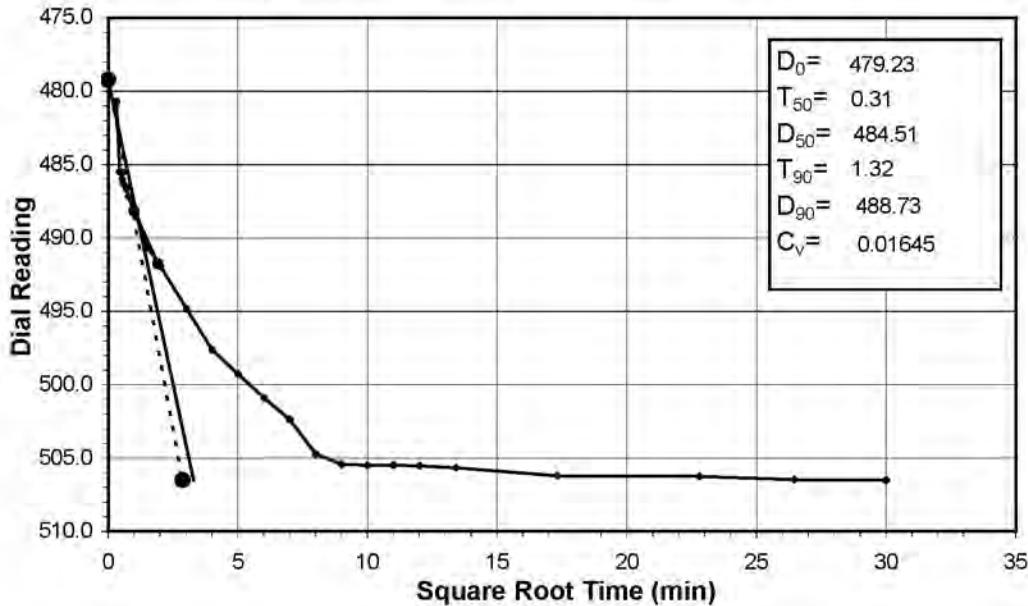
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

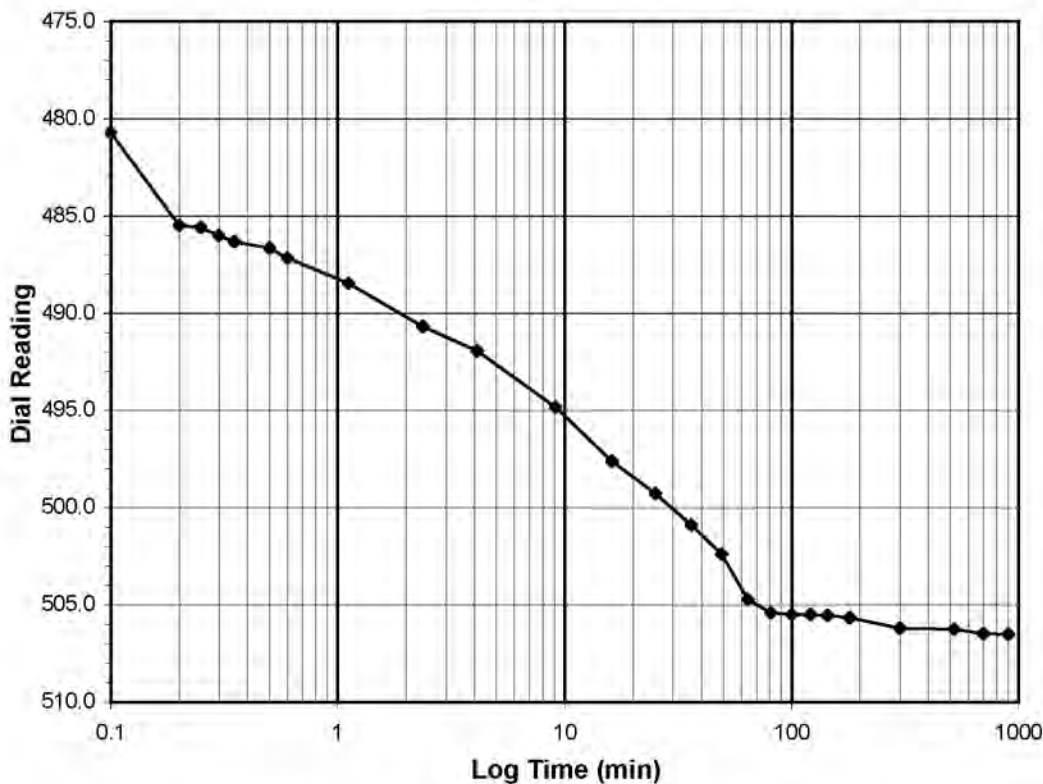
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 16.0-32.0
 Final Reading (div) 506.5
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/14/13
 Start Time 17:57:36

Elapsed Time (min)	Dial Reading (div)
Initial	377.1
0.10	480.7
0.20	485.5
0.25	485.6
0.30	486.0
0.35	486.3
0.50	486.7
0.60	487.2
1.12	488.5
2.37	490.7
4.12	491.9
9.12	494.8
16.12	497.6
25.12	499.3
36.12	500.9
49.12	502.4
64.12	504.7
81.12	505.4
100.12	505.5
121.12	505.5
144.12	505.5
180.12	505.7
300.12	506.2
520.12	506.3
700.12	506.5
900.03	506.5



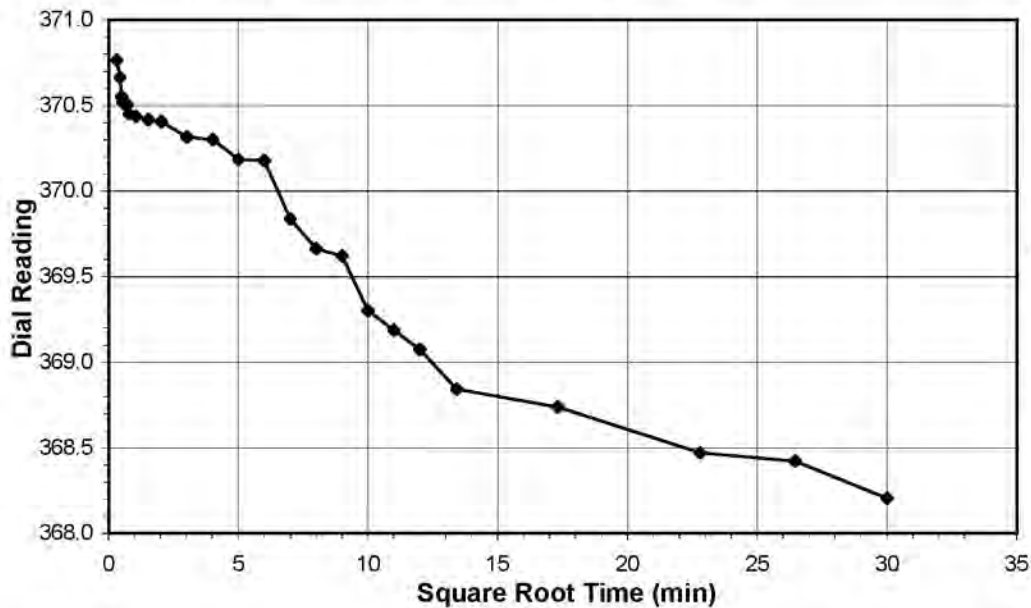
Tested By CLK Date 11/14/13 Checked By TM Date 12/5/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

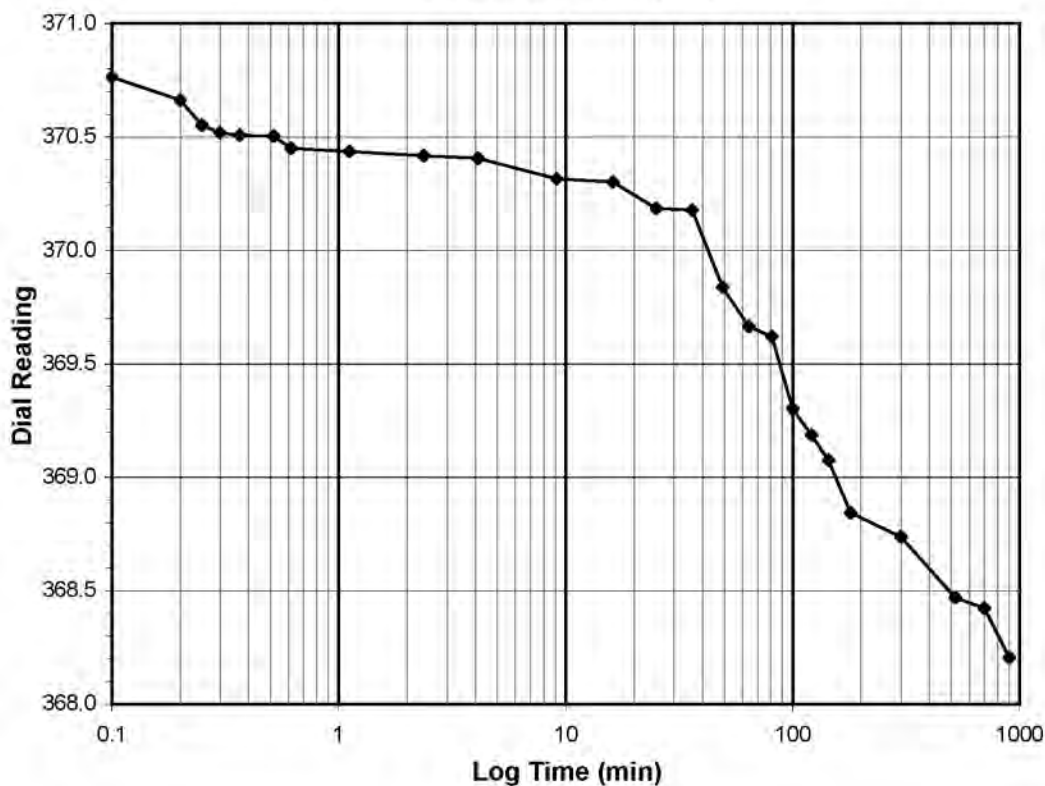
Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 32.0-8.0
 Final Reading (div) 368.2
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 8:57:38

Elapsed Time (min)	Dial Reading (div)
Initial	506.5
0.10	370.8
0.20	370.7
0.25	370.6
0.30	370.5
0.37	370.5
0.52	370.5
0.62	370.4
1.12	370.4
2.37	370.4
4.12	370.4
9.12	370.3
16.12	370.3
25.12	370.2
36.12	370.2
49.12	369.8
64.12	369.7
81.12	369.6
100.12	369.3
121.13	369.2
144.13	369.1
180.13	368.8
300.13	368.7
520.13	368.5
700.13	368.4
900.20	368.2



Tested By CLK Date 11/15/13 Checked By TM Date 12/5/13



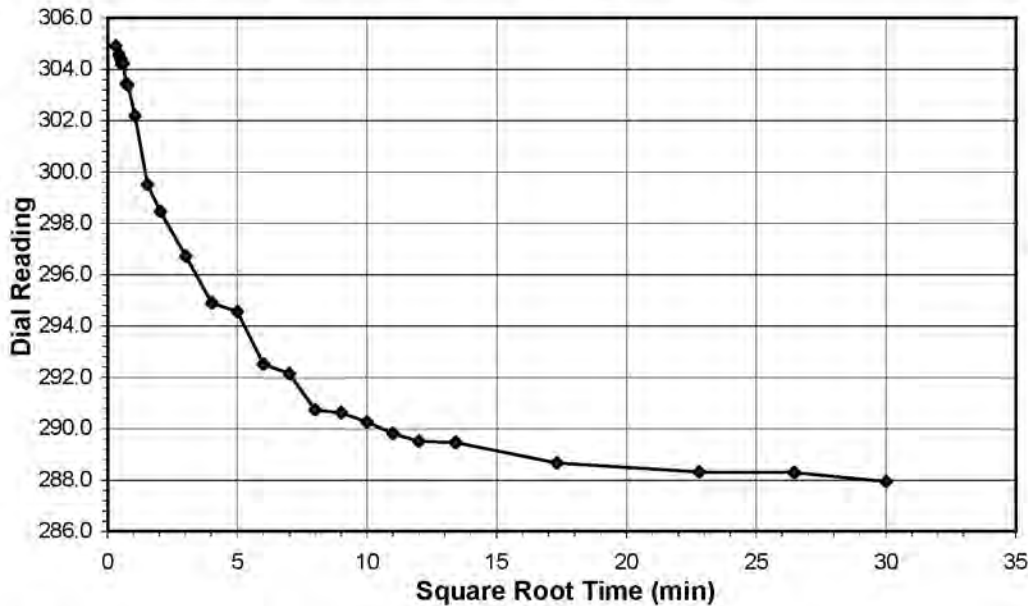
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

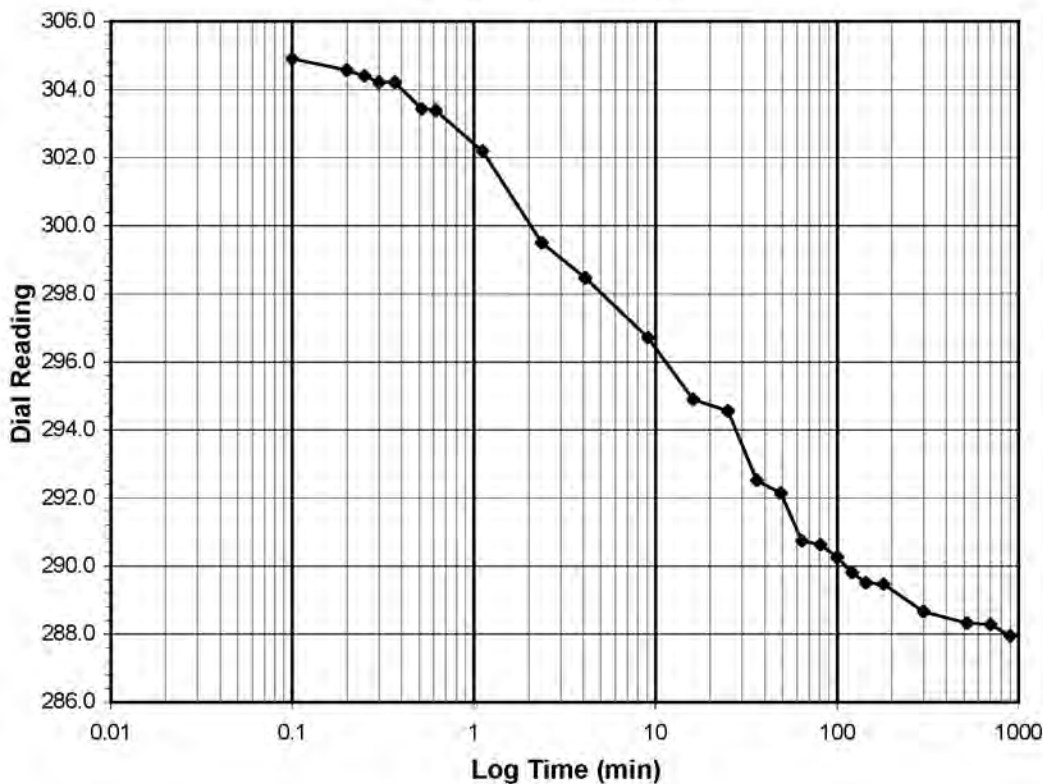
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 8.0-2.0
 Final Reading (div) 287.9
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/15/13
 Start Time 23:57:50

Elapsed Time (min)	Dial Reading (div)
Initial	368.2
0.10	304.9
0.20	304.6
0.25	304.4
0.30	304.2
0.37	304.2
0.52	303.4
0.62	303.4
1.12	302.2
2.37	299.5
4.12	298.5
9.12	296.7
16.12	294.9
25.12	294.6
36.12	292.5
49.12	292.1
64.12	290.7
81.12	290.6
100.12	290.3
121.12	289.8
144.13	289.5
180.13	289.5
300.13	288.7
520.13	288.3
700.13	288.3
900.12	287.9



Tested By CLK Date 11/15/13 Checked By TM Date 12/5/13



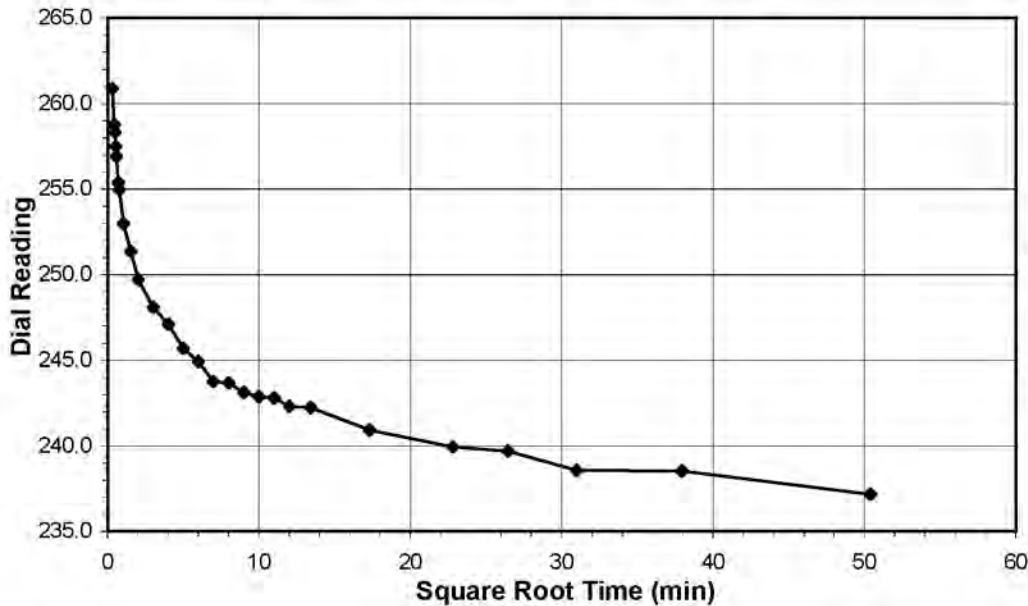
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

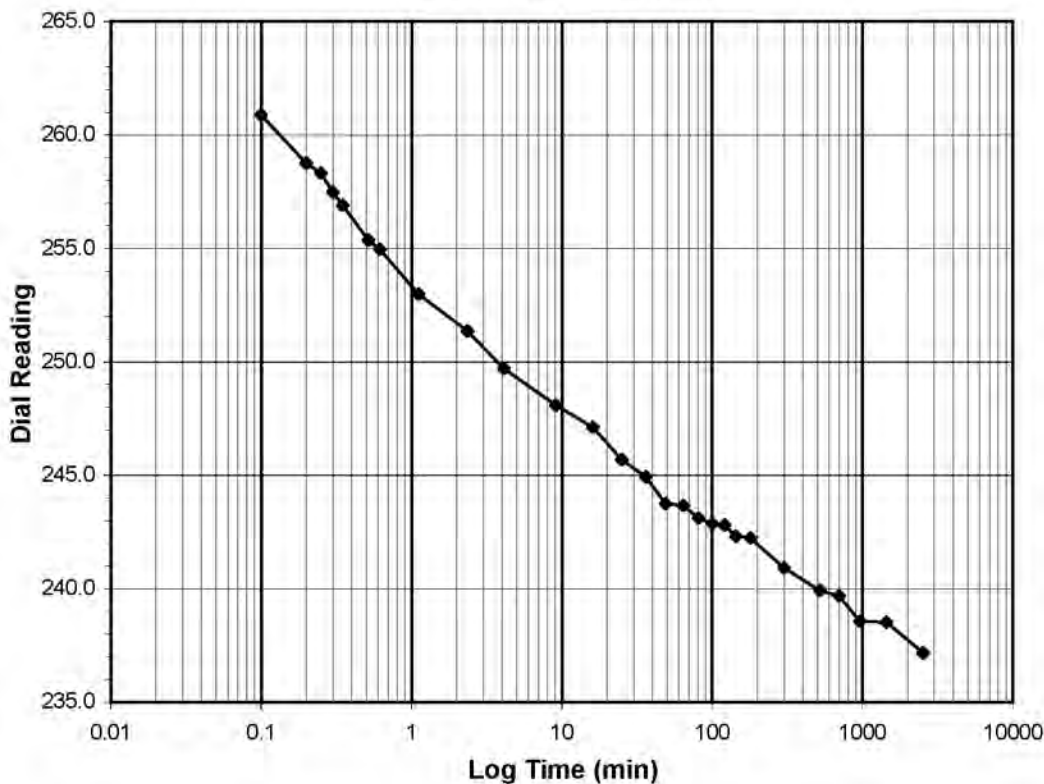
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-0.5
 Final Reading (div) 237.2
 Consolidometer No. G1418
 1 Division (in) 0.0001

Start Date 11/16/13
 Start Time 14:57:57

Elapsed Time (min)	Dial Reading (div)
Initial	287.9
0.10	260.9
0.20	258.7
0.25	258.3
0.30	257.5
0.35	256.9
0.52	255.4
0.62	255.0
1.12	253.0
2.37	251.4
4.12	249.7
9.12	248.1
16.12	247.1
25.12	245.7
36.12	244.9
49.12	243.8
64.13	243.7
81.13	243.1
100.13	242.9
121.13	242.8
144.13	242.3
180.13	242.2
300.13	240.9
520.13	239.9
700.13	239.7
960.13	238.6
1440.13	238.5
2540.95	237.2



Tested By CLK Date 11/16/13 Checked By TM Date 12/5/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

Sample Properties**Initial Final****Water Content**

Tare Number	2726	2683
Wt. Tare & WS (g)	157.09	161.63
Wt. Tare & DS (g)	128.02	130.19
Wt. Water (g)	29.07	31.44
Wt. Tare (g)	6.72	6.53
Wt. DS (g)	121.30	123.66
Water Content (%)	23.97	25.42

Sample Parameters

Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9816
Sample Volume (cm ³)	80.44	78.96
Wt. Wet Sample + Ring (g)	369.89	371.72
Wt. of Ring (g)	214.52	214.52
Wt. of Wet Sample (g)	155.37	157.20
Wet Density (pcf)	120.53	124.23
Wet Density (g/cm ³)	1.93	1.99
Water Content (%)	23.97	25.42
Wt. of Dry Sample (g)	125.33	125.33
Dry Density (pcf)	97.23	99.05
Dry Density (g/cm ³)	1.56	1.59
Void Ratio	0.6880	0.6569
Saturation (%)	91.62	101.79
Specific Gravity	2.63	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.55810	0.68795
0.25	60.1	17.6	42.5	25.292	80.098	1.56475	0.68078
0.5	86.3	27.0	59.3	25.249	79.963	1.56739	0.67795
1	119.0	40.4	78.6	25.200	79.807	1.57045	0.67468
2	157.5	66.6	91.0	25.169	79.708	1.57240	0.67260
4	210.5	97.5	113.0	25.113	79.531	1.57591	0.66887
1	160.5	58.5	102.0	25.141	79.619	1.57416	0.67073
0.25	122.6	28.5	94.1	25.161	79.683	1.57290	0.67207
0.5	135.3	33.9	101.3	25.143	79.625	1.57405	0.67085
1	151.8	48.4	103.4	25.137	79.608	1.57437	0.67051
2	180.1	68.5	111.6	25.117	79.542	1.57568	0.66912
4	222.4	97.9	124.5	25.084	79.438	1.57774	0.66694
8	288.4	129.5	158.8	24.997	79.162	1.58325	0.66114
16	377.1	176.6	200.5	24.891	78.827	1.58998	0.65411
32	506.5	251.4	255.1	24.752	78.388	1.59889	0.64489
8	368.2	142.9	225.3	24.828	78.628	1.59401	0.64992
2	287.9	89.7	198.3	24.896	78.845	1.58962	0.65449
0.5	237.2	53.4	183.8	24.933	78.961	1.58728	0.65692

Tested By CLK Date 11/6/13 Input Checked By TM Date 12/5/13

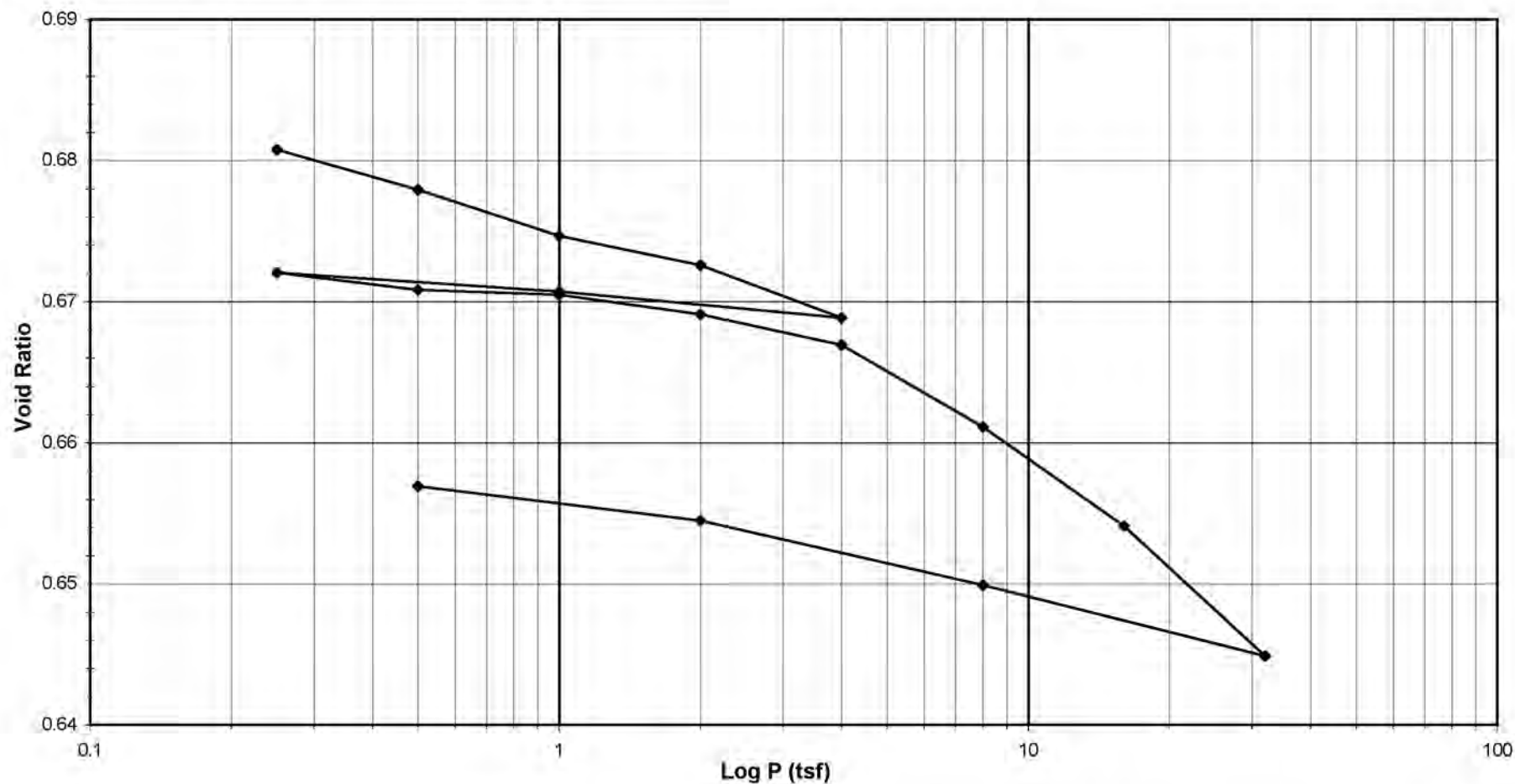
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By CLK Date 11/6/13

Approved By RJO Date 12/5/13

DCN: CT-24 AutoT50-CV Date 11/27/13 Revision: 0

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1418

1 Division = 0.0001 (in)

C_v Test Data Summary

Sample Properties	Initial	Final							
<i>Water Content</i>			Load	Dial	Machine	Corrected	Sample	Time	C_v
Tare Number	2726	2683	Increment	Reading	Deflection	Dial Reading	Height	t₅₀	
				@ t₅₀		@ t₅₀	@ t₅₀		
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm ² /sec)
Wt. Tare & WS (g)	157.09	161.63	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare & DS (g)	128.02	130.19	0.25	50.2	17.6	32.6	25.32	0.46	0.01143
Wt. Water (g)	29.07	31.44	0.5	78.9	27.0	51.9	25.27	0.43	0.01235
Wt. Tare (g)	6.72	6.53	1	107.0	40.4	66.6	25.23	0.61	0.00866
Wt. DS (g)	121.3	123.66	2	149.4	66.6	82.8	25.19	0.25	0.02124
Water Content (%)	23.97	25.42	4	198.4	97.5	100.9	25.14	0.42	0.01248
<i>Sample Parameters</i>			1	NA	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.25	NA	NA	NA	NA	NA	NA
Sample Height (in)	1.0000	0.9816	0.5	130.0	33.9	96.1	25.16	0.18	0.02891
Sample Volume (cm ³)	80.44	78.96	1	150.7	48.4	102.3	25.14	0.35	0.01477
Wt. Wet Sample + Ring (g)	369.89	371.72	2	175.4	68.5	106.9	25.13	0.22	0.02416
Wt. of Ring (g)	214.52	214.52	4	208.3	97.9	110.4	25.12	0.28	0.01860
Wt. of Wet Sample (g)	155.37	157.20	8	282.9	129.5	153.4	25.01	2.06	0.00250
Wet Density (pcf)	120.53	124.23	16	354.7	176.6	178.0	24.95	0.20	0.02554
Wet Density (g/cm ³)	1.93	1.99	32	484.5	251.4	233.1	24.81	0.31	0.01645
Water Content (%)	23.97	25.42	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	125.33	125.33	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	97.23	99.05	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm ³)	1.56	1.59							
Void Ratio	0.6880	0.6569							
Saturation (%)	91.62	101.79							
Specific Gravity	2.63	Measured							

Tested By CLK Date 11/6/13 Input Checked By TM Date 12/5/13

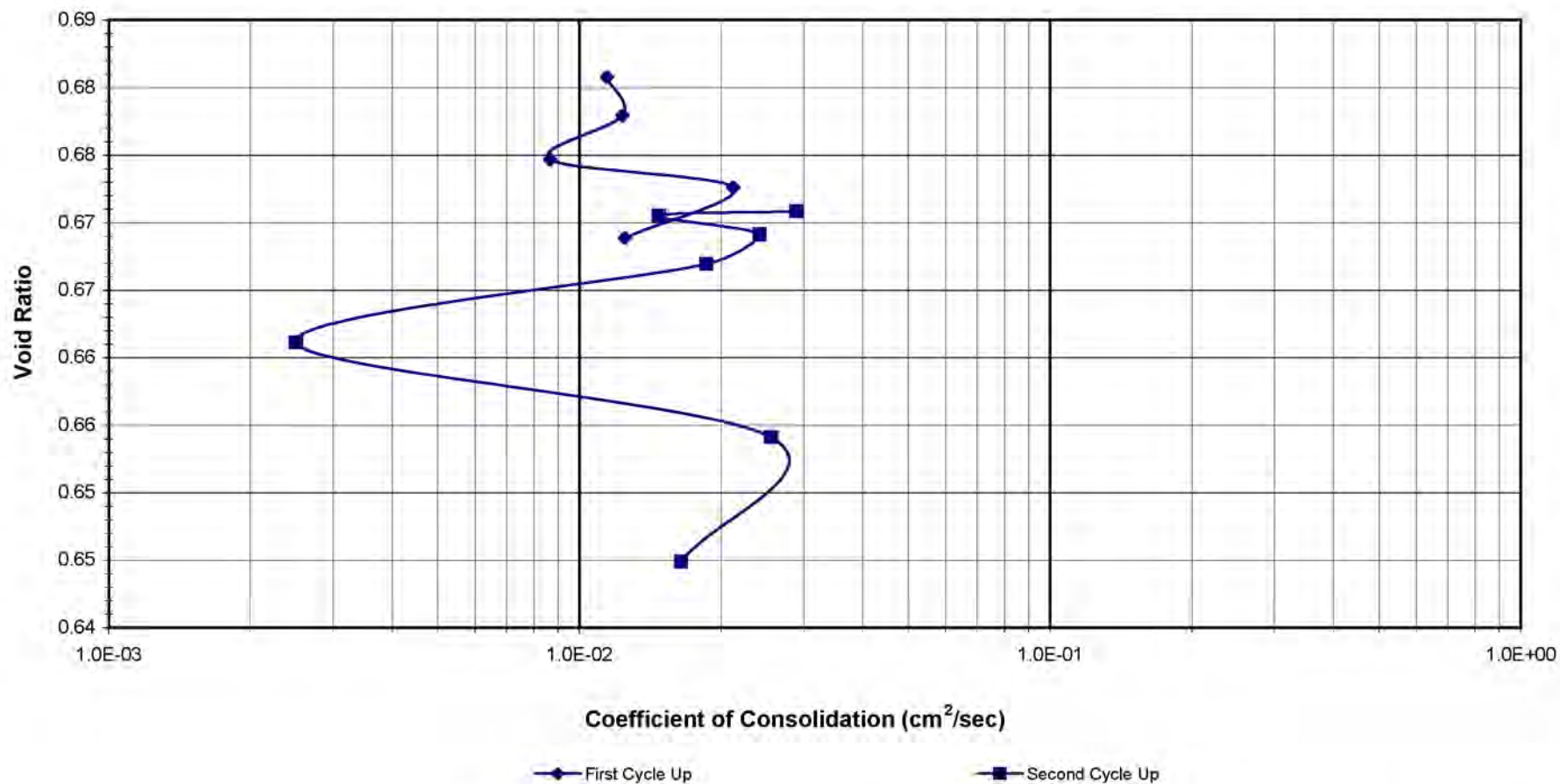
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-015

Boring No. R-7-1
 Depth (ft) 338.7-338.9
 Sample No. ST-18
 Visual Description Gray Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By CLK Date 11/6/13

Approved By RJO Date 12/5/13

**One Dimensional Consolidation**

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	338.7-338.9
Project No.	2013-465-001	Sample No.	ST-18
Lab ID #	2013-465-001-015		

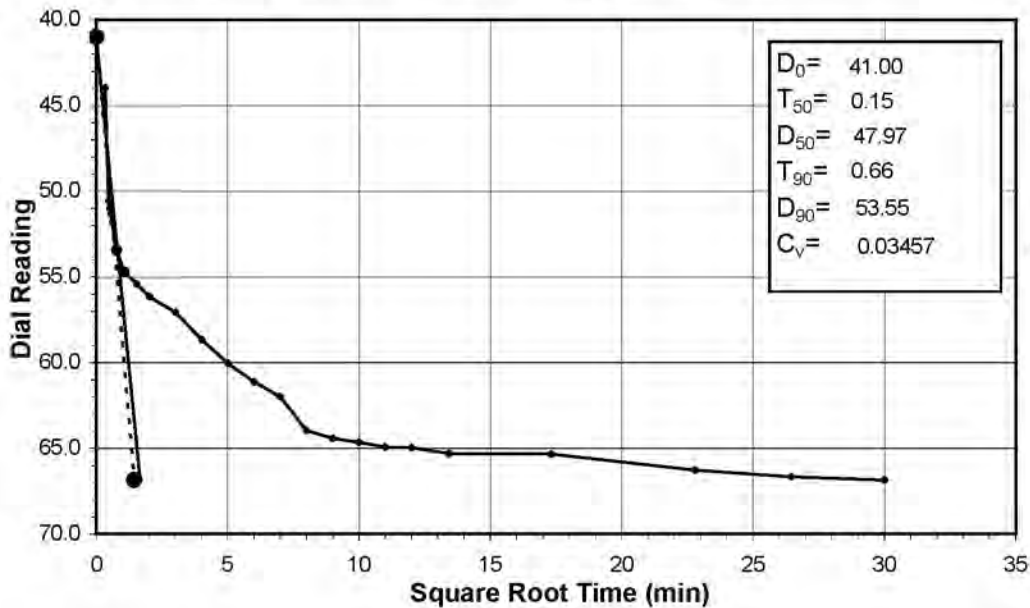
Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1418	1/9/14
Load Cell	G1419	1/9/14
LVDT	G1420	1/9/14

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

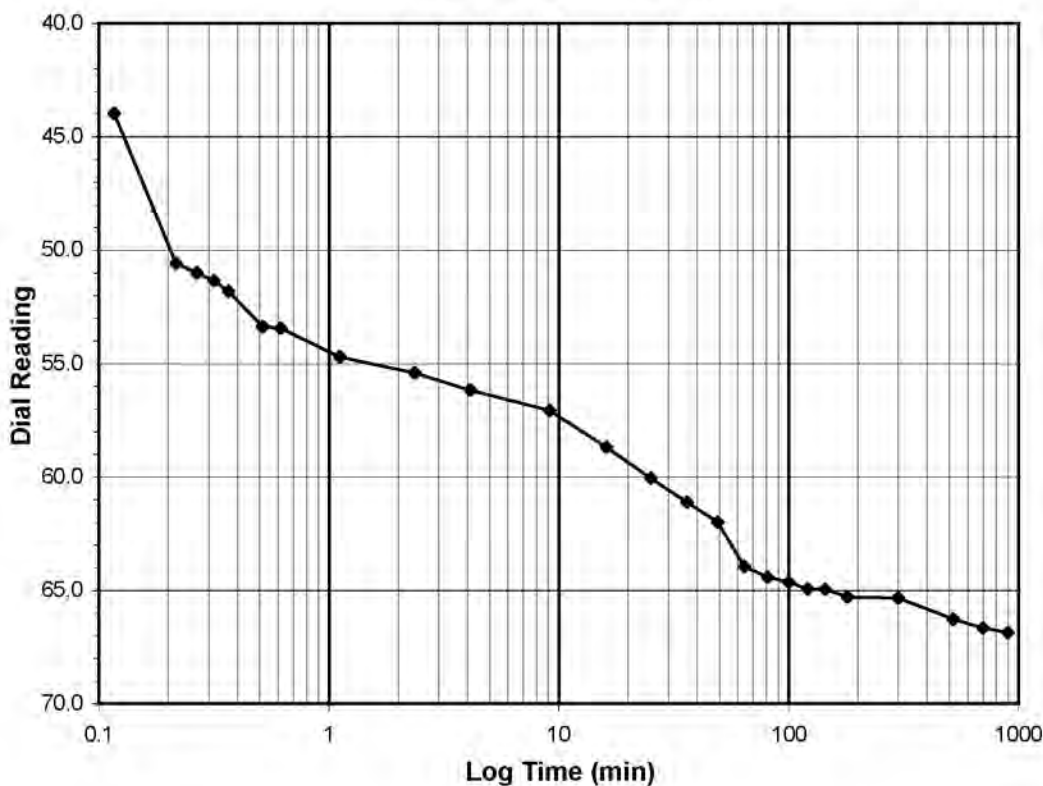
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.0-0.25
 Final Reading (div) 66.9
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/18/13
 Start Time 13:47:26

Elapsed Time (min)	Dial Reading (div)
Initial	0.0
0.12	44.0
0.22	50.6
0.27	51.0
0.32	51.3
0.37	51.8
0.52	53.4
0.62	53.4
1.12	54.7
2.37	55.4
4.13	56.2
9.13	57.1
16.13	58.7
25.13	60.1
36.13	61.1
49.13	62.0
64.13	63.9
81.13	64.4
100.13	64.6
121.13	64.9
144.13	65.0
180.13	65.3
300.13	65.3
520.13	66.3
700.13	66.6
900.38	66.9



Tested By DB Date 11/18/13 Checked By TM Date 12/6/13



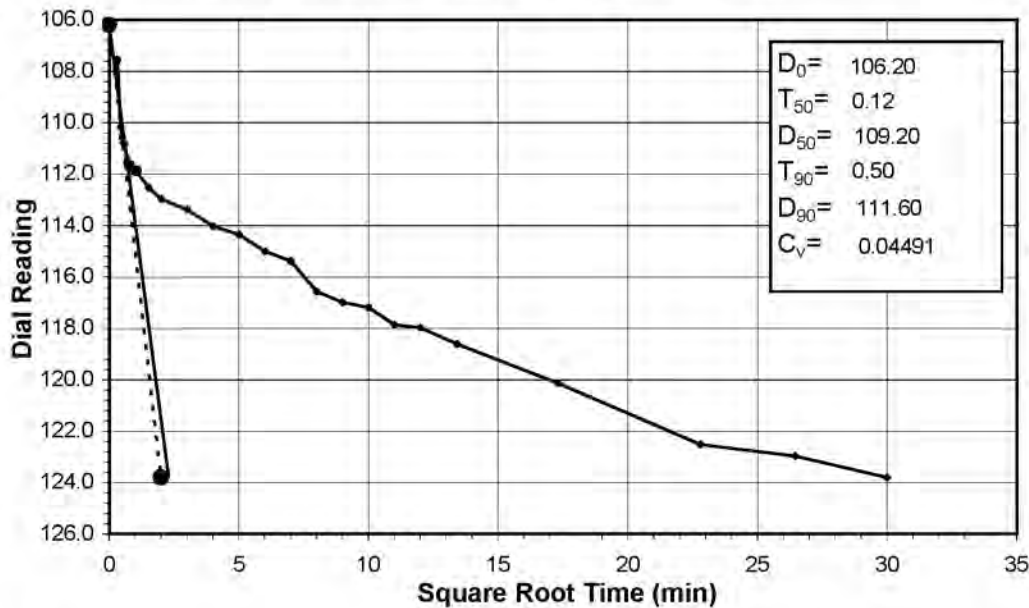
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

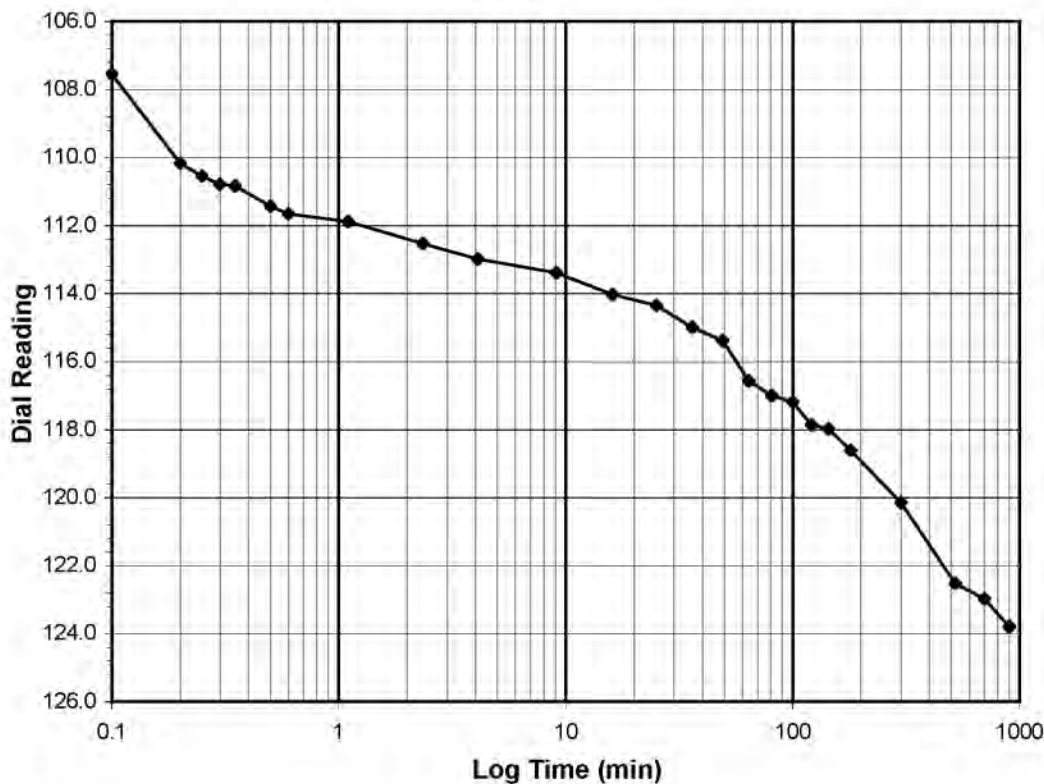
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.25-0.5
 Final Reading (div) 123.8
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/19/13
 Start Time 4:47:49

Elapsed Time (min)	Dial Reading (div)
Initial	66.9
0.10	107.5
0.20	110.2
0.25	110.5
0.30	110.8
0.35	110.8
0.50	111.4
0.60	111.7
1.10	111.9
2.35	112.5
4.10	113.0
9.10	113.4
16.10	114.0
25.10	114.3
36.10	115.0
49.10	115.4
64.12	116.6
81.12	117.0
100.12	117.2
121.12	117.9
144.12	118.0
180.12	118.6
300.12	120.1
520.12	122.5
700.12	123.0
900.35	123.8



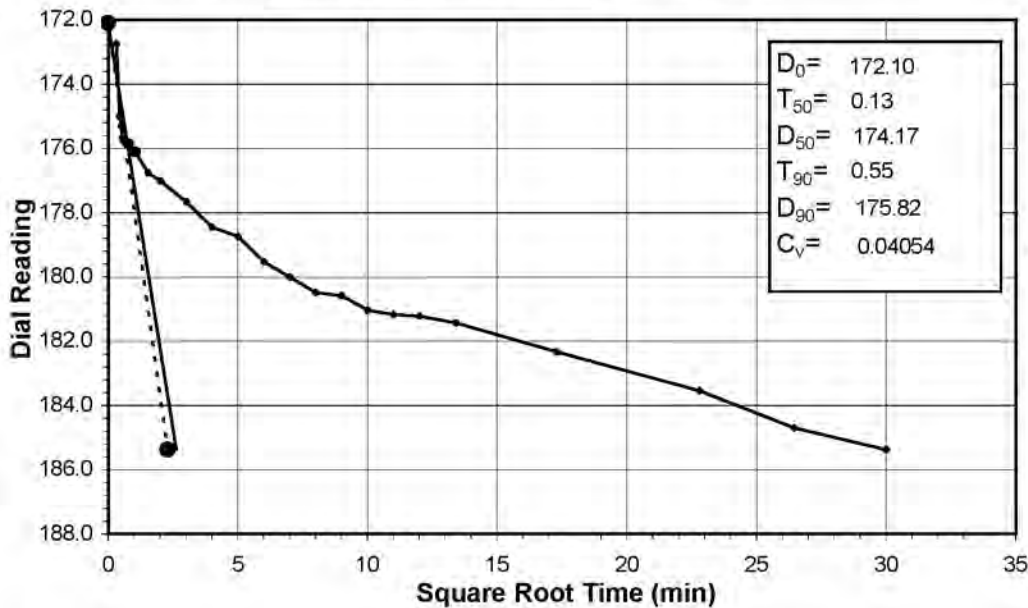
Tested By DB Date 11/19/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

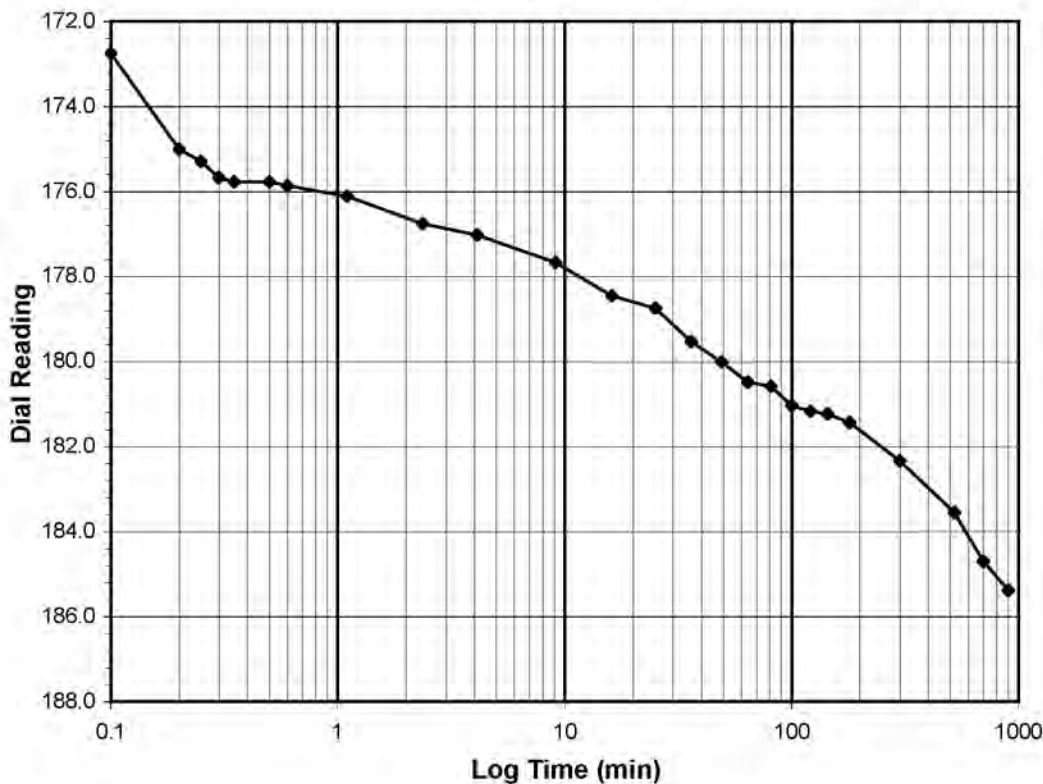
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 0.5-1.0
 Final Reading (div) 185.4
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/19/13
 Start Time 19:48:10

Elapsed Time (min)	Dial Reading (div)
Initial	123.8
0.10	172.7
0.20	175.0
0.25	175.3
0.30	175.7
0.35	175.8
0.50	175.8
0.60	175.9
1.10	176.1
2.37	176.8
4.12	177.0
9.12	177.7
16.12	178.5
25.12	178.7
36.12	179.5
49.12	180.0
64.12	180.5
81.12	180.6
100.12	181.0
121.12	181.2
144.12	181.2
180.12	181.4
300.12	182.3
520.13	183.5
700.13	184.7
900.18	185.4



Tested By DB Date 11/19/13 Checked By TM Date 12/6/13



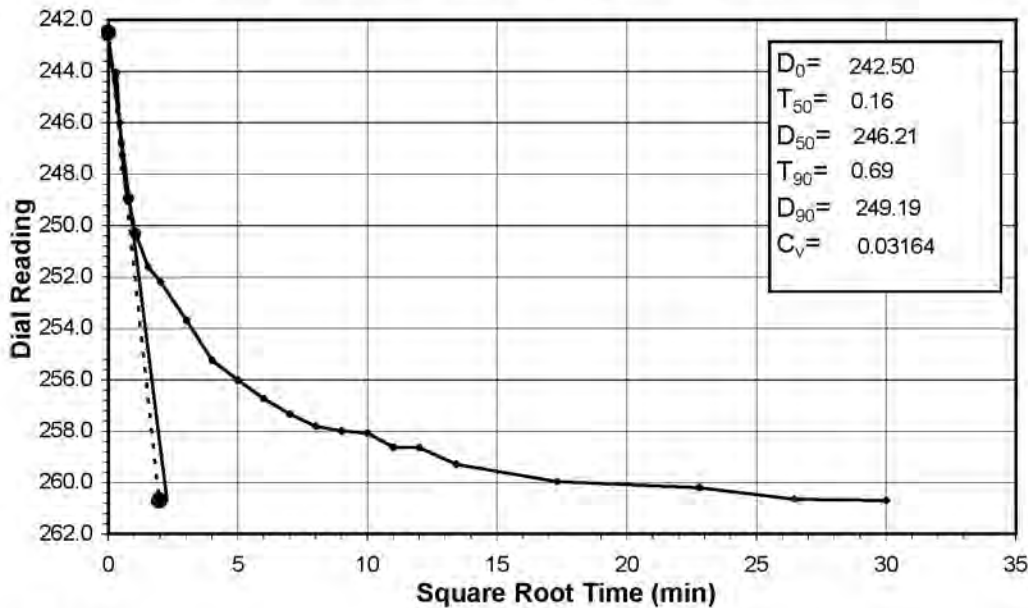
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

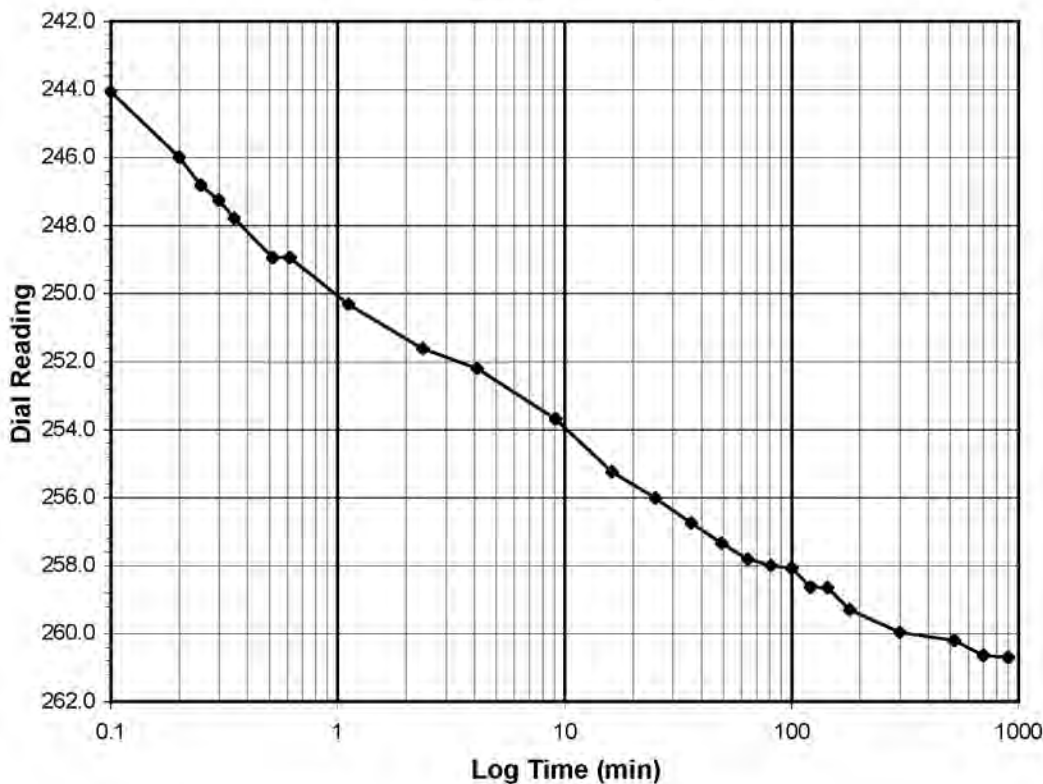
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 260.7
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/20/13
 Start Time 10:48:21

Elapsed Time (min)	Dial Reading (div)
Initial	185.4
0.10	244.1
0.20	246.0
0.25	246.8
0.30	247.2
0.35	247.8
0.52	248.9
0.62	248.9
1.12	250.3
2.37	251.6
4.12	252.2
9.12	253.7
16.12	255.2
25.12	256.0
36.12	256.7
49.12	257.3
64.12	257.8
81.13	258.0
100.13	258.1
121.13	258.6
144.13	258.6
180.13	259.3
300.13	260.0
520.13	260.2
700.13	260.6
900.30	260.7



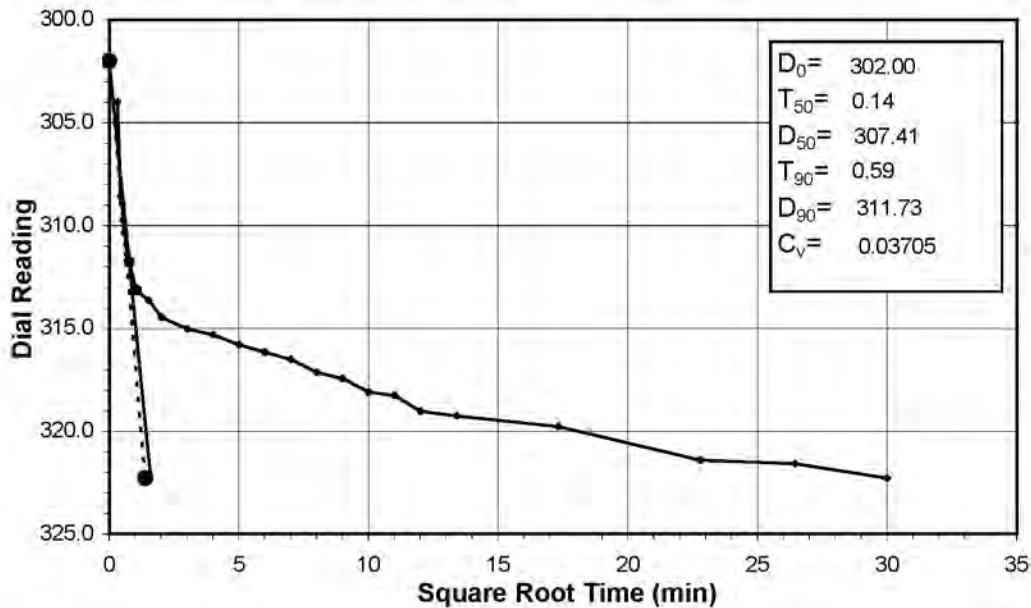
Tested By DB Date 11/20/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

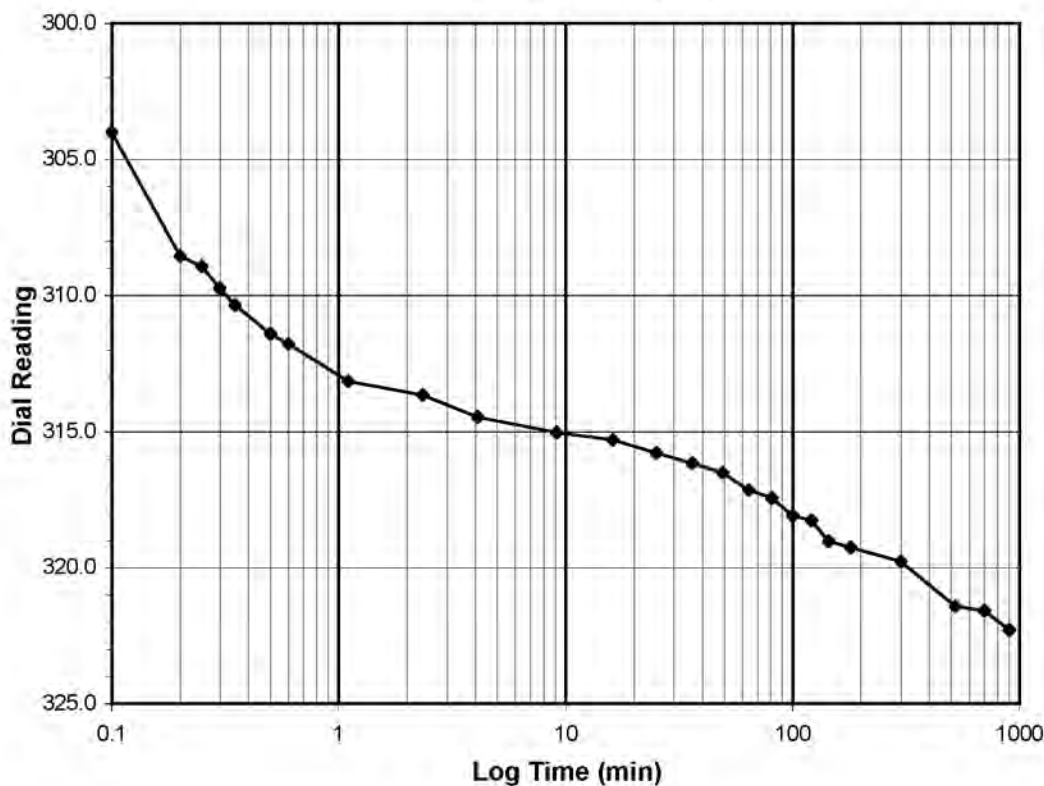
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **2.0-4.0**
 Final Reading (div) **322.3**
 Consolidometer No. **G1424**
 1 Division (in) **0.0001**

Start Date 11/21/13
 Start Time 1:48:39

Elapsed Time (min)	Dial Reading (div)
Initial	260.7
0.10	304.0
0.20	308.6
0.25	308.9
0.30	309.7
0.35	310.3
0.50	311.4
0.60	311.8
1.10	313.1
2.35	313.6
4.10	314.5
9.12	315.0
16.12	315.3
25.12	315.8
36.12	316.2
49.12	316.5
64.12	317.1
81.12	317.4
100.12	318.1
121.12	318.3
144.12	319.0
180.12	319.3
300.12	319.8
520.12	321.4
700.12	321.6
900.03	322.3



Tested By DB Date 11/21/13 Checked By TM Date 12/6/13



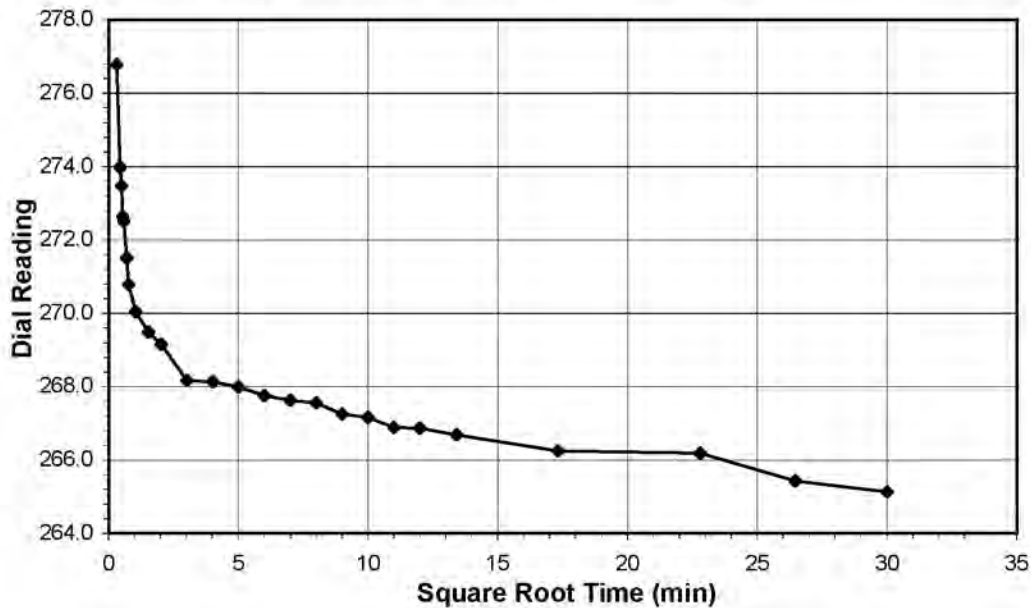
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

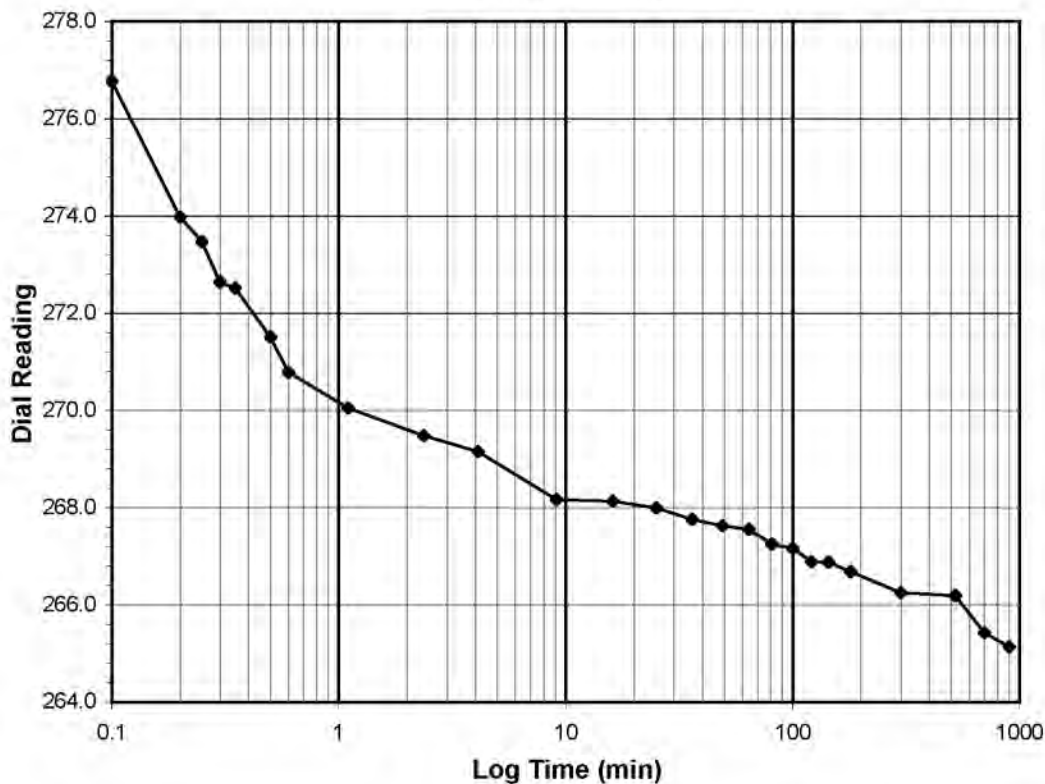
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 4.0-1.0
 Final Reading (div) 265.1
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/21/13
 Start Time 16:48:41

Elapsed Time (min)	Dial Reading (div)
Initial	322.3
0.10	276.8
0.20	274.0
0.25	273.5
0.30	272.6
0.35	272.5
0.50	271.5
0.60	270.8
1.10	270.0
2.37	269.5
4.12	269.2
9.12	268.2
16.12	268.1
25.12	268.0
36.12	267.8
49.12	267.6
64.12	267.6
81.12	267.3
100.12	267.2
121.12	266.9
144.12	266.9
180.12	266.7
300.12	266.3
520.12	266.2
700.12	265.4
900.23	265.1



Tested By DB Date 11/21/13 Checked By TM Date 12/6/13



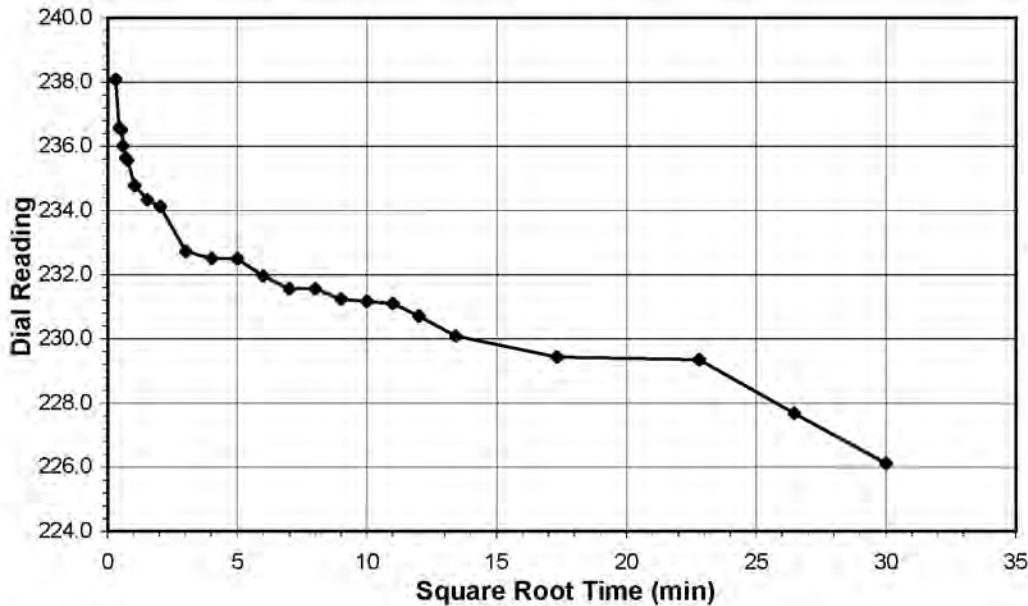
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

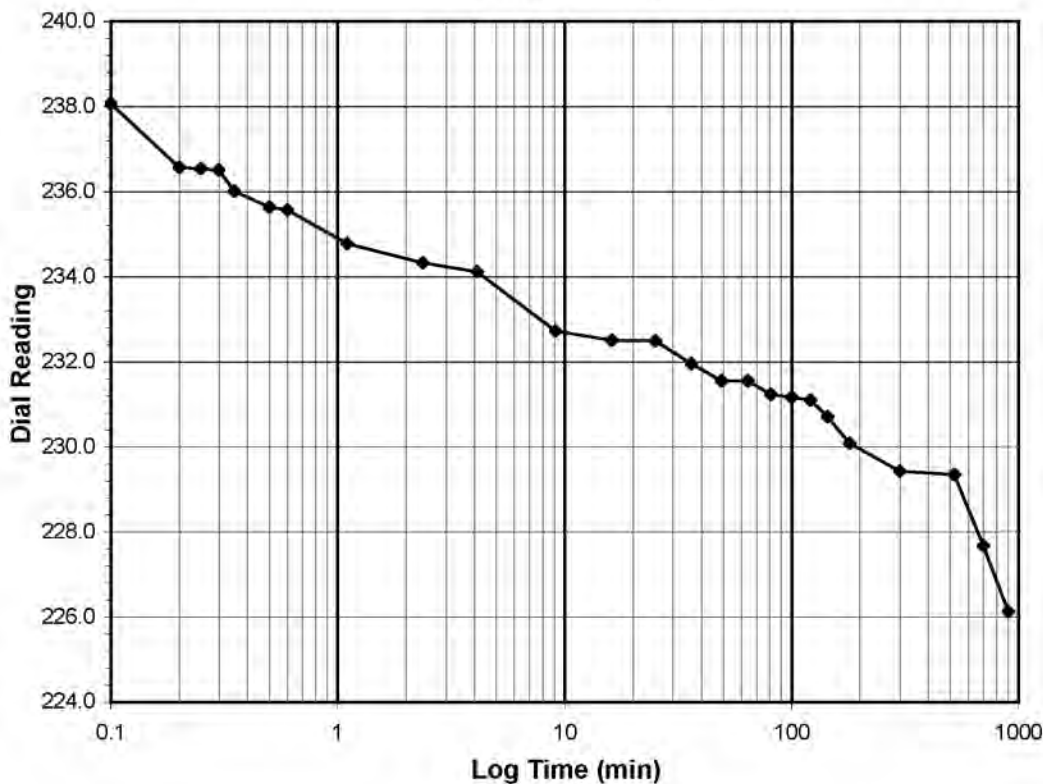
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-0.25
 Final Reading (div) 226.1
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 7:48:55

Elapsed Time (min)	Dial Reading (div)
Initial	265.1
0.10	238.1
0.20	236.6
0.25	236.5
0.30	236.5
0.35	236.0
0.50	235.6
0.60	235.6
1.10	234.8
2.37	234.3
4.12	234.1
9.12	232.7
16.12	232.5
25.12	232.5
36.12	232.0
49.12	231.6
64.12	231.6
81.12	231.2
100.12	231.2
121.12	231.1
144.12	230.7
180.12	230.1
300.12	229.4
520.12	229.3
700.12	227.7
900.23	226.1



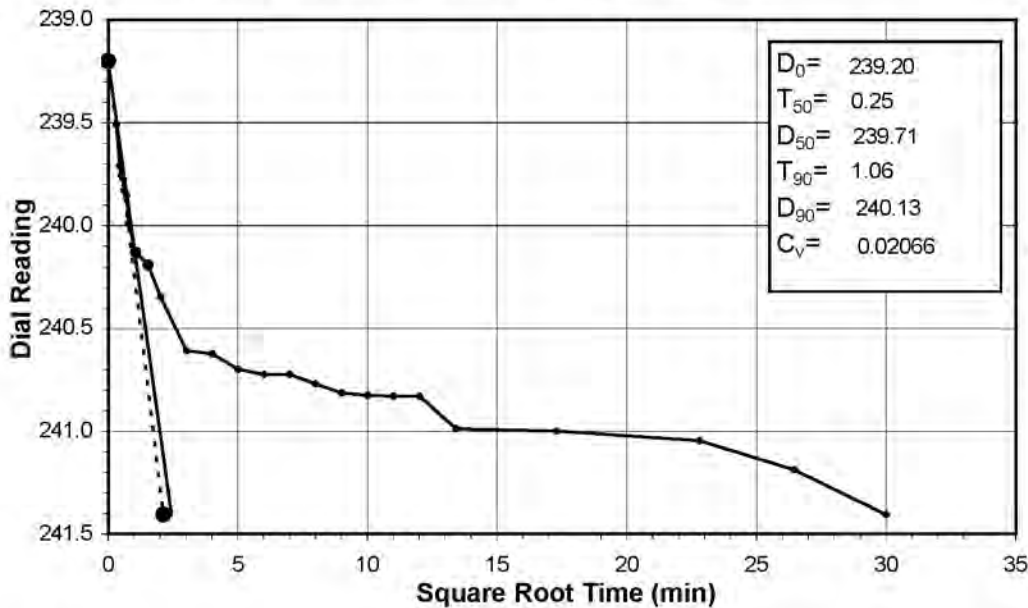
Tested By DB Date 11/22/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

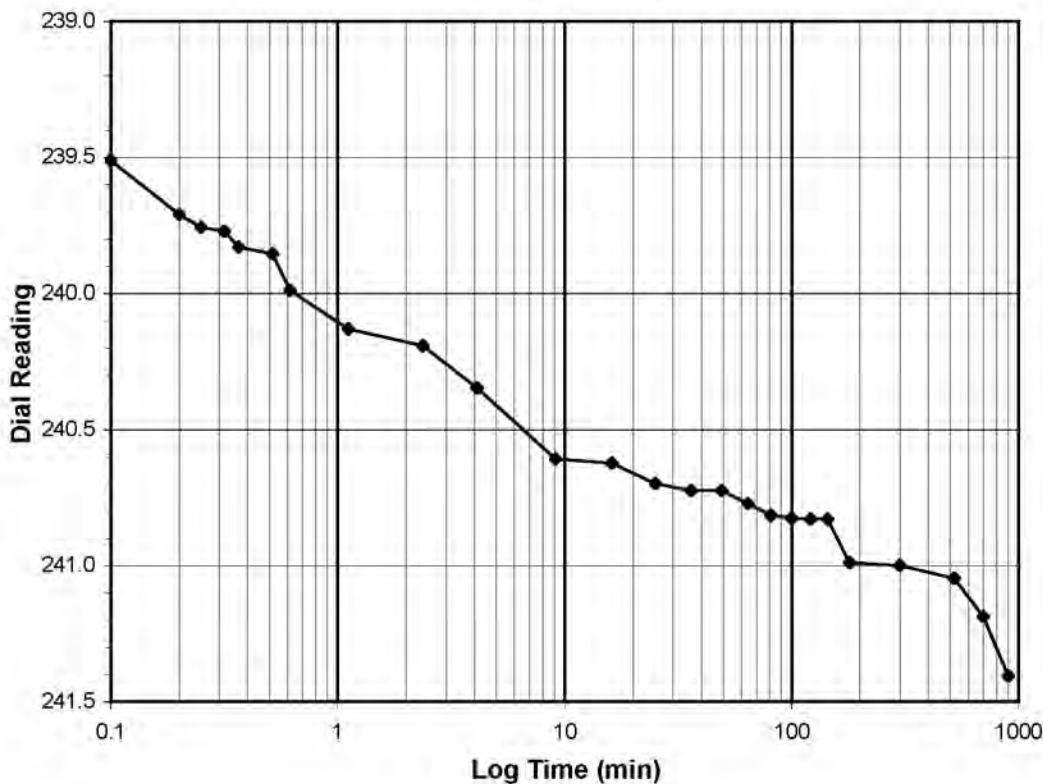
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **0.25-0.5**
 Final Reading (div) **241.4**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001

Start Date 11/22/13
 Start Time 22:49:09

Elapsed Time (min)	Dial Reading (div)
Initial	226.1
0.10	239.5
0.20	239.7
0.25	239.8
0.32	239.8
0.37	239.8
0.52	239.9
0.62	240.0
1.12	240.1
2.37	240.2
4.12	240.3
9.12	240.6
16.12	240.6
25.12	240.7
36.12	240.7
49.12	240.7
64.12	240.8
81.12	240.8
100.13	240.8
121.13	240.8
144.13	240.8
180.13	241.0
300.13	241.0
520.13	241.0
700.13	241.2
900.23	241.4



Tested By DB Date 11/22/13 Checked By TM Date 12/6/13



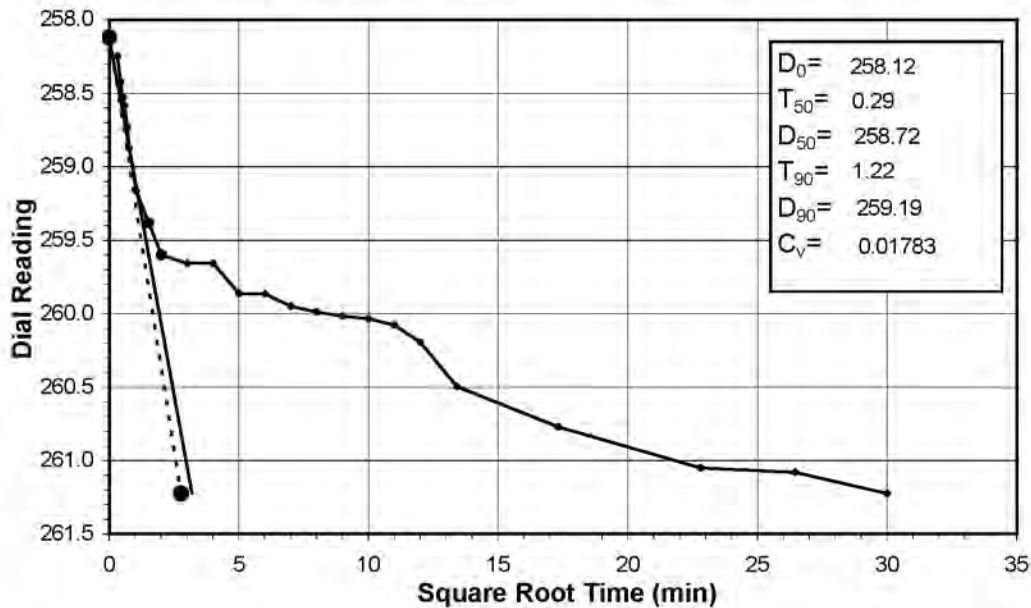
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

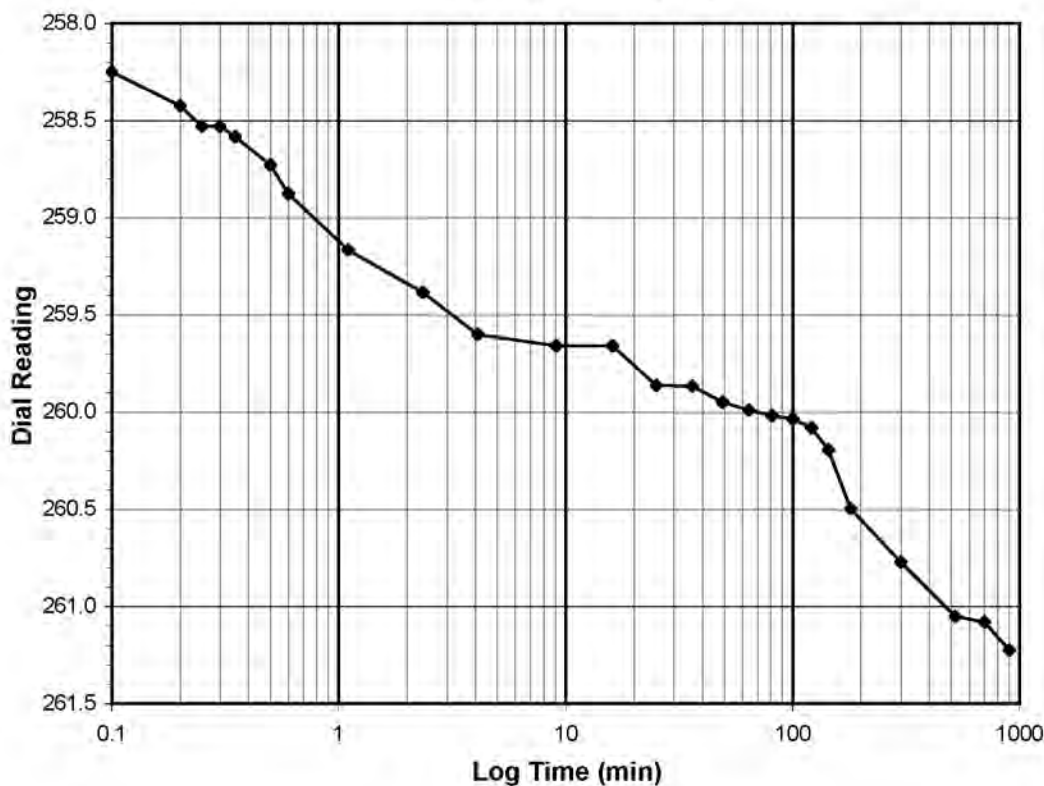
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 0.5-1.0
 Final Reading (div) 261.2
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/23/13
 Start Time 13:49:24

Elapsed Time (min)	Dial Reading (div)
Initial	241.4
0.10	258.2
0.20	258.4
0.25	258.5
0.30	258.5
0.35	258.6
0.50	258.7
0.60	258.9
1.10	259.2
2.35	259.4
4.10	259.6
9.10	259.7
16.10	259.7
25.10	259.9
36.10	259.9
49.10	259.9
64.10	260.0
81.10	260.0
100.10	260.0
121.12	260.1
144.12	260.2
180.12	260.5
300.12	260.8
520.12	261.0
700.12	261.1
900.22	261.2



Tested By DB Date 11/23/13 Checked By TM Date 12/6/13



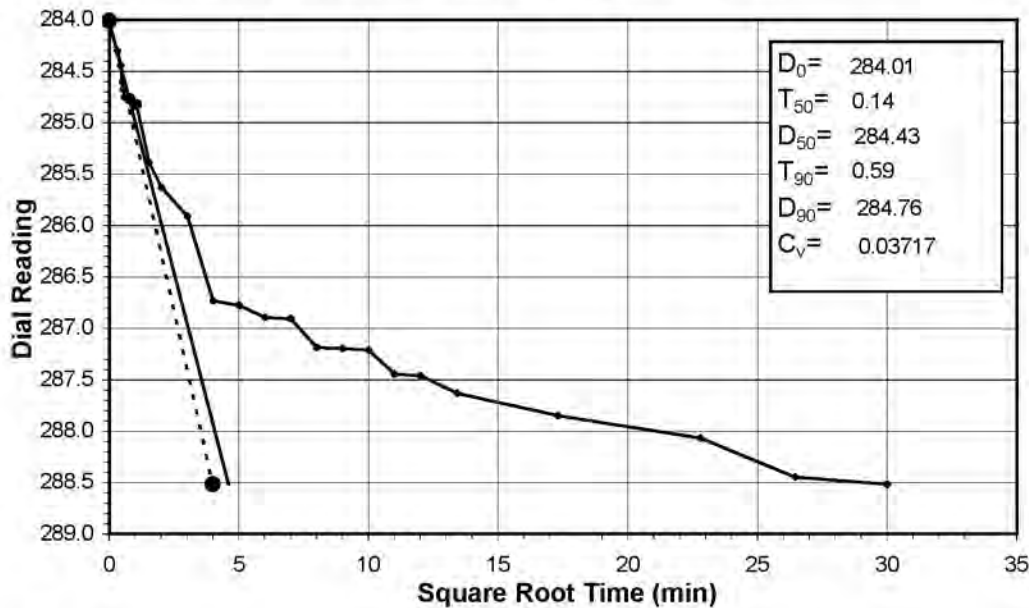
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

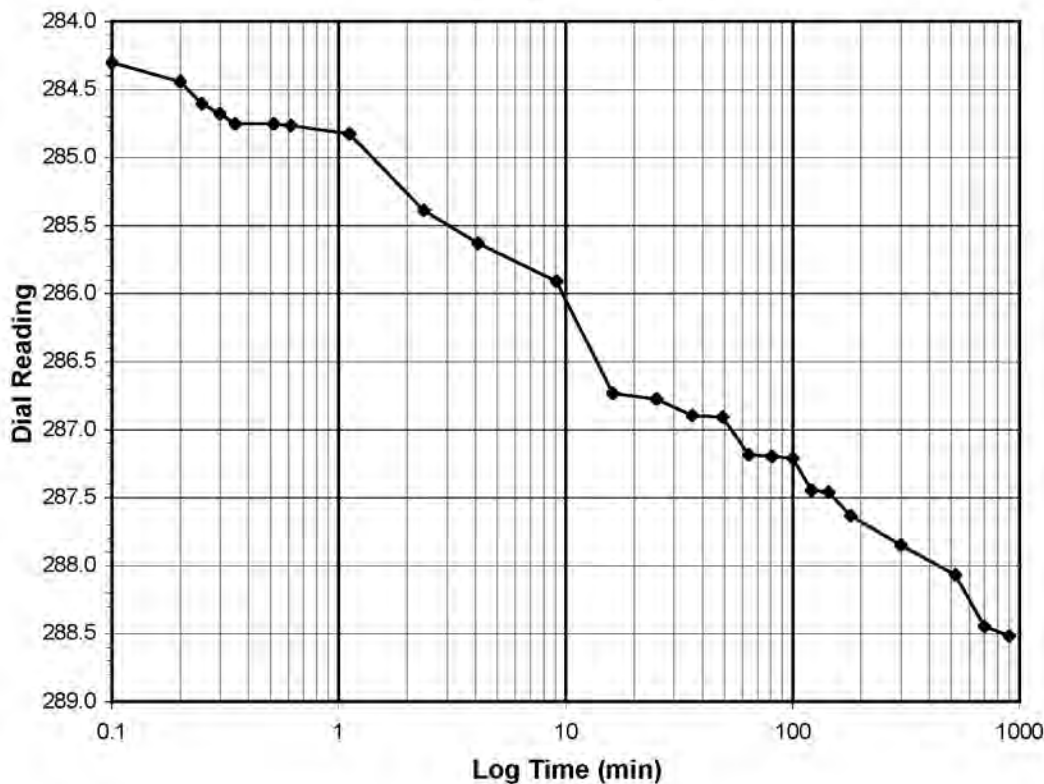
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 1.0-2.0
 Final Reading (div) 288.5
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/24/13
 Start Time 4:49:37

Elapsed Time (min)	Dial Reading (div)
Initial	261.2
0.10	284.3
0.20	284.4
0.25	284.6
0.30	284.7
0.35	284.8
0.52	284.8
0.62	284.8
1.12	284.8
2.37	285.4
4.12	285.6
9.12	285.9
16.12	286.7
25.12	286.8
36.12	286.9
49.12	286.9
64.12	287.2
81.12	287.2
100.12	287.2
121.12	287.4
144.12	287.5
180.13	287.6
300.13	287.8
520.13	288.1
700.13	288.4
900.32	288.5



Tested By DB Date 11/24/13 Checked By TM Date 12/6/13

DCN: CT-24 AutoT50-CV Date: 11/27/13 Revision: 0

CONSOL-Auto T50-Cv



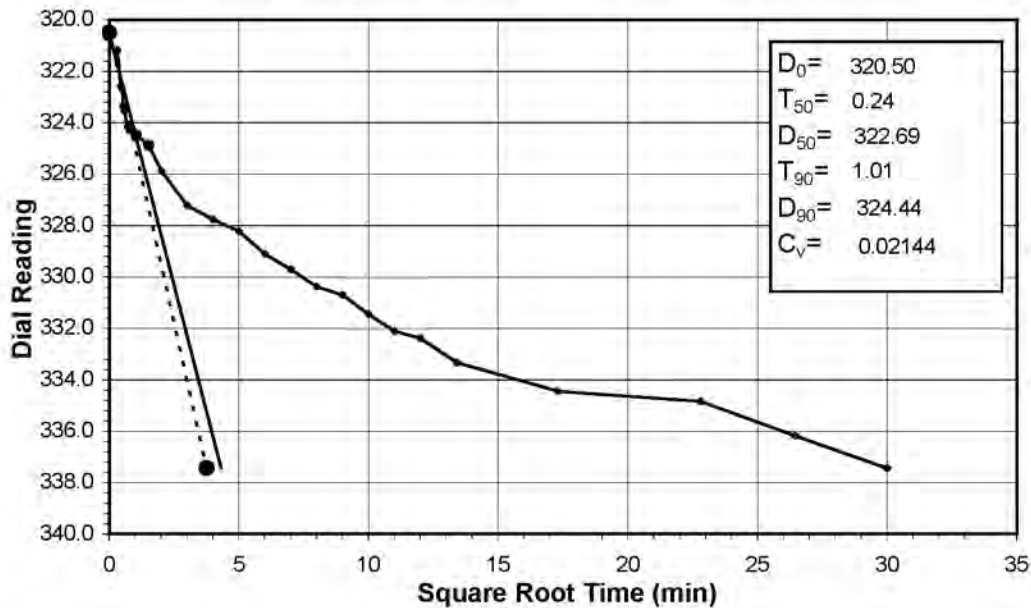
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

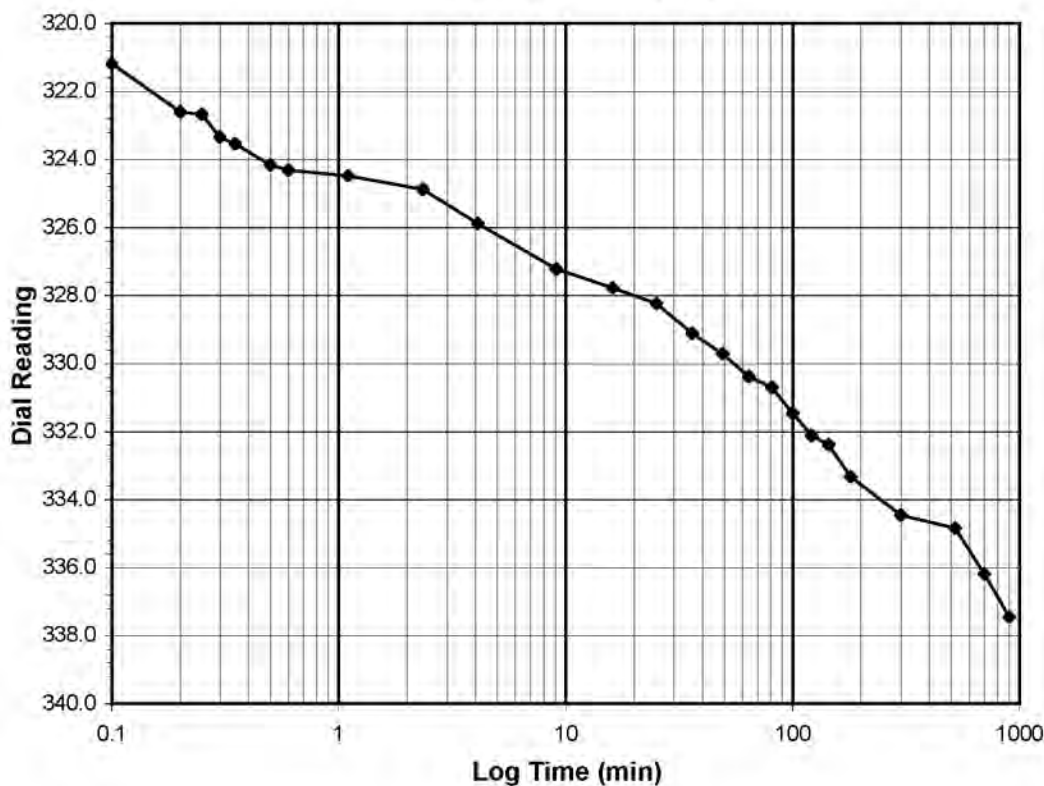
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-4.0
 Final Reading (div) 337.4
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/24/13
 Start Time 19:49:56

Elapsed Time (min)	Dial Reading (div)
Initial	288.5
0.10	321.2
0.20	322.6
0.25	322.7
0.30	323.3
0.35	323.5
0.50	324.2
0.60	324.3
1.10	324.5
2.35	324.9
4.10	325.9
9.10	327.2
16.10	327.8
25.12	328.2
36.12	329.1
49.12	329.7
64.12	330.4
81.12	330.7
100.12	331.5
121.12	332.1
144.12	332.4
180.12	333.3
300.12	334.5
520.12	334.8
700.12	336.2
900.28	337.4



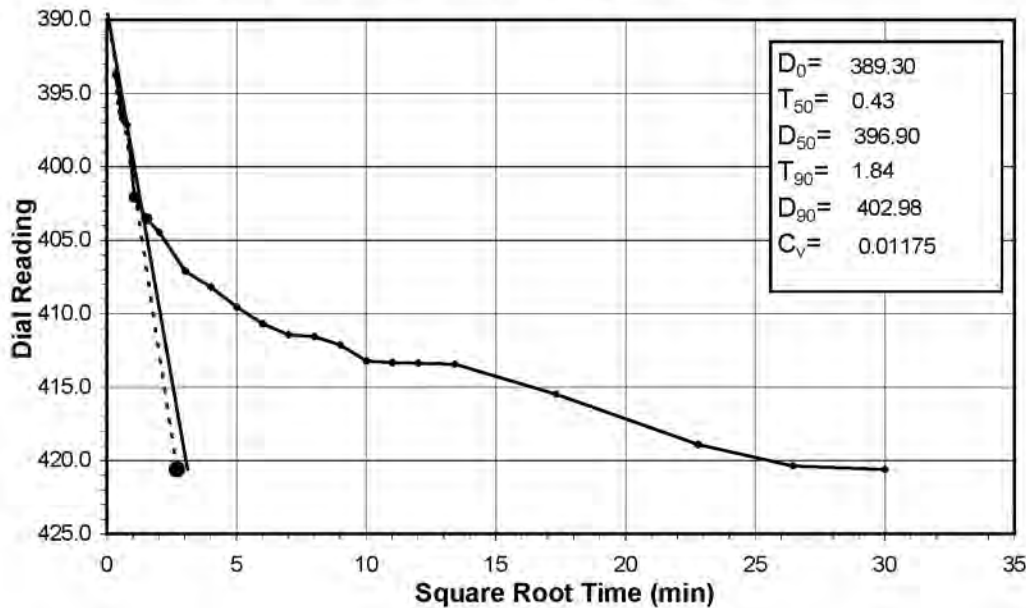
Tested By DB Date 11/24/13 Checked By TM Date 12/6/13

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ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

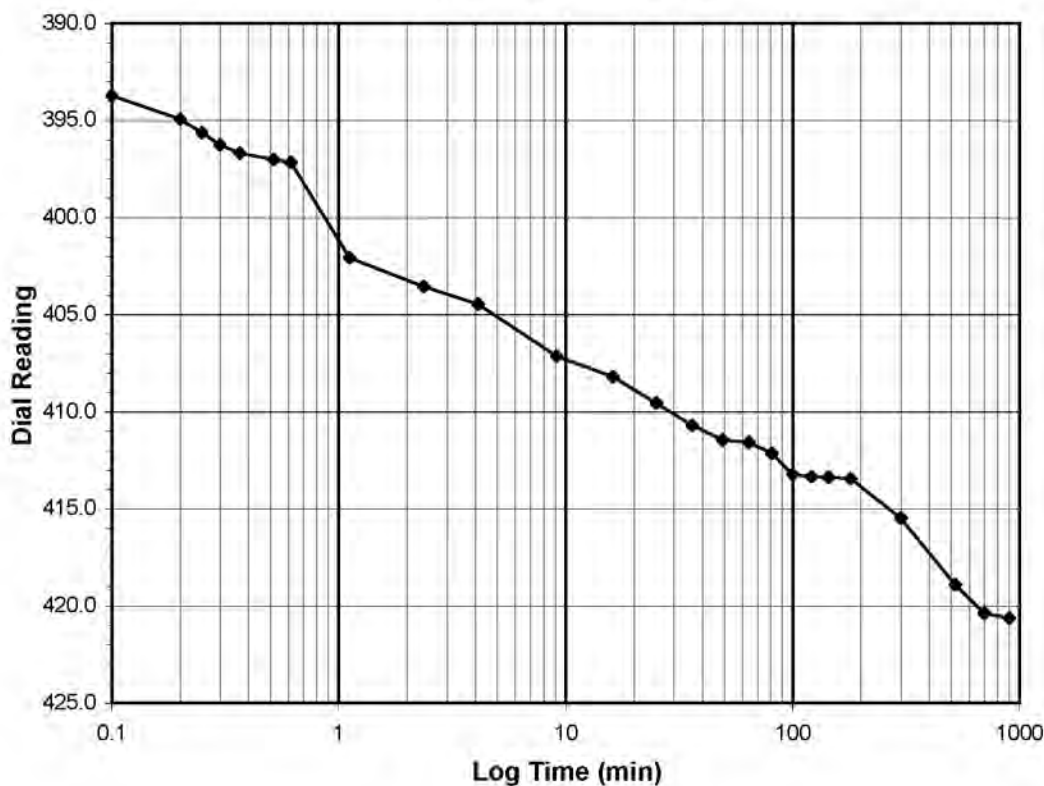
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) **4.0-8.0**
 Final Reading (div) **420.6**
 Consolidometer No. **G1424**
 1 Division (in) 0.0001

Start Date 11/25/13
 Start Time 10:50:13

Elapsed Time (min)	Dial Reading (div)
Initial	337.4
0.10	393.7
0.20	394.9
0.25	395.6
0.30	396.2
0.37	396.7
0.52	397.0
0.62	397.1
1.12	402.1
2.37	403.5
4.12	404.5
9.12	407.1
16.12	408.2
25.12	409.5
36.12	410.7
49.12	411.4
64.12	411.6
81.12	412.1
100.12	413.2
121.12	413.3
144.12	413.4
180.13	413.4
300.13	415.5
520.13	418.9
700.13	420.4
900.30	420.6



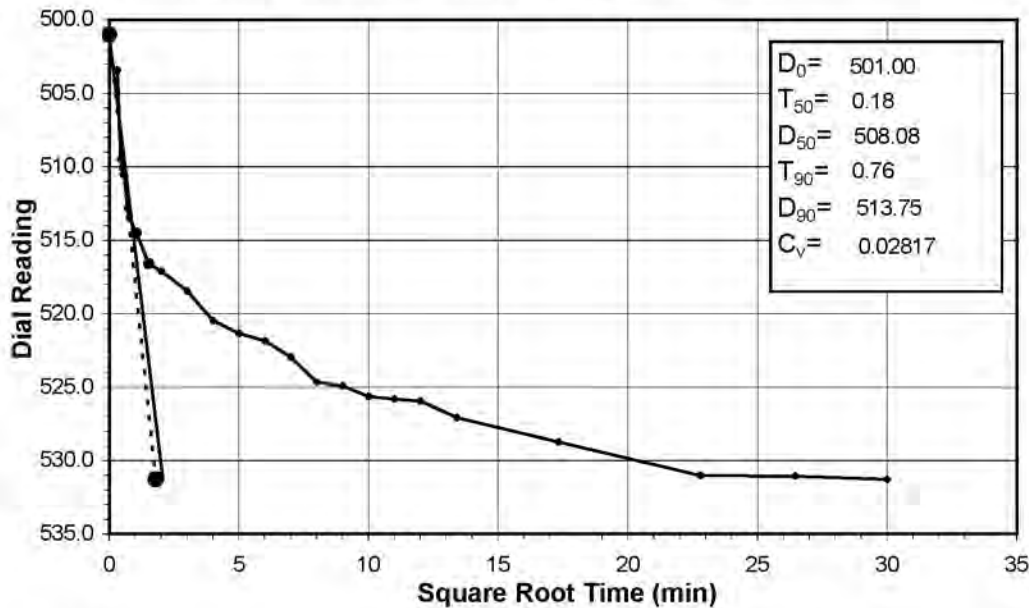
Tested By DB Date 11/25/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

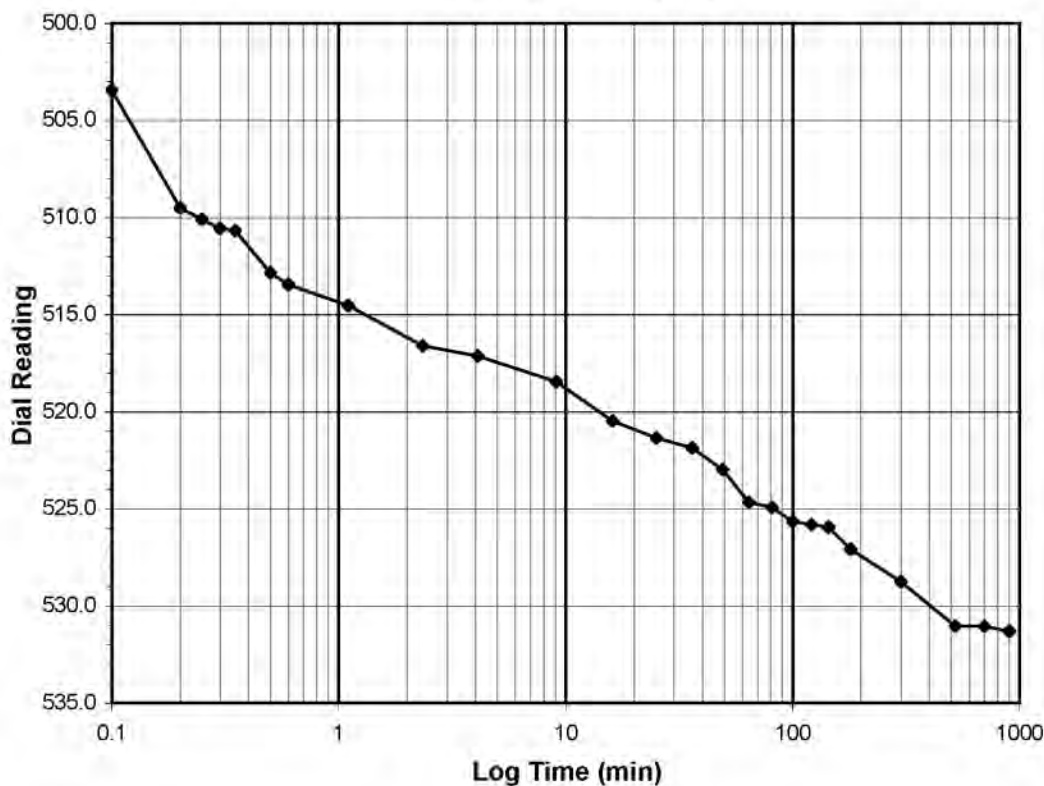
Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 8.0-16.0
 Final Reading (div) 531.3
 Consolidometer No. G1424
 1 Division (in) 0.0001
 Start Date 11/26/13
 Start Time 1:50:31

Elapsed Time (min)	Dial Reading (div)
Initial	420.6
0.10	503.4
0.20	509.5
0.25	510.1
0.30	510.5
0.35	510.7
0.50	512.8
0.60	513.4
1.10	514.5
2.35	516.6
4.10	517.1
9.10	518.4
16.10	520.5
25.10	521.3
36.10	521.8
49.10	523.0
64.12	524.7
81.12	524.9
100.12	525.6
121.12	525.8
144.12	525.9
180.12	527.1
300.12	528.7
520.12	531.0
700.12	531.1
900.33	531.3



Tested By DB Date 11/26/13 Checked By TM Date 12/6/13



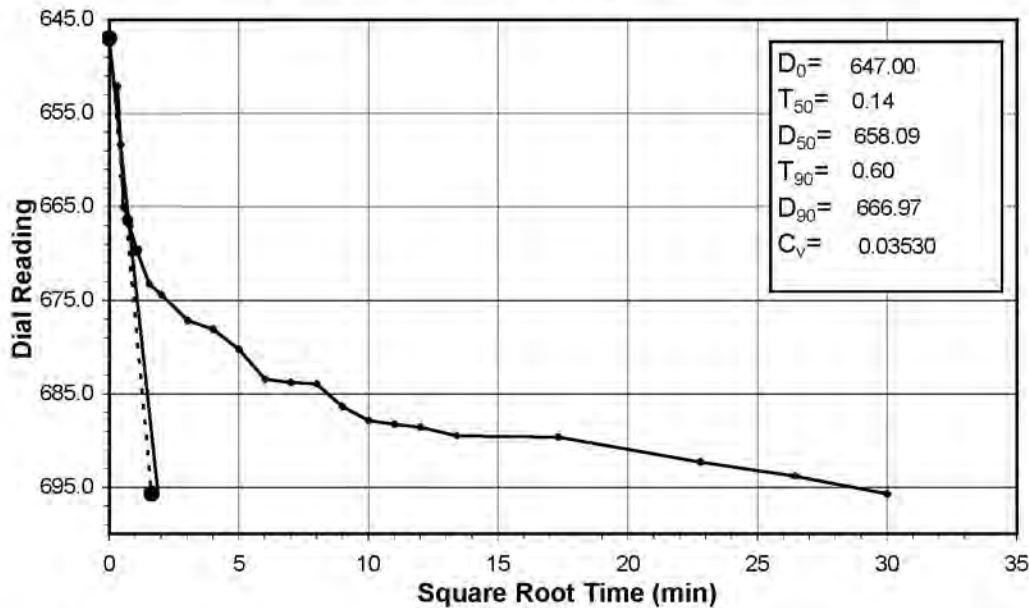
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

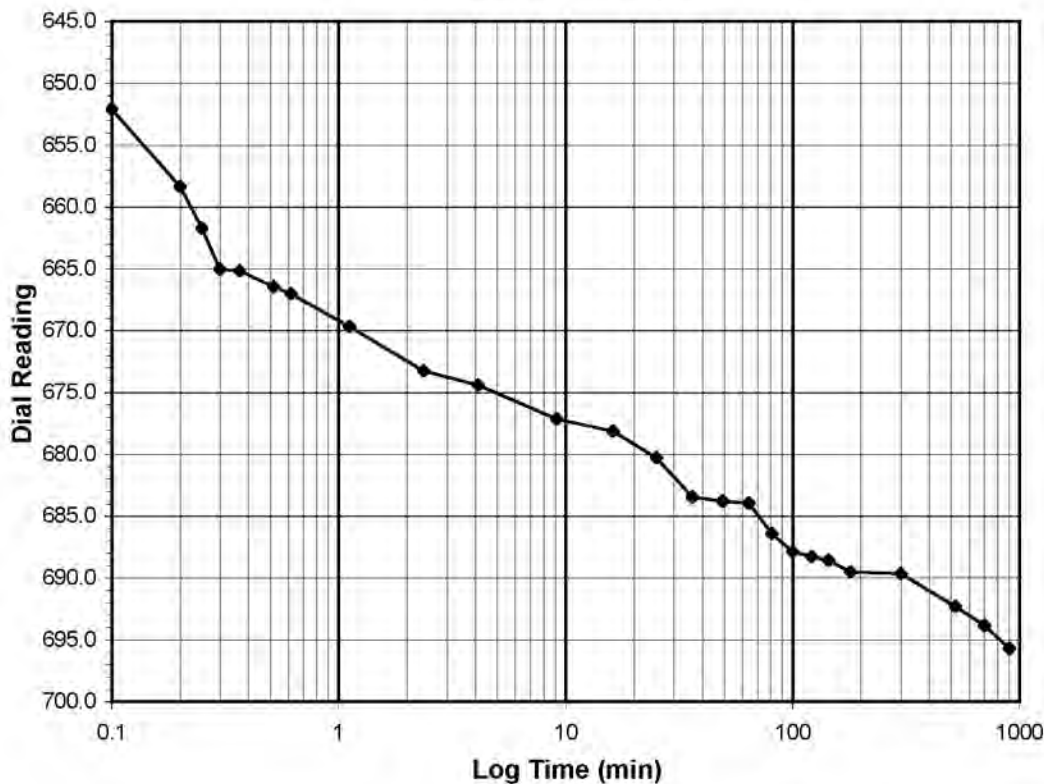
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 16.0-32.0
 Final Reading (div) 695.7
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/26/13
 Start Time 16:50:51

Elapsed Time (min)	Dial Reading (div)
Initial	531.3
0.10	652.1
0.20	658.3
0.25	661.7
0.30	665.0
0.37	665.1
0.52	666.5
0.62	667.0
1.12	669.6
2.37	673.2
4.12	674.4
9.12	677.1
16.12	678.1
25.12	680.3
36.12	683.4
49.12	683.8
64.12	683.9
81.12	686.4
100.12	687.9
121.12	688.3
144.12	688.6
180.12	689.5
300.12	689.6
520.12	692.3
700.12	693.8
900.28	695.7



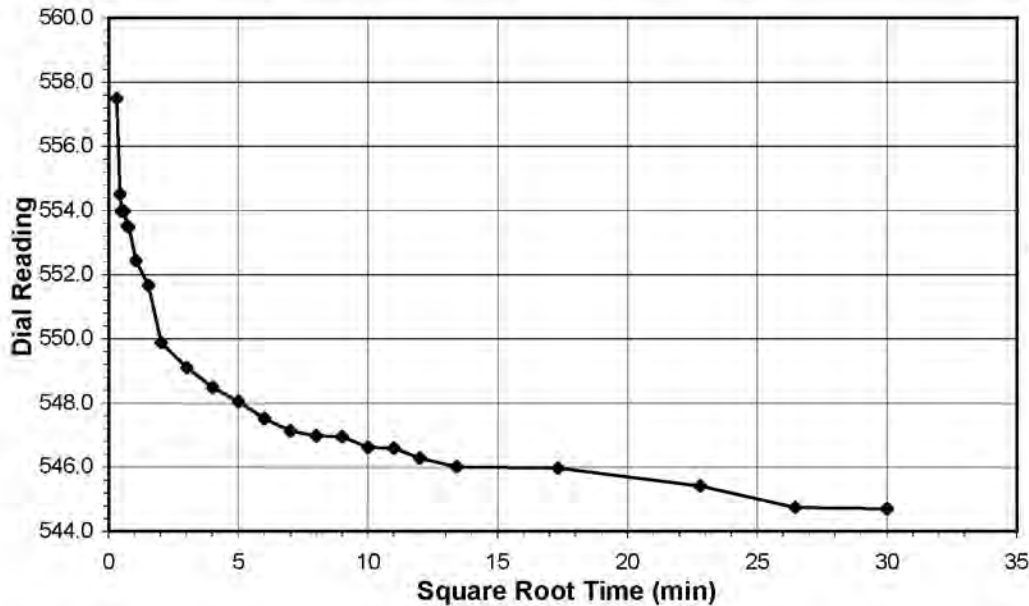
Tested By DB Date 11/26/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

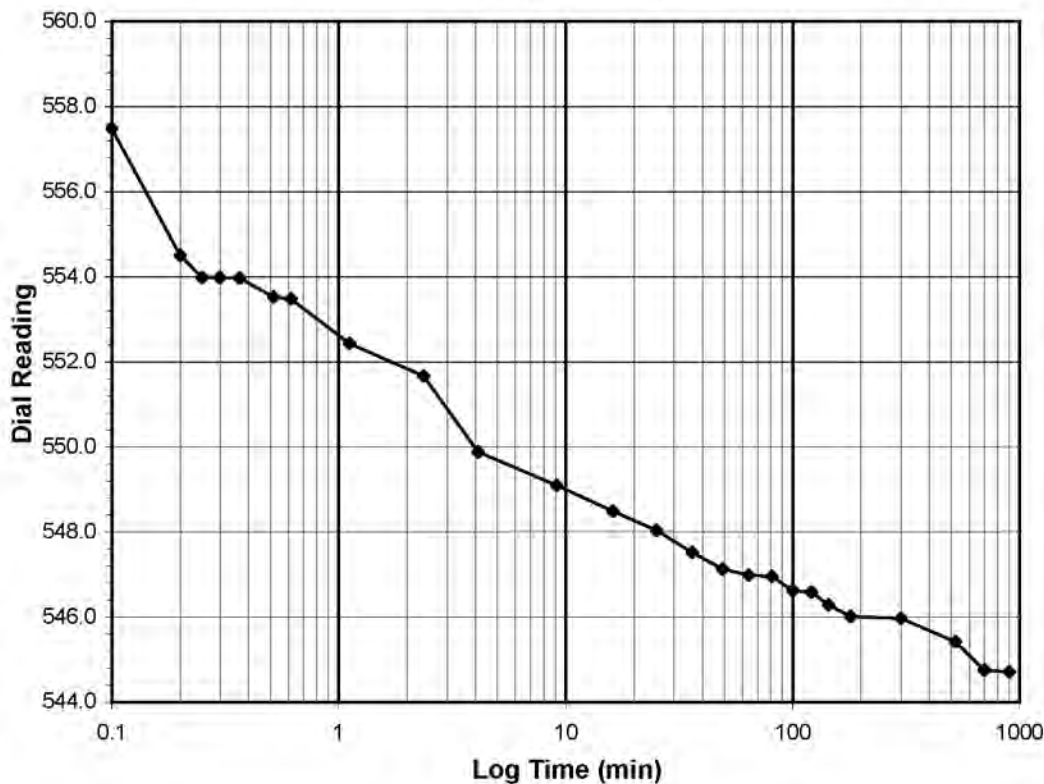
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Test Load (tsf) 32.0-8.0
 Final Reading (div) 544.7
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/27/13
 Start Time 7:51:08

Elapsed Time (min)	Dial Reading (div)
Initial	695.7
0.10	557.5
0.20	554.5
0.25	554.0
0.30	554.0
0.37	554.0
0.52	553.5
0.62	553.5
1.12	552.4
2.37	551.7
4.12	549.9
9.12	549.1
16.12	548.5
25.12	548.0
36.12	547.5
49.12	547.1
64.12	547.0
81.12	547.0
100.13	546.6
121.13	546.6
144.13	546.3
180.13	546.0
300.13	546.0
520.13	545.4
700.13	544.8
900.15	544.7



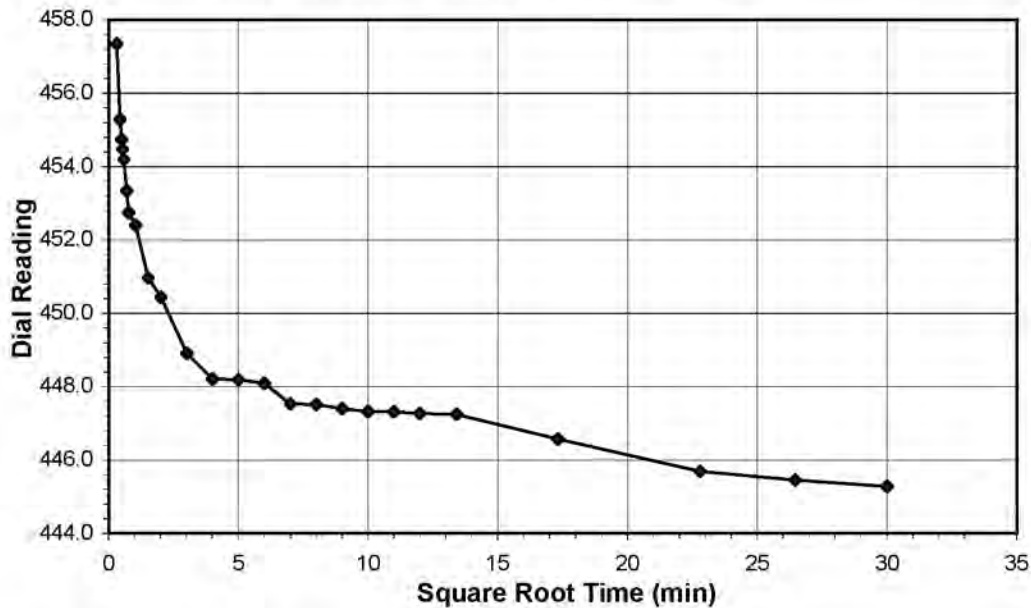
Tested By DB Date 11/27/13 Checked By TM Date 12/6/13

**ONE DIMENSIONAL CONSOLIDATION**

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

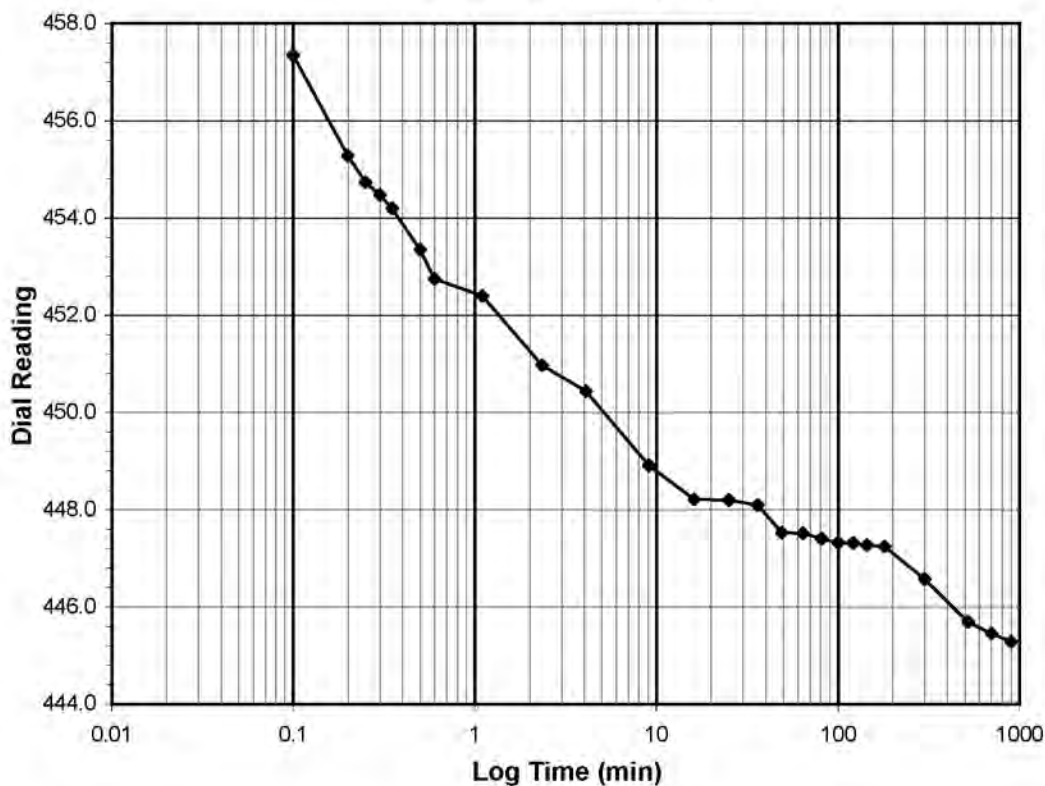
Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

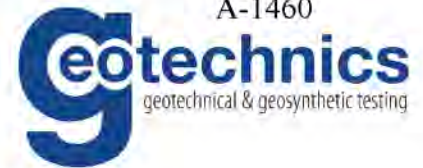
Test Load (tsf) 8.0-2.0
 Final Reading (div) 445.3
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/27/13
 Start Time 22:51:17

Elapsed Time (min)	Dial Reading (div)
Initial	544.7
0.10	457.3
0.20	455.3
0.25	454.7
0.30	454.5
0.35	454.2
0.50	453.3
0.60	452.8
1.10	452.4
2.35	451.0
4.10	450.4
9.10	448.9
16.10	448.2
25.10	448.2
36.10	448.1
49.10	447.5
64.10	447.5
81.10	447.4
100.12	447.3
121.12	447.3
144.12	447.3
180.12	447.2
300.12	446.6
520.12	445.7
700.12	445.5
900.07	445.3



Tested By DB Date 11/27/13 Checked By TM Date 12/6/13



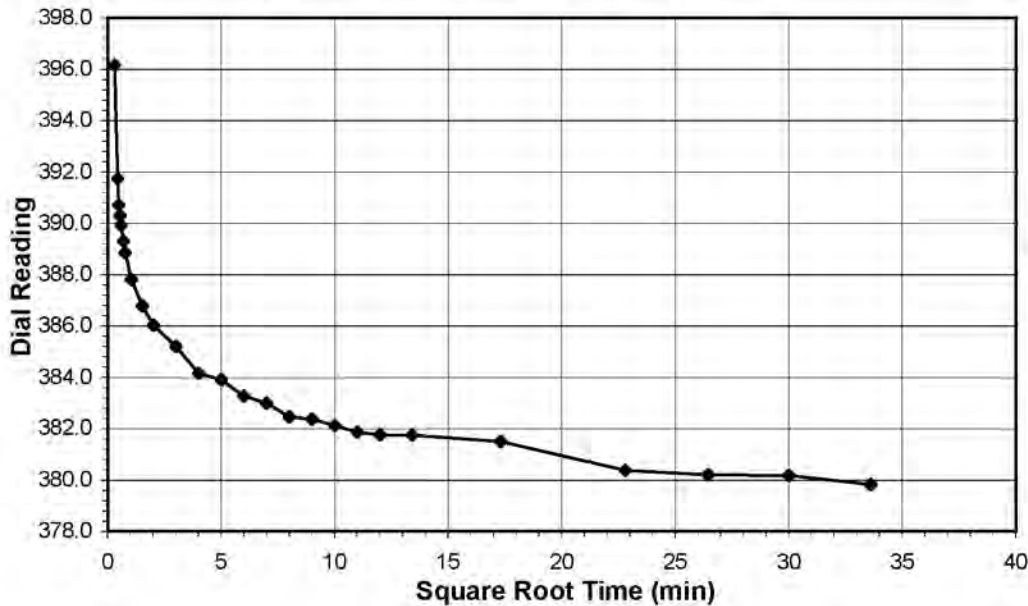
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Project Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

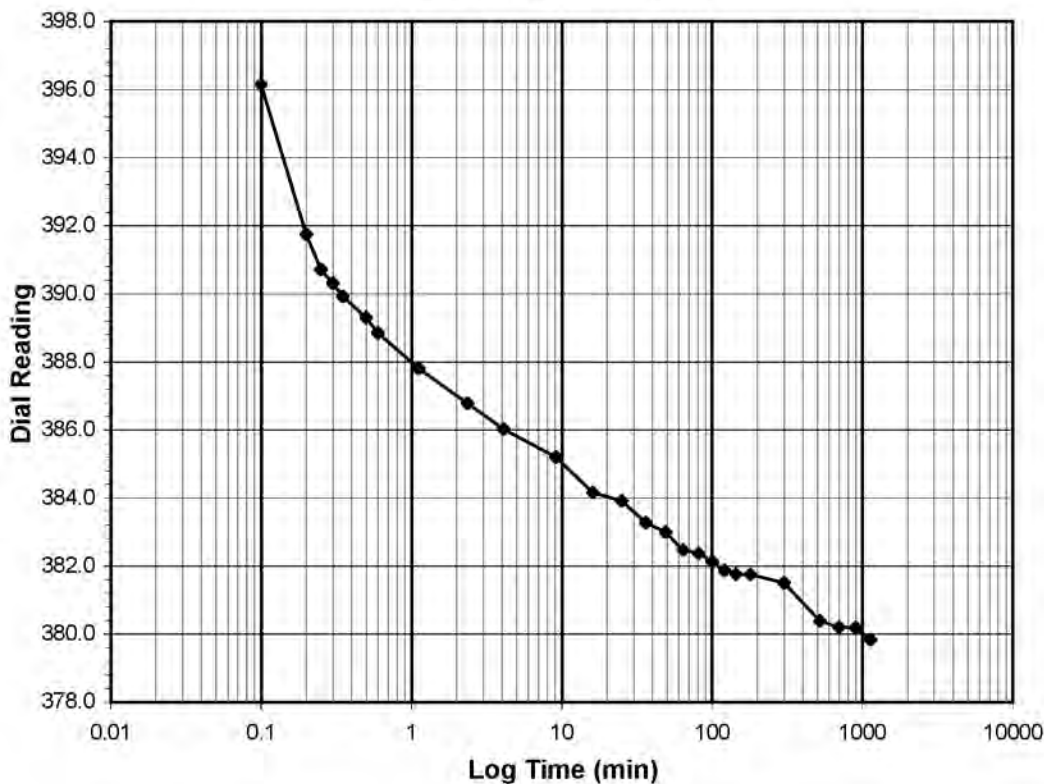
Sample Conditions: Undisturbed, Inundated And Double Drained



Test Load (tsf) 2.0-0.5
 Final Reading (div) 379.8
 Consolidometer No. G1424
 1 Division (in) 0.0001

Start Date 11/28/13
 Start Time 13:51:21

Elapsed Time (min)	Dial Reading (div)
Initial	445.3
0.10	396.1
0.20	391.8
0.25	390.7
0.30	390.3
0.35	389.9
0.50	389.3
0.60	388.9
1.12	387.8
2.37	386.8
4.12	386.0
9.12	385.2
16.12	384.2
25.12	383.9
36.12	383.3
49.12	383.0
64.12	382.5
81.12	382.4
100.12	382.1
121.12	381.9
144.12	381.8
180.12	381.8
300.12	381.5
520.12	380.4
700.12	380.2
900.27	380.2
1130.40	379.8



Tested By DB Date 11/28/13 Checked By TM Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1424

1 Division = 0.0001 (in)

Sample Properties

Initial **Final**

Water Content

Tare Number	2661	2752
Wt. Tare & WS (g)	121.54	161.86
Wt. Tare & DS (g)	90.81	130.75
Wt. Water (g)	30.73	31.11
Wt. Tare (g)	6.65	6.88
Wt. DS (g)	84.16	123.87
Water Content (%)	36.51	25.12

Sample Parameters

Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9689
Sample Volume (cm ³)	80.44	77.93
Wt. Wet Sample + Ring (g)	370.36	357.33
Wt. of Ring (g)	214.26	214.26
Wt. of Wet Sample (g)	156.10	143.07
Wet Density (pcf)	121.09	114.55
Wet Density (g/cm ³)	1.94	1.84
Water Content (%)	36.51	25.12
Wt. of Dry Sample (g)	114.35	114.35
Dry Density (pcf)	88.70	91.56
Dry Density (g/cm ³)	1.42	1.47
Void Ratio	0.8290	0.7720
Saturation (%)	114.52	84.58
Specific Gravity	2.60	Measured

Test Data Summary

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm ³)	Dry Density (g/cm ³)	Void Ratio
Seating	0	0	0	25.400	80.440	1.42153	0.82902
0.25	66.9	17.0	49.9	25.273	80.039	1.42866	0.81989
0.5	123.8	22.5	101.3	25.143	79.625	1.43608	0.81048
1	185.4	31.8	153.6	25.010	79.204	1.44370	0.80093
2	260.7	56.2	204.5	24.881	78.795	1.45120	0.79162
4	322.3	87.6	234.7	24.804	78.552	1.45569	0.78610
1	265.1	52.8	212.3	24.861	78.732	1.45237	0.79018
0.25	226.1	24.8	201.4	24.889	78.820	1.45074	0.79219
0.5	241.4	31.4	210.0	24.867	78.751	1.45202	0.79061
1	261.2	45.6	215.6	24.852	78.706	1.45285	0.78958
2	288.5	60.3	228.3	24.820	78.604	1.45473	0.78727
4	337.4	86.5	250.9	24.763	78.421	1.45812	0.78312
8	420.6	137.0	283.6	24.680	78.159	1.46301	0.77715
16	531.3	196.5	334.8	24.550	77.747	1.47077	0.76778
32	695.7	283.7	412.0	24.354	77.126	1.48261	0.75367
8	544.7	174.5	370.3	24.460	77.461	1.47619	0.76130
2	445.3	104.7	340.6	24.535	77.700	1.47166	0.76672
0.5	379.8	68.4	311.5	24.609	77.934	1.46723	0.77205

Tested By DB Date 11/18/13 Input Checked By TM Date 12/6/13

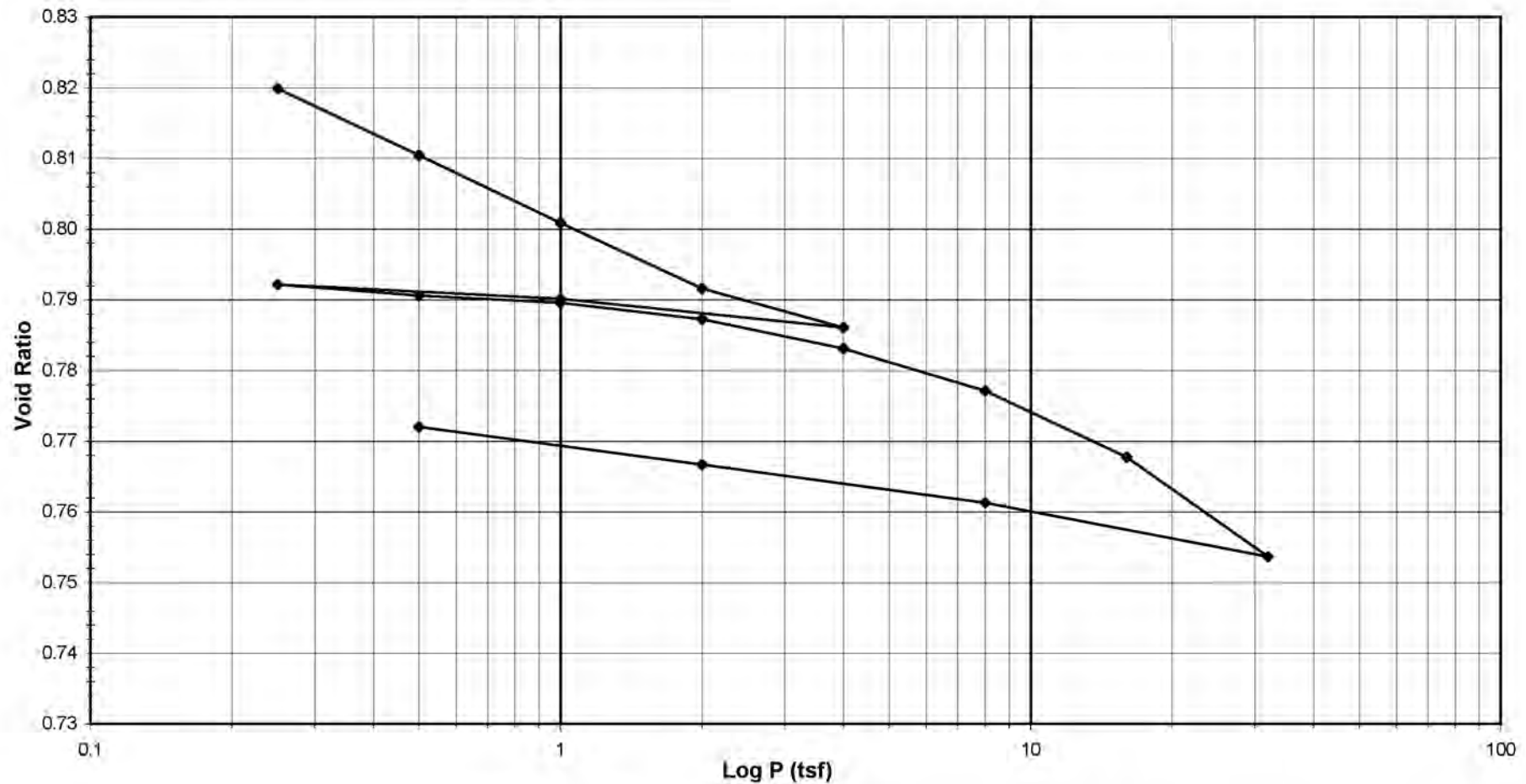
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/18/13

Approved By RJO

Date 12/6/13

ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
 Client Reference Turkey Point Units 6 & 7 Site
 Project No. 2013-465-001
 Lab ID 2013-465-001-019

Boring No. R-7-1
 Depth (ft) 390.7-390.9
 Sample No. ST-23
 Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained

Consolidometer No. G1424

1 Division = 0.0001 (in)

C_v Test Data Summary

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>						
<i>Water Content</i>			Load	Dial	Machine	Corrected	Sample	C_v
Tare Number	2661	2752	Increment	Reading	Deflection	Dial Reading	Height	Time
				@ t₅₀		@ t₅₀	@ t₅₀	t₅₀
			(tsf)	(div)	(div)	(div)	(mm)	(min)
								(cm ² /sec)
Wt. Tare & WS (g)	121.54	161.86	Seating	NA	NA	NA	NA	NA
Wt. Tare & DS (g)	90.81	130.75	0.25	48.0	17.0	31.0	25.32	0.15
Wt. Water (g)	30.73	31.11	0.5	109.2	22.5	86.7	25.18	0.12
Wt. Tare (g)	6.65	6.88	1	174.2	31.8	142.4	25.04	0.13
Wt. DS (g)	84.16	123.87	2	246.2	56.2	190.0	24.92	0.16
Water Content (%)	36.51	25.12	4	307.4	87.6	219.8	24.84	0.14
			1	NA	NA	NA	NA	NA
<i>Sample Parameters</i>			0.25	NA	NA	NA	NA	NA
Sample Diameter (in)	2.5	2.5	0.5	239.7	31.4	208.3	24.87	0.25
Sample Height (in)	1.0000	0.9689	1	258.7	45.6	213.1	24.86	0.29
Sample Volume (cm ³)	80.44	77.93	2	284.4	60.3	224.2	24.83	0.14
Wt. Wet Sample + Ring (g)	370.36	357.33	4	322.7	86.5	236.2	24.80	0.24
Wt. of Ring (g)	214.26	214.26	8	396.9	137.0	259.9	24.74	0.43
Wt. of Wet Sample (g)	156.10	143.07	16	508.1	196.5	311.6	24.61	0.18
Wet Density (pcf)	121.09	114.55	32	658.1	283.7	374.4	24.45	0.14
Wet Density (g/cm ³)	1.94	1.84	8	NA	NA	NA	NA	NA
Water Content (%)	36.51	25.12	2	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	114.35	114.35	0.5	NA	NA	NA	NA	NA
Dry Density (pcf)	88.70	91.56						
Dry Density (g/cm ³)	1.42	1.47						
Void Ratio	0.8290	0.7720						
Saturation (%)	114.52	84.58						
Specific Gravity	2.60	Measured						

Tested By DB Date 11/18/13 Input Checked By TM Date 12/6/13

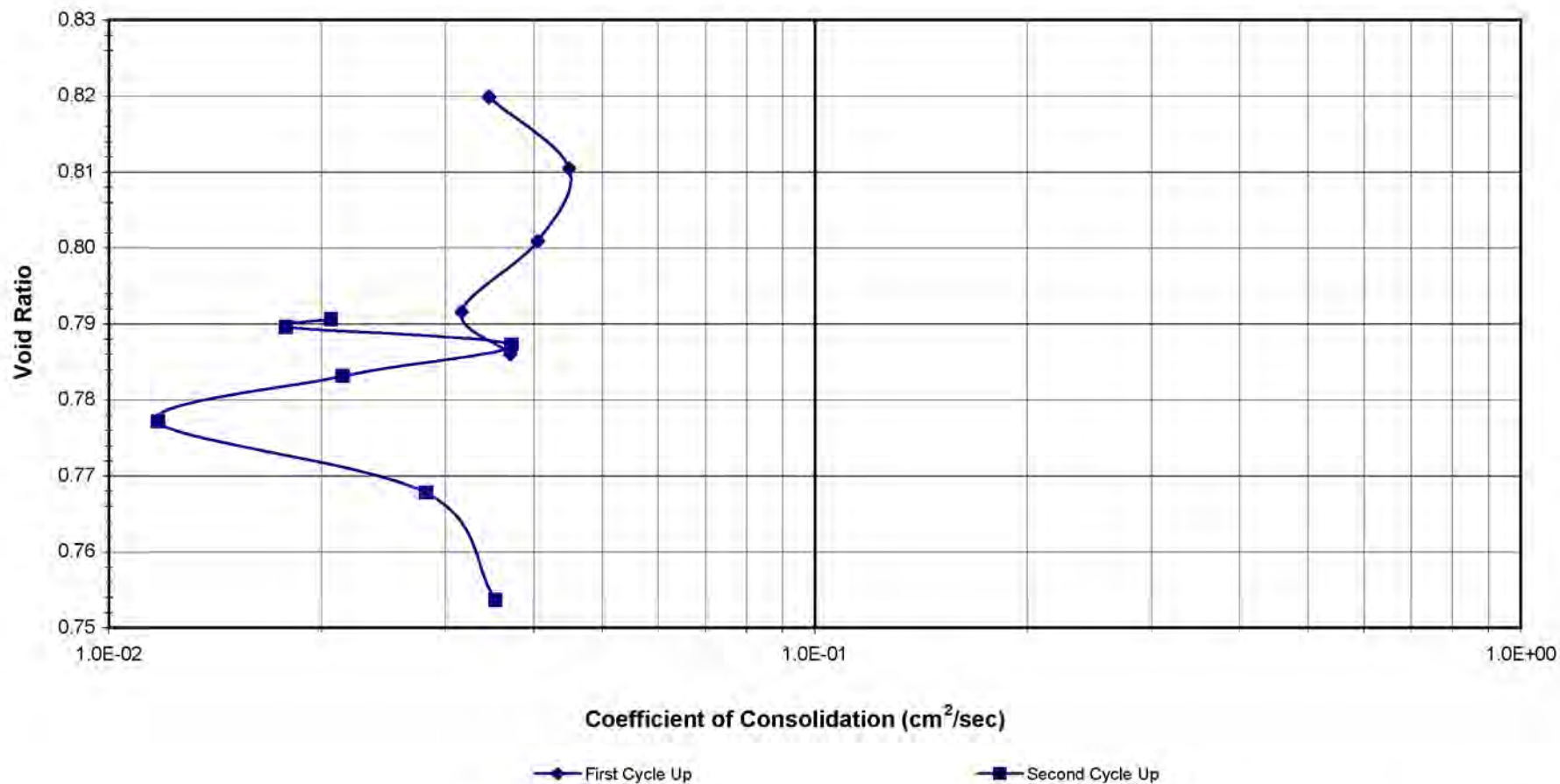
ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates
Client Reference Turkey Point Units 6 & 7 Site
Project No. 2013-465-001
Lab ID 2013-465-001-019

Boring No. R-7-1
Depth (ft) 390.7-390.9
Sample No. ST-23
Visual Description Gray Silty Sand

Sample Conditions: Undisturbed, Inundated And Double Drained



Tested By DB Date 11/18/13

Approved By RJO Date 12/6/13

One Dimensional Consolidation

ASTM D2435 / D2435M-11

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	390.7-390.9
Project No.	2013-465-001	Sample No.	ST-23
Lab ID #	2013-465-001-019		

Equipment	Equipment ID#	Calibration Due Date
Calipers	G1122	12/3/13
Balance	G1394	5/15/14
Oven	G1387	8/16/14
Consolidometer	G1424	1/9/14
Load Cell	G1425	1/9/14
LVDT	G1426	1/9/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 01
Boring No.: R-6-1b
Depth (ft): 81.0-81.7
Sample No.: SC-4A

Drying Tare No. XZ
Testing Tare No. J

Temperature (°C) 20.5

pH of Sample Test 1 8.84

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	81.0-81.7
Project No.	2013-465-004	Sample No.	SC-4A
Lab ID #	2013-465-004-001		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 02
Boring No.: R-6-1a
Depth (ft): 33.0-33.7
Sample No.: SC-1

Drying Tare No. Q
Testing Tare No. O

Temperature (°C) 20.5

pH of Sample Test 1 8.73

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1a
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	33.0-33.7
Project No.	2013-465-004	Sample No.	SC-1
Lab ID #	2013-465-004-002		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 03
Boring No.: R-6-1a
Depth (ft): 114.7-115.0
Sample No.: SC-5

Drying Tare No. N
Testing Tare No. H

Temperature (°C) 20.5

pH of Sample Test 1 8.75

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1a
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	114.7-115.0
Project No.	2013-465-004	Sample No.	SC-5
Lab ID #	2013-465-004-003		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 04
Boring No.: R-6-1a-A
Depth (ft): 72.6-73.5
Sample No.: SC-1

Drying Tare No. XA
Testing Tare No. Q

Temperature (°C) 20.5

pH of Sample Test 1 8.24

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1a-A
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	72.6-73.5
Project No.	2013-465-004	Sample No.	SC-1
Lab ID #	2013-465-004-004		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 05
Boring No.: R-7-1
Depth (ft): 37.5-37.9
Sample No.: SC-2

Drying Tare No. F
Testing Tare No. G

Temperature (°C) 20.5

pH of Sample Test 1 8.85

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	37.5-37.9
Project No.	2013-465-004	Sample No.	SC-2
Lab ID #	2013-465-004-005		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 06
Boring No.: R-7-1
Depth (ft): 46.9-47.7
Sample No.: SC-4

Drying Tare No. M5
Testing Tare No. R

Temperature (°C) 20.5

pH of Sample Test 1 8.72

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	46.9-47.7
Project No.	2013-465-004	Sample No.	SC-4
Lab ID #	2013-465-004-006		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 07
Boring No.: R-7-1
Depth (ft): 74.3-75.0
Sample No.: SC-6

Drying Tare No. B
Testing Tare No. K

Temperature (°C) 20.5

pH of Sample Test 1 8.98

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-1
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	74.3-75.0
Project No.	2013-465-004	Sample No.	SC-6
Lab ID #	2013-465-004-007		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

pH OF SOILS
ASTM D 4972-01

Client: Paul C. Rizzo & Associates
Client Reference: Turkey Point Units 6 & 7 Site
Project No.: 2013-465-004

Lab ID : 08
Boring No.: R-7-4
Depth (ft): 48.2-49.0
Sample No.: SC-2

Drying Tare No. 00
Testing Tare No. N

Temperature (°C) 20.5

pH of Sample Test 1 8.86

Meter Calibration		
Buffer pH	Meter Reading	Meter Model
4.00	4.08	ORION 720A (G940)
7.00	7.04	
10.0	10.03	

Tested By JAM Date 12/17/13 Checked By CLK Date 12/18/13

pH of SOILS

ASTM D 4972-01

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-7-4
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	48.2-49.0
Project No.	2013-465-004	Sample No.	SC-2
Lab ID #	2013-465-004-008		

Equipment	Equipment ID#	Calibration Due Date
Balance	G1485	11/11/14
#10 Sieve	G884	8/20/14
pH Meter	G940	7/9/14
pH Electrode	G1339	7/9/14
Thermometer	G1082	11/23/14

Water-Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1b
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	81.0-81.7
Project No.:	2013-465-004	Sample No.:	SC-4A
Lab ID:	2013-465-004-001	Soil Description:	White Grainstone

Sulfate Standard - Calibration Curve Spectrophotometer Readings

<u>Sulfate Ion Concentrations (mg/L)</u>								
0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0
<u>Spectrophotometer Readings (FAU)</u>								
Underrange	7	17	39	58	98	154	231	302

Measurement of Barium Chloride Turbidity

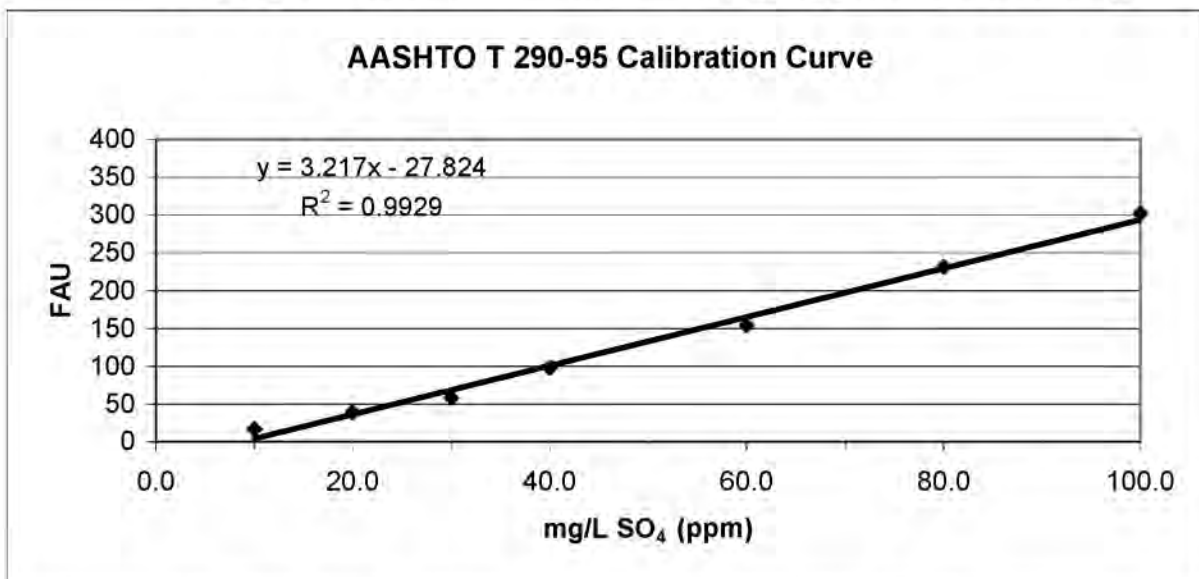
(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl₂·2H₂O)

Sample Weight:	100.0	grams	NaCl Solution Mix Date:	8/23/13
Water added to Sample:	300.0	ml	Sample Moisture Content	
Size of Sample Aliquot:	50.0	ml	Tare Number:	41
Sample Reading:	141	FAU	Weight of Tare & Wet Sample (g):	506.31
			Weight of Tare & Dry Sample (g):	505.87
			Weight of Tare (g):	206.11
			Weight of Water (g):	0.44
			Weight of Dry Sample (g):	299.76
			Water Content (%):	0.15

Note: 25 ml of sample diluted to 50 ml = Dilution Factor of 2.

Sample Sulfate Ion Concentration:	104.96	mg/L SO₄ (ppm)
Sample Sulfate Ion Content:	314.9	mg/kg SO₄ (not corrected for moisture)
Sample Sulfate Ion Content:	315.3	mg/kg SO₄ (corrected for moisture)

AASHTO T 290-95 Calibration Curve



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
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DCN: CT-T290 DATE: 8/4/2010 REV: 1

SULFATE T290

Water Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1b
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	81.0-81.7
Project No.	2013-465-004	Sample No.	SC-4A
Lab ID #	2013-465-004-001		

Equipment	Equipment ID#	Calibration Due Date
50 ml Graduated Cylinder	G1330	INITIAL ONLY
500 ml Erlenmeyer Flask	G1319	INITIAL ONLY
1000 ml Volumetric Flask	G1318	INITIAL ONLY
1000 ml Volumetric Flask	G1322	INITIAL ONLY
50 ml Volumetric Flask	G1325	INITIAL ONLY
#30 Sieve	G830	10/2/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14
Oven	G1387	8/16/14
Stopwatch	G1277	5/13/14

Water-Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1a
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	33.0-33.7
Project No.:	2013-465-004	Sample No.:	SC-1
Lab ID:	2013-465-004-002	Soil Description:	White Wackestone

Sulfate Standard - Calibration Curve Spectrophotometer Readings

<u>Sulfate Ion Concentrations (mg/L)</u>								
0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0
<u>Spectrophotometer Readings (FAU)</u>								
Underrange	7	17	39	58	98	154	231	302

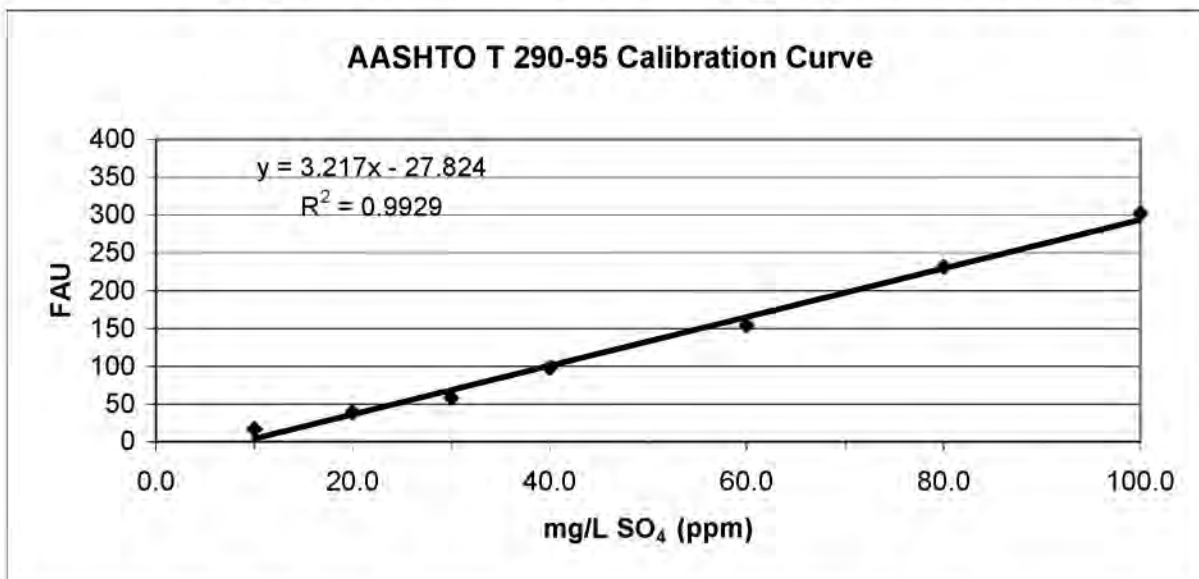
Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl₂·2H₂O)

Sample Weight:	100.0	grams	NaCl Solution Mix Date:	8/23/13
Water added to Sample:	300.0	ml	Sample Moisture Content	
Size of Sample Aliquot:	50.0	ml	Tare Number:	59
Sample Reading:	249	FAU	Weight of Tare & Wet Sample (g):	537.96
			Weight of Tare & Dry Sample (g):	537.12
			Weight of Tare (g):	200.91
			Weight of Water (g):	0.84
			Weight of Dry Sample (g):	336.21
			Water Content (%):	0.25

Sample Sulfate Ion Concentration:	86.05	mg/L SO₄ (ppm)
Sample Sulfate Ion Content:	258.2	mg/kg SO₄ (not corrected for moisture)
Sample Sulfate Ion Content:	258.8	mg/kg SO₄ (corrected for moisture)

AASHTO T 290-95 Calibration Curve



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
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DCN: CT-T290 DATE: 8/4/2010 REV: 1

SULFATE T290

Water Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1a
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	33.0-33.7
Project No.	2013-465-004	Sample No.	SC-1
Lab ID #	2013-465-004-002		

Equipment	Equipment ID#	Calibration Due Date
50 ml Graduated Cylinder	G1330	INITIAL ONLY
500 ml Erlenmeyer Flask	G1319	INITIAL ONLY
1000 ml Volumetric Flask	G1318	INITIAL ONLY
1000 ml Volumetric Flask	G1322	INITIAL ONLY
50 ml Volumetric Flask	G1325	INITIAL ONLY
#30 Sieve	G830	10/2/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14
Oven	G1387	8/16/14
Stopwatch	G1277	5/13/14

Water-Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1a
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	114.7-115.0
Project No.:	2013-465-004	Sample No.:	SC-5
Lab ID:	2013-465-004-003	Soil Description:	White Grainstone

Sulfate Standard - Calibration Curve Spectrophotometer Readings

<u>Sulfate Ion Concentrations (mg/L)</u>								
0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0
<u>Spectrophotometer Readings (FAU)</u>								
Underrange	7	17	39	58	98	154	231	302

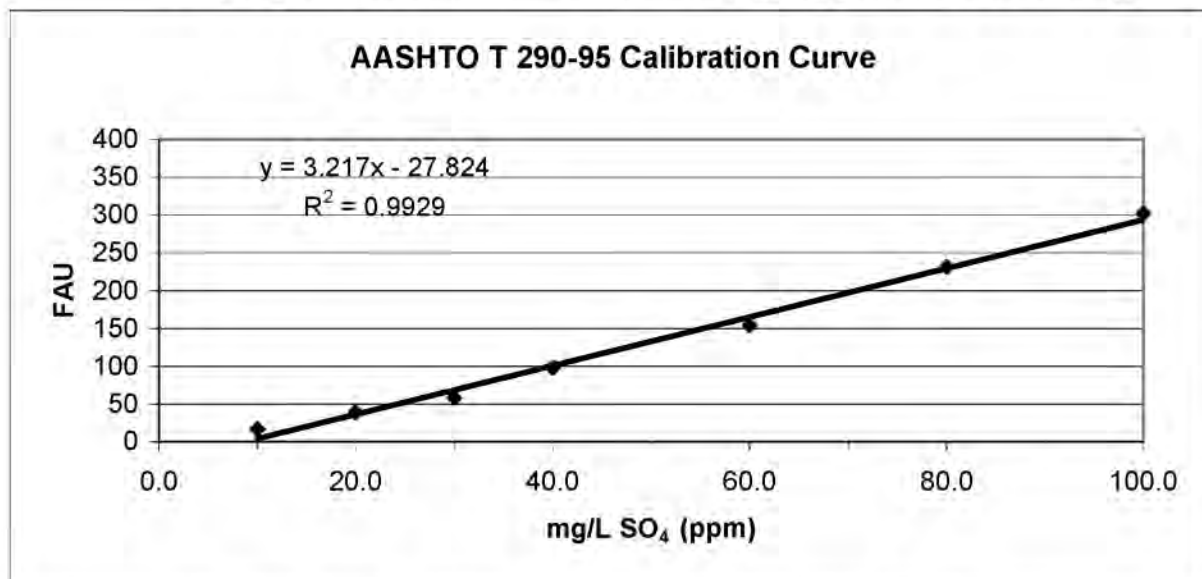
Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl₂•2H₂O)

Sample Weight:	100.0	grams	NaCl Solution Mix Date:	8/23/13
Water added to Sample:	300.0	ml	Sample Moisture Content	
Size of Sample Aliquot:	50.0	ml	Tare Number:	21
Sample Reading:	217	FAU	Weight of Tare & Wet Sample (g):	540.58
			Weight of Tare & Dry Sample (g):	539.99
			Weight of Tare (g):	202.50
			Weight of Water (g):	0.59
			Weight of Dry Sample (g):	337.49
			Water Content (%):	0.17

Note: 25 ml of sample diluted to 50 ml = Dilution Factor of 2.

Sample Sulfate Ion Concentration:	152.21	mg/L SO₄ (ppm)
Sample Sulfate Ion Content:	456.6	mg/kg SO₄ (not corrected for moisture)
Sample Sulfate Ion Content:	457.4	mg/kg SO₄ (corrected for moisture)



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
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DCN: CT-T290 DATE: 8/4/2010 REV: 1

SULFATE T290

Water Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	R-6-1a
Client Reference	Turkey Point Units 6 & 7 Site	Depth (ft)	114.7-115.0
Project No.	2013-465-004	Sample No.	SC-5
Lab ID #	2013-465-004-003		

Equipment	Equipment ID#	Calibration Due Date
50 ml Graduated Cylinder	G1330	INITIAL ONLY
500 ml Erlenmeyer Flask	G1319	INITIAL ONLY
1000 ml Volumetric Flask	G1318	INITIAL ONLY
1000 ml Volumetric Flask	G1322	INITIAL ONLY
50 ml Volumetric Flask	G1325	INITIAL ONLY
#30 Sieve	G830	10/2/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14
Oven	G1387	8/16/14
Stopwatch	G1277	5/13/14

Water-Soluble Sulfate Ion Content in Soil

AASHTO T 290-95 (2012)

Client:	Paul C. Rizzo & Associates	Boring No.:	R-6-1a-A
Client Reference:	Turkey Point Units 6 & 7 Site	Depth (ft):	72.6-73.5
Project No.:	2013-465-004	Sample No.:	SC-1
Lab ID:	2013-465-004-004	Soil Description:	White Grainstone

Sulfate Standard - Calibration Curve Spectrophotometer Readings

<u>Sulfate Ion Concentrations (mg/L)</u>								
0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0
<u>Spectrophotometer Readings (FAU)</u>								
Underrange	7	17	39	58	98	154	231	302

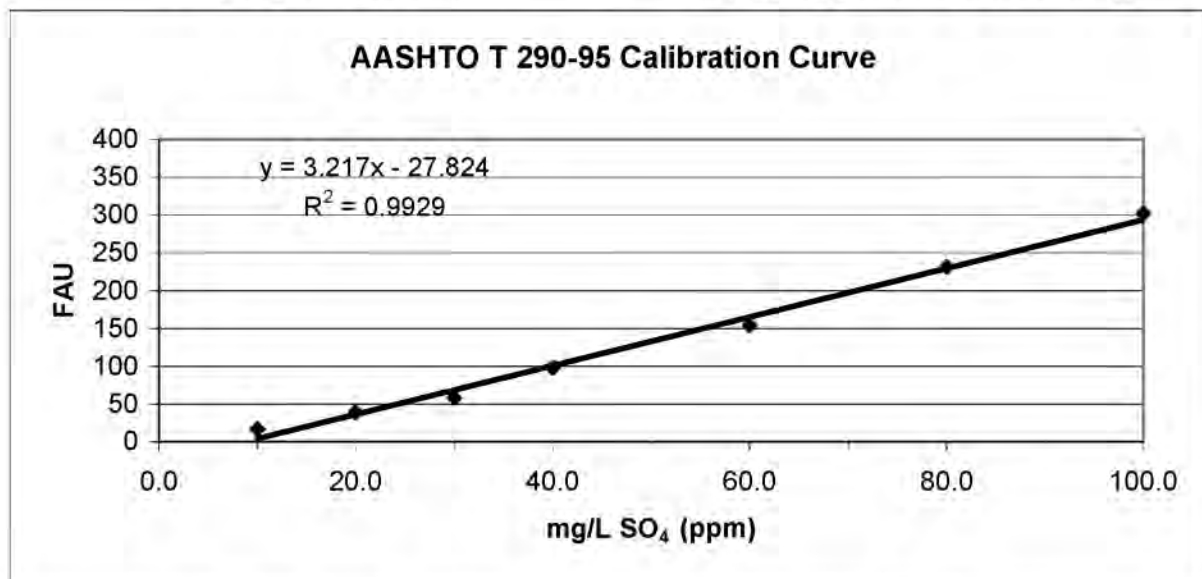
Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl₂·2H₂O)

Sample Weight:	100.0	grams	NaCl Solution Mix Date:	8/23/13
Water added to Sample:	300.0	ml	Sample Moisture Content	
Size of Sample Aliquot:	50.0	ml	Tare Number:	14
Sample Reading:	78	FAU	Weight of Tare & Wet Sample (g):	593.23
			Weight of Tare & Dry Sample (g):	592.67
			Weight of Tare (g):	204.02
			Weight of Water (g):	0.56
			Weight of Dry Sample (g):	388.65
			Water Content (%):	0.14

Note: 25 ml of sample diluted to 50 ml = Dilution Factor of 2.

Sample Sulfate Ion Concentration:	65.79	mg/L SO₄ (ppm)
Sample Sulfate Ion Content:	197.4	mg/kg SO₄ (not corrected for moisture)
Sample Sulfate Ion Content:	197.7	mg/kg SO₄ (corrected for moisture)



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
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DCN: CT-T290 DATE: 8/4/2010 REV: 1

SULFATE T290