

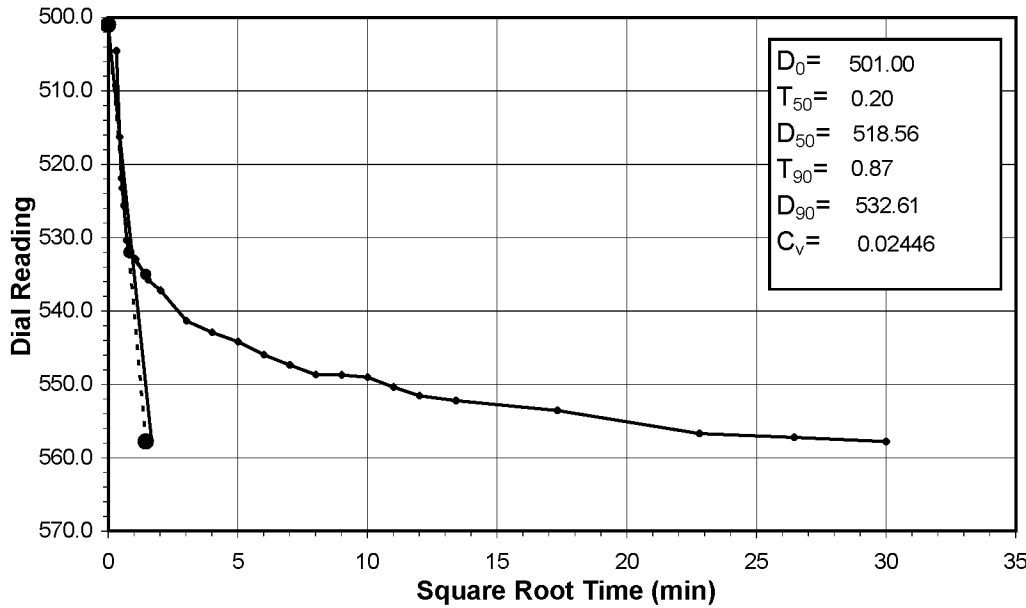
# ONE DIMENSIONAL CONSOLIDATION

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

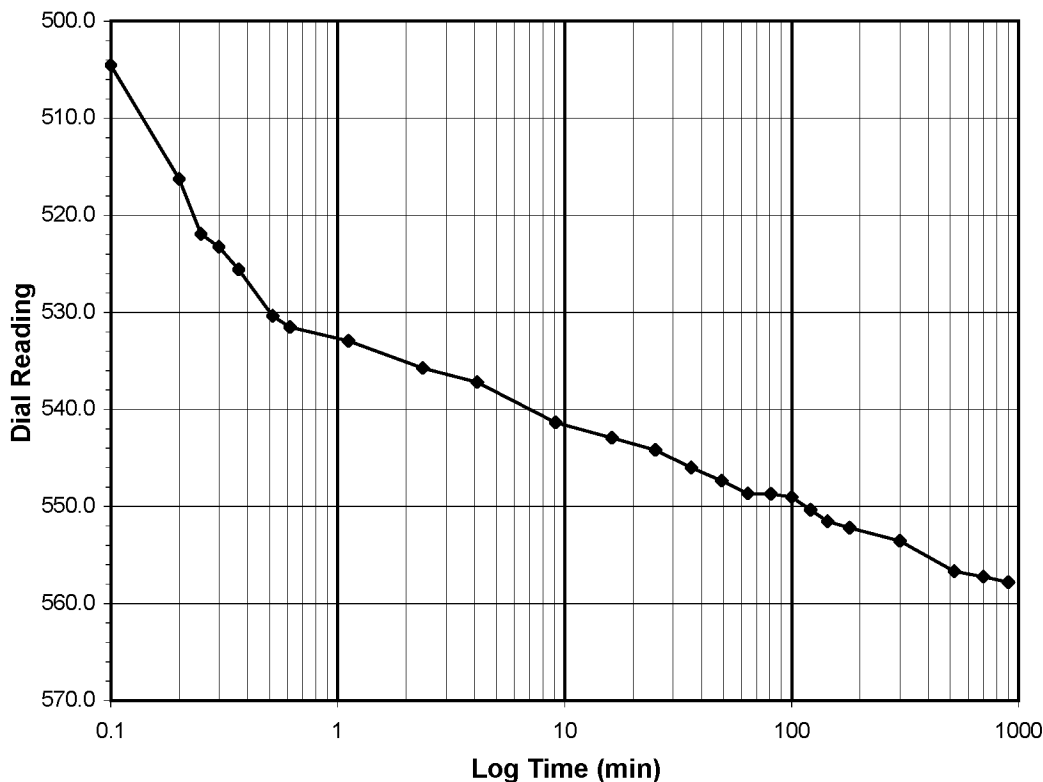
Boring No. R-7-1  
 Depth (ft) 289.6-290.0  
 Sample No. ST-12  
 Visual Description Gray Silty Fine Sand

**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)
<b>Initial</b>	<b>397.0</b>
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**

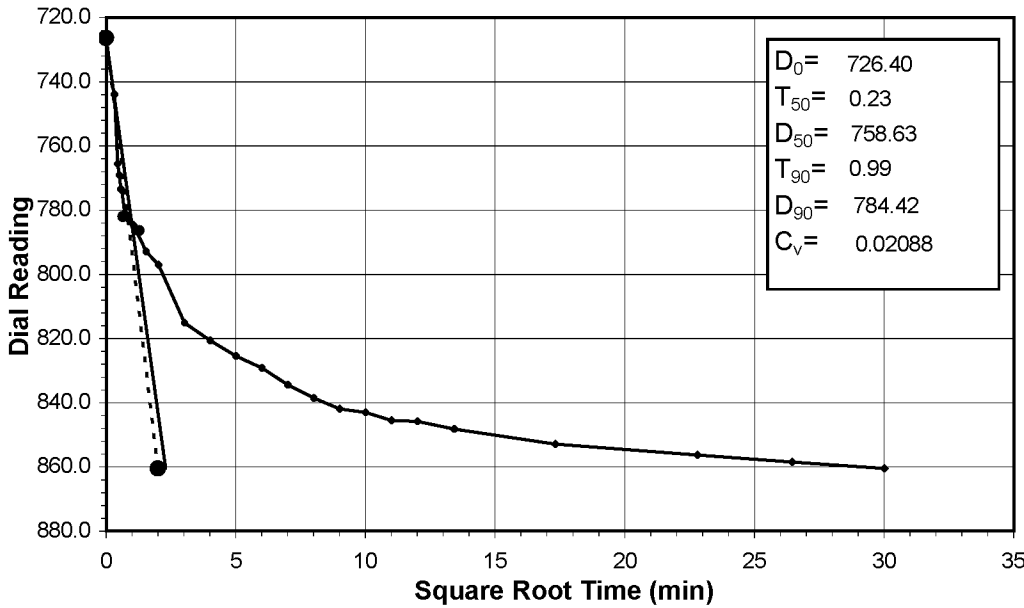
# ONE DIMENSIONAL CONSOLIDATION

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

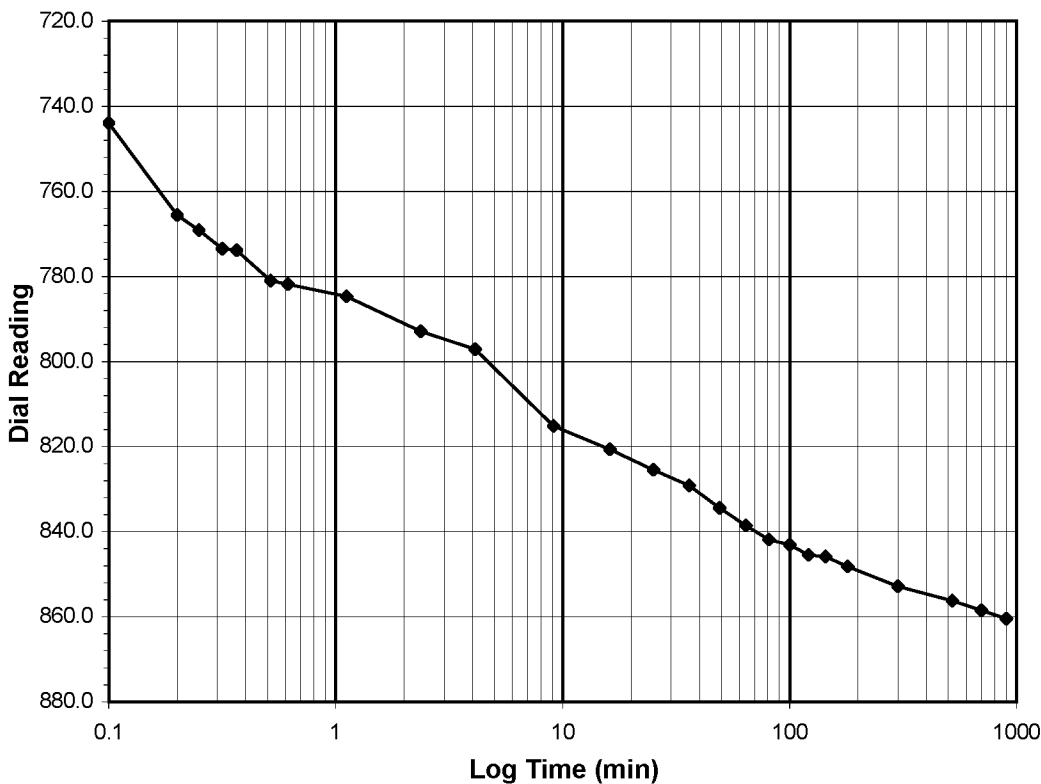
Boring No. R-7-1  
 Depth (ft) 289.6-290.0  
 Sample No. ST-12  
 Visual Description Gray Silty Fine Sand

**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)
<i>Initial</i>	<b>557.8</b>
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**



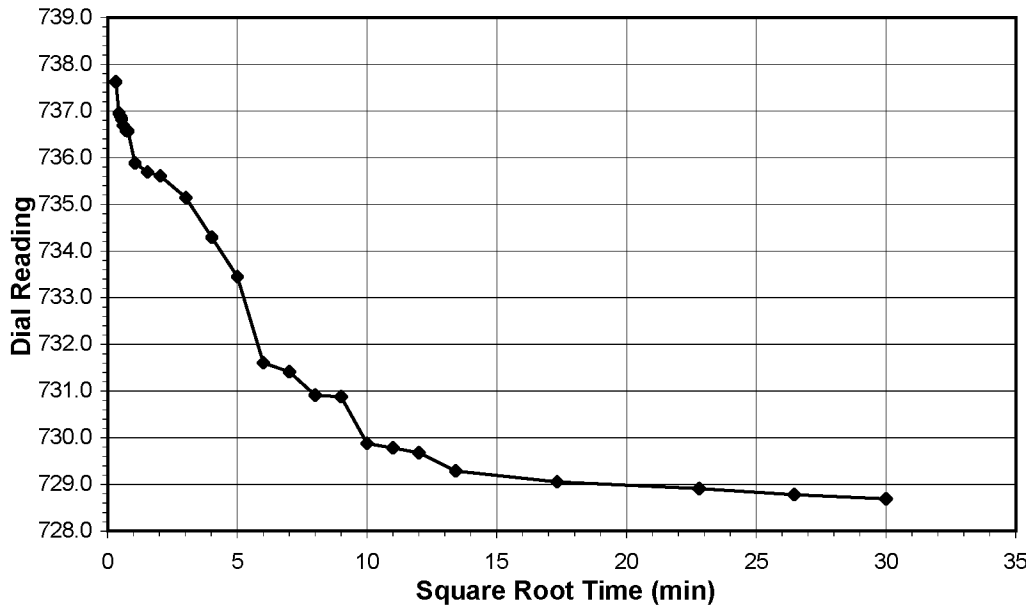
# ONE DIMENSIONAL CONSOLIDATION

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

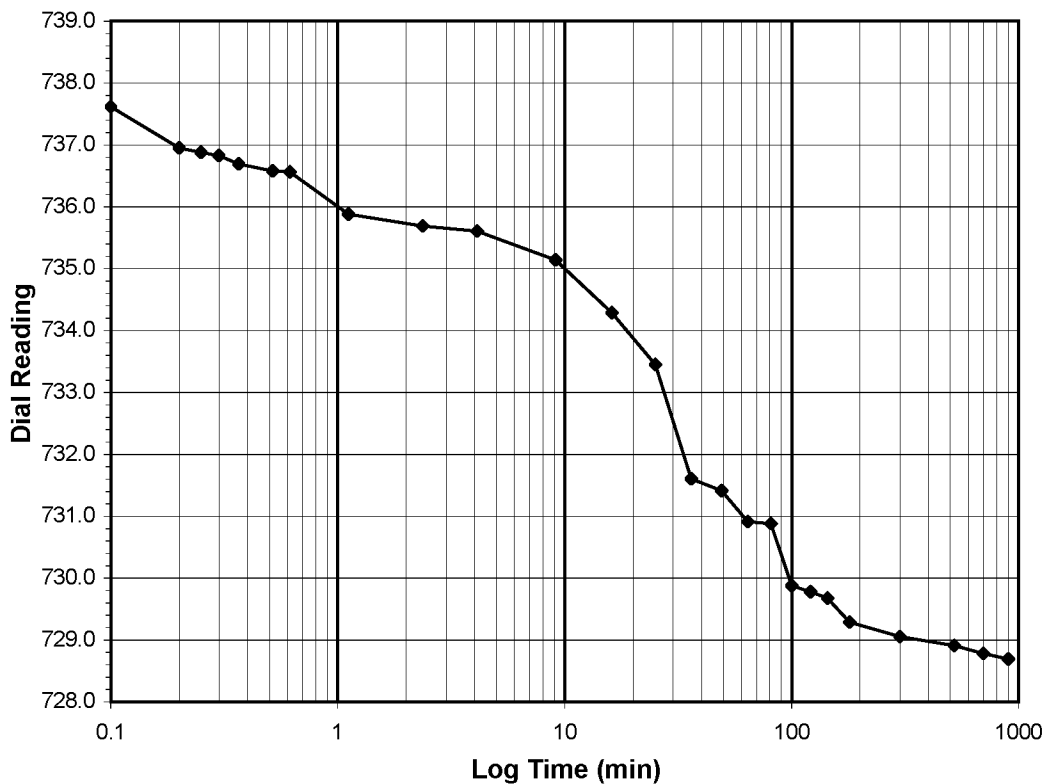
Boring No. R-7-1  
 Depth (ft) 289.6-290.0  
 Sample No. ST-12  
 Visual Description Gray Silty Fine Sand

**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)
<b>Initial</b>	<b>860.5</b>
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



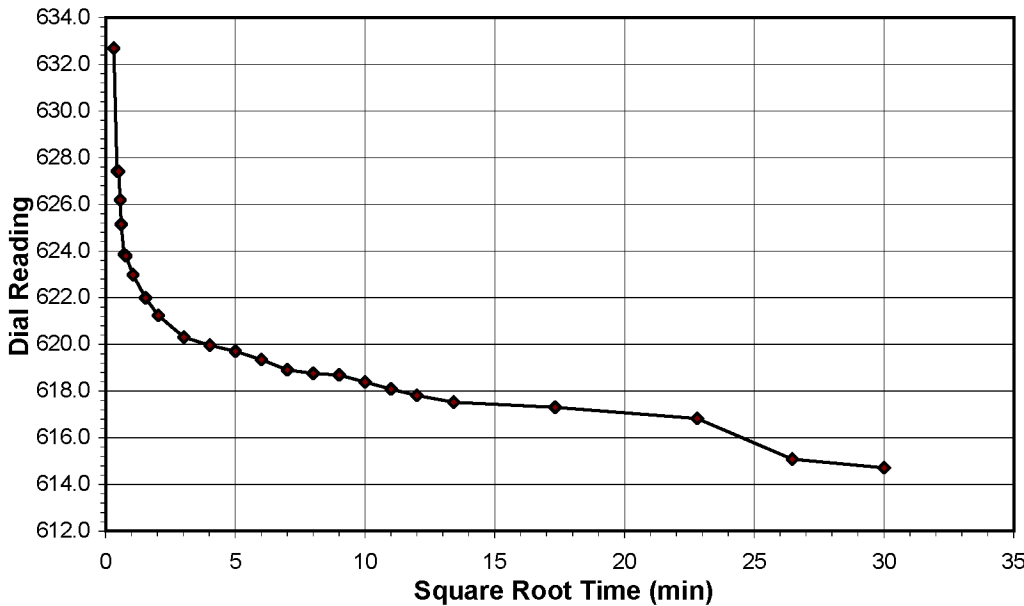
# ONE DIMENSIONAL CONSOLIDATION

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

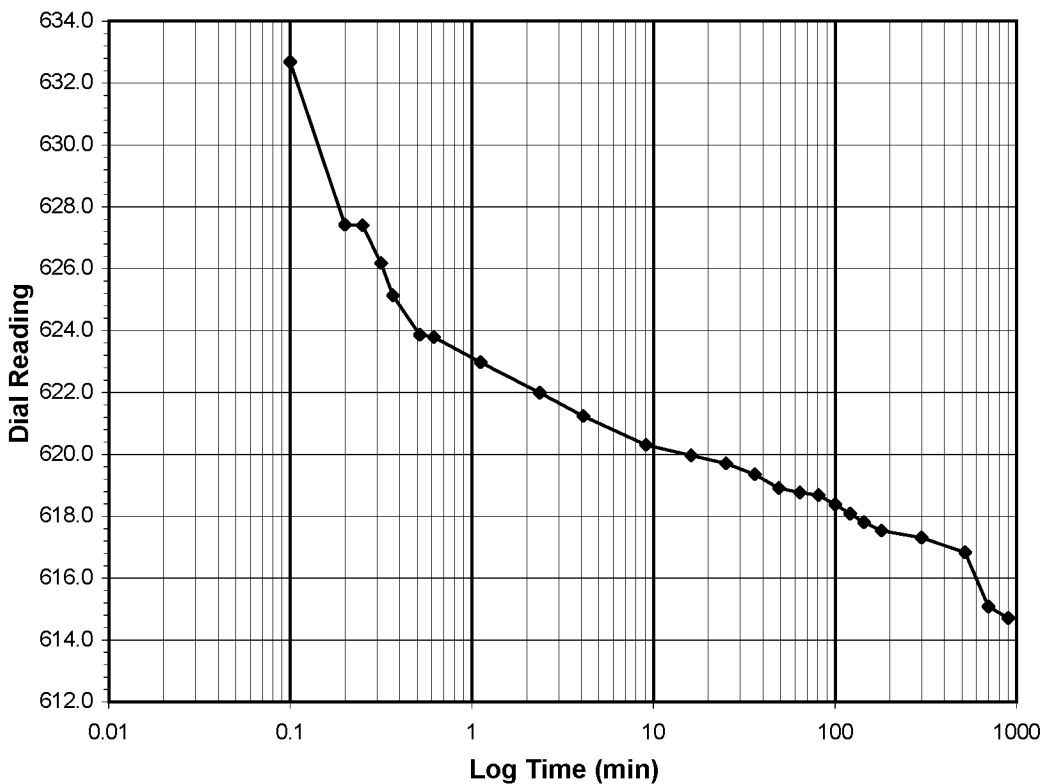
Boring No. R-7-1  
 Depth (ft) 289.6-290.0  
 Sample No. ST-12  
 Visual Description Gray Silty Fine Sand

**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)
<b>Initial</b>	<b>728.7</b>
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

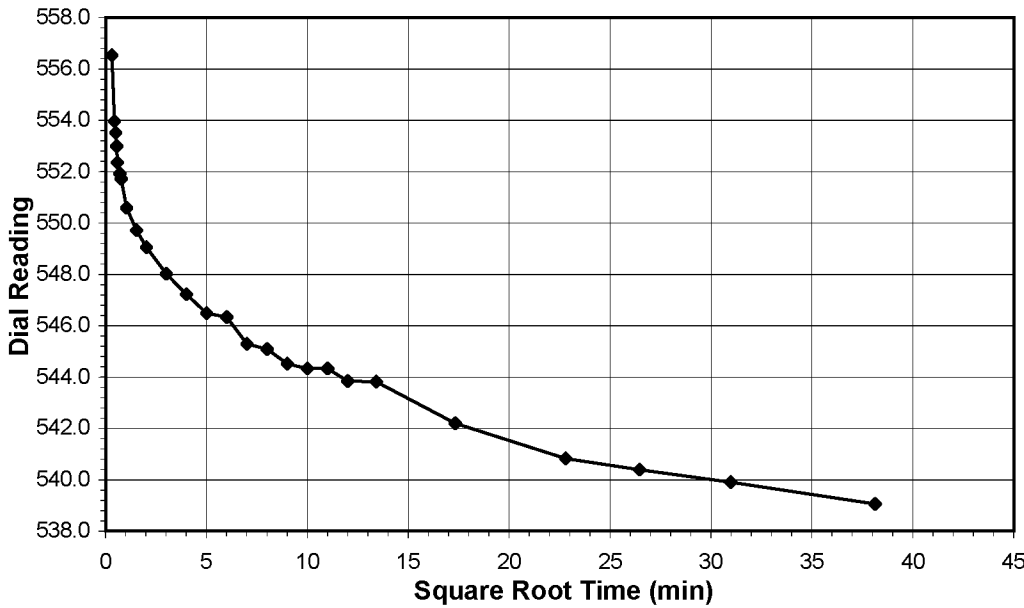
## ONE DIMENSIONAL CONSOLIDATION

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

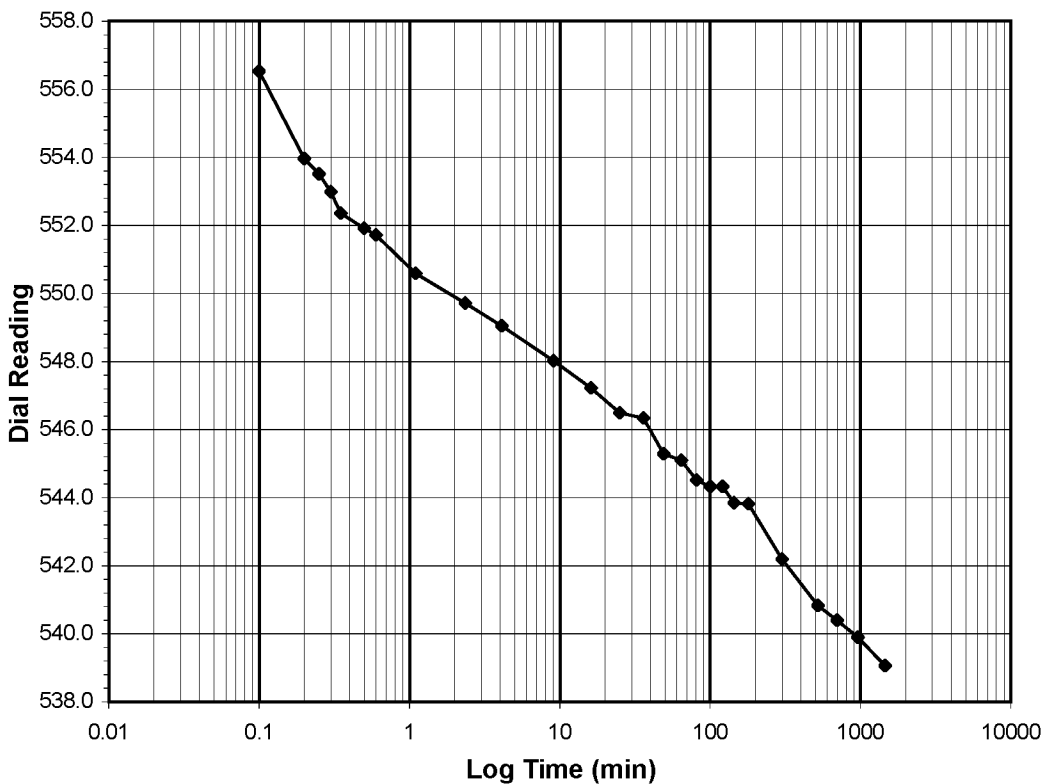
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>614.7</b>
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	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	Visual Description	Gray Silty 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 (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cm <sup>3</sup> )	Dry Density (g/cm <sup>3</sup> )	Void Ratio
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	Seating	0	0	0	25.400	80.440	1.52930	<b>0.73935</b>
Wt. Tare (g)	6.79	6.77	0.25	62.3	17.0	45.3	25.285	80.075	1.53627	<b>0.73147</b>
Wt. DS (g)	103.67	121.47	0.5	95.5	22.5	73.1	25.214	79.852	1.54056	<b>0.72665</b>
Water Content (%)	24.00	25.84	1	146.0	31.8	114.2	25.110	79.521	1.54697	<b>0.71949</b>
			2	209.8	56.2	153.6	25.010	79.204	1.55316	<b>0.71264</b>
			4	297.6	87.6	210.0	24.867	78.751	1.56210	<b>0.70283</b>
<b><u>Sample Parameters</u></b>			1	235.8	52.8	183.0	24.935	78.968	1.55781	<b>0.70753</b>
Sample Diameter (in)	2.5	2.5	0.25	189.9	24.8	165.1	24.981	79.112	1.55497	<b>0.71064</b>
Sample Height (in)	1.0000	0.9529	0.5	203.6	31.4	172.1	24.963	79.055	1.55609	<b>0.70942</b>
Sample Volume (cm <sup>3</sup> )	80.44	76.65	1	222.1	45.6	176.5	24.952	79.020	1.55677	<b>0.70866</b>
Wt. Wet Sample + Ring (g)	366.79	369.06	2	248.5	60.3	188.3	24.922	78.926	1.55865	<b>0.70661</b>
Wt. of Ring (g)	214.25	214.25	4	299.7	86.5	213.2	24.858	78.725	1.56263	<b>0.70226</b>
Wt. of Wet Sample (g)	152.54	154.81	8	397.0	137.0	260.0	24.740	78.349	1.57012	<b>0.69414</b>
Wet Density (pcf)	118.33	126.02	16	557.8	196.5	361.3	24.482	77.533	1.58663	<b>0.67651</b>
Wet Density (g/cm <sup>3</sup> )	1.90	2.02	32	860.5	283.7	576.8	23.935	75.800	1.62291	<b>0.63904</b>
Water Content (%)	24.00	25.84	8	728.7	174.5	554.2	23.992	75.981	1.61904	<b>0.64295</b>
Wt. of Dry Sample (g)	123.02	123.02	2	614.7	104.7	510.1	24.104	76.337	1.61150	<b>0.65064</b>
Dry Density (pcf)	95.43	100.14	0.5	539.1	68.4	470.7	24.204	76.654	1.60484	<b>0.65748</b>
Dry Density (g/cm <sup>3</sup> )	1.53	1.60								
Void Ratio	0.7394	0.6575								
Saturation (%)	86.34	104.55								
Specific Gravity	2.66	<i>Measured</i>								
			<i>Tested By</i>	<i>DB</i>	<i>Date</i>	<i>10/25/13</i>	<i>Input Checked By</i>	<i>TM</i>	<i>Date</i>	<i>12/5/13</i>

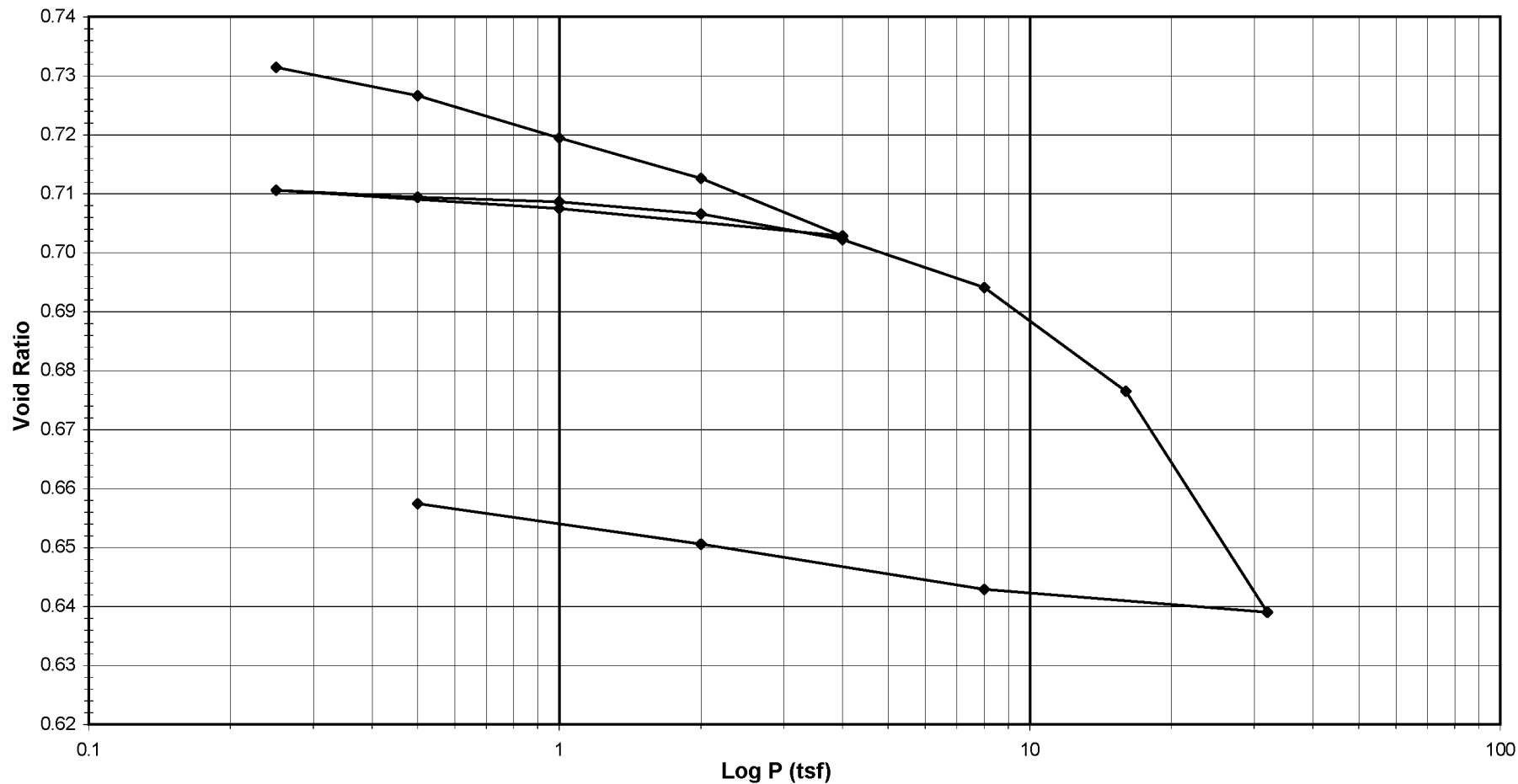
# ONE DIMENSIONAL CONSOLIDATION

ASTM D2435 / D2435M-11

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point Units 6 & 7 Site  
 Project No. 2013-465-001  
 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	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	Visual Description	Gray Silty Fine Sand

**Sample Conditions:** Undisturbed, Inundated And Double Drained**Consolidometer No.** G1424**1 Division** = 0.0001 (in)**C<sub>v</sub> Test Data Summary**

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>	<u>Load Increment</u>	<u>Dial Reading @ t<sub>50</sub></u>	<u>Machine Deflection</u>	<u>Corrected Dial Reading @ t<sub>50</sub></u>	<u>Sample Height @ t<sub>50</sub></u>	<u>Time t<sub>50</sub></u>	<u>C<sub>v</sub></u>
			(tsf)	(div)	(div)	(div)	(mm)	(min)	(cm <sup>2</sup> /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	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare (g)	6.79	6.77	0.25	42.2	17.0	25.2	25.34	0.29	0.01797
Wt. DS (g)	103.67	121.47	0.5	80.5	22.5	58.1	25.25	0.82	0.00644
Water Content (%)	24.00	25.84	1	123.3	31.8	91.5	25.17	0.39	0.01349
			2	186.8	56.2	130.6	25.07	0.26	0.01999
			4	260.0	87.6	172.4	24.96	0.14	0.03684
<b><u>Sample Parameters</u></b>			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	0.9529	0.5	200.1	31.4	168.7	24.97	0.30	0.01712
Sample Volume (cm <sup>3</sup> )	80.44	76.65	1	216.8	45.6	171.2	24.97	0.34	0.01491
Wt. Wet Sample + Ring (g)	366.79	369.06	2	241.9	60.3	181.7	24.94	0.35	0.01474
Wt. of Ring (g)	214.25	214.25	4	285.5	86.5	199.0	24.89	0.74	0.00695
Wt. of Wet Sample (g)	152.54	154.81	8	367.3	137.0	230.3	24.82	0.22	0.02262
Wet Density (pcf)	118.33	126.02	16	518.6	196.5	322.1	24.58	0.20	0.02446
Wet Density (g/cm <sup>3</sup> )	1.90	2.02	32	758.6	283.7	474.9	24.19	0.23	0.02088
Water Content (%)	24.00	25.84	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	123.02	123.02	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	95.43	100.14	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm <sup>3</sup> )	1.53	1.60							
Void Ratio	0.7394	0.6575							
Saturation (%)	86.34	104.55							
Specific Gravity	2.66	Measured							

<b>Tested By</b>	DB	<b>Date</b>	10/25/13	<b>Input Checked By</b>	TM	<b>Date</b>	12/5/13
------------------	----	-------------	----------	-------------------------	----	-------------	---------



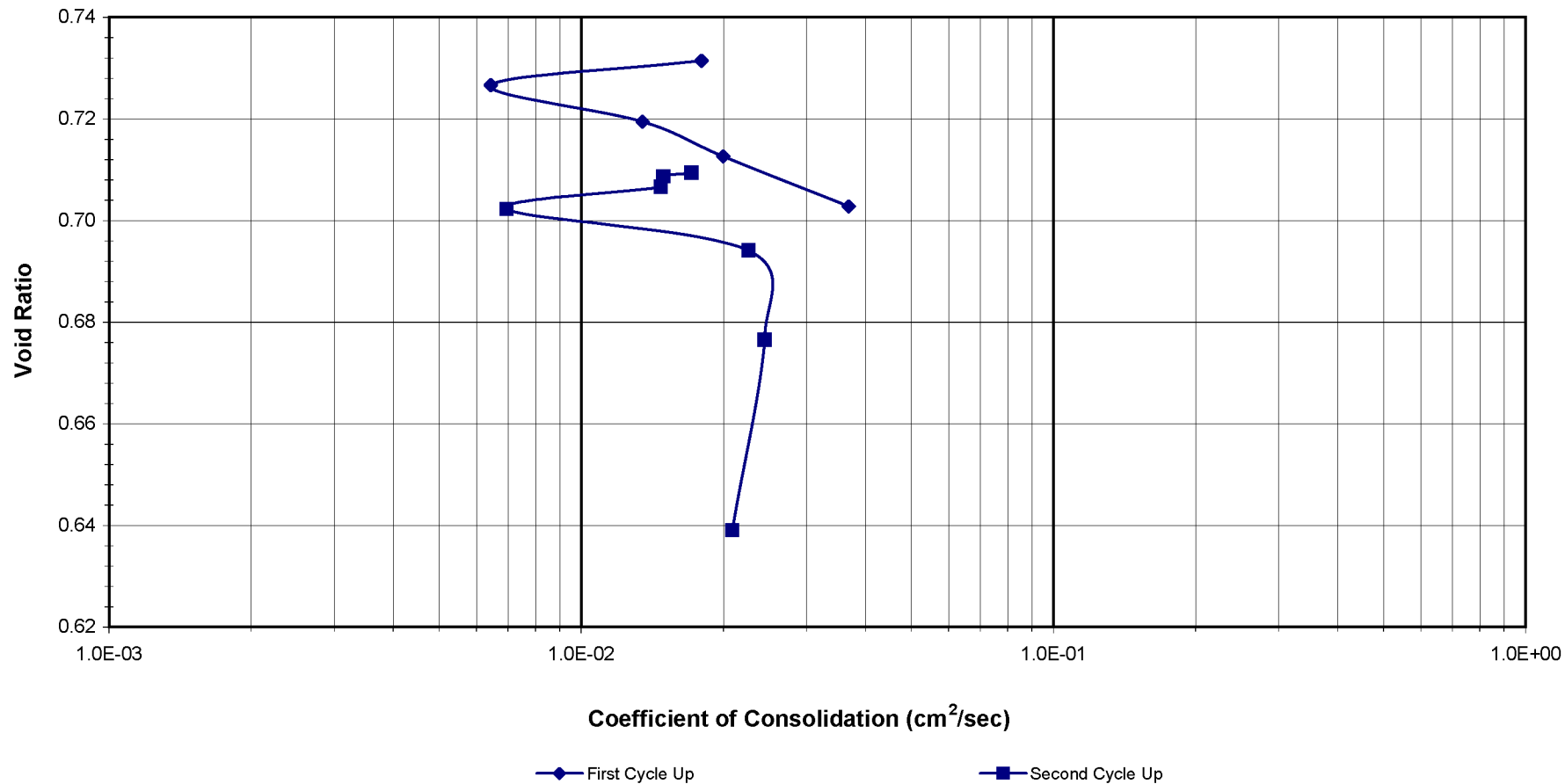
# ONE DIMENSIONAL CONSOLIDATION

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

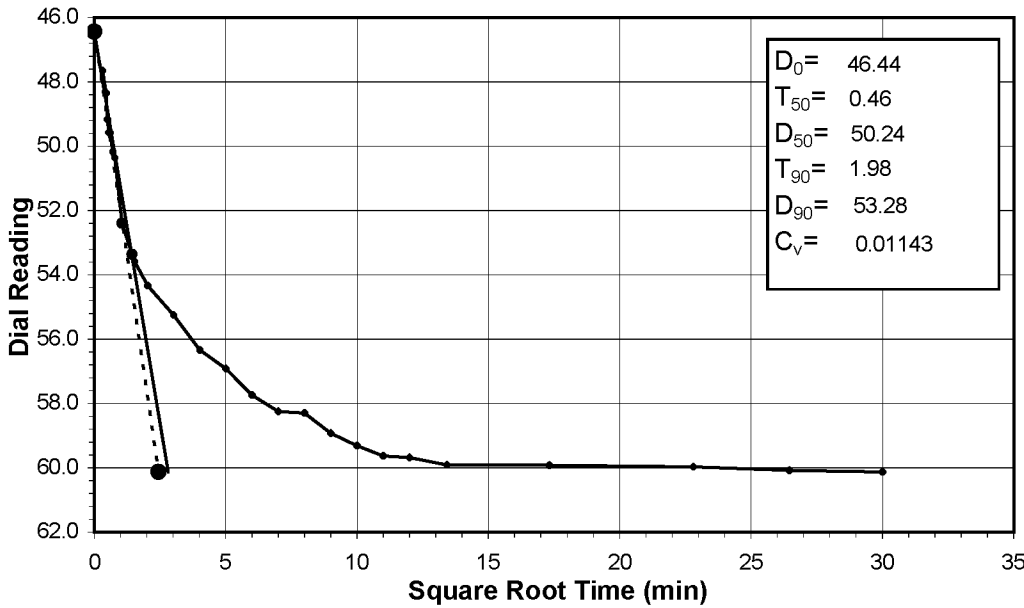
# ONE DIMENSIONAL CONSOLIDATION

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

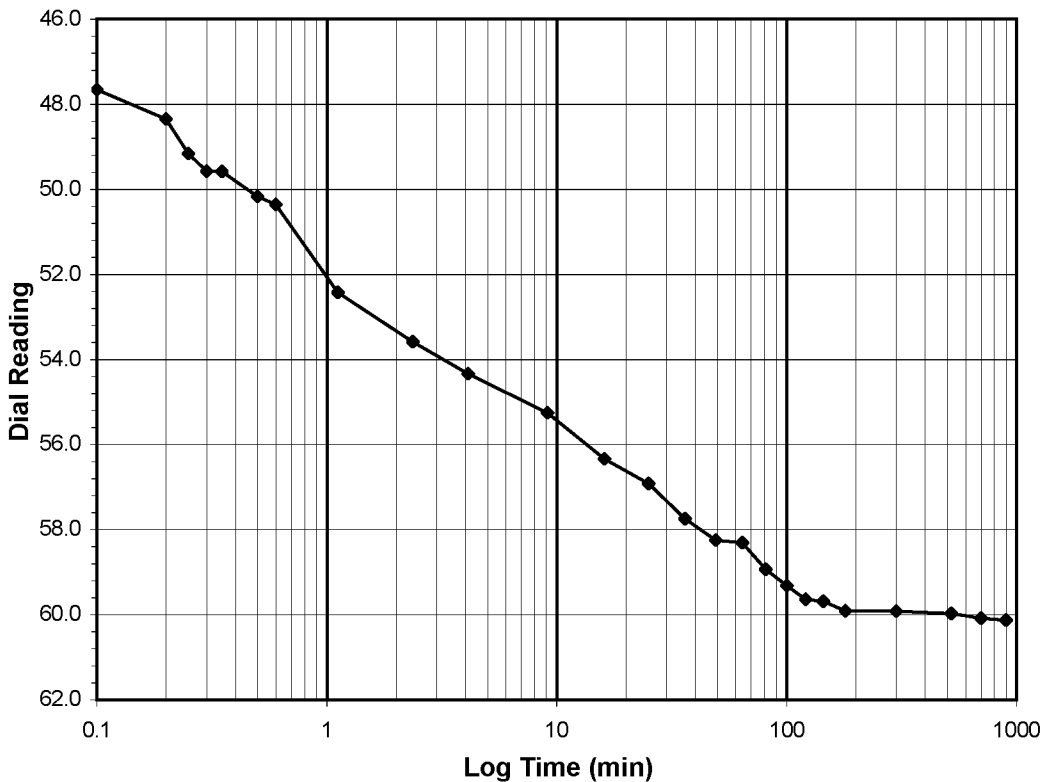
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>0.0</b>
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

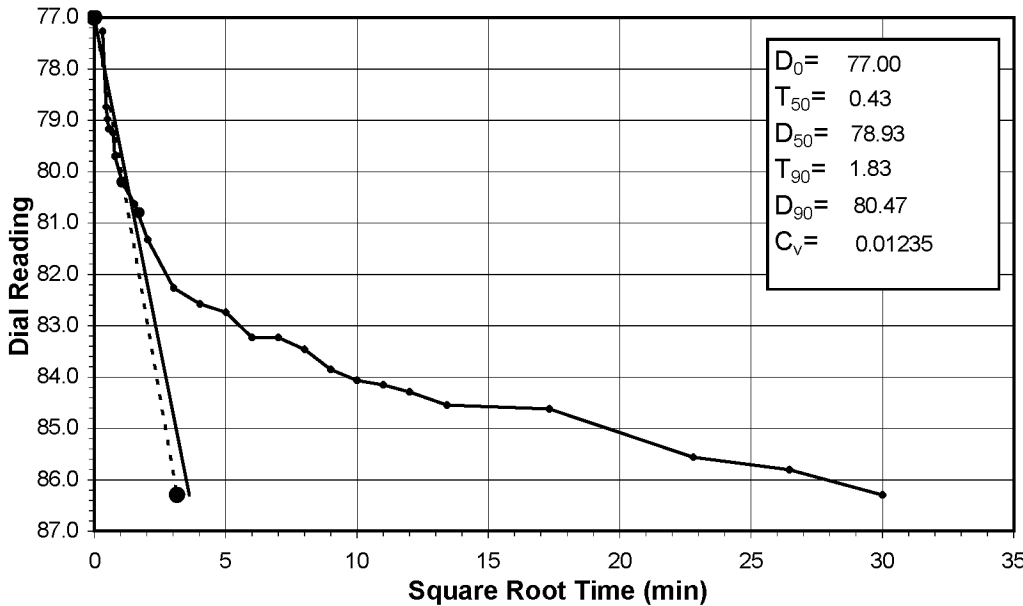
# ONE DIMENSIONAL CONSOLIDATION

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

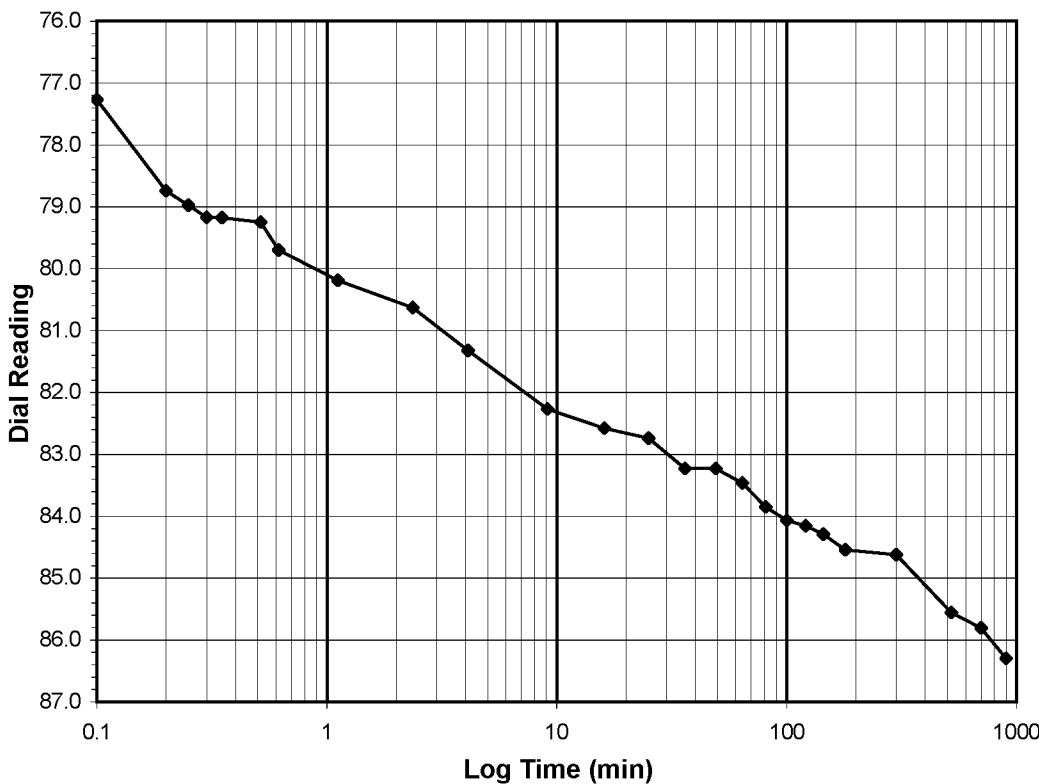
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>60.1</b>
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

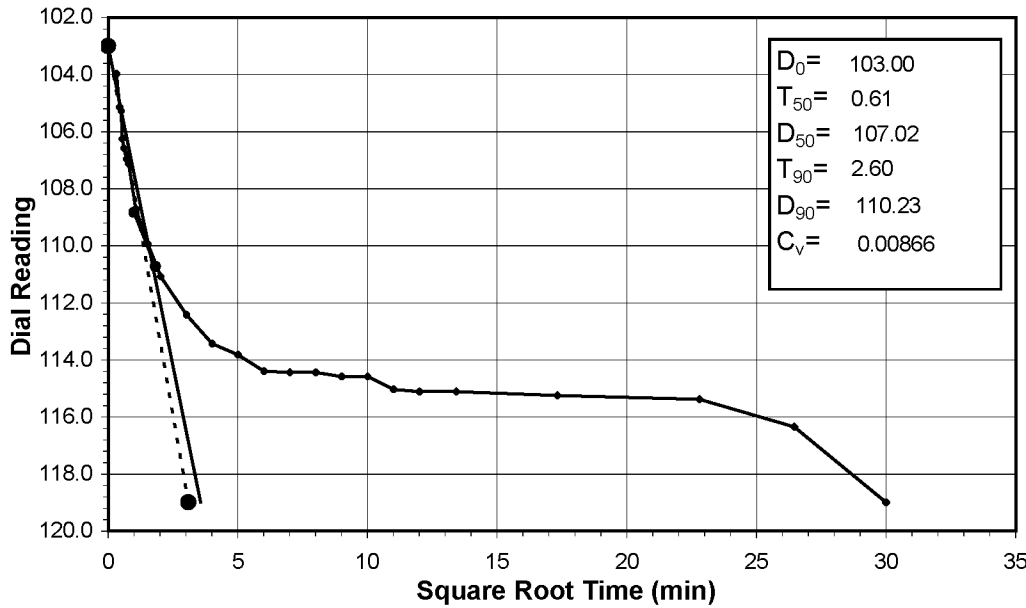
# ONE DIMENSIONAL CONSOLIDATION

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

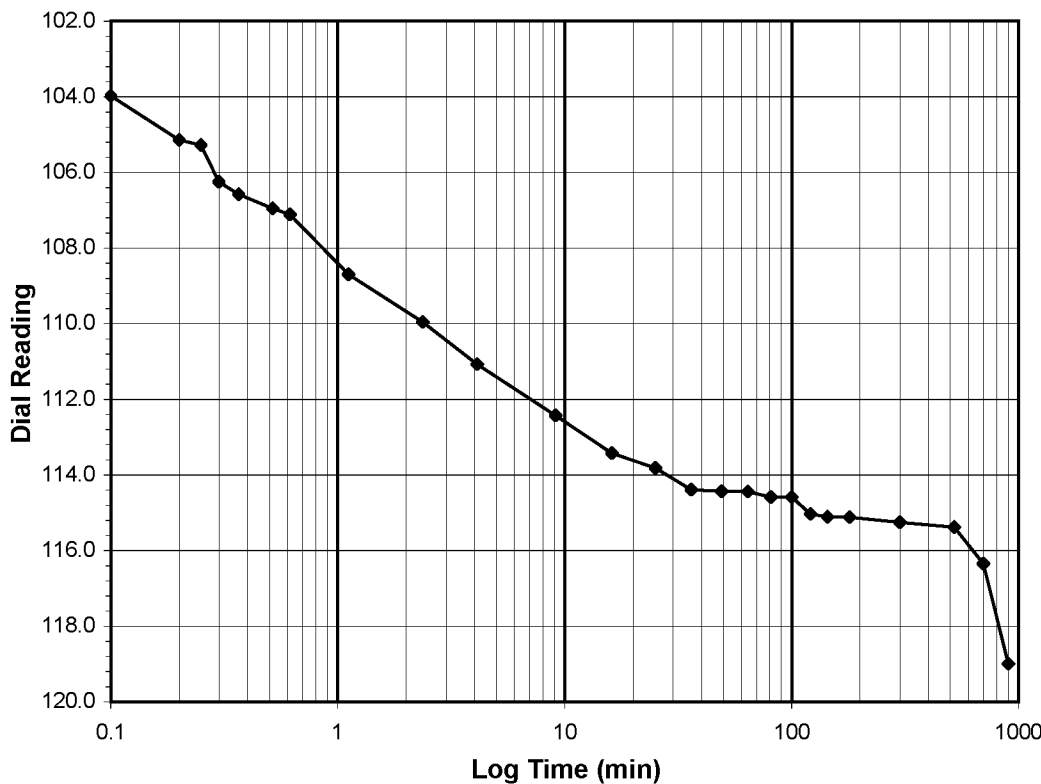
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>86.3</b>
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

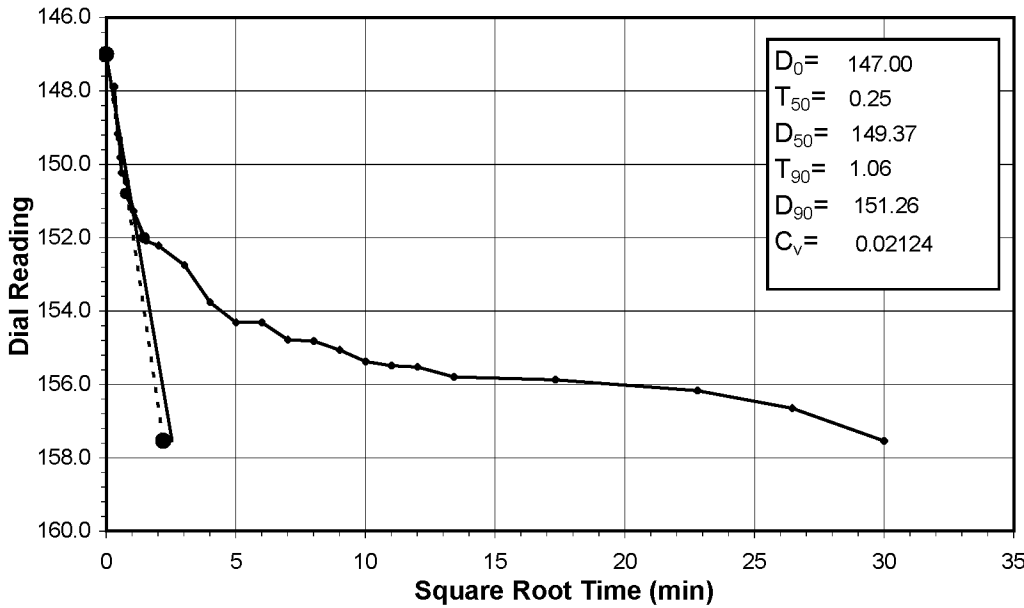
# ONE DIMENSIONAL CONSOLIDATION

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

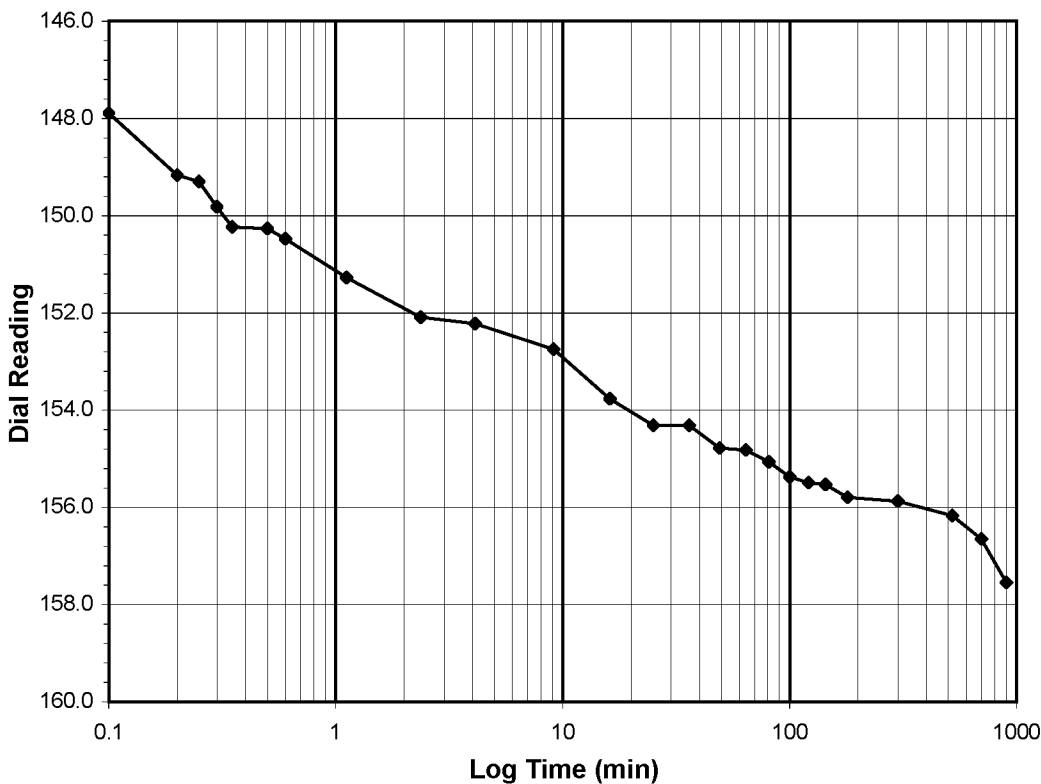
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>119.0</b>
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

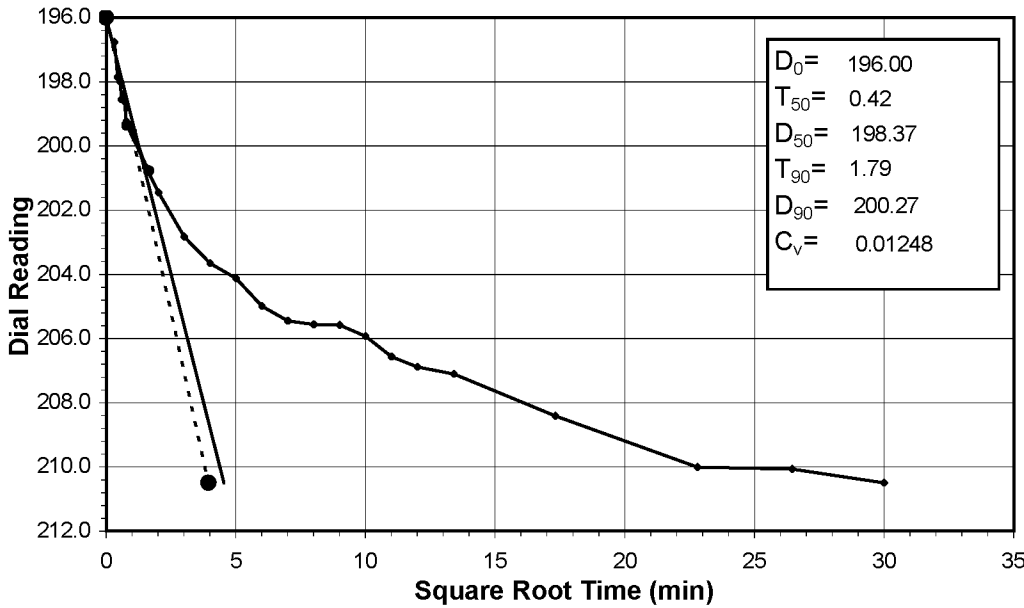
## ONE DIMENSIONAL CONSOLIDATION

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

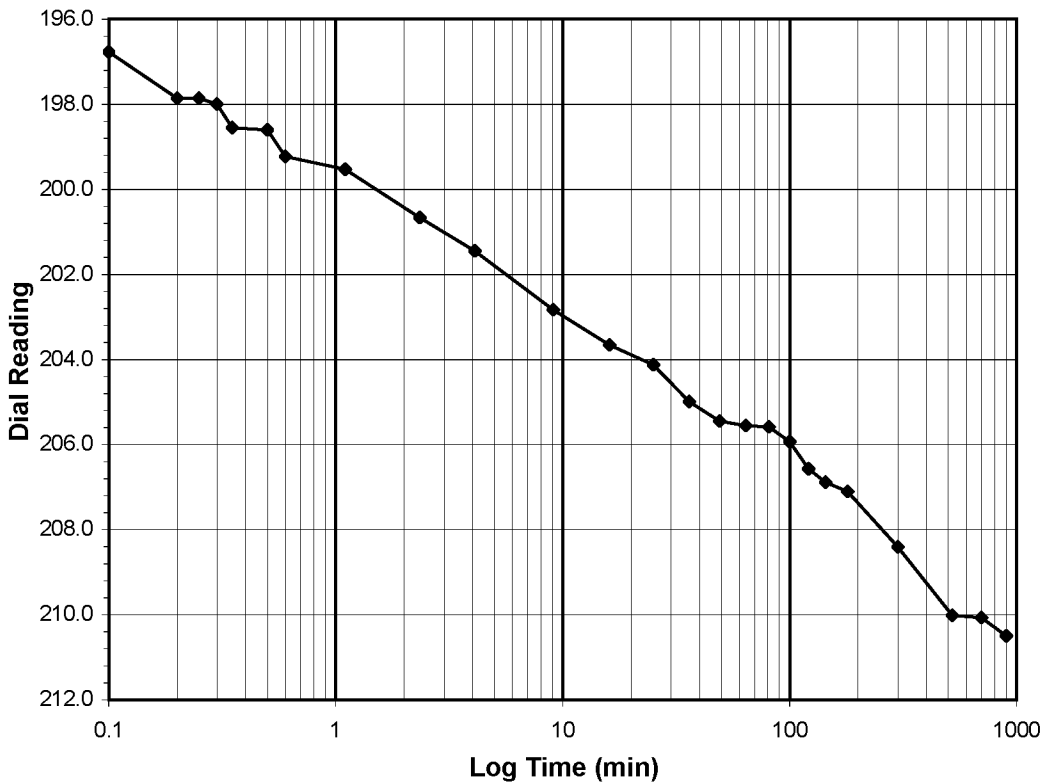
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**Sample Conditions:** Undisturbed, Inundated And Double Drained



<b>Test Load (tsf)</b>	<b>2.0-4.0</b>
<b>Final Reading (div)</b>	<b>210.5</b>
Consolidometer No.	<b>G1418</b>
1 Division (in)	0.0001
Start Date	11/9/13
Start Time	2:55:43

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>157.5</b>
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**

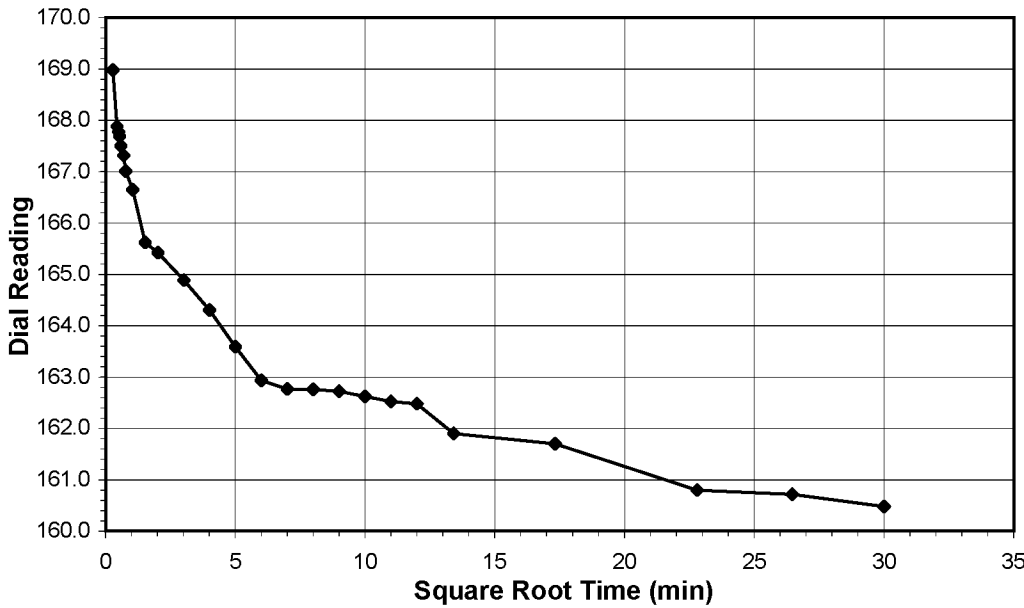
# ONE DIMENSIONAL CONSOLIDATION

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

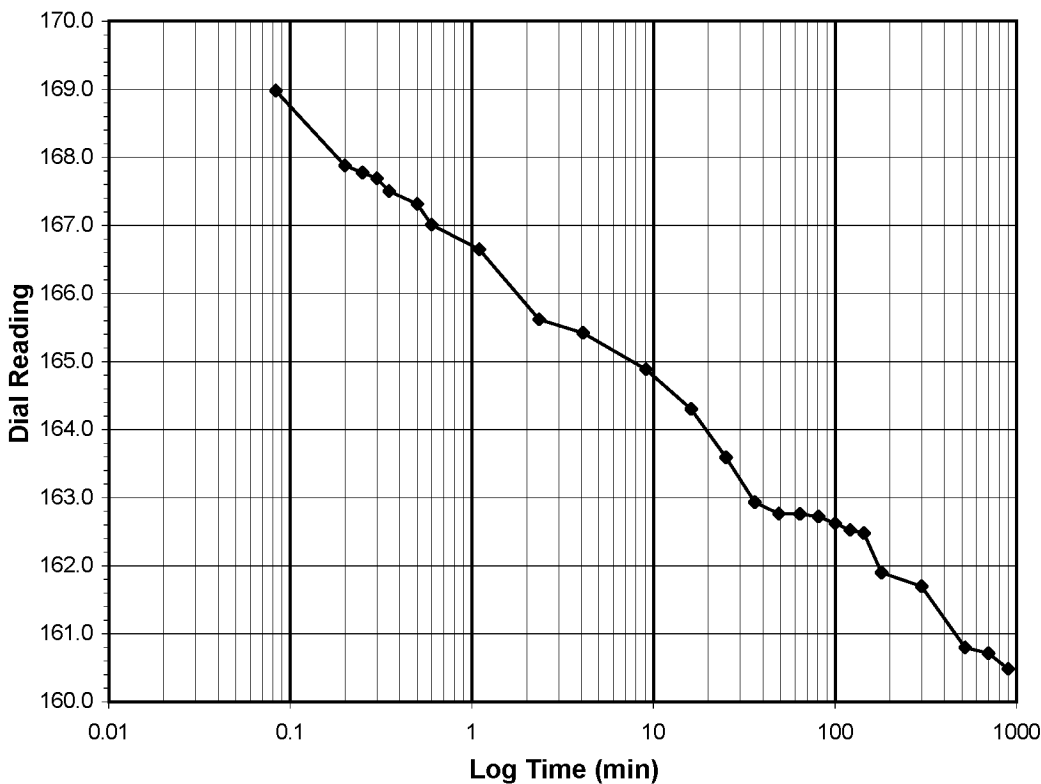
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>210.5</b>
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





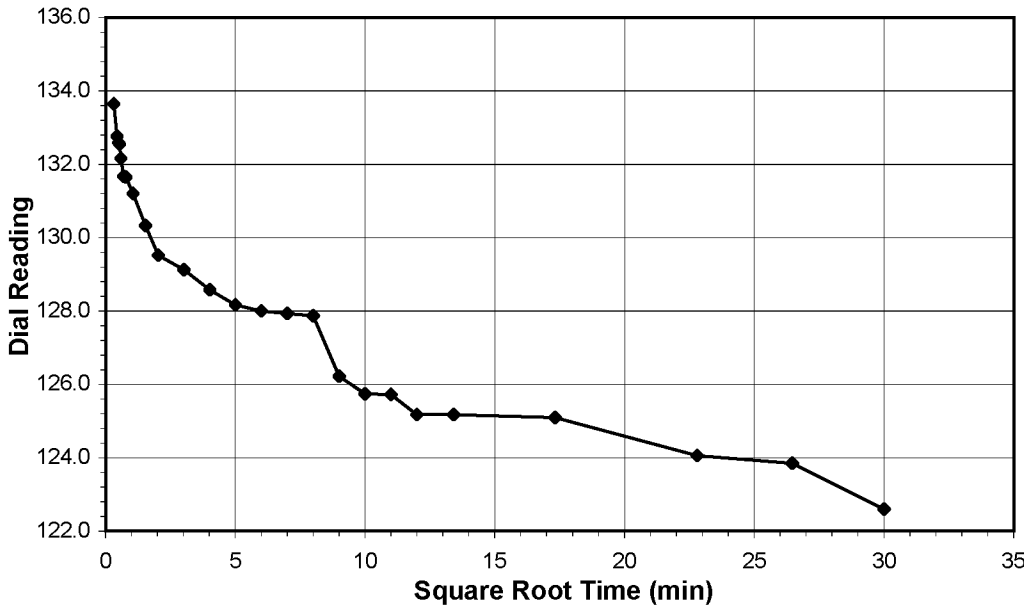
# ONE DIMENSIONAL CONSOLIDATION

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

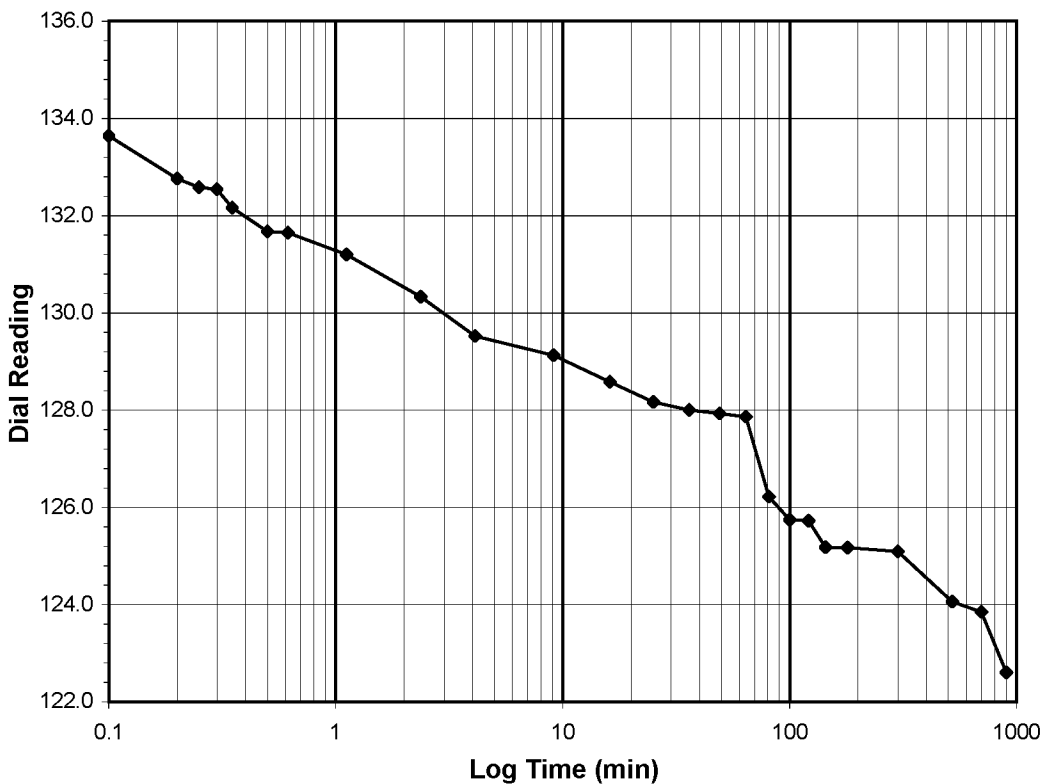
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>160.5</b>
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

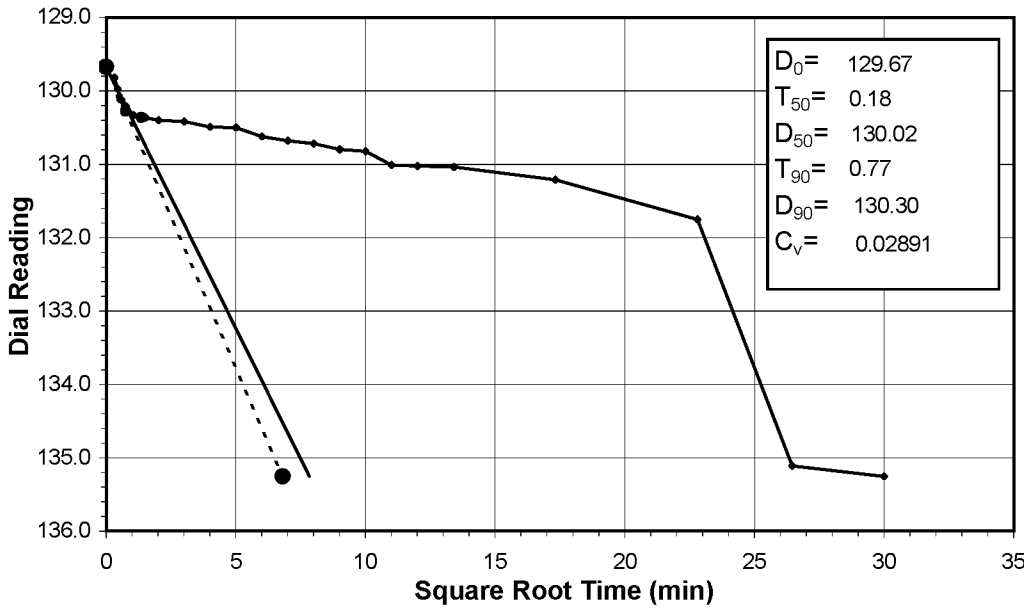
# ONE DIMENSIONAL CONSOLIDATION

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

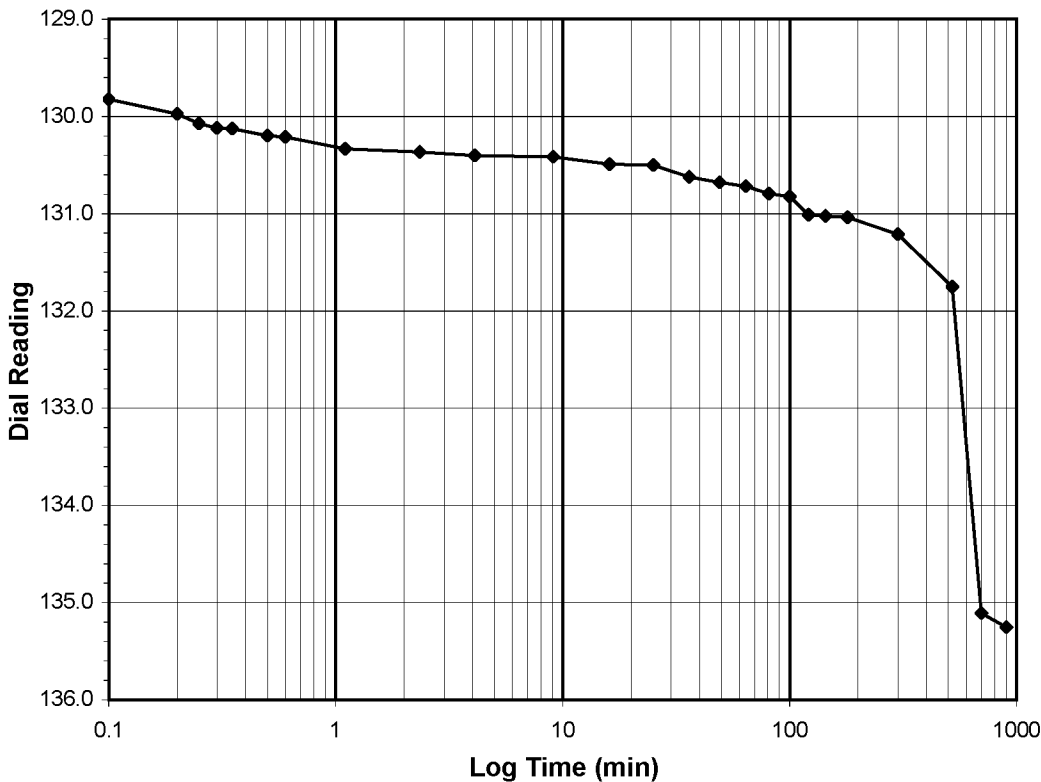
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>122.6</b>
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

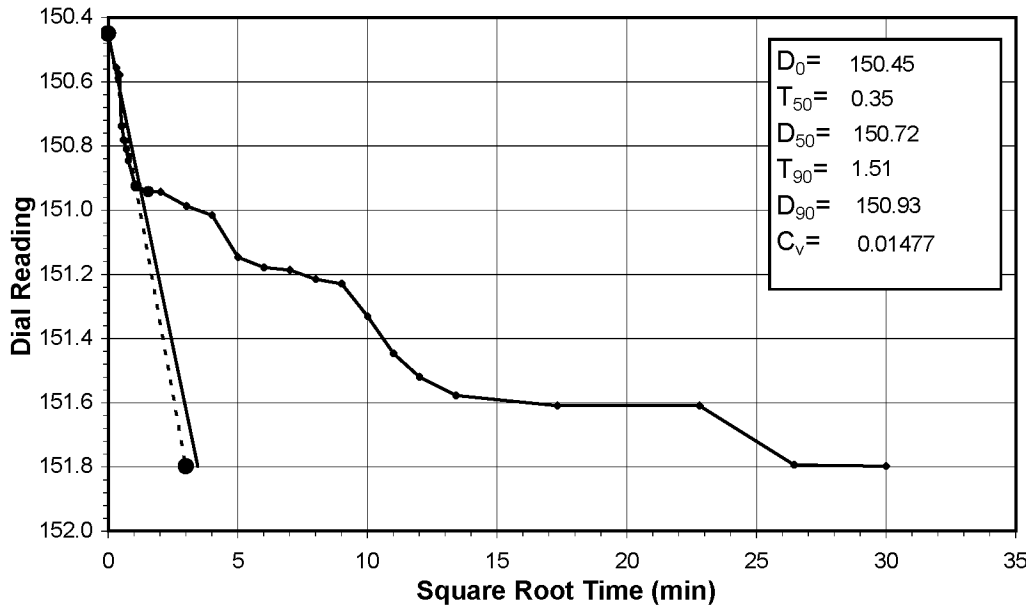
# ONE DIMENSIONAL CONSOLIDATION

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

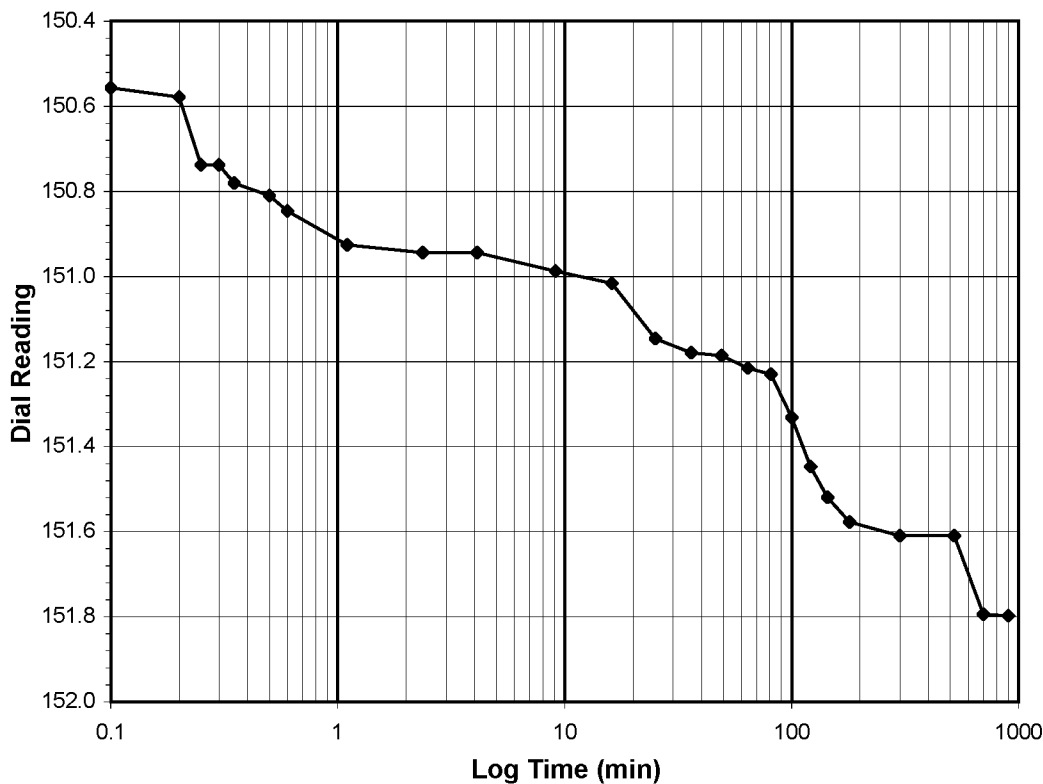
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>135.3</b>
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

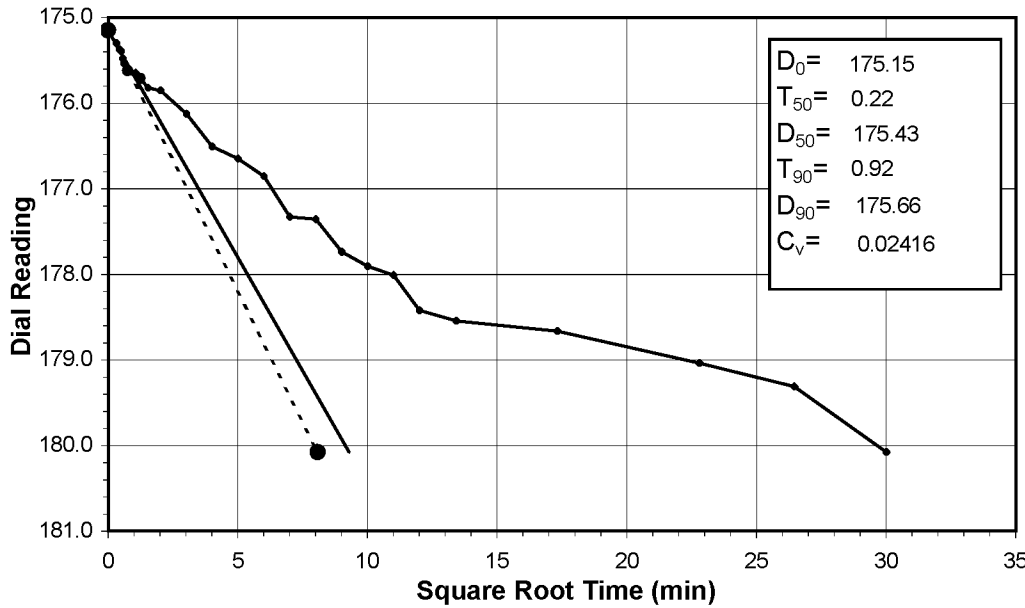
# ONE DIMENSIONAL CONSOLIDATION

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

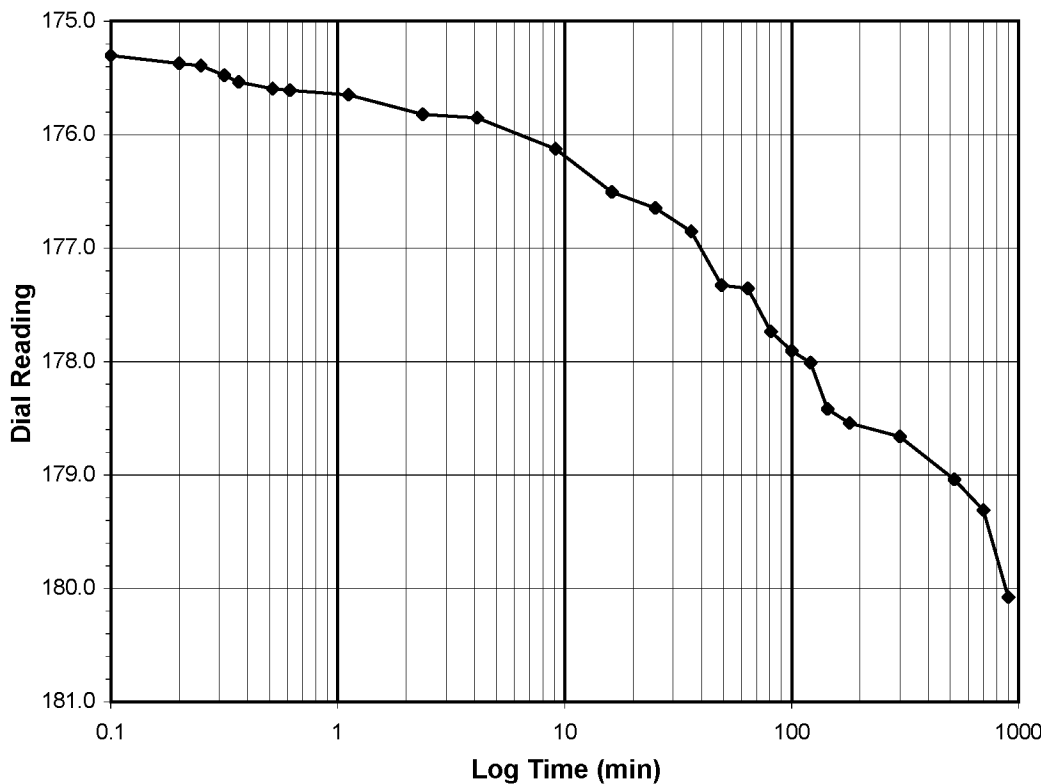
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>151.8</b>
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

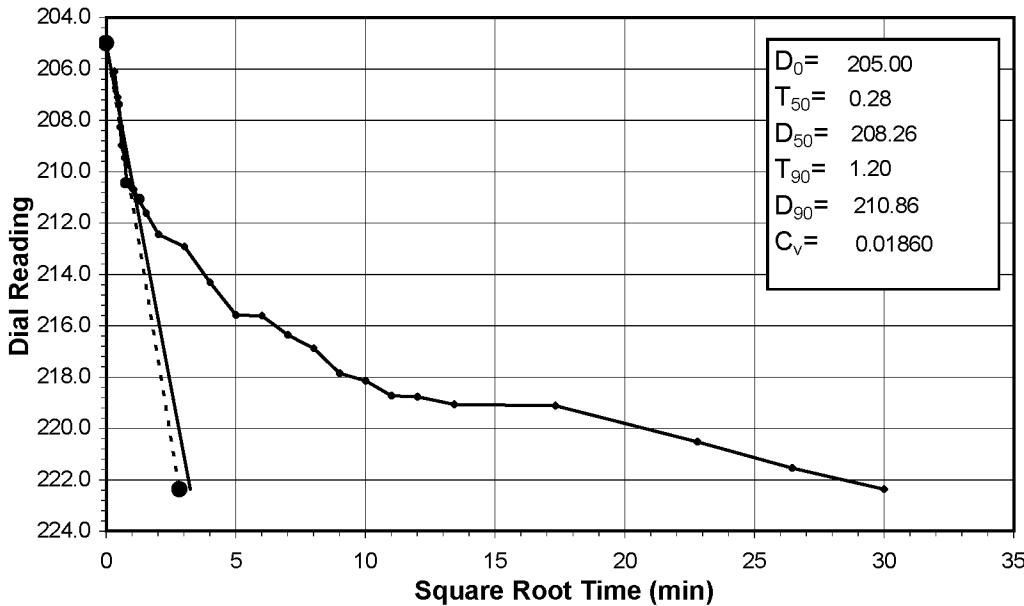
# ONE DIMENSIONAL CONSOLIDATION

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

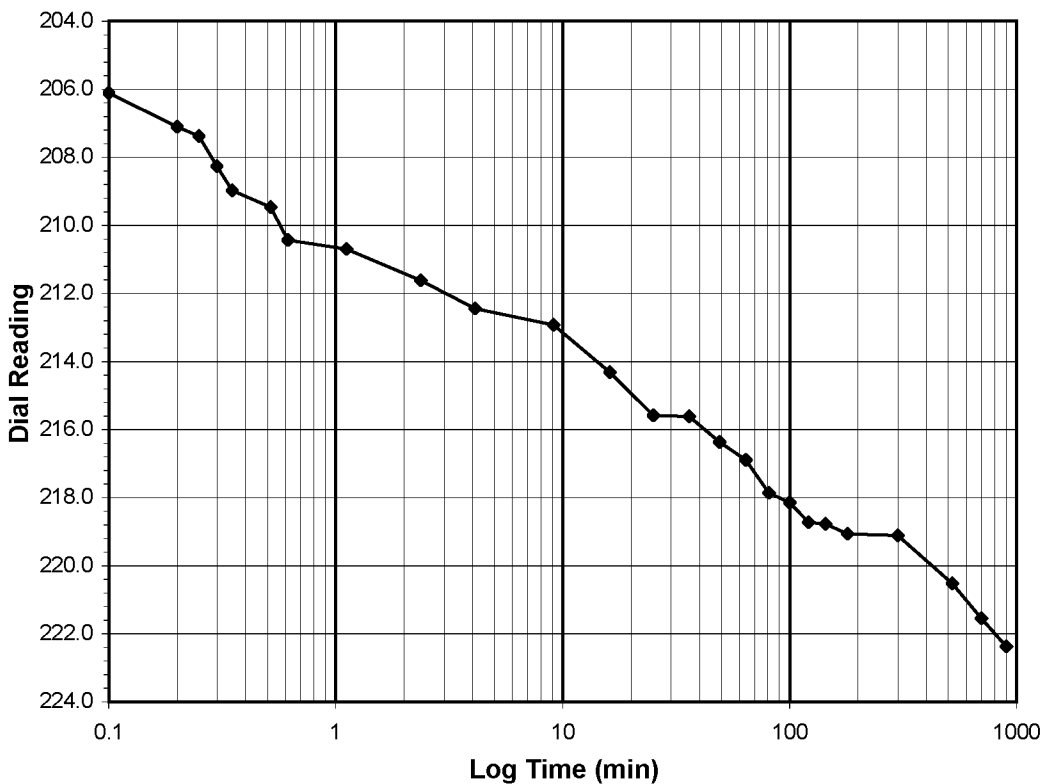
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>180.1</b>
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

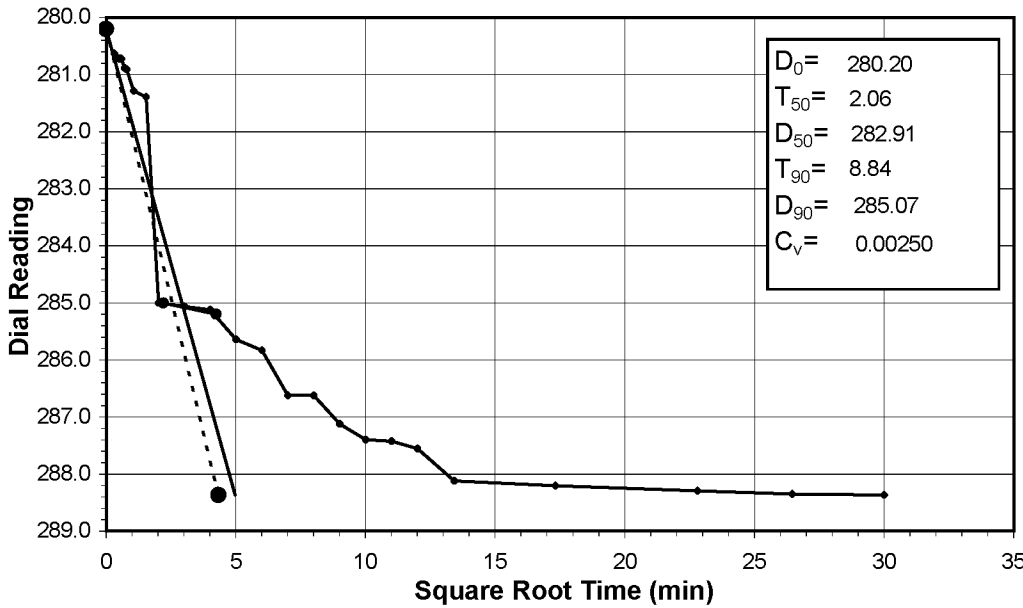
# ONE DIMENSIONAL CONSOLIDATION

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

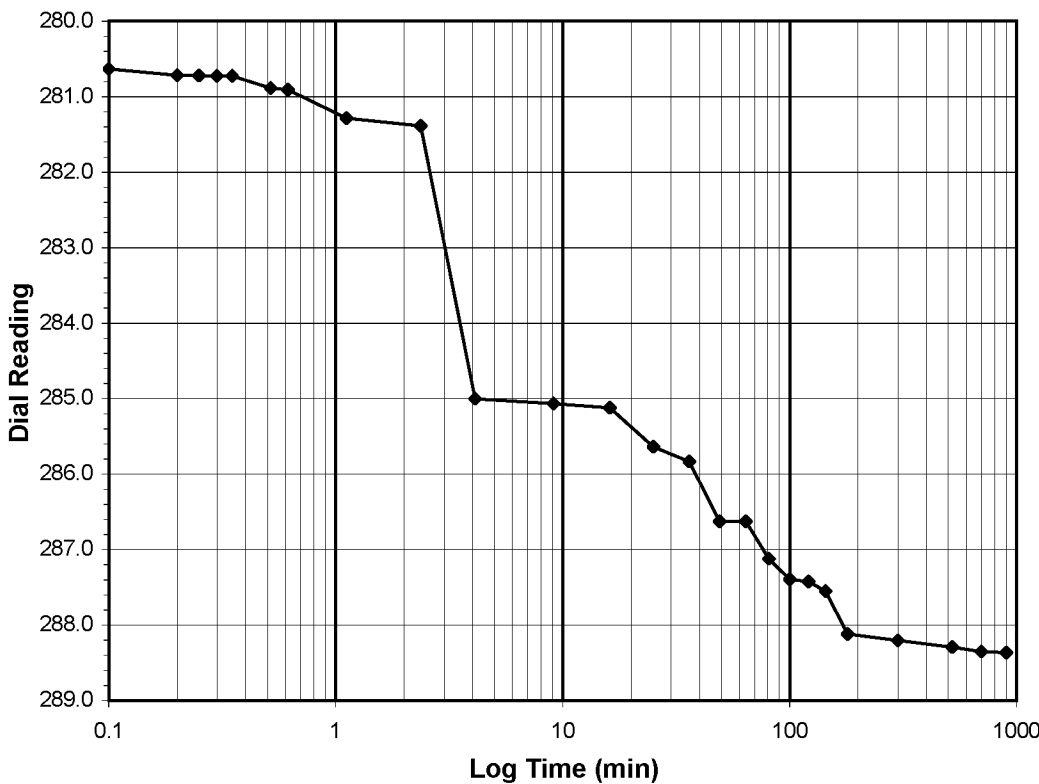
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>222.4</b>
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



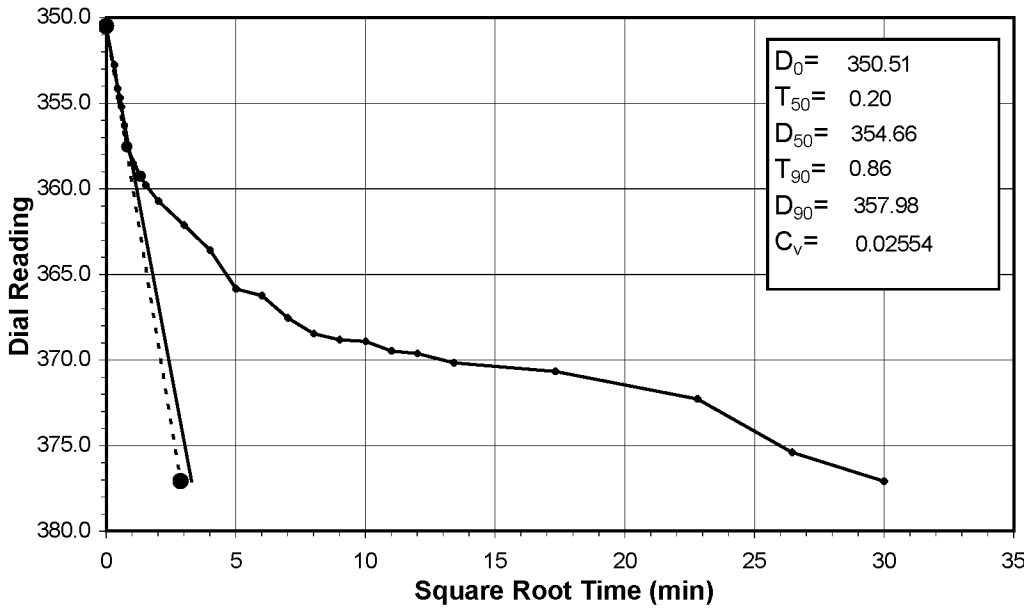
# ONE DIMENSIONAL CONSOLIDATION

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

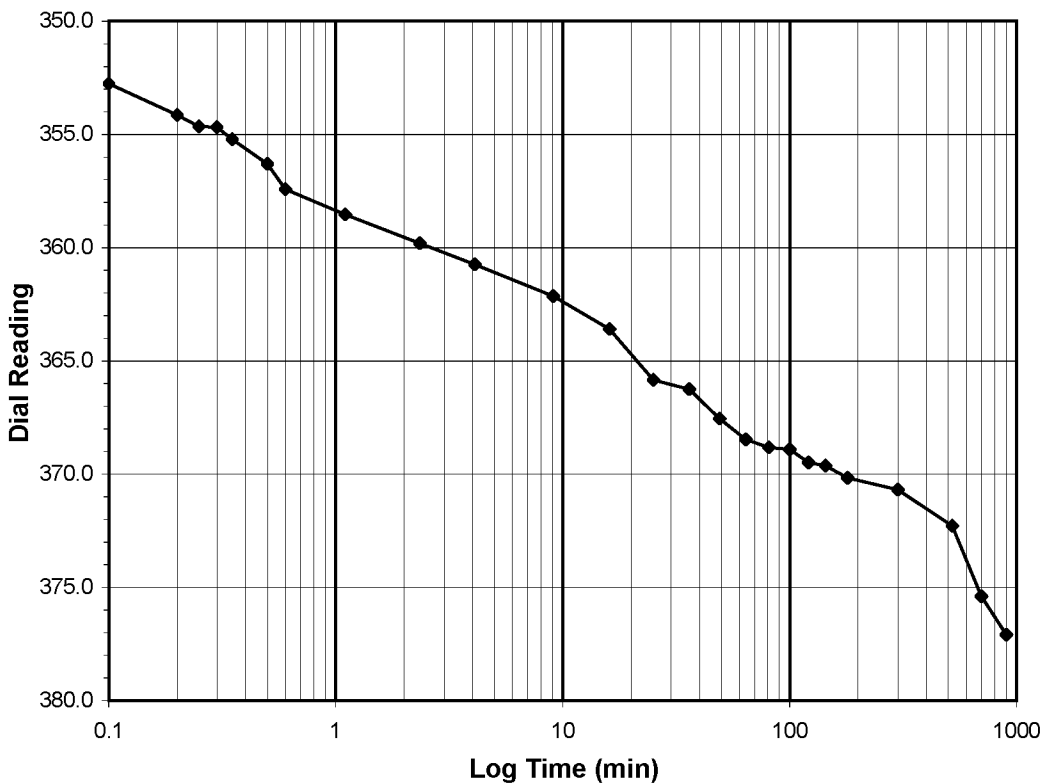
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>288.4</b>
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

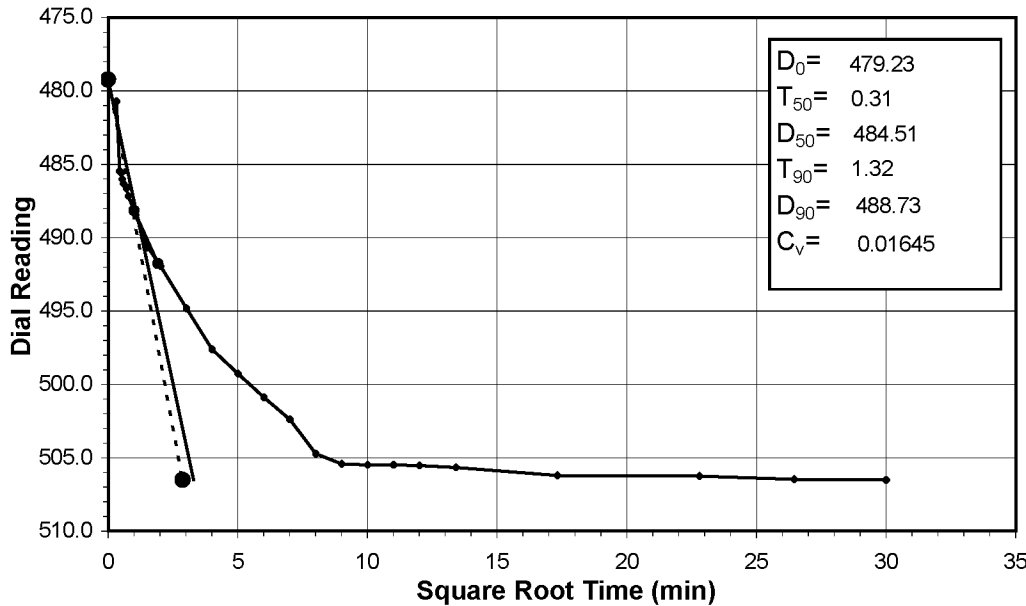
# ONE DIMENSIONAL CONSOLIDATION

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

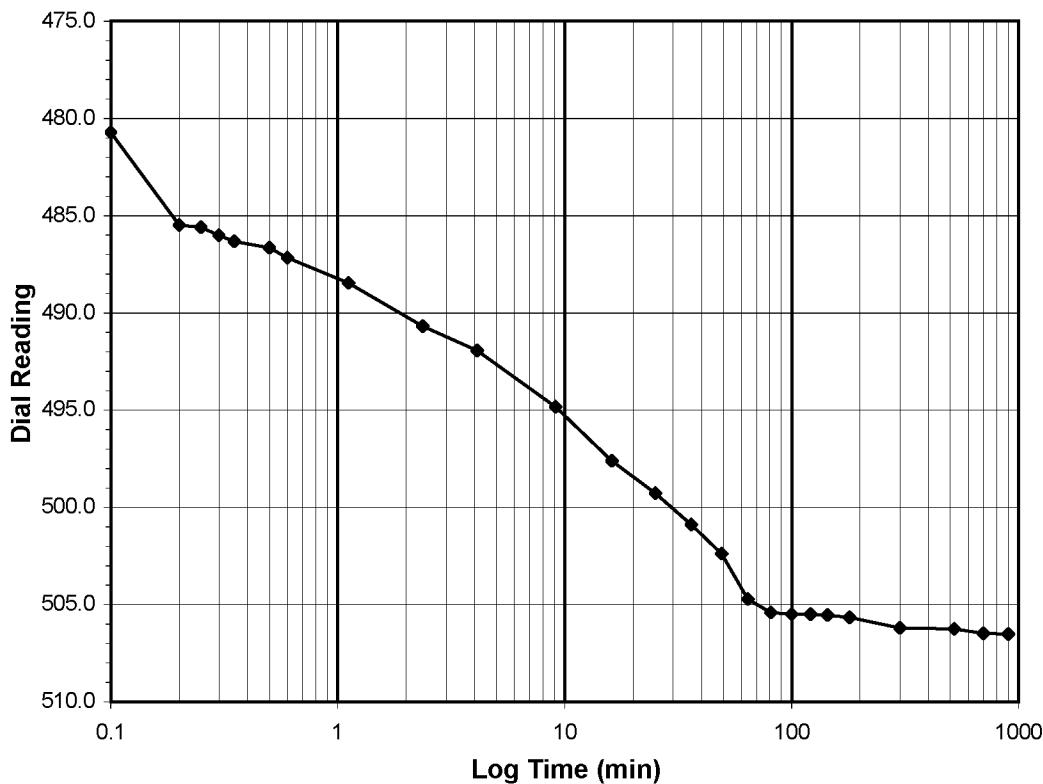
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>377.1</b>
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





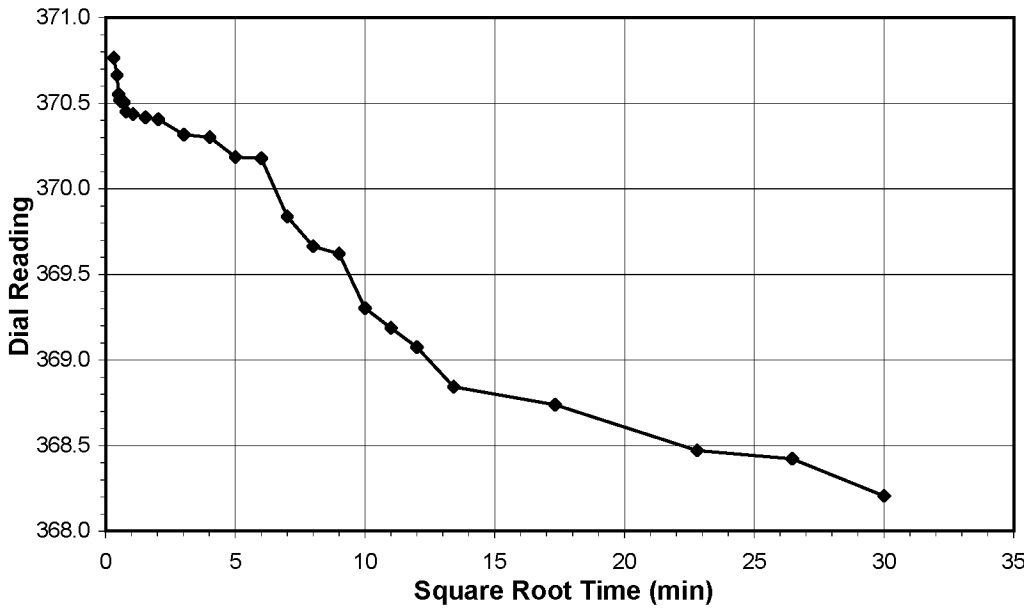
# ONE DIMENSIONAL CONSOLIDATION

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

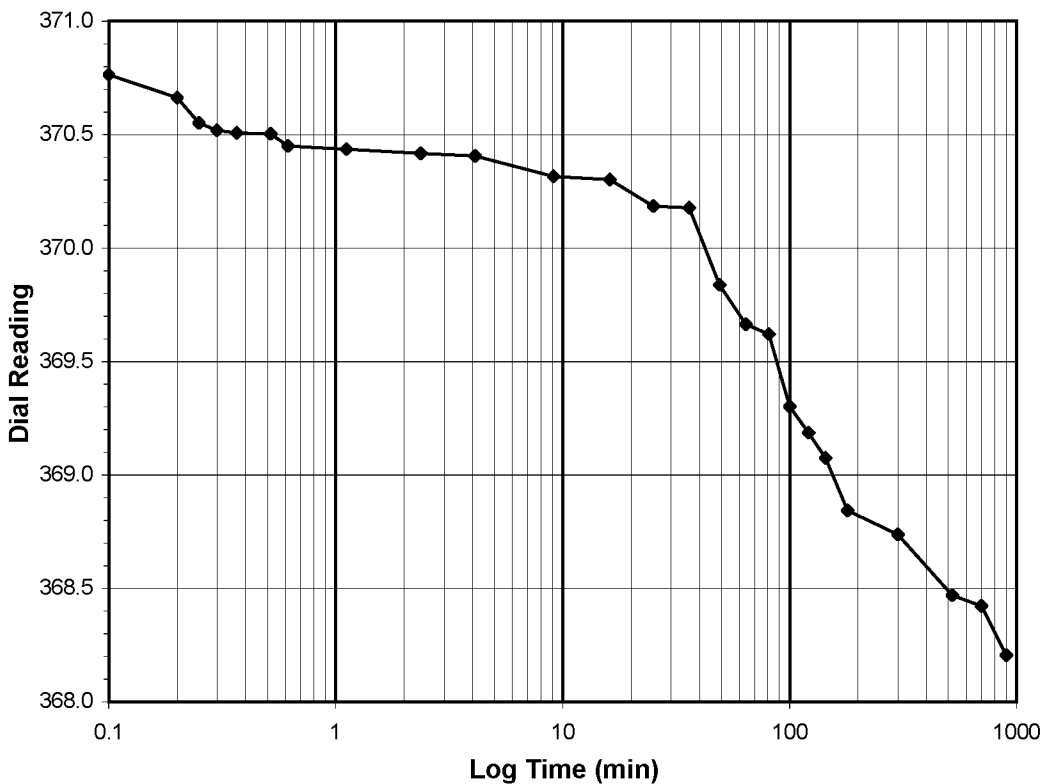
Boring No. R-7-1  
 Depth (ft) 338.7-338.9  
 Sample No. ST-18  
 Visual Description Gray Sand

**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)
<b>Initial</b>	<b>506.5</b>
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



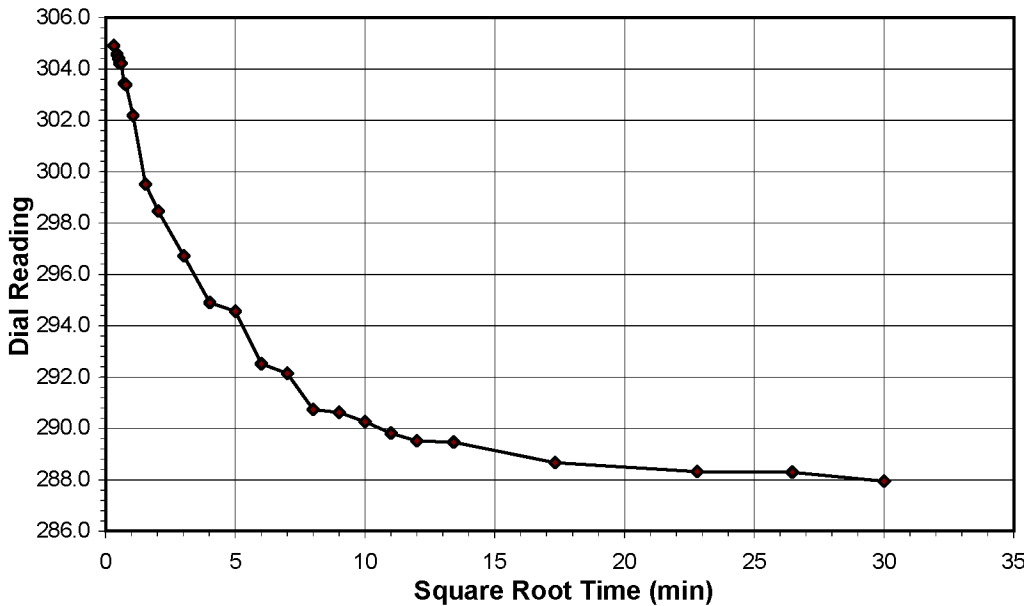
# ONE DIMENSIONAL CONSOLIDATION

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

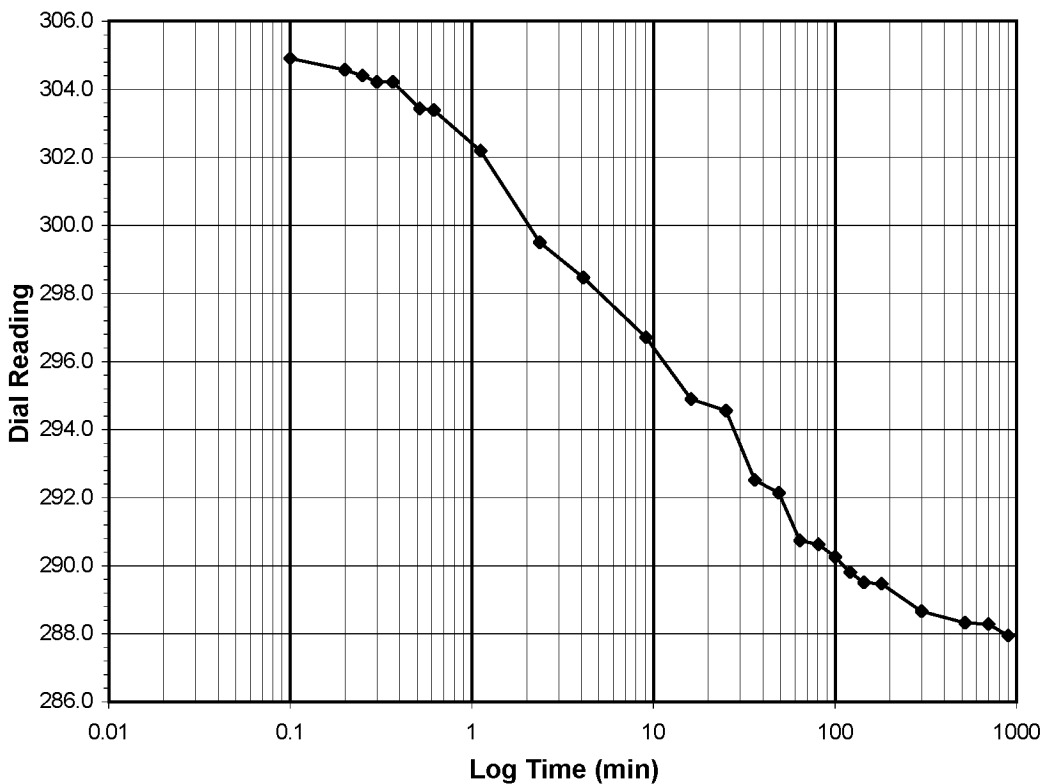
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>368.2</b>
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



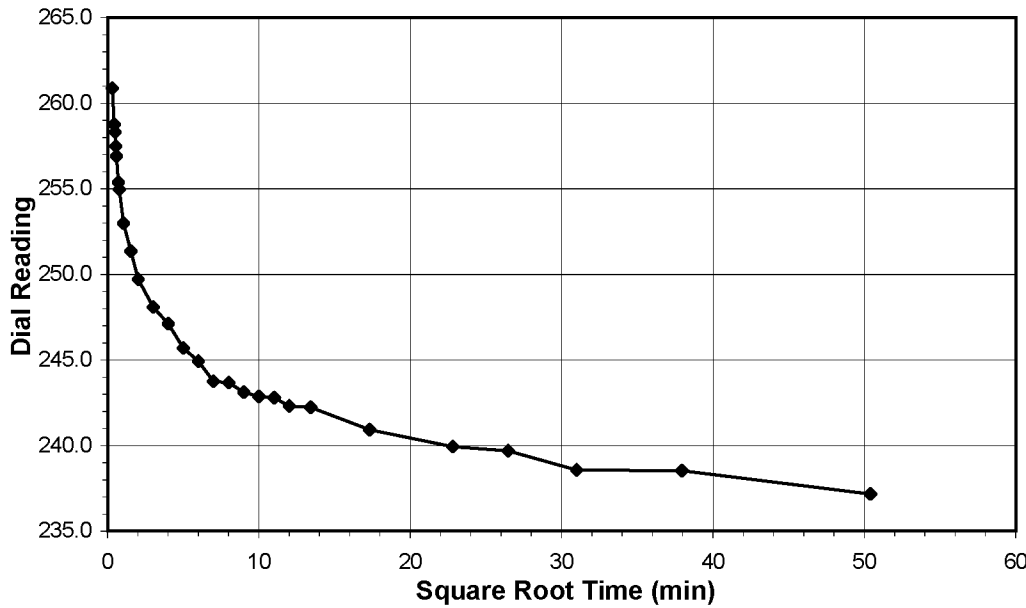
# ONE DIMENSIONAL CONSOLIDATION

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

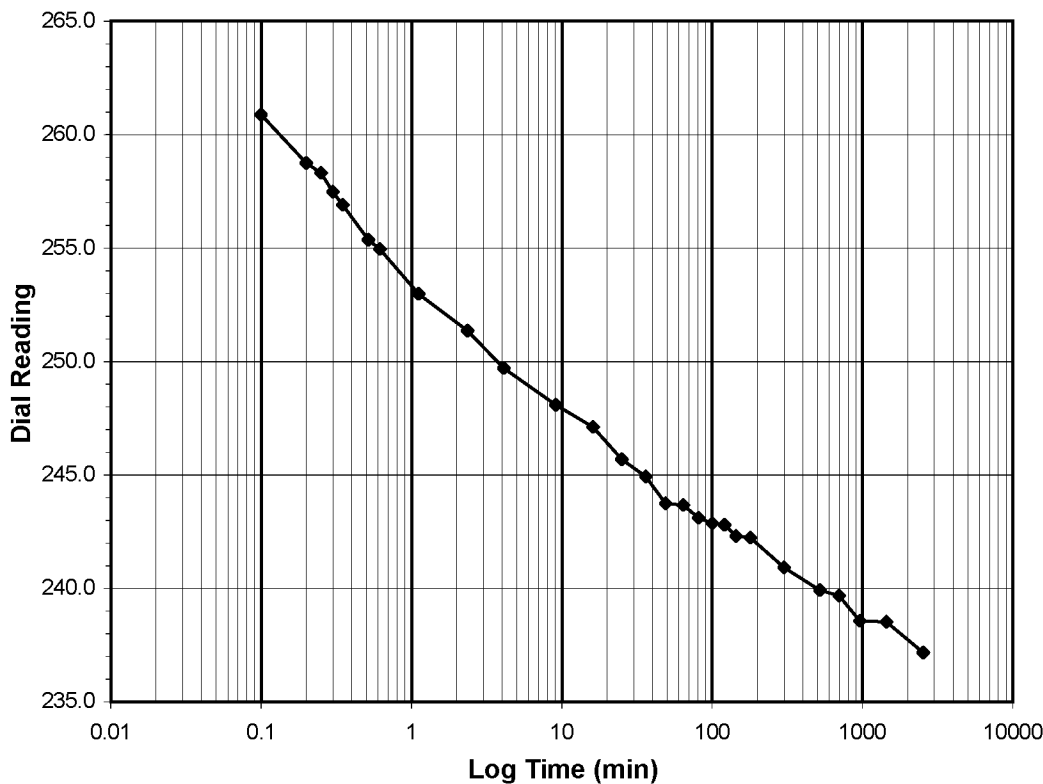
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>287.9</b>
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	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	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 <sup>3</sup> )	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 <sup>3</sup> )	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 <sup>3</sup> )	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 <sup>3</sup> )	Dry Density (g/cm <sup>3</sup> )	Void Ratio
Seating	0	0	0	25.400	80.440	1.55810	<b>0.68795</b>
0.25	60.1	17.6	42.5	25.292	80.098	1.56475	<b>0.68078</b>
0.5	86.3	27.0	59.3	25.249	79.963	1.56739	<b>0.67795</b>
1	119.0	40.4	78.6	25.200	79.807	1.57045	<b>0.67468</b>
2	157.5	66.6	91.0	25.169	79.708	1.57240	<b>0.67260</b>
4	210.5	97.5	113.0	25.113	79.531	1.57591	<b>0.66887</b>
1	160.5	58.5	102.0	25.141	79.619	1.57416	<b>0.67073</b>
0.25	122.6	28.5	94.1	25.161	79.683	1.57290	<b>0.67207</b>
0.5	135.3	33.9	101.3	25.143	79.625	1.57405	<b>0.67085</b>
1	151.8	48.4	103.4	25.137	79.608	1.57437	<b>0.67051</b>
2	180.1	68.5	111.6	25.117	79.542	1.57568	<b>0.66912</b>
4	222.4	97.9	124.5	25.084	79.438	1.57774	<b>0.66694</b>
8	288.4	129.5	158.8	24.997	79.162	1.58325	<b>0.66114</b>
16	377.1	176.6	200.5	24.891	78.827	1.58998	<b>0.65411</b>
32	506.5	251.4	255.1	24.752	78.388	1.59889	<b>0.64489</b>
8	368.2	142.9	225.3	24.828	78.628	1.59401	<b>0.64992</b>
2	287.9	89.7	198.3	24.896	78.845	1.58962	<b>0.65449</b>
0.5	237.2	53.4	183.8	24.933	78.961	1.58728	<b>0.65692</b>

<b>Tested By</b>	CLK	<b>Date</b>	11/6/13	<b>Input Checked By</b>	TM	<b>Date</b>	12/5/13
------------------	-----	-------------	---------	-------------------------	----	-------------	---------

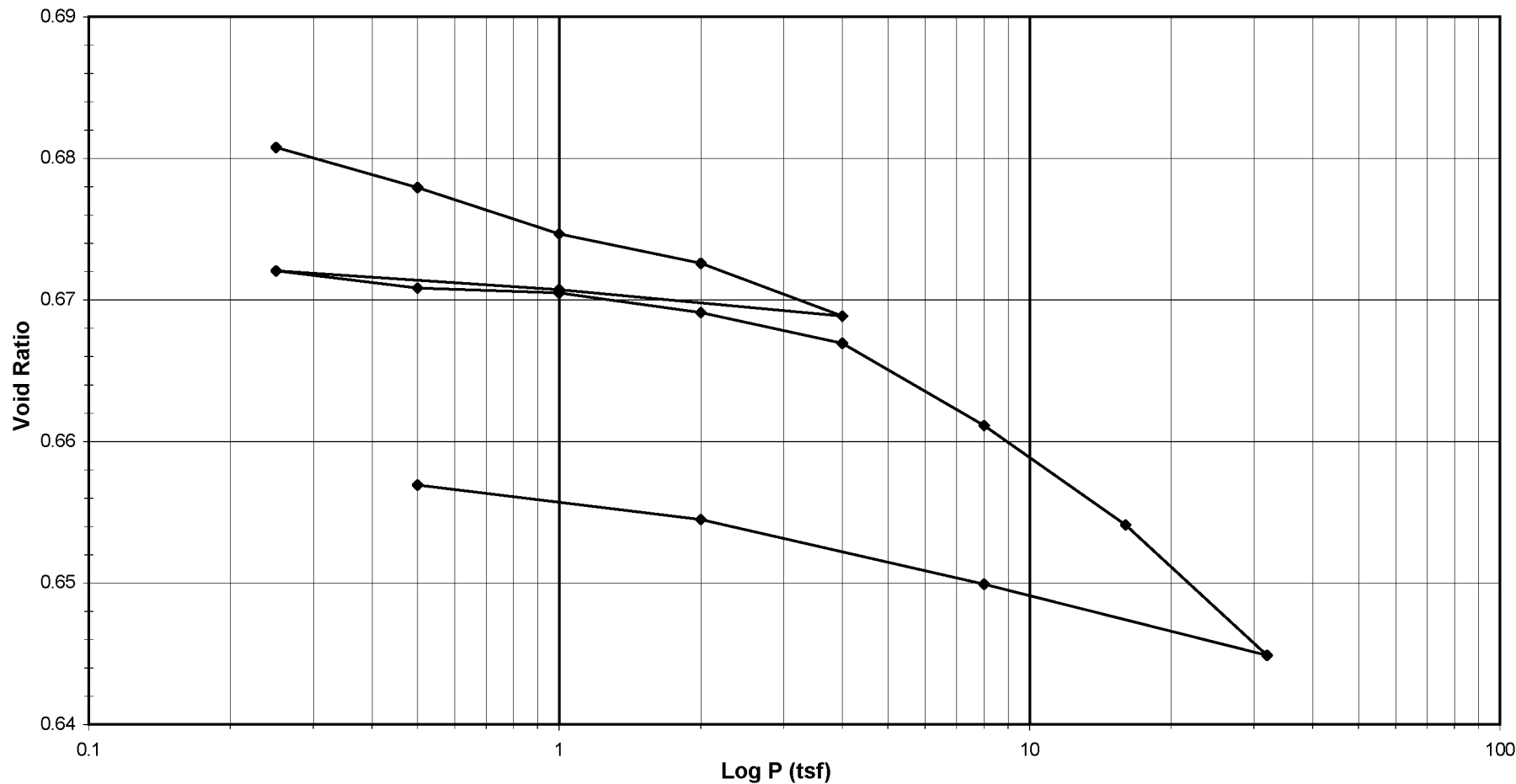
# ONE DIMENSIONAL CONSOLIDATION

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

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	Visual Description	Gray Sand

**Sample Conditions:** Undisturbed, Inundated And Double Drained**Consolidometer No.** G1418**1 Division** = 0.0001 (in)**C<sub>v</sub> Test Data Summary**

<u>Sample Properties</u>	<u>Initial</u>	<u>Final</u>							
			Load	Dial	Machine	Corrected	Sample	Time	C <sub>v</sub>
			Increment	Reading	Deflection	Dial Reading	Height	t <sub>50</sub>	
			(tsf)	@ t <sub>50</sub>	(div)	@ t <sub>50</sub>	@ t <sub>50</sub>	(min)	(cm <sup>2</sup> /sec)
<i>Water Content</i>									
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	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare (g)	6.72	6.53	0.25	50.2	17.6	32.6	25.32	<b>0.46</b>	<b>0.01143</b>
Wt. DS (g)	121.3	123.66	0.5	78.9	27.0	51.9	25.27	<b>0.43</b>	<b>0.01235</b>
Water Content (%)	23.97	25.42	1	107.0	40.4	66.6	25.23	<b>0.61</b>	<b>0.00866</b>
			2	149.4	66.6	82.8	25.19	<b>0.25</b>	<b>0.02124</b>
			4	198.4	97.5	100.9	25.14	<b>0.42</b>	<b>0.01248</b>
<u>Sample Parameters</u>			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	<b>0.18</b>	<b>0.02891</b>
Sample Volume (cm <sup>3</sup> )	80.44	78.96	1	150.7	48.4	102.3	25.14	<b>0.35</b>	<b>0.01477</b>
Wt. Wet Sample + Ring (g)	369.89	371.72	2	175.4	68.5	106.9	25.13	<b>0.22</b>	<b>0.02416</b>
Wt. of Ring (g)	214.52	214.52	4	208.3	97.9	110.4	25.12	<b>0.28</b>	<b>0.01860</b>
Wt. of Wet Sample (g)	155.37	157.20	8	282.9	129.5	153.4	25.01	<b>2.06</b>	<b>0.00250</b>
Wet Density (pcf)	120.53	124.23	16	354.7	176.6	178.0	24.95	<b>0.20</b>	<b>0.02554</b>
Wet Density (g/cm <sup>3</sup> )	1.93	1.99	32	484.5	251.4	233.1	24.81	<b>0.31</b>	<b>0.01645</b>
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 <sup>3</sup> )	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

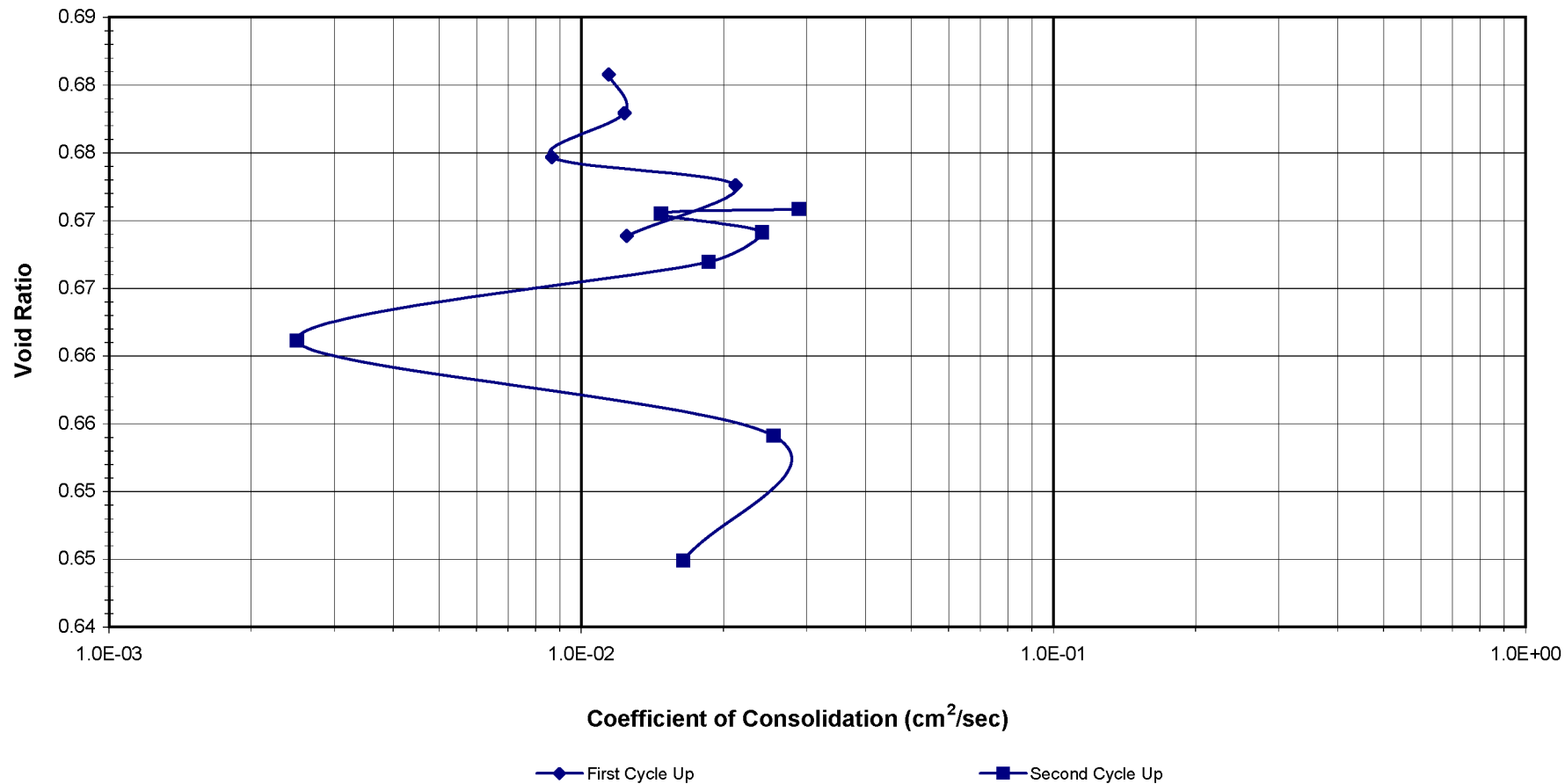
# ONE DIMENSIONAL CONSOLIDATION

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



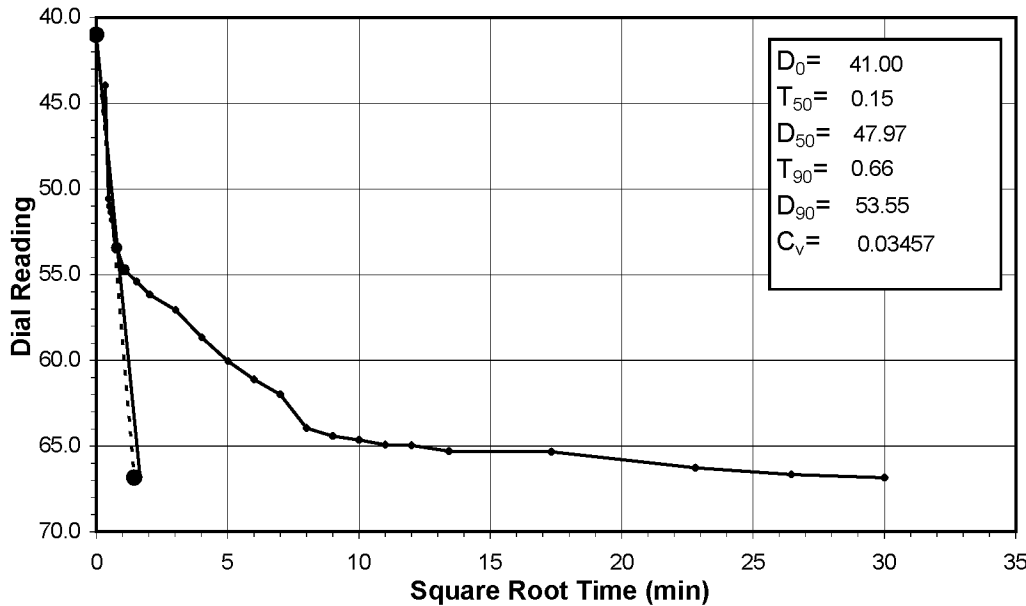
# ONE DIMENSIONAL CONSOLIDATION

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

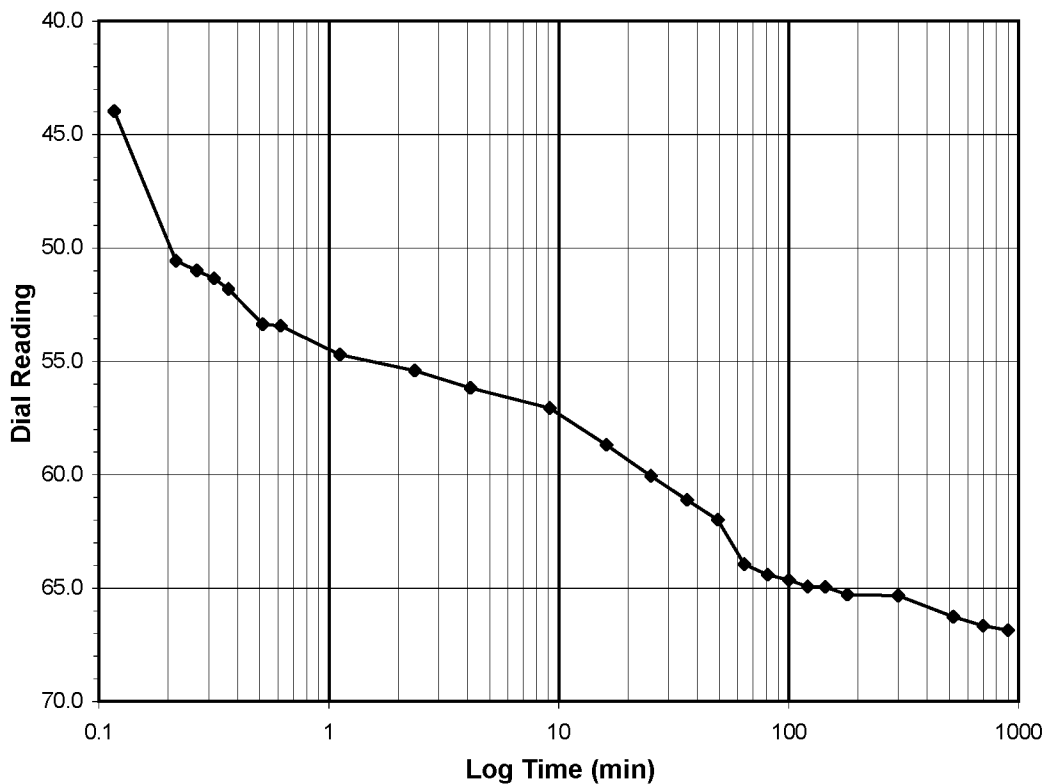
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>0.0</b>
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

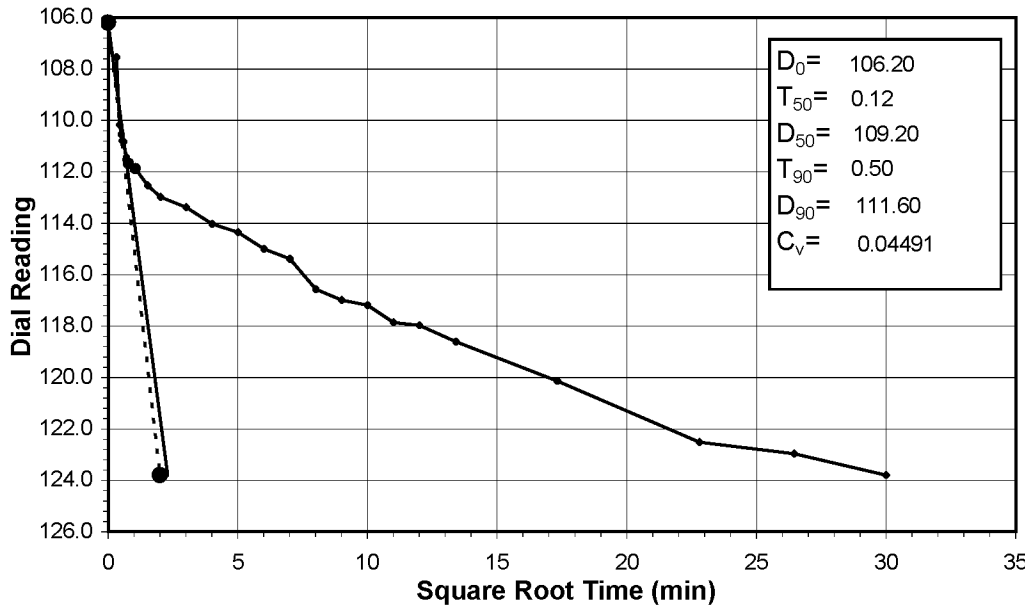
# ONE DIMENSIONAL CONSOLIDATION

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

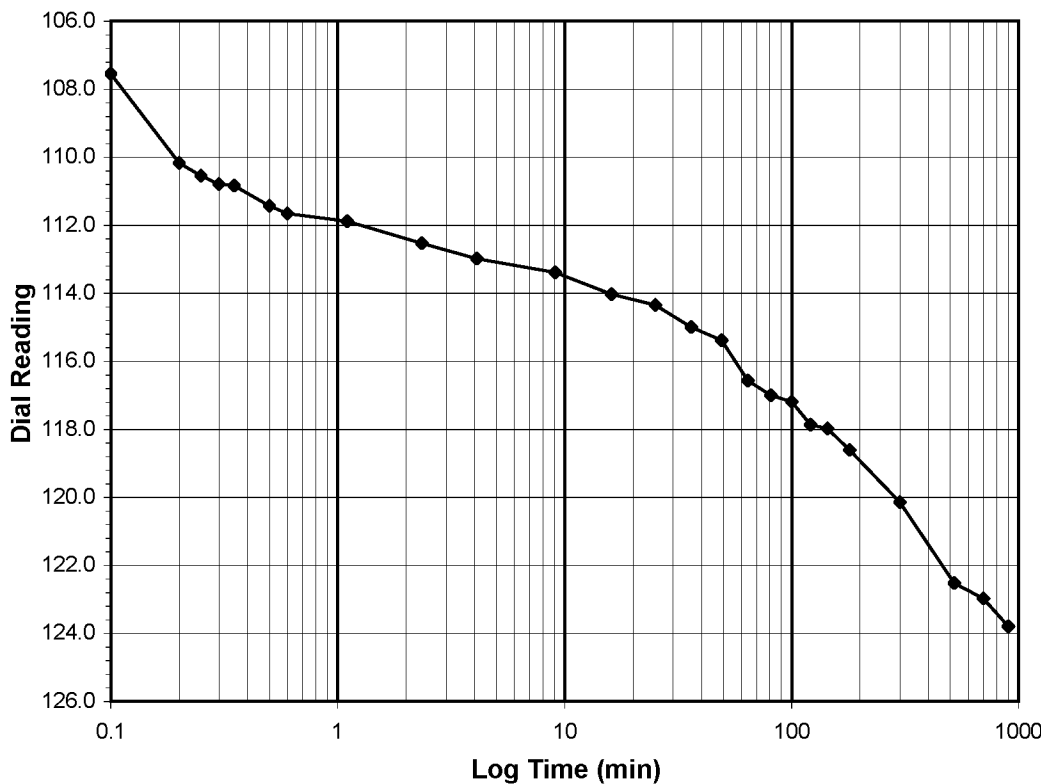
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>66.9</b>
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

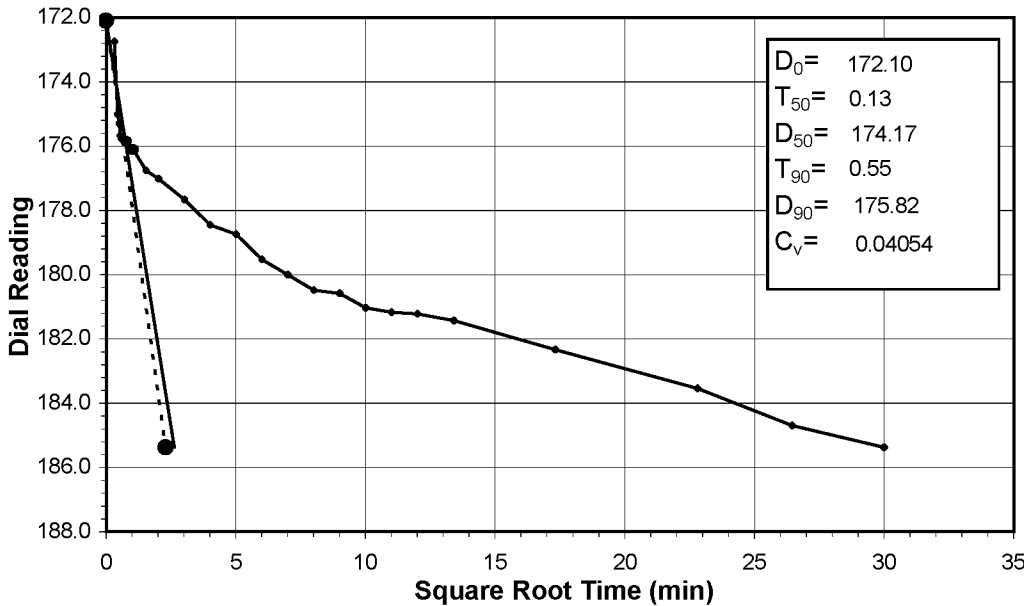
# ONE DIMENSIONAL CONSOLIDATION

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

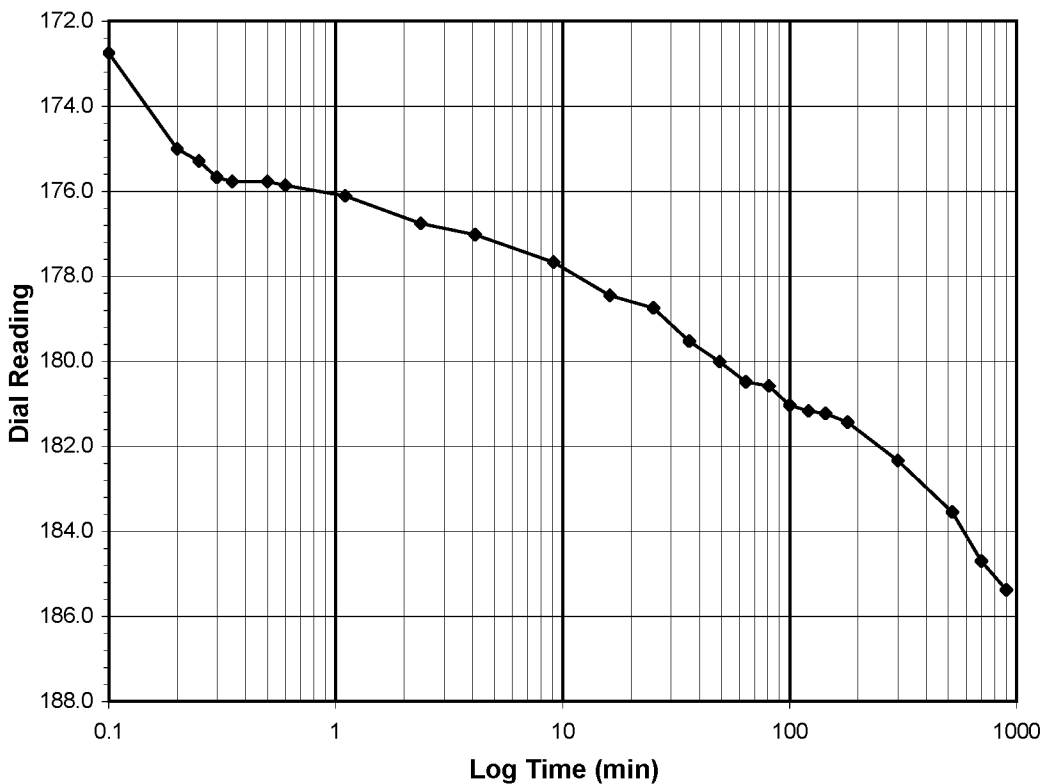
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>123.8</b>
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

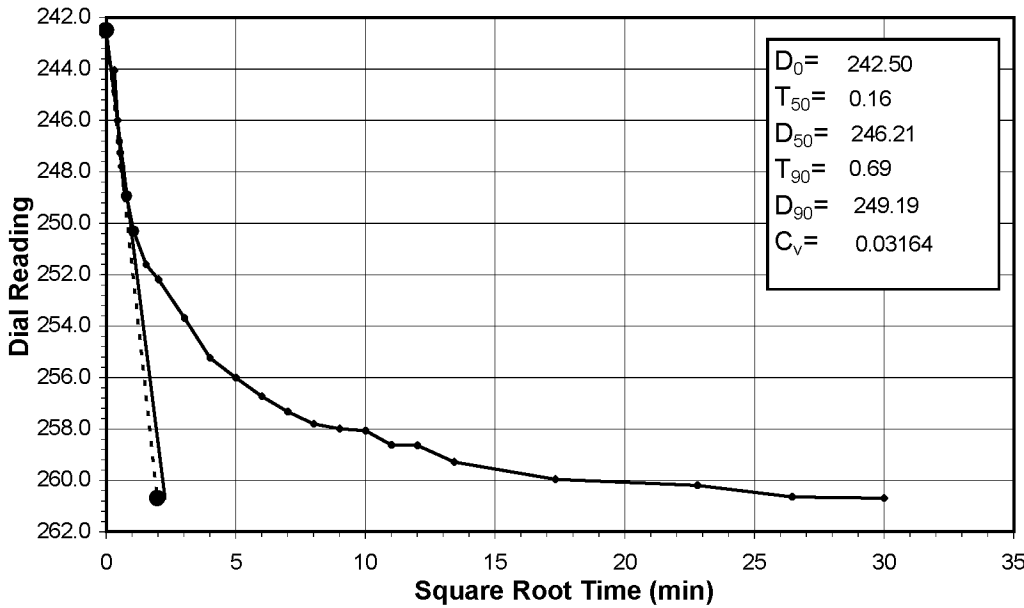
# ONE DIMENSIONAL CONSOLIDATION

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

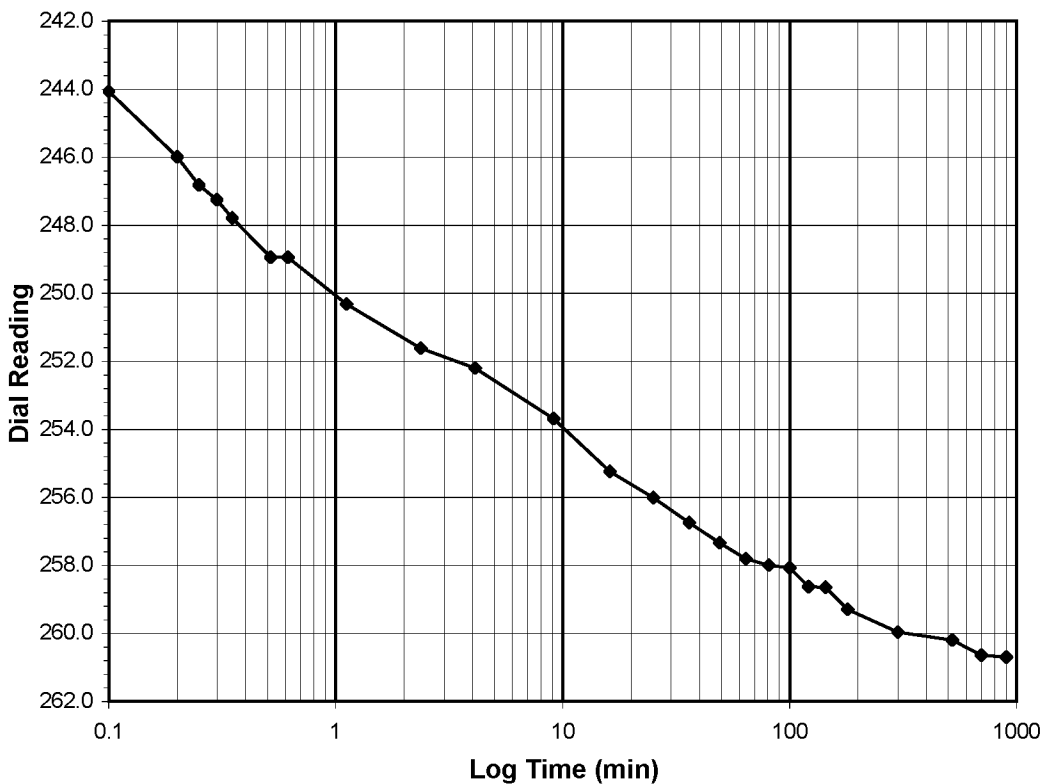
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>185.4</b>
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**



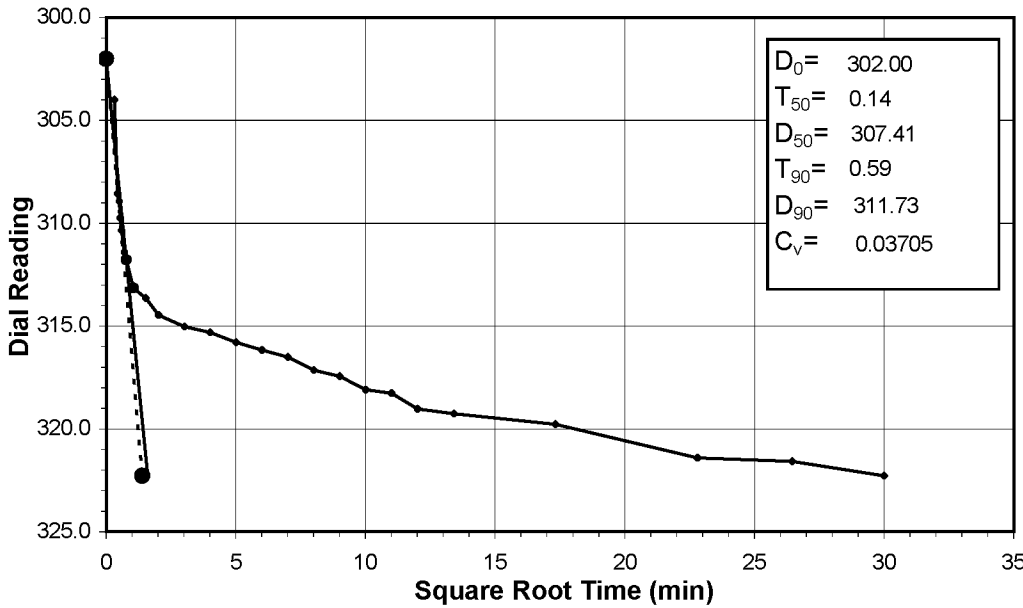
# ONE DIMENSIONAL CONSOLIDATION

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

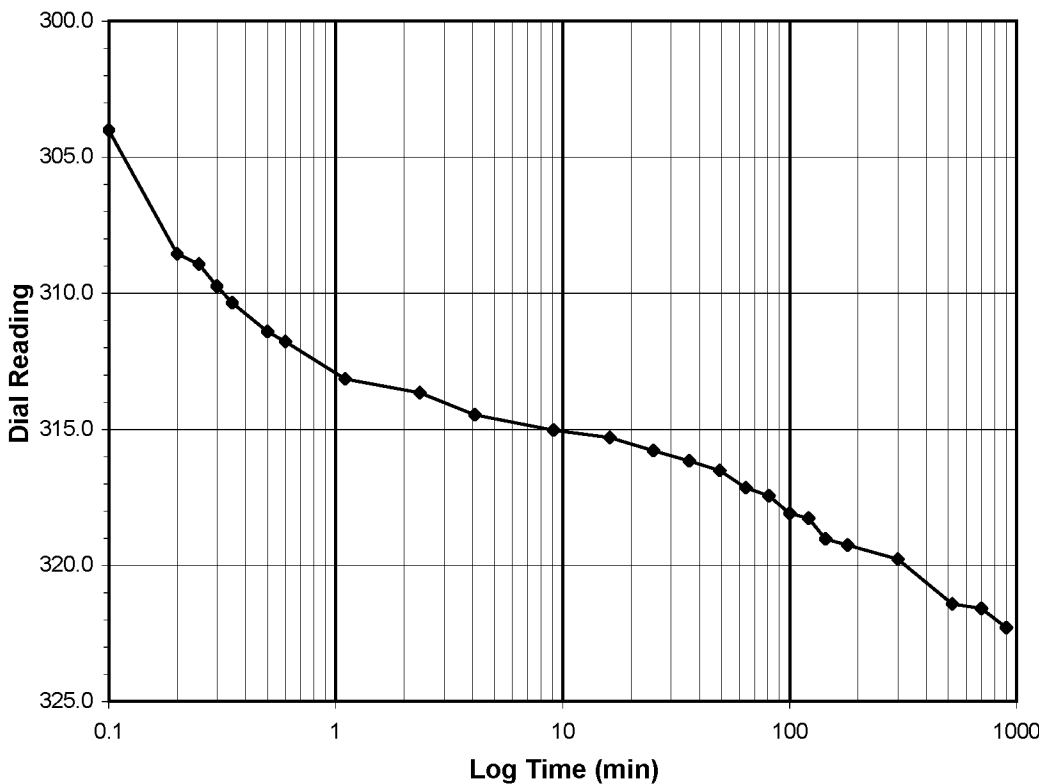
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>260.7</b>
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



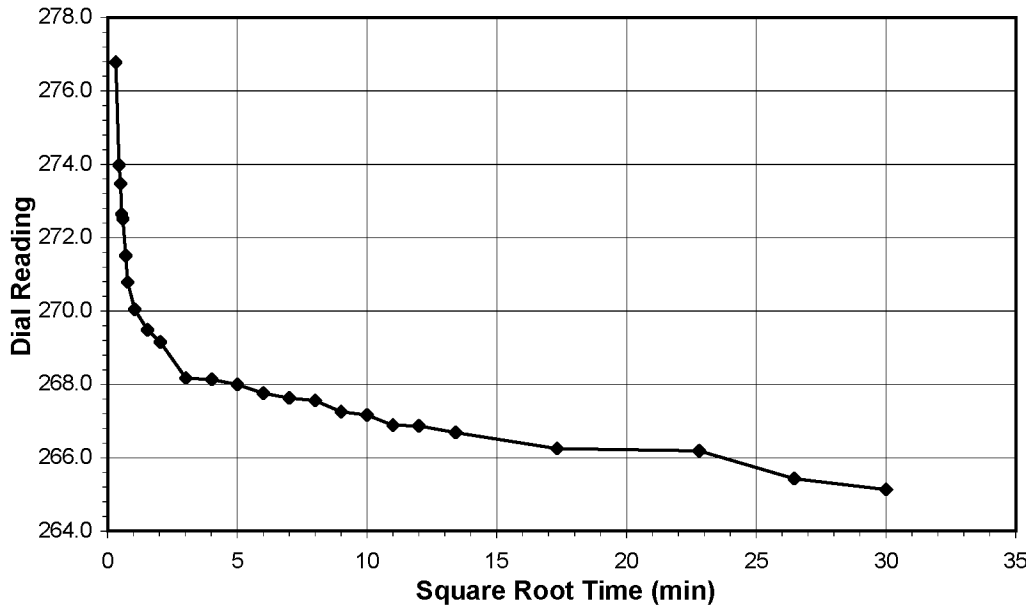
# ONE DIMENSIONAL CONSOLIDATION

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

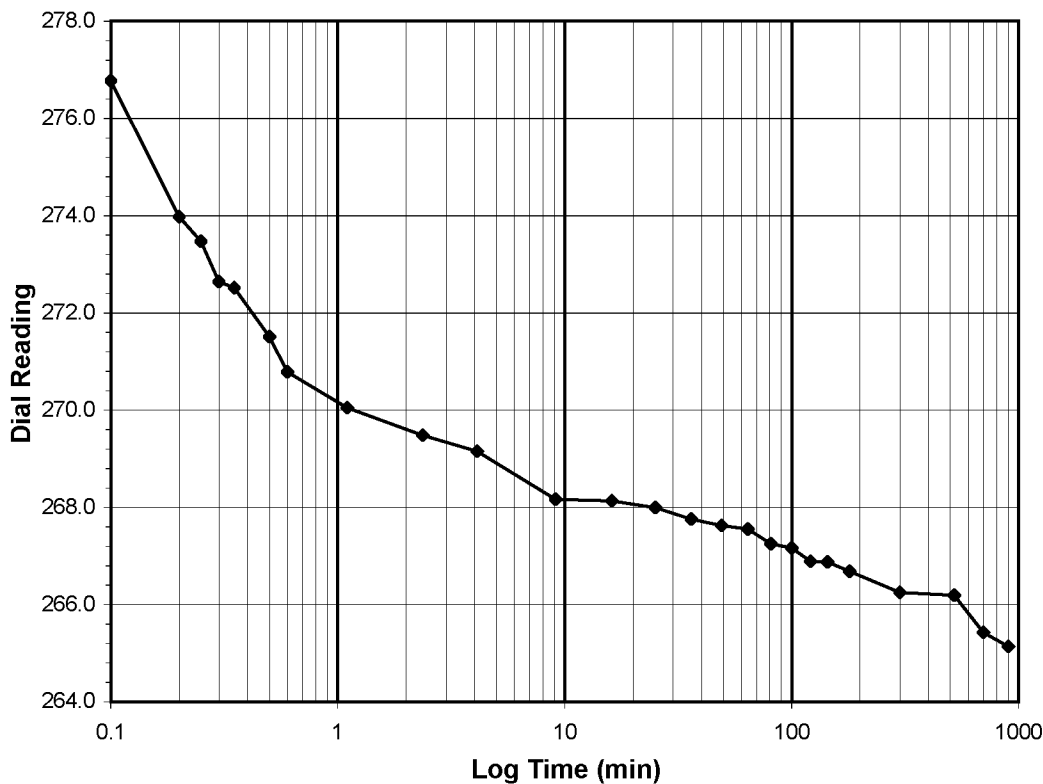
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>322.3</b>
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

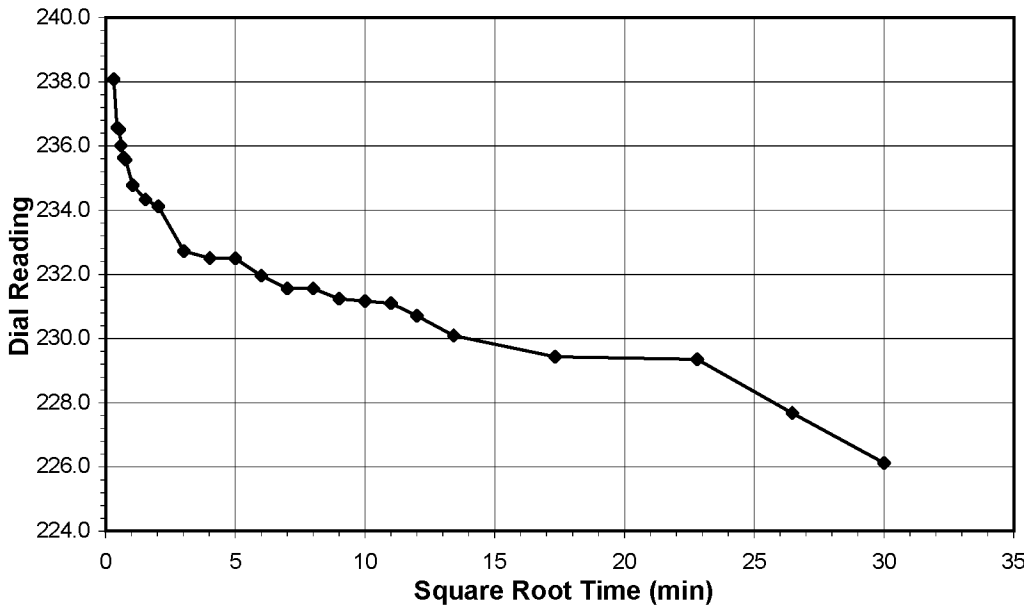
# ONE DIMENSIONAL CONSOLIDATION

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

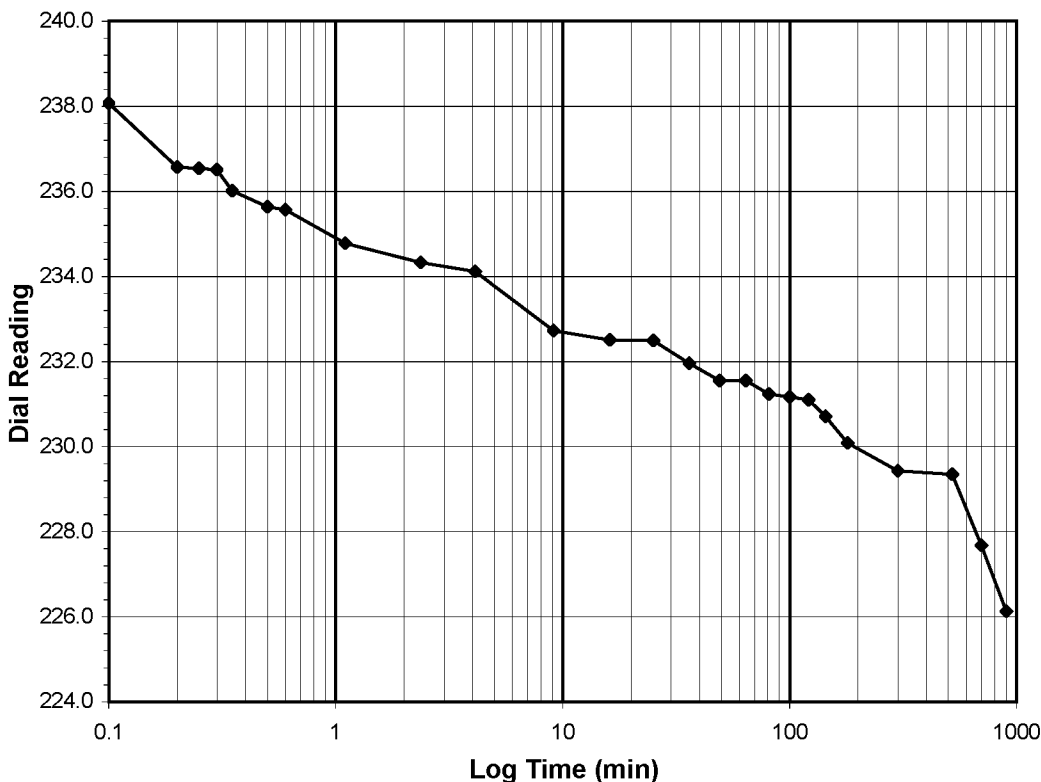
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>265.1</b>
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



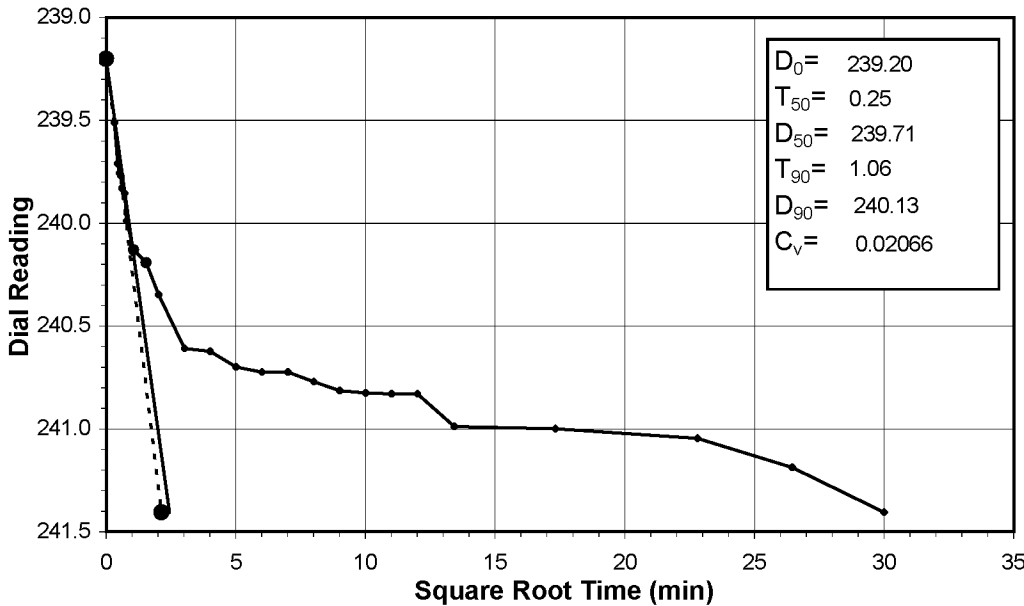
# ONE DIMENSIONAL CONSOLIDATION

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

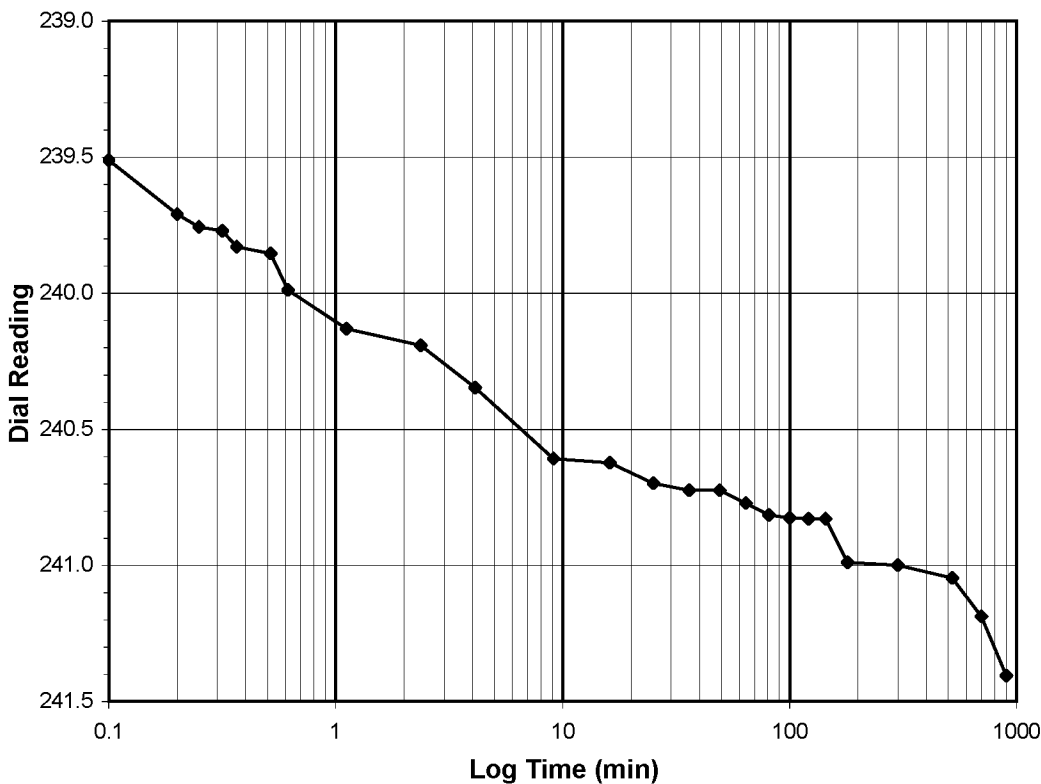
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>226.1</b>
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



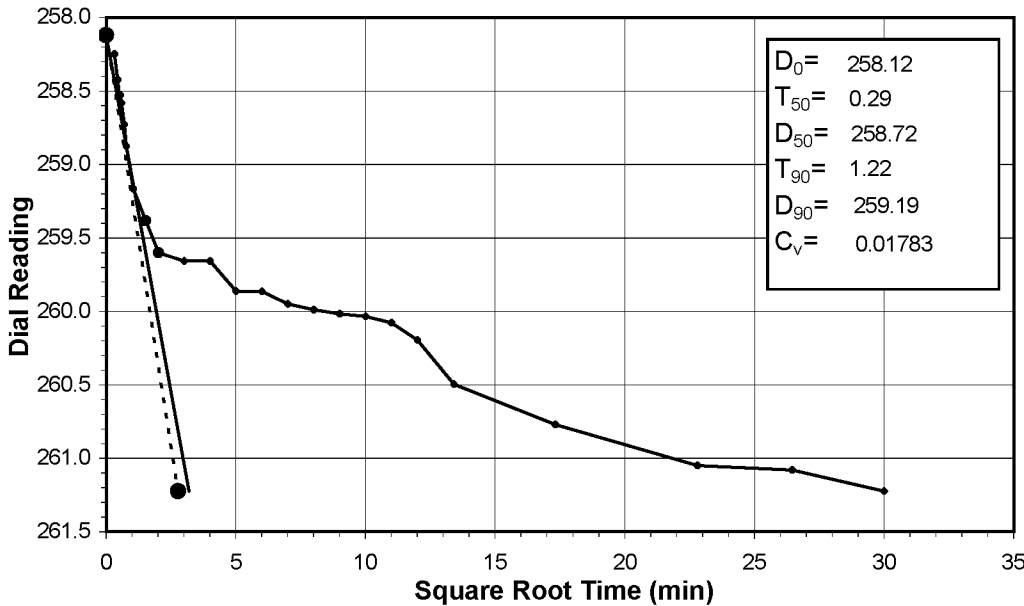
# ONE DIMENSIONAL CONSOLIDATION

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

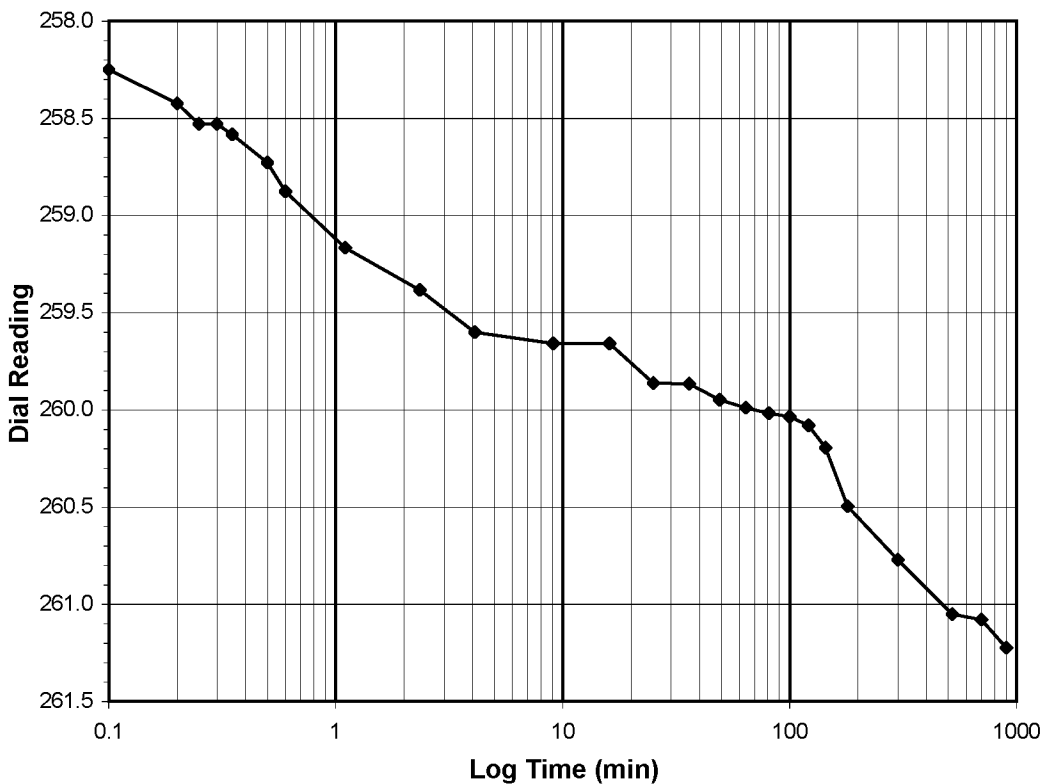
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>241.4</b>
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**

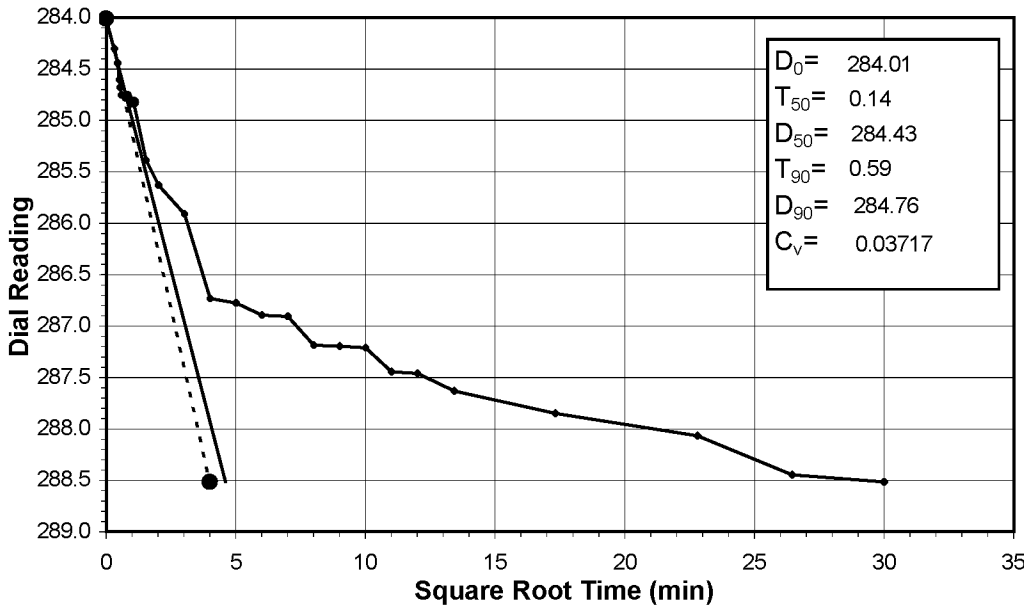
## ONE DIMENSIONAL CONSOLIDATION

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

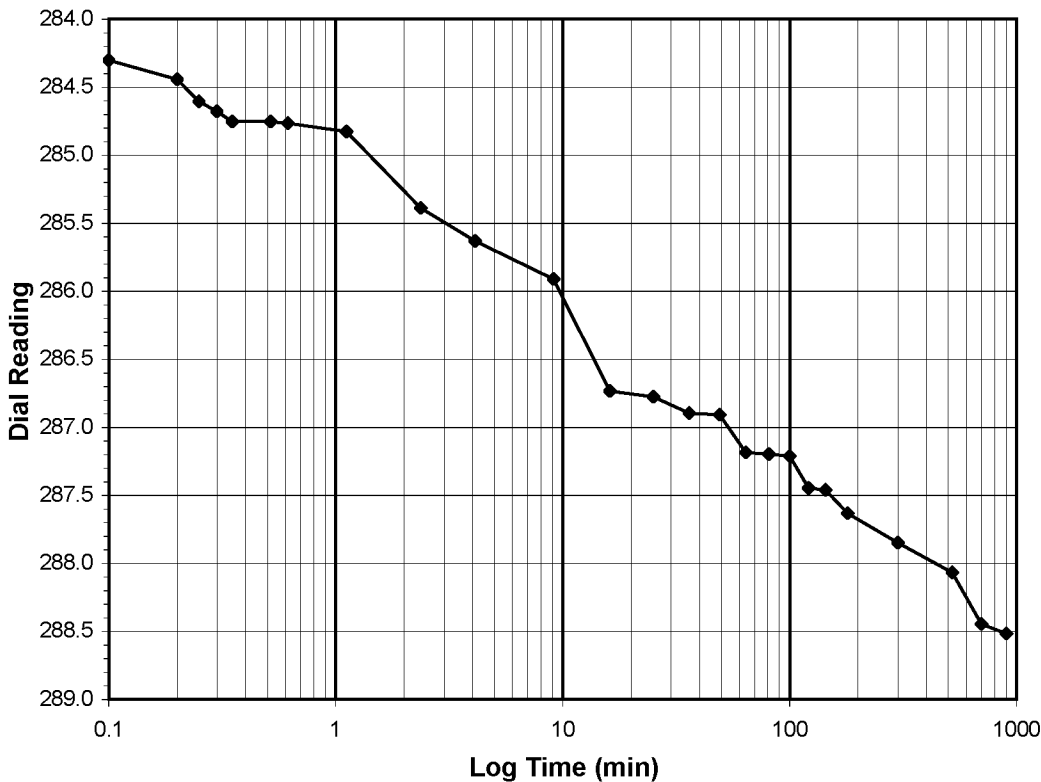
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>261.2</b>
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**



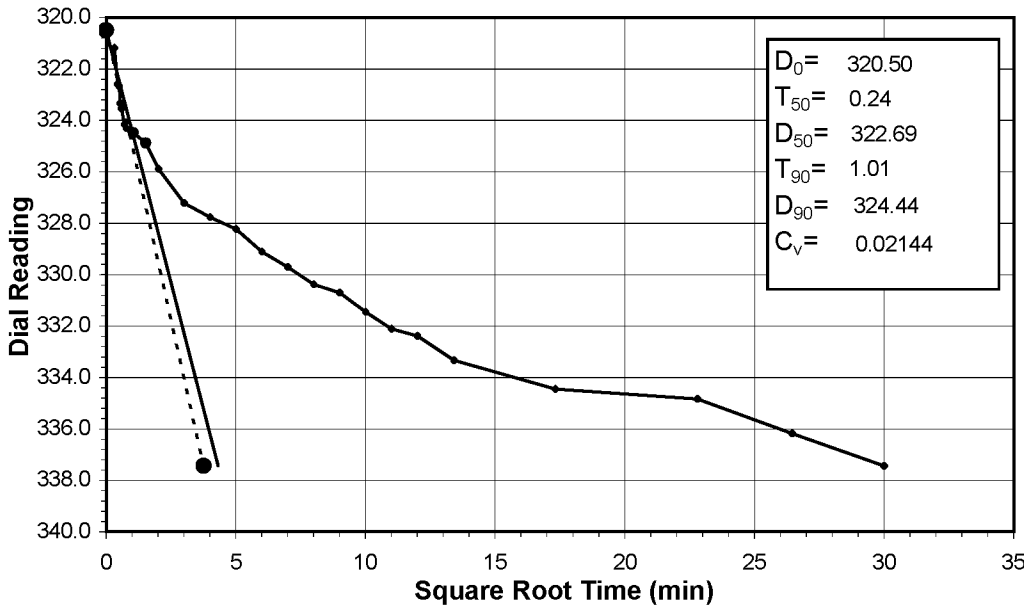
# ONE DIMENSIONAL CONSOLIDATION

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

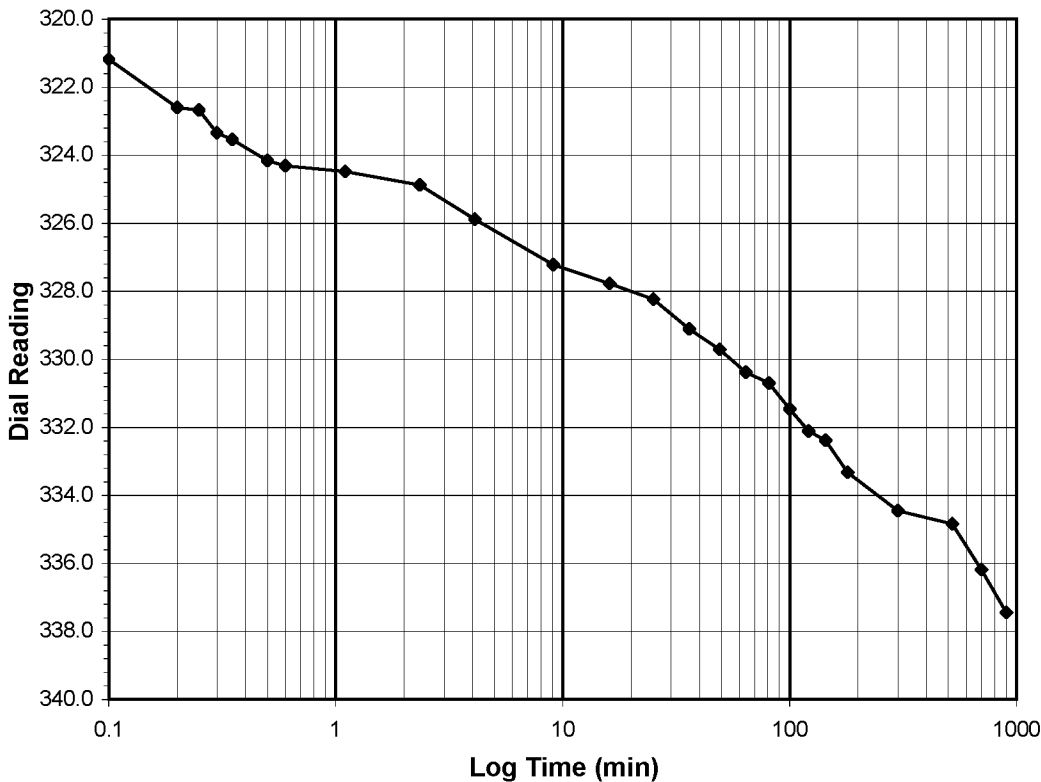
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>288.5</b>
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**

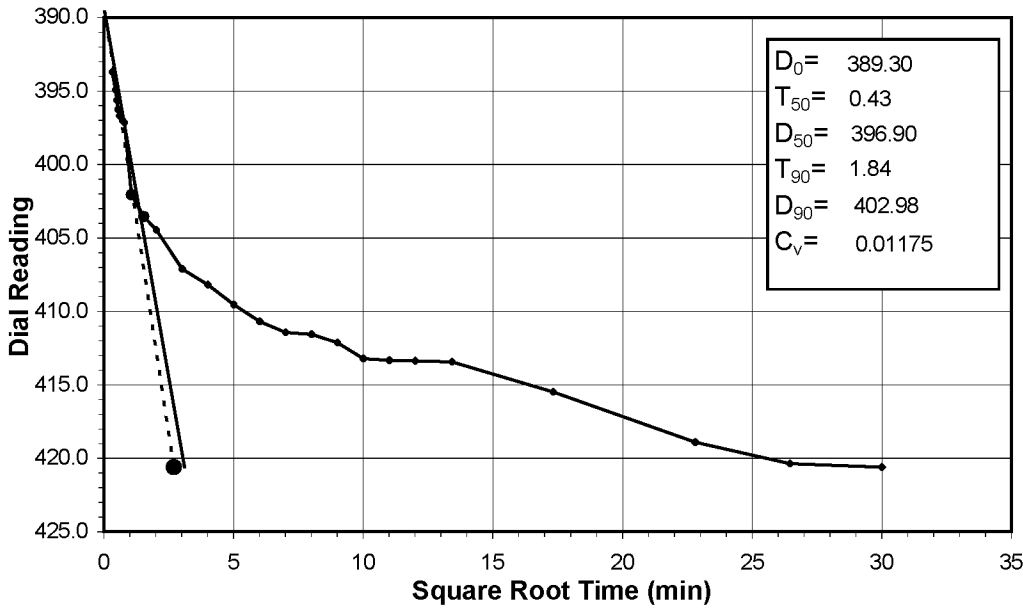
## ONE DIMENSIONAL CONSOLIDATION

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

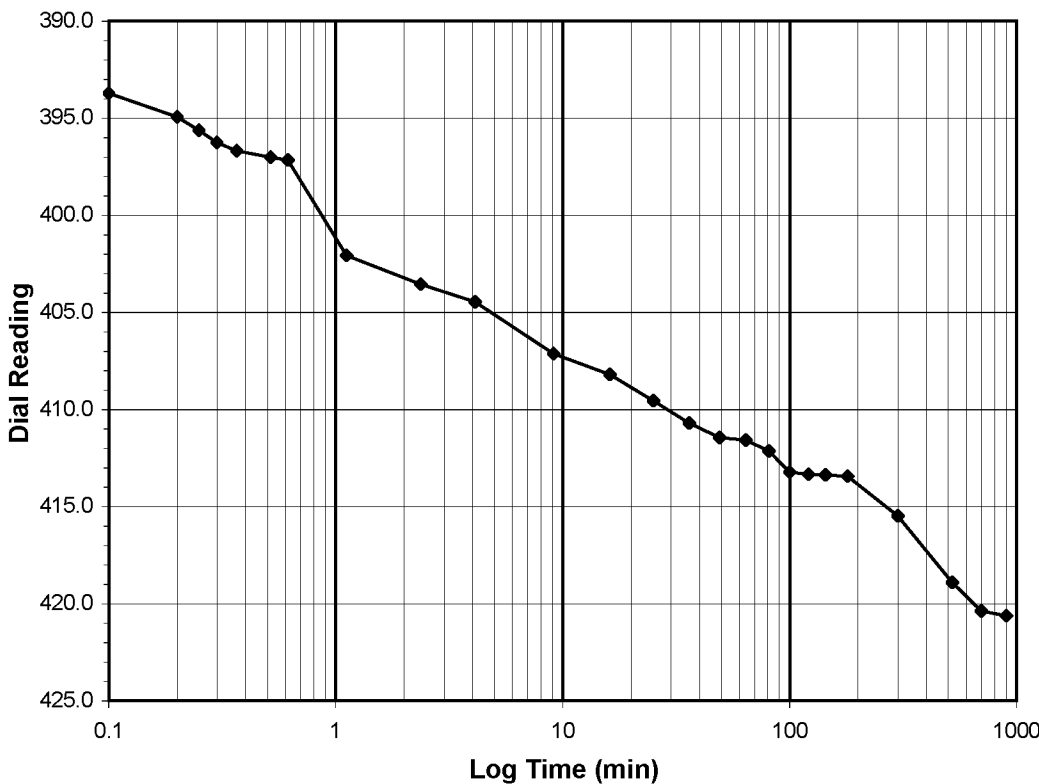
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**Sample Conditions:** Undisturbed, Inundated And Double Drained



**Test Load (tsf)** 4.0-8.0  
**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)
<i>Initial</i>	<b>337.4</b>
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**

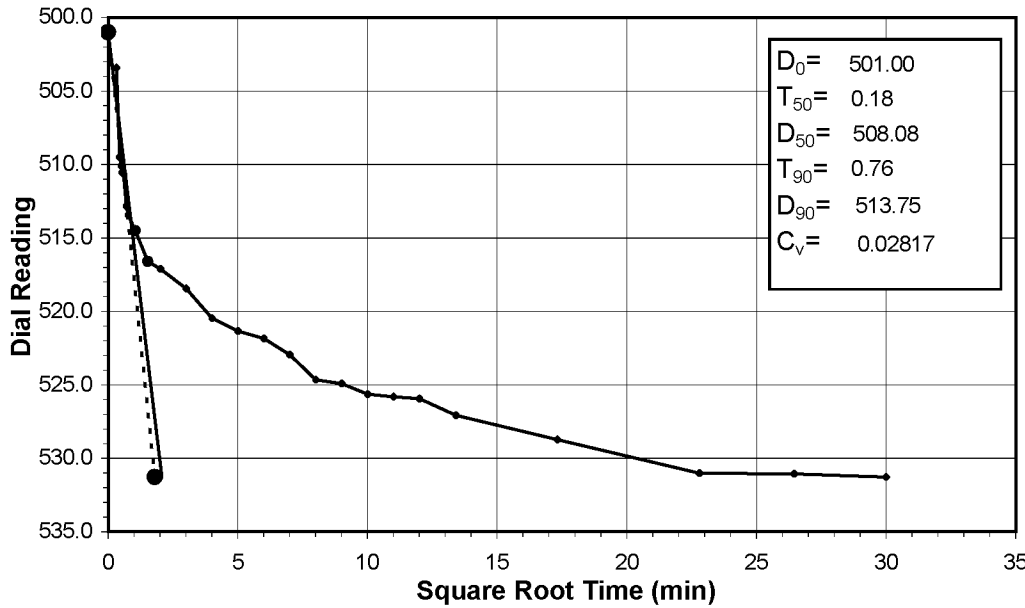
# ONE DIMENSIONAL CONSOLIDATION

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

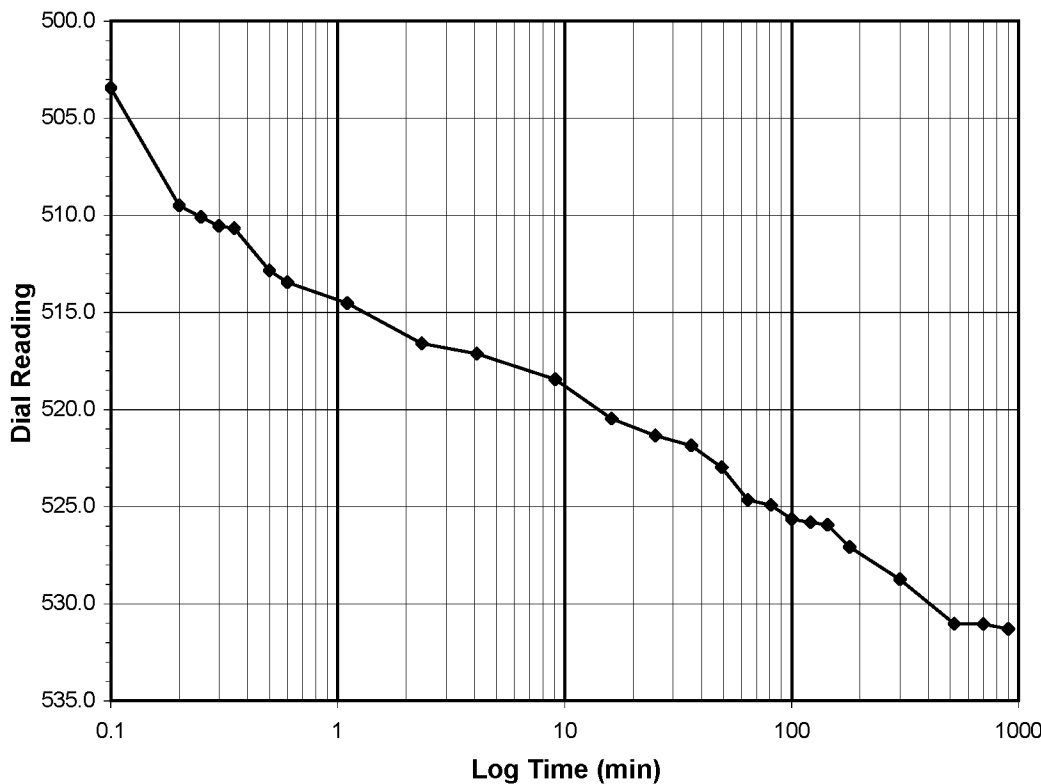
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<i>Initial</i>	<b>420.6</b>
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**

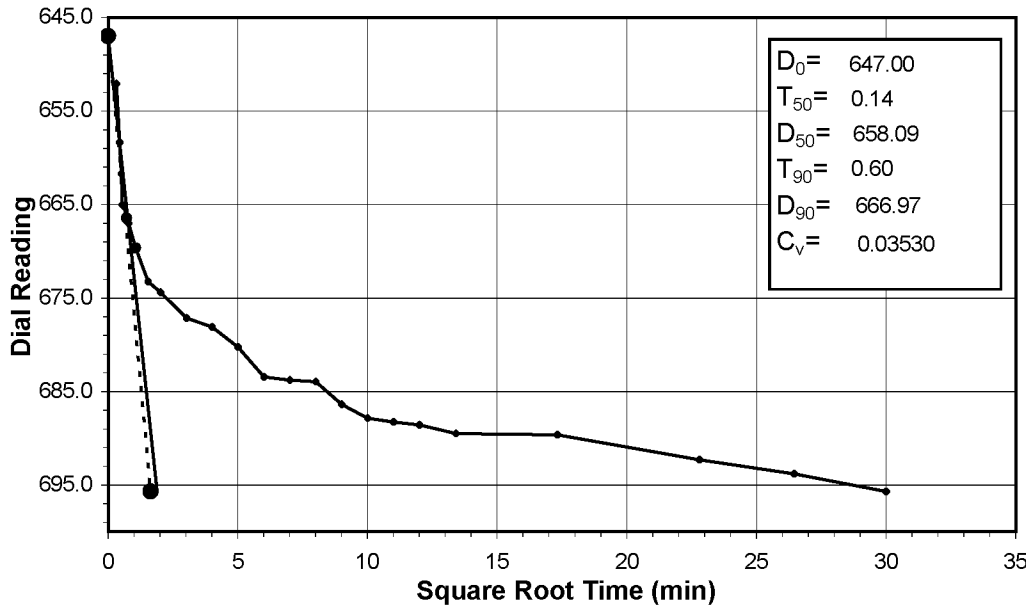
# ONE DIMENSIONAL CONSOLIDATION

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

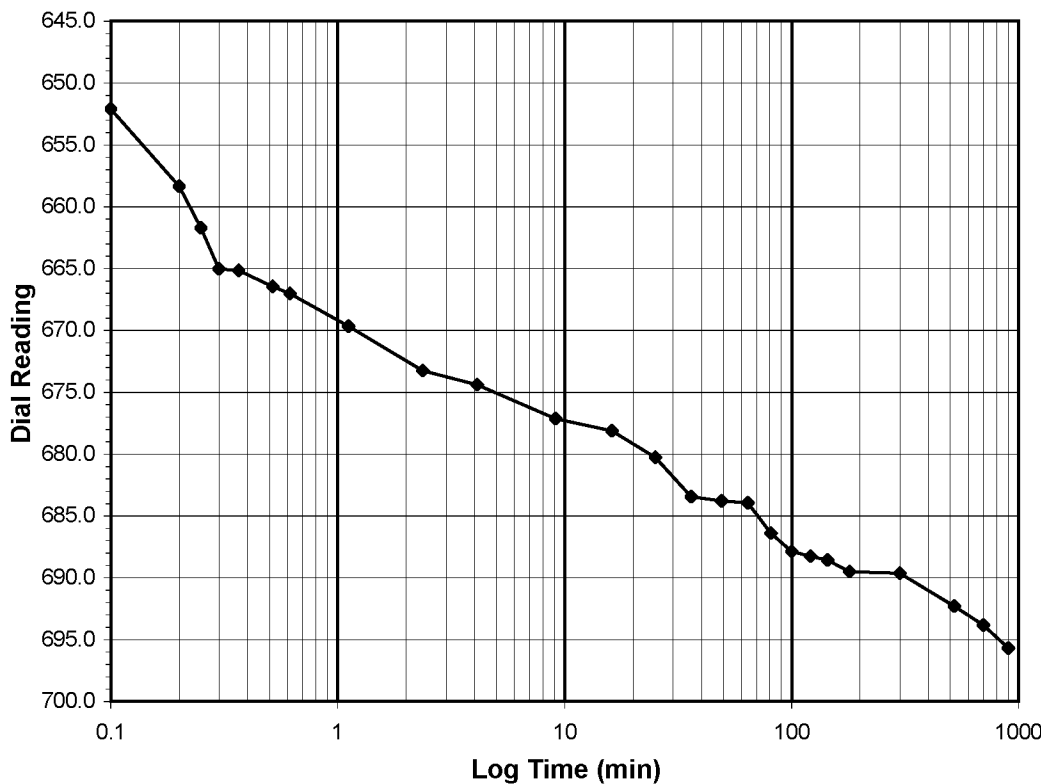
Boring No. R-7-1  
 Depth (ft) 390.7-390.9  
 Sample No. ST-23  
 Visual Description Gray Silty Sand

**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)
<b>Initial</b>	<b>531.3</b>
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



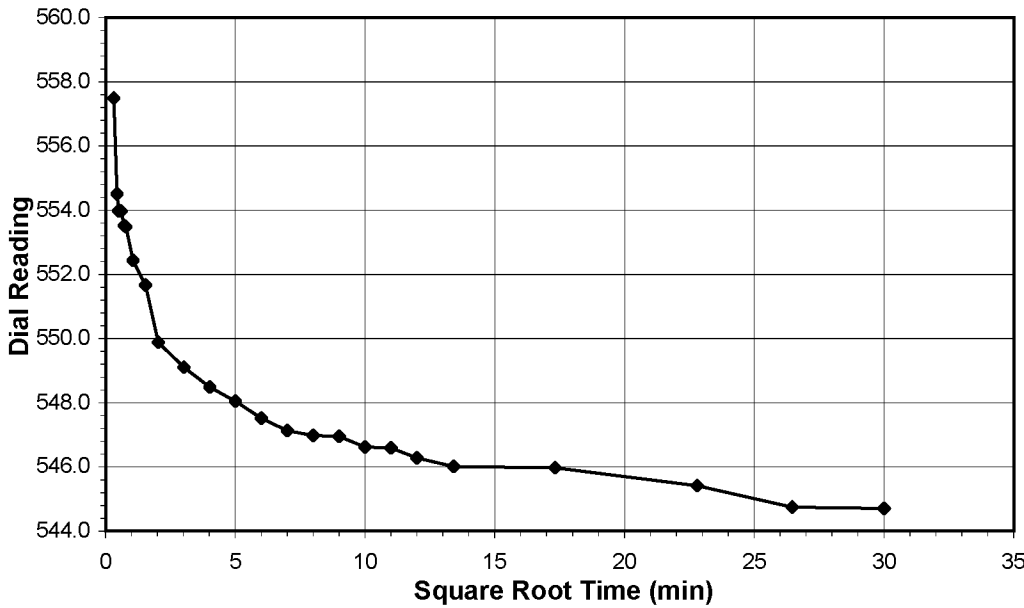
# ONE DIMENSIONAL CONSOLIDATION

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

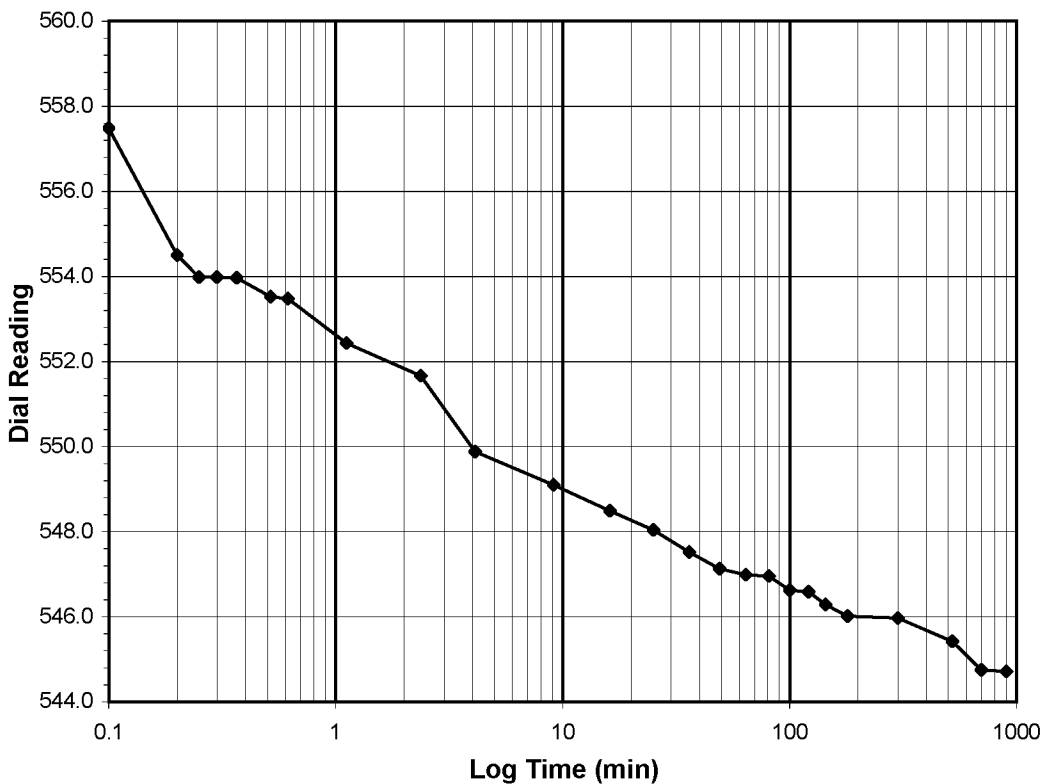
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>695.7</b>
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

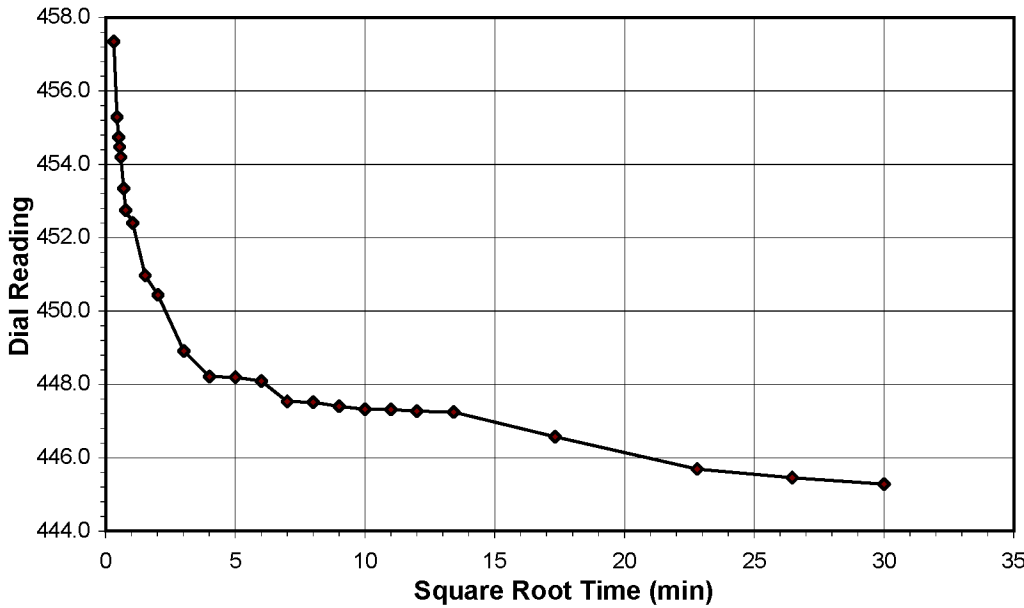
# ONE DIMENSIONAL CONSOLIDATION

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

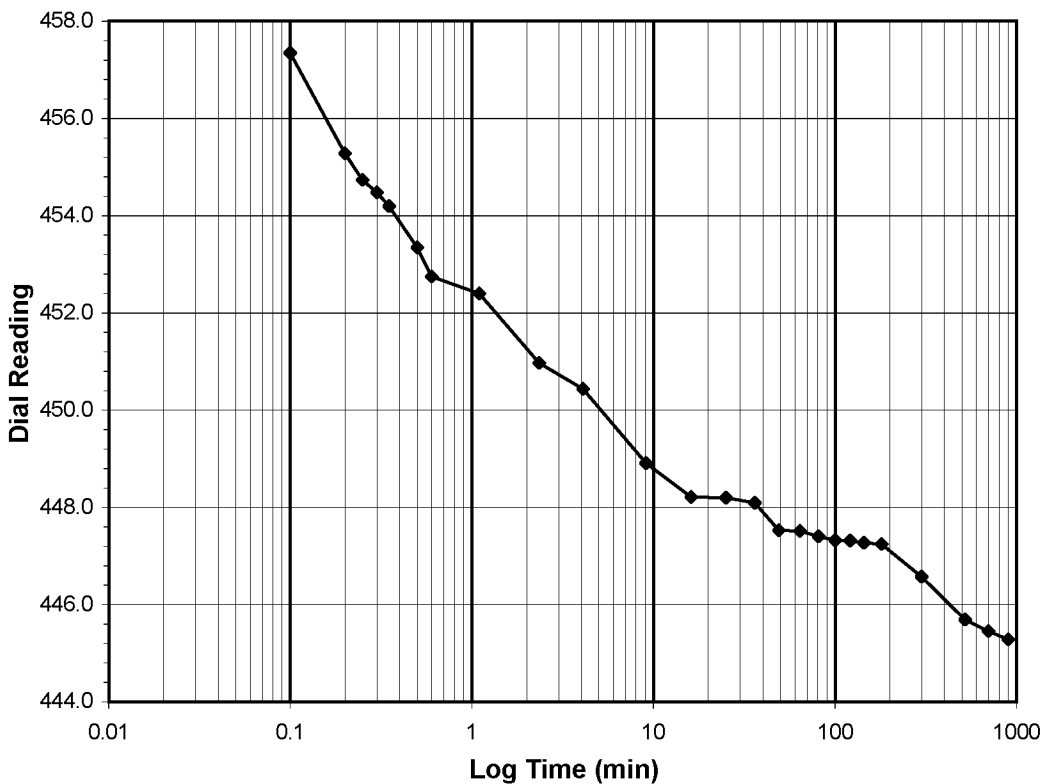
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>544.7</b>
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





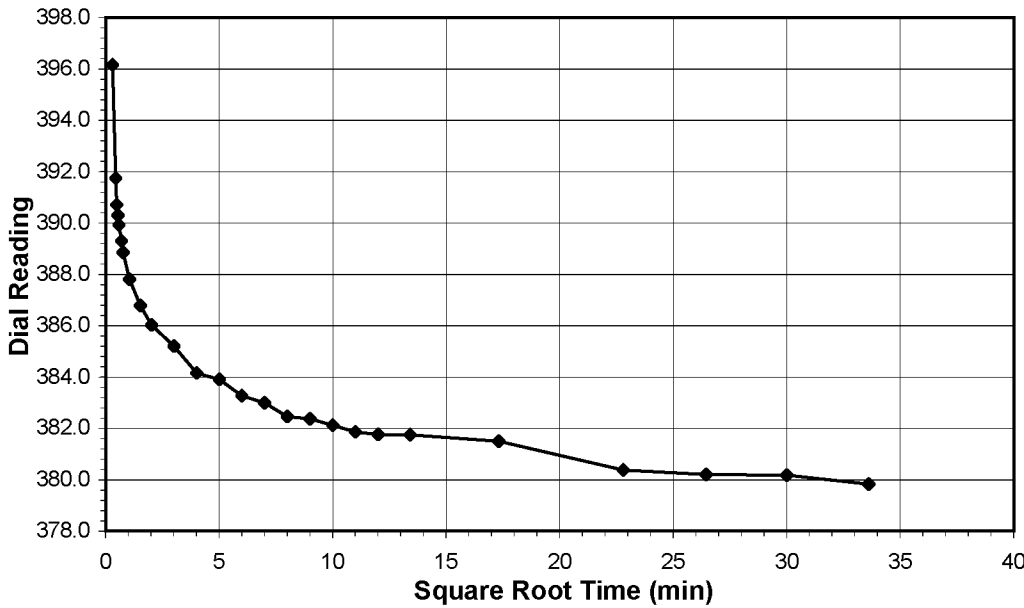
# ONE DIMENSIONAL CONSOLIDATION

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

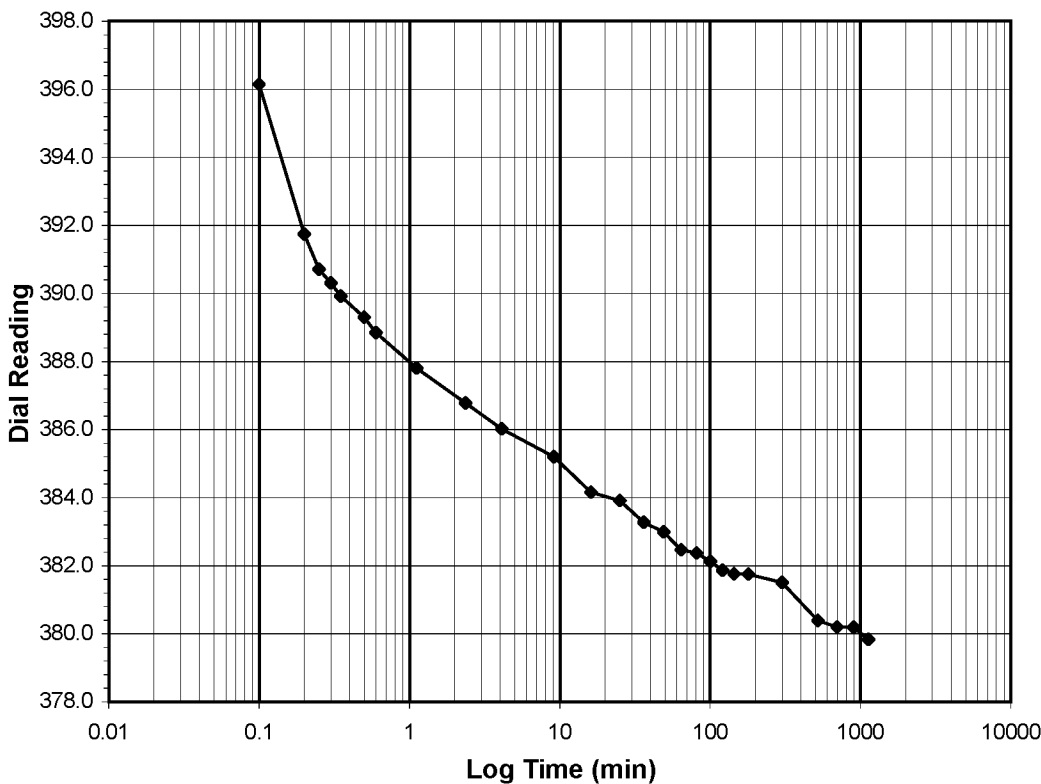
**Sample Conditions:** Undisturbed, Inundated And Double Drained



**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)
<b>Initial</b>	<b>445.3</b>
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	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	Visual Description	Gray Silty 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>			<b>Applied Pressure</b>	<b>Final Dial Reading</b>	<b>Machine Deflection</b>	<b>Corrected Reading</b>	<b>Height of Sample</b>	<b>Volume</b>	<b>Dry Density</b>	<b>Void Ratio</b>
Tare Number	2661	2752	(tsf)	(div)	(div)	(div)	(mm)	(cm <sup>3</sup> )	(g/cm <sup>3</sup> )	
Wt. Tare & WS (g)	121.54	161.86	Seating	0	0	0	25.400	80.440	1.42153	<b>0.82902</b>
Wt. Tare & DS (g)	90.81	130.75	0.25	66.9	17.0	49.9	25.273	80.039	1.42866	<b>0.81989</b>
Wt. Water (g)	30.73	31.11	0.5	123.8	22.5	101.3	25.143	79.625	1.43608	<b>0.81048</b>
Wt. Tare (g)	6.65	6.88	1	185.4	31.8	153.6	25.010	79.204	1.44370	<b>0.80093</b>
Wt. DS (g)	84.16	123.87	2	260.7	56.2	204.5	24.881	78.795	1.45120	<b>0.79162</b>
Water Content (%)	36.51	25.12	4	322.3	87.6	234.7	24.804	78.552	1.45569	<b>0.78610</b>
<b><u>Sample Parameters</u></b>			1	265.1	52.8	212.3	24.861	78.732	1.45237	<b>0.79018</b>
Sample Diameter (in)	2.5	2.5	0.25	226.1	24.8	201.4	24.889	78.820	1.45074	<b>0.79219</b>
Sample Height (in)	1.0000	0.9689	0.5	241.4	31.4	210.0	24.867	78.751	1.45202	<b>0.79061</b>
Sample Volume (cm <sup>3</sup> )	80.44	77.93	1	261.2	45.6	215.6	24.852	78.706	1.45285	<b>0.78958</b>
Wt. Wet Sample + Ring (g)	370.36	357.33	2	288.5	60.3	228.3	24.820	78.604	1.45473	<b>0.78727</b>
Wt. of Ring (g)	214.26	214.26	4	337.4	86.5	250.9	24.763	78.421	1.45812	<b>0.78312</b>
Wt. of Wet Sample (g)	156.10	143.07	8	420.6	137.0	283.6	24.680	78.159	1.46301	<b>0.77715</b>
Wet Density (pcf)	121.09	114.55	16	531.3	196.5	334.8	24.550	77.747	1.47077	<b>0.76778</b>
Wet Density (g/cm <sup>3</sup> )	1.94	1.84	32	695.7	283.7	412.0	24.354	77.126	1.48261	<b>0.75367</b>
Water Content (%)	36.51	25.12	8	544.7	174.5	370.3	24.460	77.461	1.47619	<b>0.76130</b>
Wt. of Dry Sample (g)	114.35	114.35	2	445.3	104.7	340.6	24.535	77.700	1.47166	<b>0.76672</b>
Dry Density (pcf)	88.70	91.56	0.5	379.8	68.4	311.5	24.609	77.934	1.46723	<b>0.77205</b>
Dry Density (g/cm <sup>3</sup> )	1.42	1.47								
Void Ratio	0.8290	0.7720								
Saturation (%)	114.52	84.58								
Specific Gravity	2.60	Measured								
			<b>Tested By</b>	DB	<b>Date</b>	11/18/13	<b>Input Checked By</b>	TM	<b>Date</b>	12/6/13

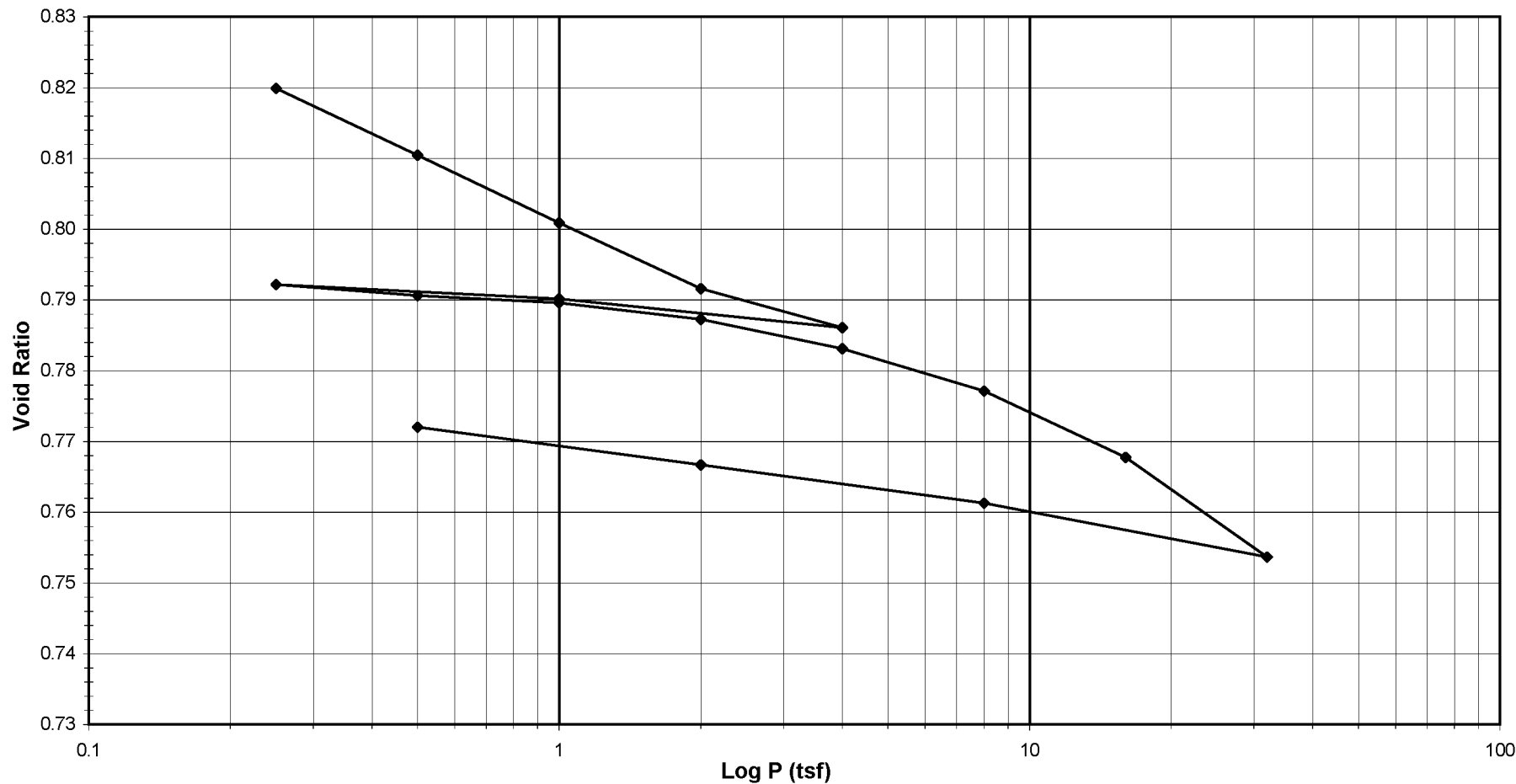
# ONE DIMENSIONAL CONSOLIDATION

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	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	Visual Description	Gray Silty Sand

**Sample Conditions:** Undisturbed, Inundated And Double Drained**Consolidometer No.** G1424**1 Division** = 0.0001 (in)**C<sub>v</sub> Test Data Summary**

<b><u>Sample Properties</u></b>	<b><u>Initial</u></b>	<b><u>Final</u></b>	<b><u>Load</u></b>	<b><u>Dial</u></b>	<b><u>Machine</u></b>	<b><u>Corrected</u></b>	<b><u>Sample</u></b>	<b><u>Time</u></b>	<b><u>C<sub>v</sub></u></b>
			<b><u>Increment</u></b>	<b><u>Reading</u></b>	<b><u>Deflection</u></b>	<b><u>Dial Reading</u></b>	<b><u>Height</u></b>	<b><u>t<sub>50</sub></u></b>	
			(tsf)	@ t <sub>50</sub> (div)	(div)	@ t <sub>50</sub> (div)	@ t <sub>50</sub> (mm)	(min)	(cm <sup>2</sup> /sec)
<i>Water Content</i>									
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	Seating	NA	NA	NA	NA	NA	NA
Wt. Tare (g)	6.65	6.88	0.25	48.0	17.0	31.0	25.32	0.15	0.03457
Wt. DS (g)	84.16	123.87	0.5	109.2	22.5	86.7	25.18	0.12	0.04491
Water Content (%)	36.51	25.12	1	174.2	31.8	142.4	25.04	0.13	0.04054
			2	246.2	56.2	190.0	24.92	0.16	0.03164
			4	307.4	87.6	219.8	24.84	0.14	0.03705
<b><u>Sample Parameters</u></b>			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	0.9689	0.5	239.7	31.4	208.3	24.87	0.25	0.02066
Sample Volume (cm <sup>3</sup> )	80.44	77.93	1	258.7	45.6	213.1	24.86	0.29	0.01783
Wt. Wet Sample + Ring (g)	370.36	357.33	2	284.4	60.3	224.2	24.83	0.14	0.03717
Wt. of Ring (g)	214.26	214.26	4	322.7	86.5	236.2	24.80	0.24	0.02144
Wt. of Wet Sample (g)	156.10	143.07	8	396.9	137.0	259.9	24.74	0.43	0.01175
Wet Density (pcf)	121.09	114.55	16	508.1	196.5	311.6	24.61	0.18	0.02817
Wet Density (g/cm <sup>3</sup> )	1.94	1.84	32	658.1	283.7	374.4	24.45	0.14	0.03530
Water Content (%)	36.51	25.12	8	NA	NA	NA	NA	NA	NA
Wt. of Dry Sample (g)	114.35	114.35	2	NA	NA	NA	NA	NA	NA
Dry Density (pcf)	88.70	91.56	0.5	NA	NA	NA	NA	NA	NA
Dry Density (g/cm <sup>3</sup> )	1.42	1.47							
Void Ratio	0.8290	0.7720							
Saturation (%)	114.52	84.58							
Specific Gravity	2.60	Measured							

<b>Tested By</b>	DB	<b>Date</b>	11/18/13	<b>Input Checked By</b>	TM	<b>Date</b>	12/6/13
------------------	----	-------------	----------	-------------------------	----	-------------	---------

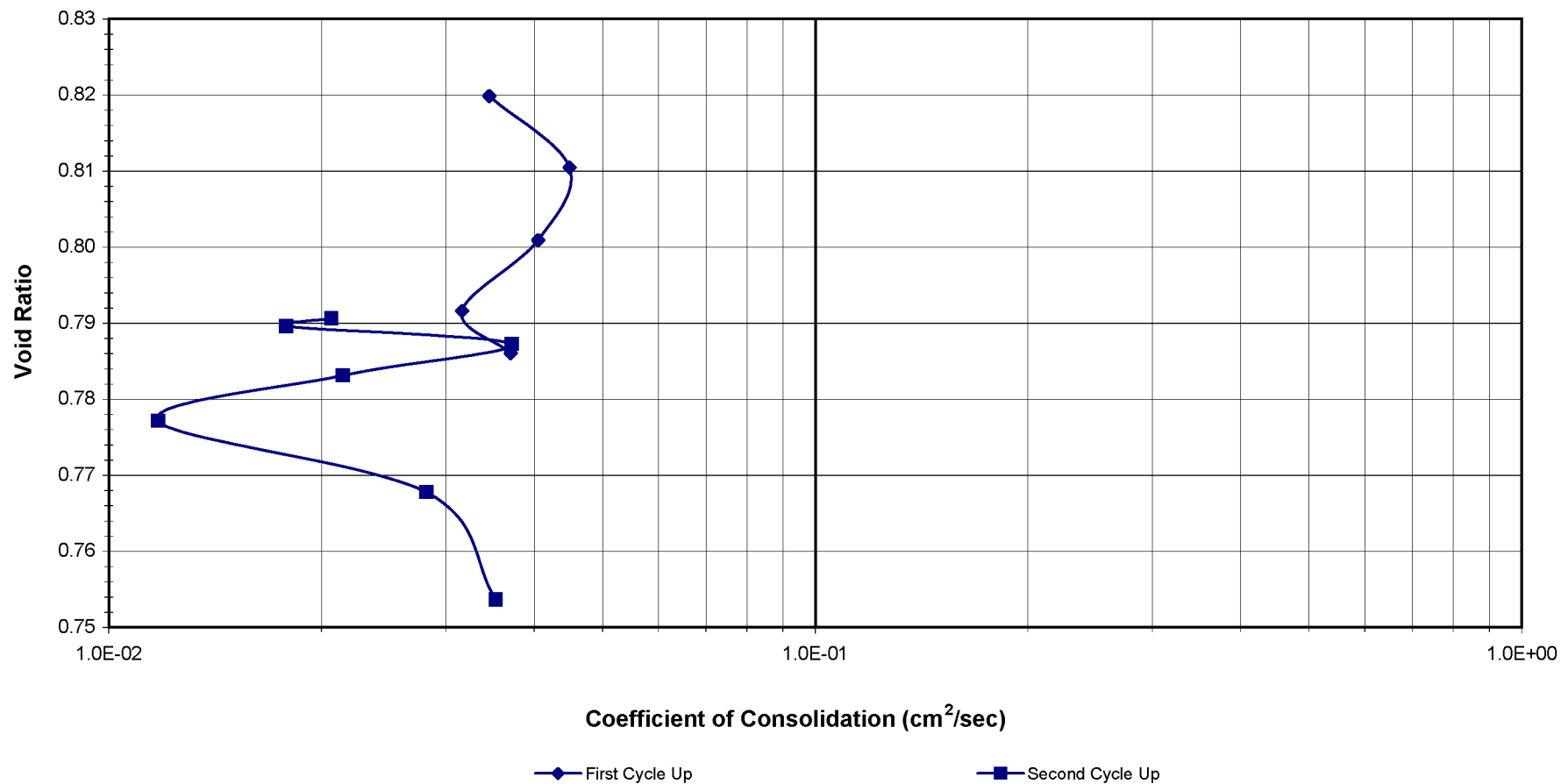
# ONE DIMENSIONAL CONSOLIDATION

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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-6-1b
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	81.0-81.7
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-4A
<b>Lab ID:</b>	2013-465-004-001	<b>Soil Description:</b>	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	

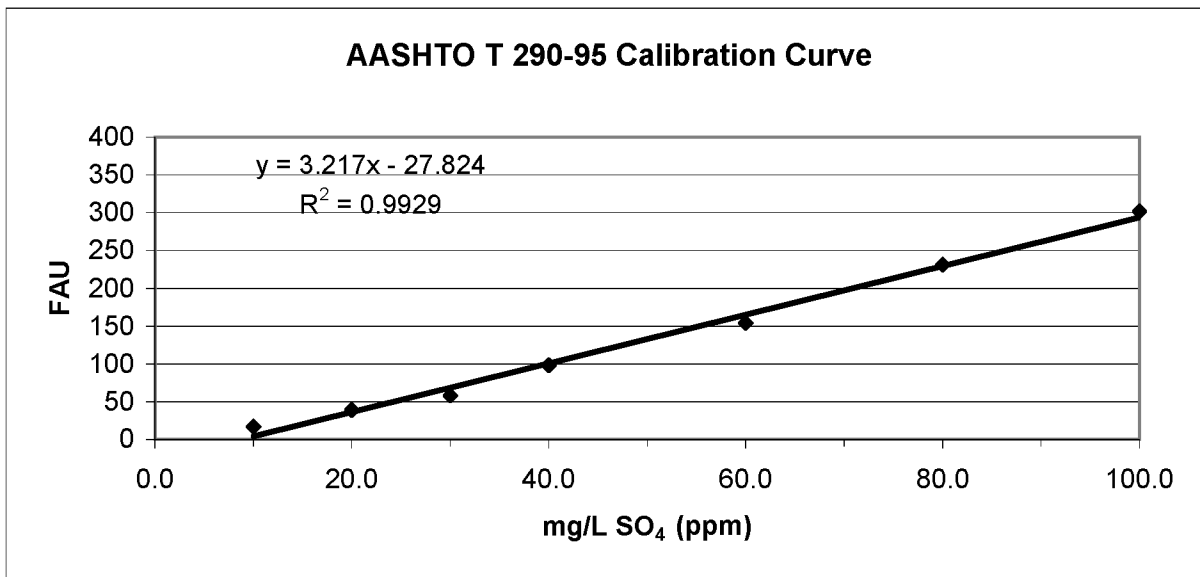
### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	41
<b>Sample Reading:</b>	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.

<b>Sample Sulfate Ion Concentration:</b>	104.96	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	314.9	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	315.3	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-6-1a
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	33.0-33.7
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-1
<b>Lab ID:</b>	2013-465-004-002	<b>Soil Description:</b>	White Wackestone

### Sulfate Standard - Calibration Curve Spectrophotometer Readings

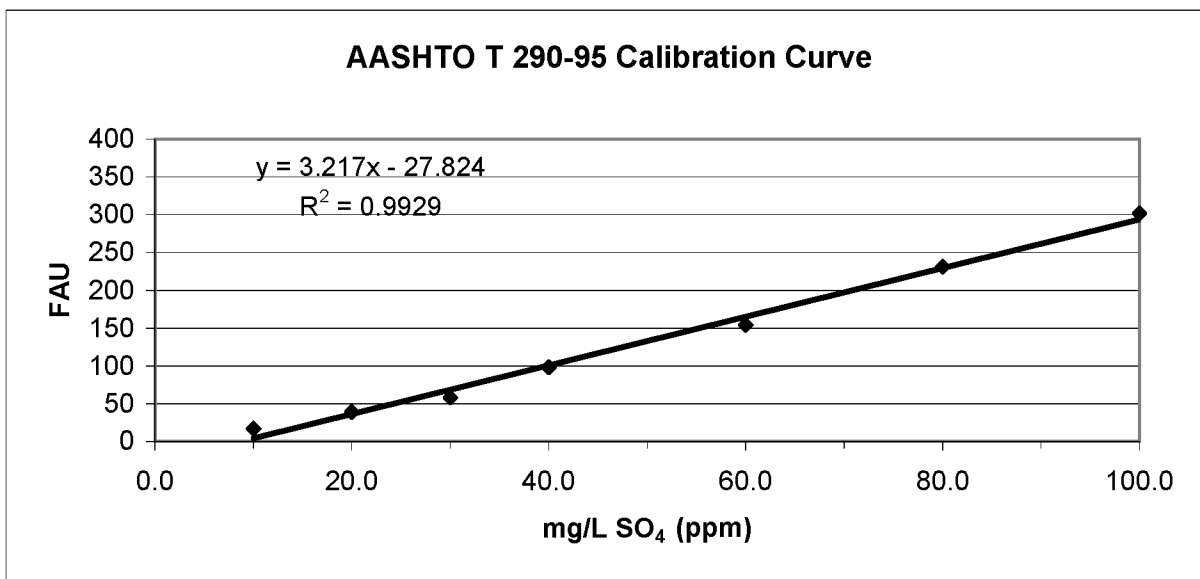
	<u>Sulfate Ion Concentrations (mg/L)</u>								
	0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0
	<u>Spectrophotometer Readings (FAU)</u>								
Underrange	7	17	39	58	98	154	231	302	

### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	59
<b>Sample Reading:</b>	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

<b>Sample Sulfate Ion Concentration:</b>	86.05	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	258.2	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	258.8	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-6-1a
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	114.7-115.0
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-5
<b>Lab ID:</b>	2013-465-004-003	<b>Soil Description:</b>	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	

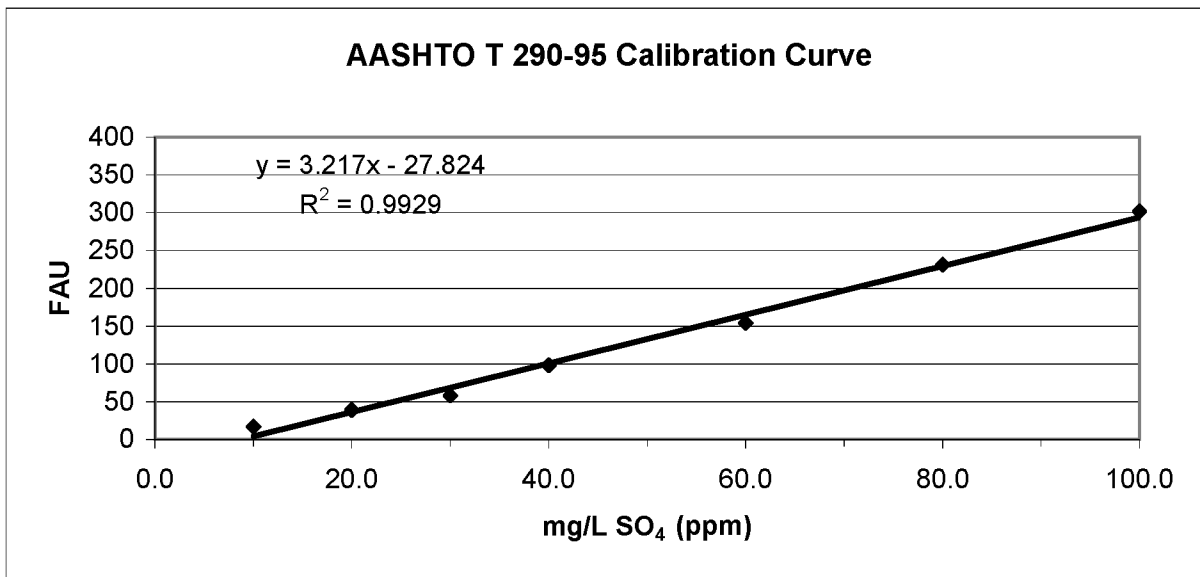
### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	21
<b>Sample Reading:</b>	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.

<b>Sample Sulfate Ion Concentration:</b>	152.21	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	456.6	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	457.4	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-6-1a-A
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	72.6-73.5
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-1
<b>Lab ID:</b>	2013-465-004-004	<b>Soil Description:</b>	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	

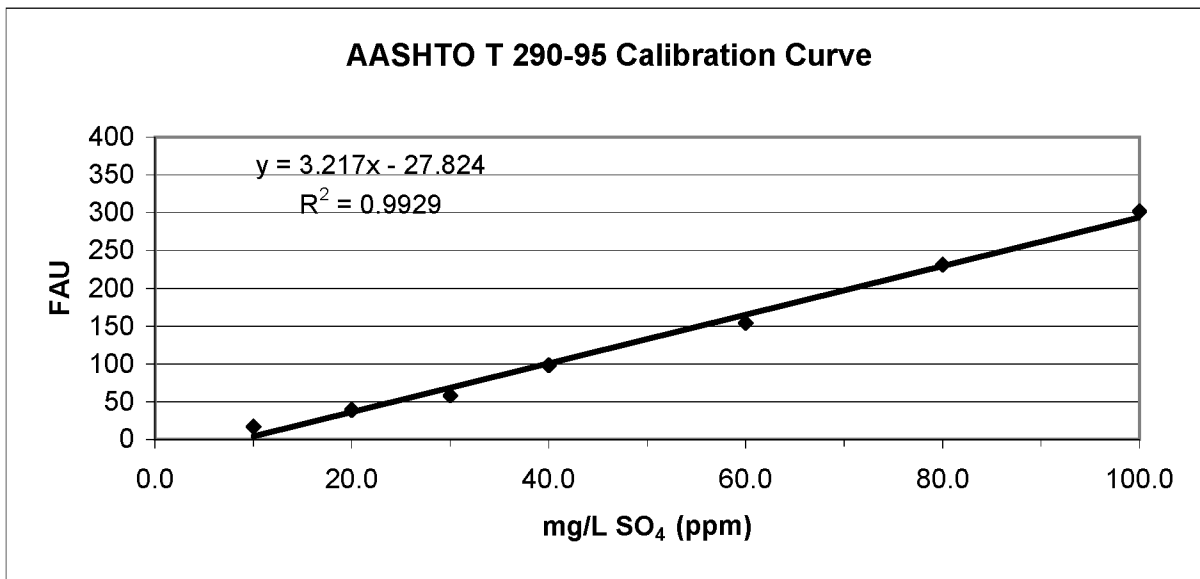
### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	14
<b>Sample Reading:</b>	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.

<b>Sample Sulfate Ion Concentration:</b>	65.79	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	197.4	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	197.7	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**Water Soluble Sulfate Ion Content in Soil**

AASHTO T 290-95 (2012)

**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
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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-7-1
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	37.5-37.9
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-2
<b>Lab ID:</b>	2013-465-004-005	<b>Soil Description:</b>	White Boundstone

### Sulfate Standard - Calibration Curve Spectrophotometer Readings

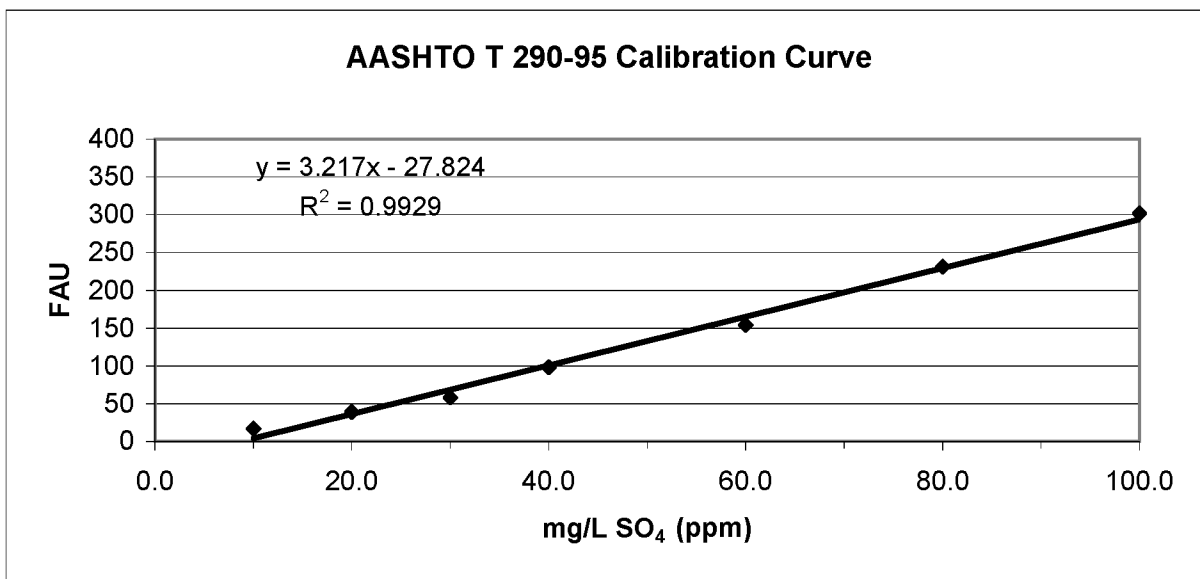
	<u>Sulfate Ion Concentrations (mg/L)</u>								
	0.0	4.0	10.0	20.0	30.0	40.0	60.0	80.0	100.0
	<u>Spectrophotometer Readings (FAU)</u>								
Underrange	7	17	39	58	98	154	231	302	

### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	9
<b>Sample Reading:</b>	247	FAU	Weight of Tare & Wet Sample (g):	374.69
			Weight of Tare & Dry Sample (g):	374.41
			Weight of Tare (g):	202.26
			Weight of Water (g):	0.28
			Weight of Dry Sample (g):	172.15
			Water Content (%):	0.16

<b>Sample Sulfate Ion Concentration:</b>	85.43	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	256.3	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	256.7	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**Water Soluble Sulfate Ion Content in Soil**

AASHTO T 290-95 (2012)

**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
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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-7-1
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	46.9-47.7
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-4
<b>Lab ID:</b>	2013-465-004-006	<b>Soil Description:</b>	White Packstone

### 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	

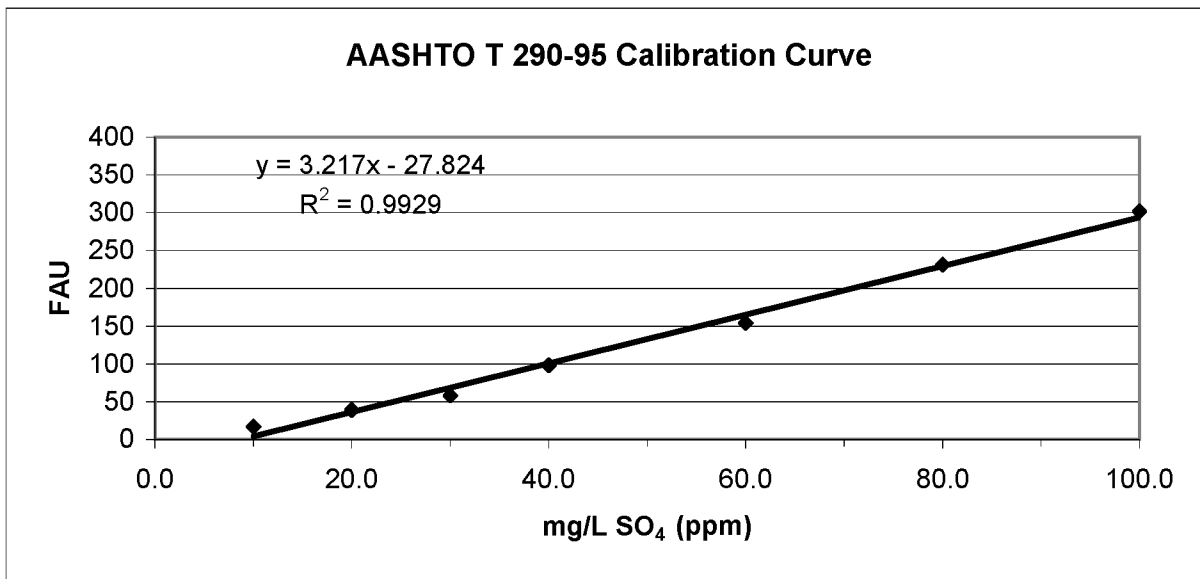
### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	27
<b>Sample Reading:</b>	167	FAU	Weight of Tare & Wet Sample (g):	436.42
			Weight of Tare & Dry Sample (g):	435.93
			Weight of Tare (g):	204.87
			Weight of Water (g):	0.49
			Weight of Dry Sample (g):	231.06
			Water Content (%):	0.21

**Note:** 25 ml of sample diluted to 50 ml = Dilution Factor of 2.

<b>Sample Sulfate Ion Concentration:</b>	121.12	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	363.4	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	364.1	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM      Date: 12/16/13      Checked by: KC      Date: 12/17/13

**Water Soluble Sulfate Ion Content in Soil**

AASHTO T 290-95 (2012)

**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
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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-7-1
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	74.3-75.0
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-6
<b>Lab ID:</b>	2013-465-004-007	<b>Soil Description:</b>	White Packstone

### 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	

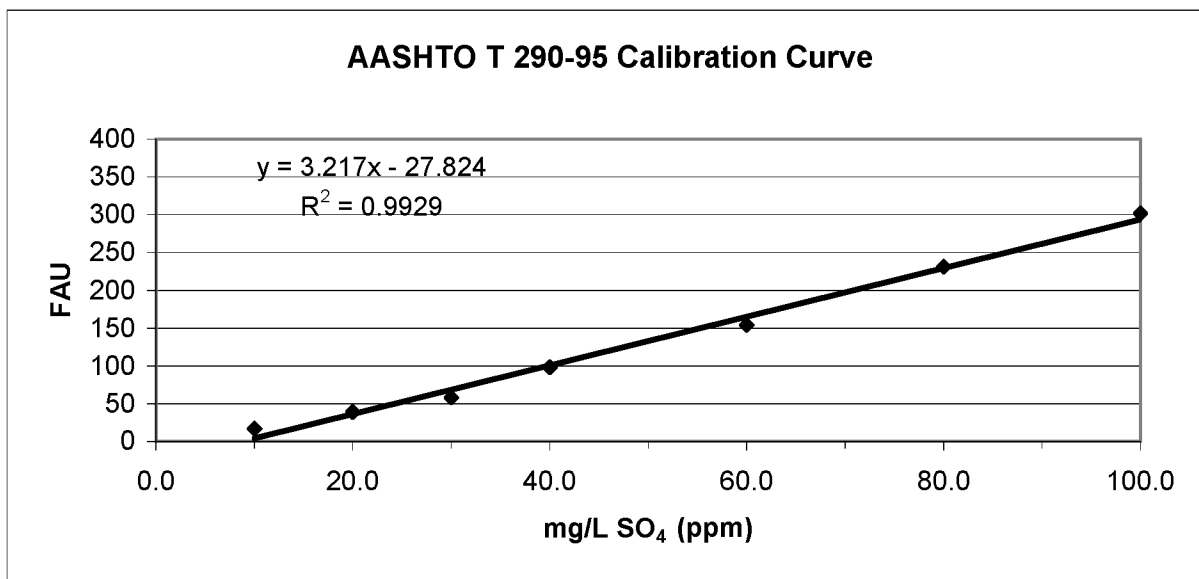
### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	53
<b>Sample Reading:</b>	186	FAU	Weight of Tare & Wet Sample (g):	479.98
			Weight of Tare & Dry Sample (g):	479.57
			Weight of Tare (g):	203.54
			Weight of Water (g):	0.41
			Weight of Dry Sample (g):	276.03
			Water Content (%):	0.15

**Note:** 25 ml of sample diluted to 50 ml = Dilution Factor of 2.

<b>Sample Sulfate Ion Concentration:</b>	132.94	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	398.8	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	399.4	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**Water Soluble Sulfate Ion Content in Soil**

AASHTO T 290-95 (2012)

**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
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)

<b>Client:</b>	Paul C. Rizzo & Associates	<b>Boring No.:</b>	R-7-4
<b>Client Reference:</b>	Turkey Point Units 6 & 7 Site	<b>Depth (ft):</b>	48.2-49.0
<b>Project No.:</b>	2013-465-004	<b>Sample No.:</b>	SC-2
<b>Lab ID:</b>	2013-465-004-008	<b>Soil Description:</b>	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	

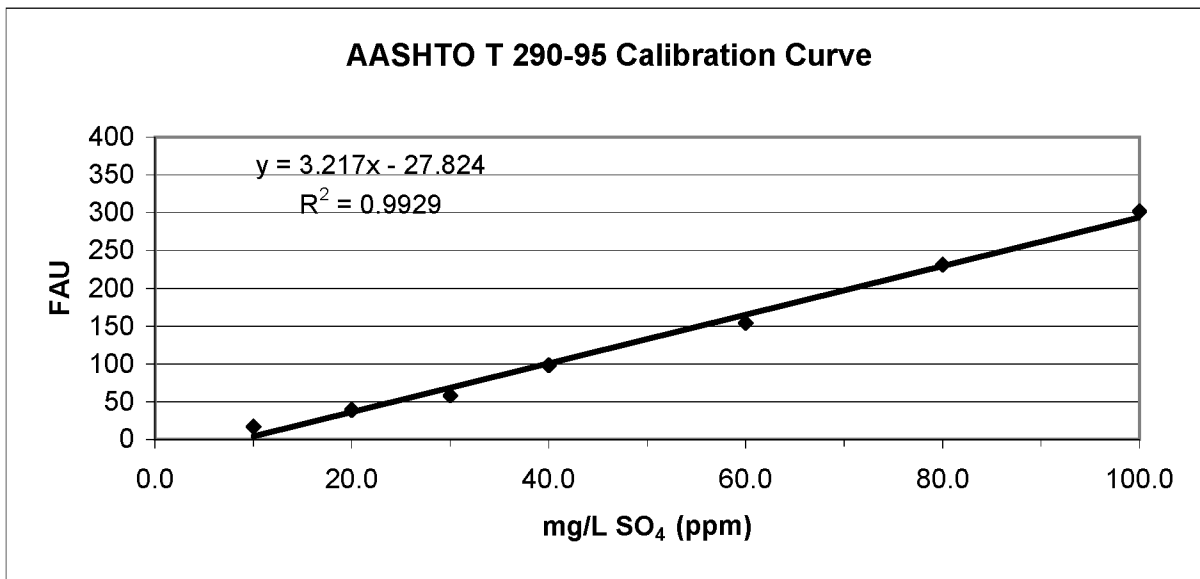
### Measurement of Barium Chloride Turbidity

(Sample contains 5.0 ml NaCl solution and 0.3 g BaCl<sub>2</sub>•2H<sub>2</sub>O)

<b>Sample Weight:</b>	100.0	grams	<b>NaCl Solution Mix Date:</b>	8/23/13
<b>Water added to Sample:</b>	300.0	ml	<b>Sample Moisture Content</b>	
<b>Size of Sample Aliquot:</b>	50.0	ml	Tare Number:	39
<b>Sample Reading:</b>	107	FAU	Weight of Tare & Wet Sample (g):	412.09
			Weight of Tare & Dry Sample (g):	411.69
			Weight of Tare (g):	207.11
			Weight of Water (g):	0.40
			Weight of Dry Sample (g):	204.58
			Water Content (%):	0.20

**Note:** 25 ml of sample diluted to 50 ml = Dilution Factor of 2.

<b>Sample Sulfate Ion Concentration:</b>	83.82	<b>mg/L SO<sub>4</sub> (ppm)</b>
<b>Sample Sulfate Ion Content:</b>	251.5	<b>mg/kg SO<sub>4</sub> (not corrected for moisture)</b>
<b>Sample Sulfate Ion Content:</b>	252.0	<b>mg/kg SO<sub>4</sub> (corrected for moisture)</b>



Tested by: JAM	Date: 12/16/13	Checked by: KC	Date: 12/17/13
----------------	----------------	----------------	----------------

**Water Soluble Sulfate Ion Content in Soil**

AASHTO T 290-95 (2012)

**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
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

**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-001

Boring No.: R-6-1b  
 Depth (ft): 81.0-81.7  
 Sample No.: SC-4A  
 Description: White Grainstone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

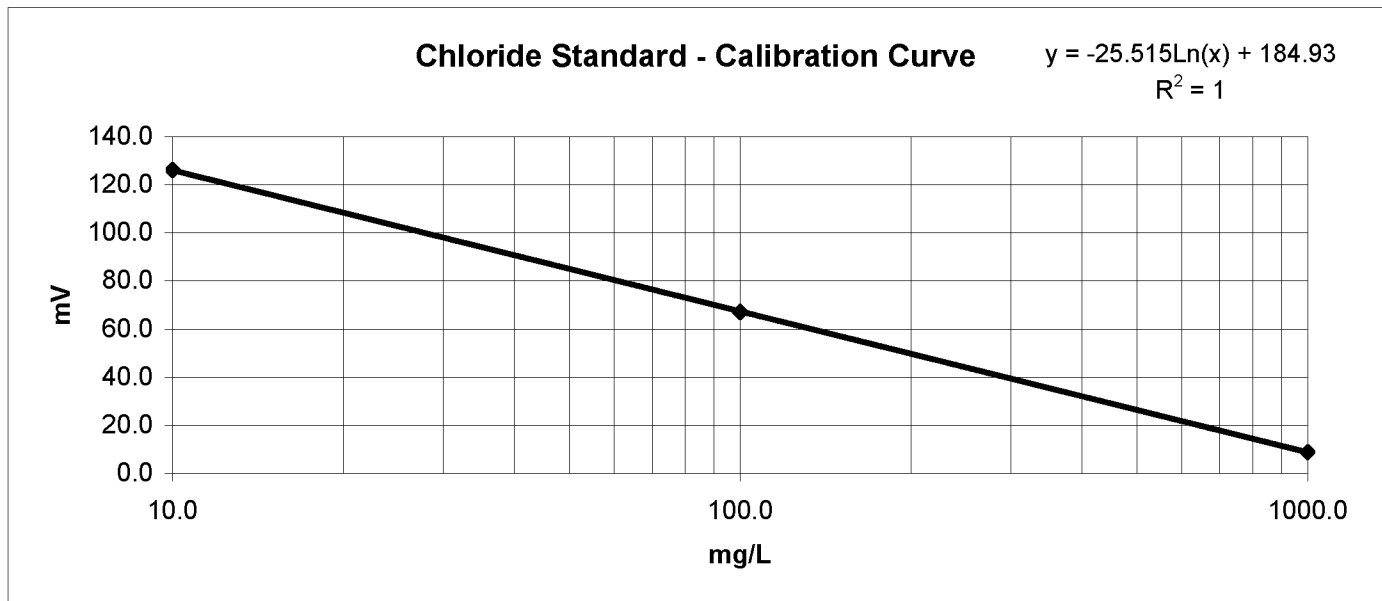
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>40.0</u> ml	1832.54	1832.54
Sample Reading: <u>28.6</u> mV		

**Note: 10 ml of sample diluted to 40 ml = Dilution Factor of 4.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14



**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-002

Boring No.: R-6-1a  
 Depth (ft): 33.0-33.7  
 Sample No.: SC-1  
 Description: White Wackestone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

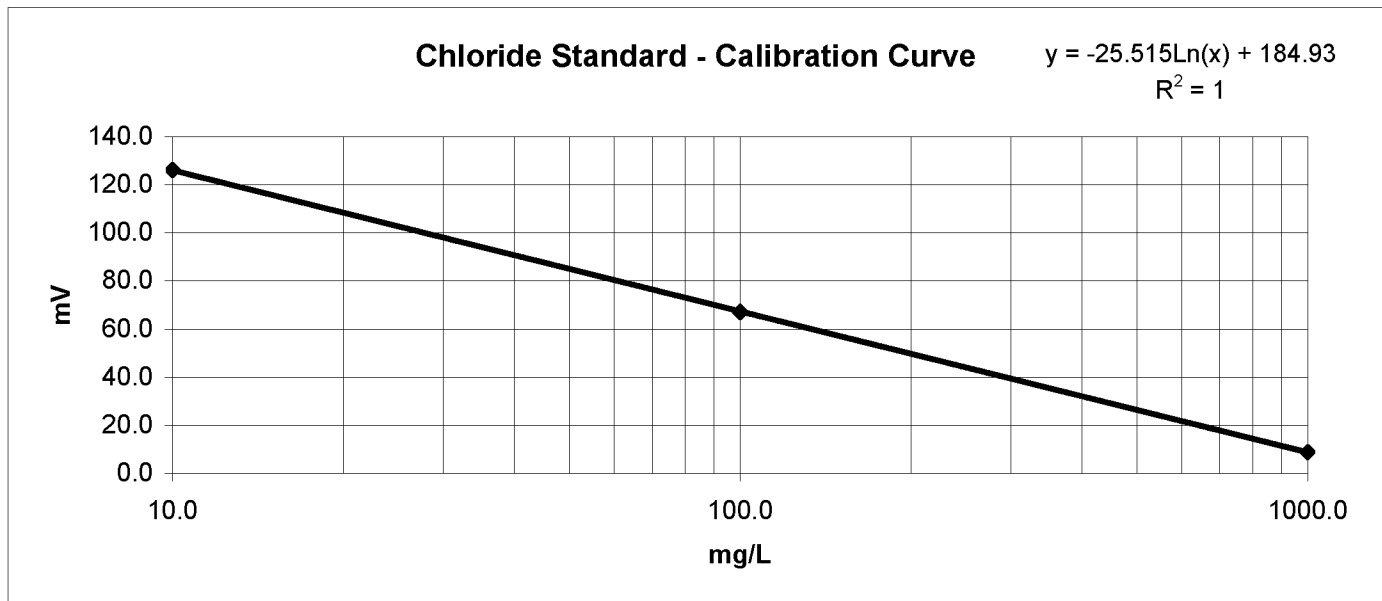
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>40.0</u> ml	3110.57	3110.57
Sample Reading: <u>15.1</u> mV		

**Note: 10 ml of sample diluted to 40 ml = Dilution Factor of 4.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14

**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-003

Boring No.: R-6-1a  
 Depth (ft): 114.7-115.0  
 Sample No.: SC-5  
 Description: White Grainstone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

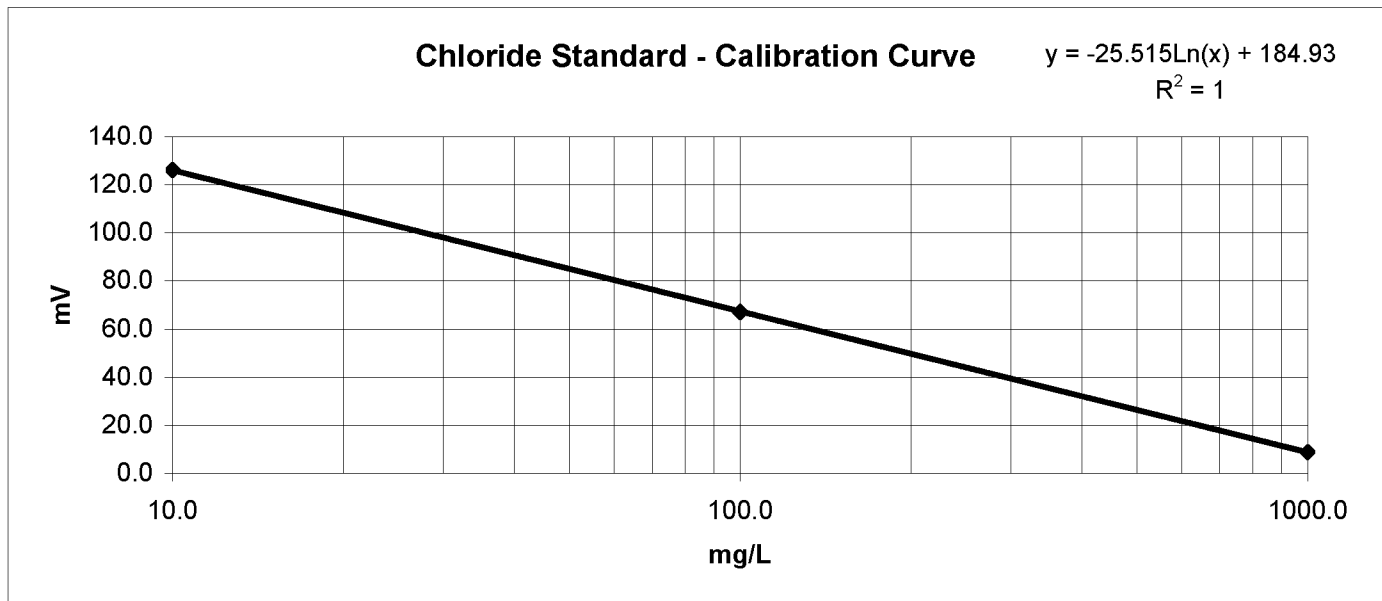
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>40.0</u> ml	3404.00	3404.00
Sample Reading: <u>12.8</u> mV		

**Note: 10 ml of sample diluted to 40 ml = Dilution Factor of 4.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14

**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-004

Boring No.: R-6-1a-A  
 Depth (ft): 72.6-73.5  
 Sample No.: SC-1  
 Description: White Grainstone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

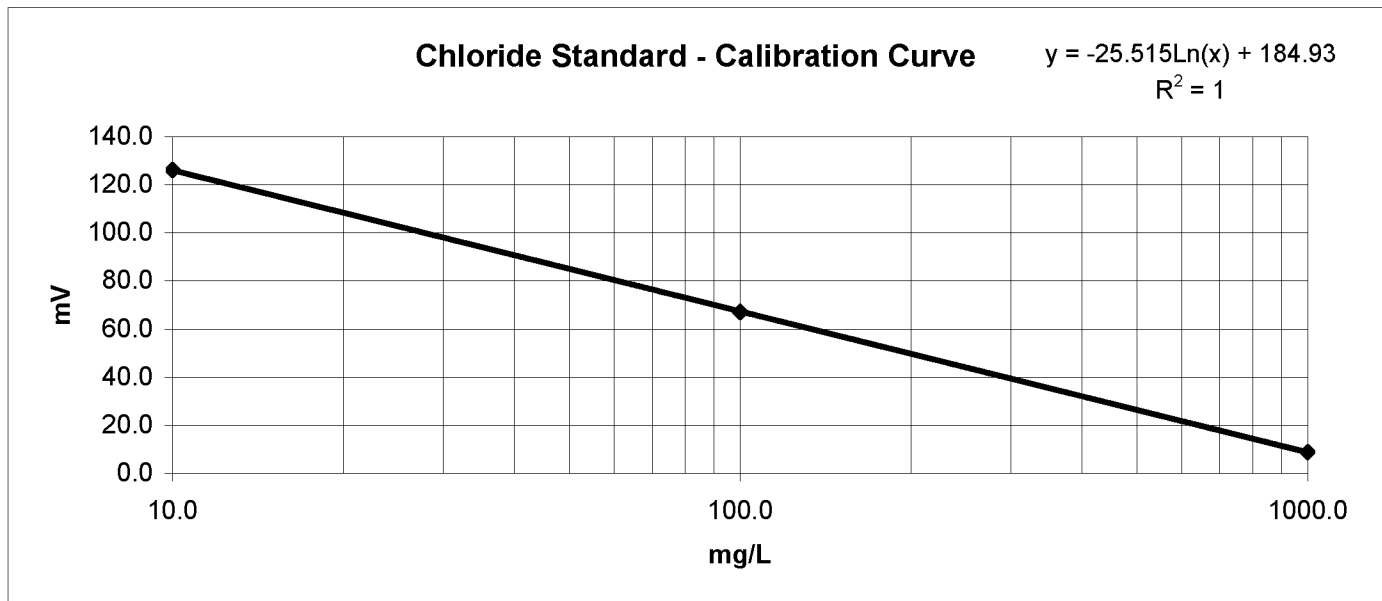
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>40.0</u> ml	1974.21	1974.21
Sample Reading: <u>26.7</u> mV		

**Note: 10 ml of sample diluted to 40 ml = Dilution Factor of 4.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14

**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-005

Boring No.: R-7-1  
 Depth (ft): 37.5-37.9  
 Sample No.: SC-2  
 Description: White Boundstone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

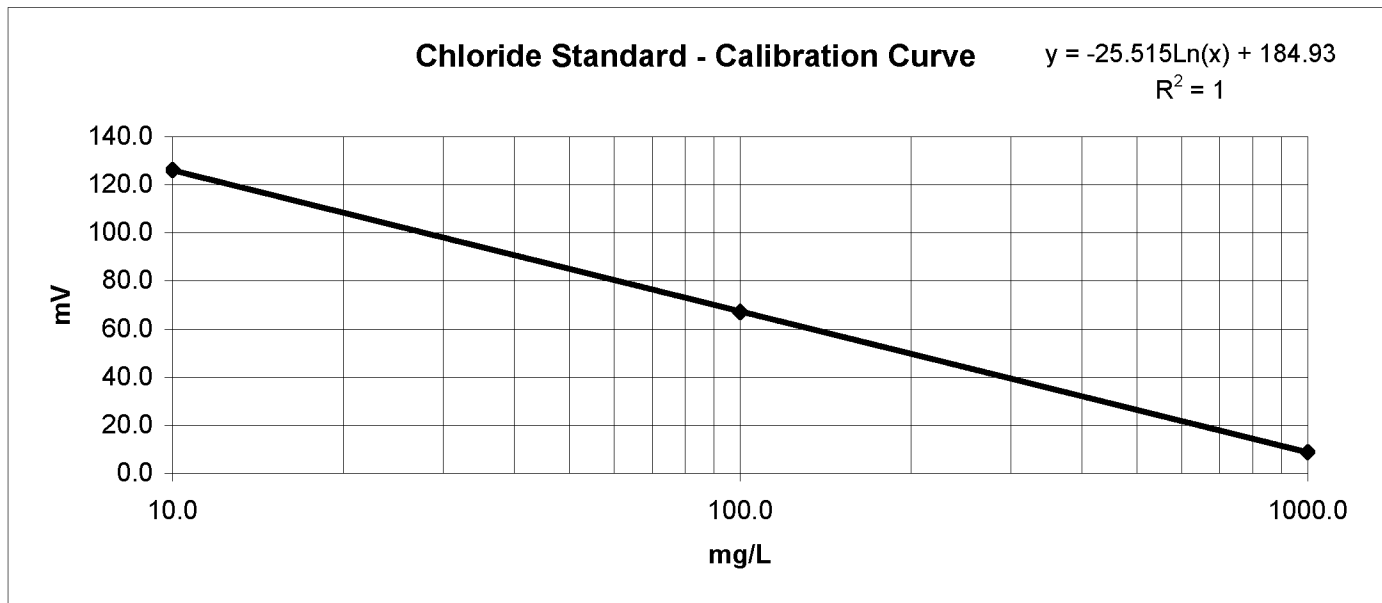
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>50.0</u> ml	1959.91	1959.91
Sample Reading: <u>9.2</u> mV		

**Note: 25 ml of sample diluted to 50 ml = Dilution Factor of 2.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

## Water Soluble Chloride Ion Content in Soil

AASHTO T 291-94 (2008)

### 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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14



**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-006

Boring No.: R-7-1  
 Depth (ft): 46.9-47.7  
 Sample No.: SC-4  
 Description: White Packstone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

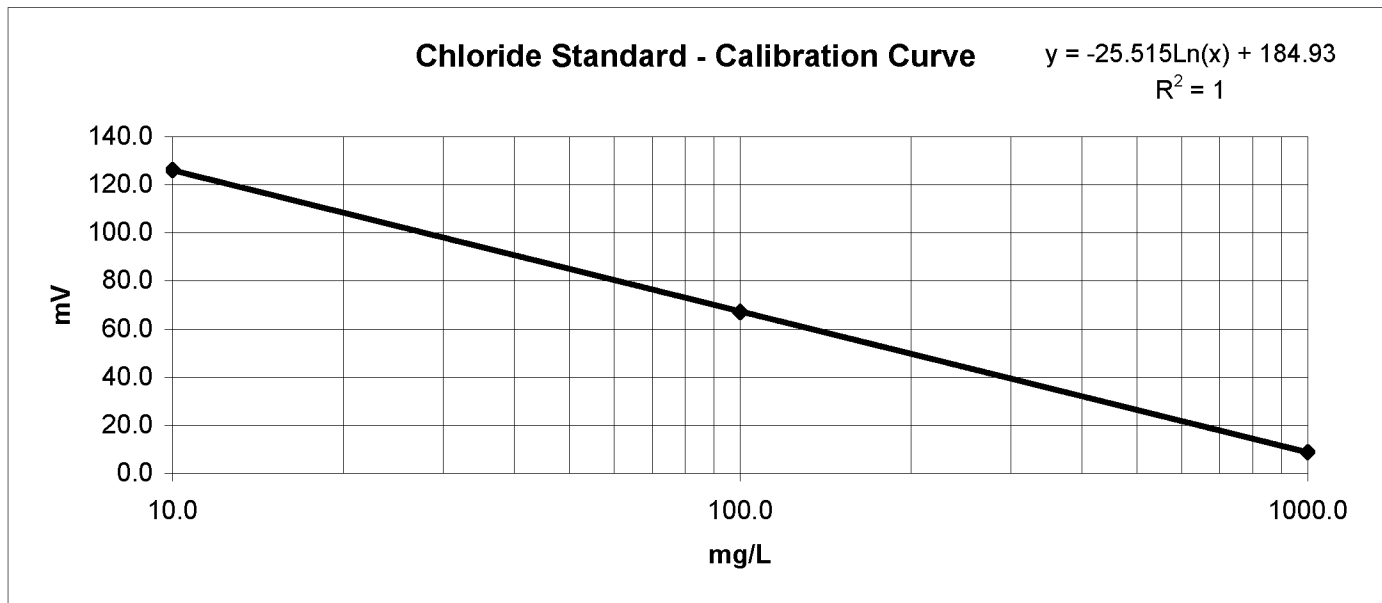
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>40.0</u> ml	2991.02	2991.02
Sample Reading: <u>16.1</u> mV		

**Note: 10 ml of sample diluted to 40 ml = Dilution Factor of 4.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14

**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-007

Boring No.: R-7-1  
 Depth (ft): 74.3-75.0  
 Sample No.: SC-6  
 Description: White Packstone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

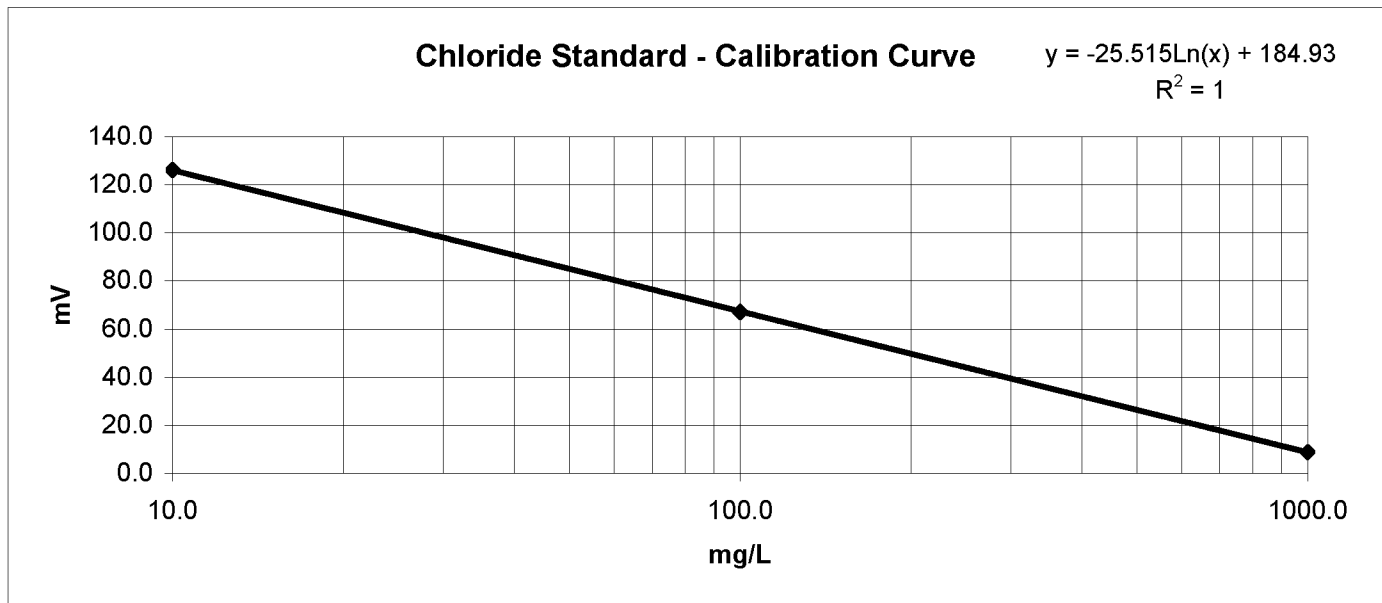
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>50.0</u> ml	1862.55	1862.55
Sample Reading: <u>10.5</u> mV		

**Note: 25 ml of sample diluted to 50 ml = Dilution Factor of 2.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14

**CHLORIDE ION CONTENT IN SOILS**  
 AASHTO T 291 - 94 (2008)

Client: Paul C. Rizzo & Associates  
 Client Reference: Turkey Point Units 6 & 7 Site  
 Project No.: 2013-465-004  
 Lab ID: 2013-465-004-008

Boring No.: R-7-4  
 Depth (ft): 48.2-49.0  
 Sample No.: SC-2  
 Description: White Wackestone  
 (- # 10 Sieve material)

**CHLORIDE STANDARD: CALIBRATION CURVE**

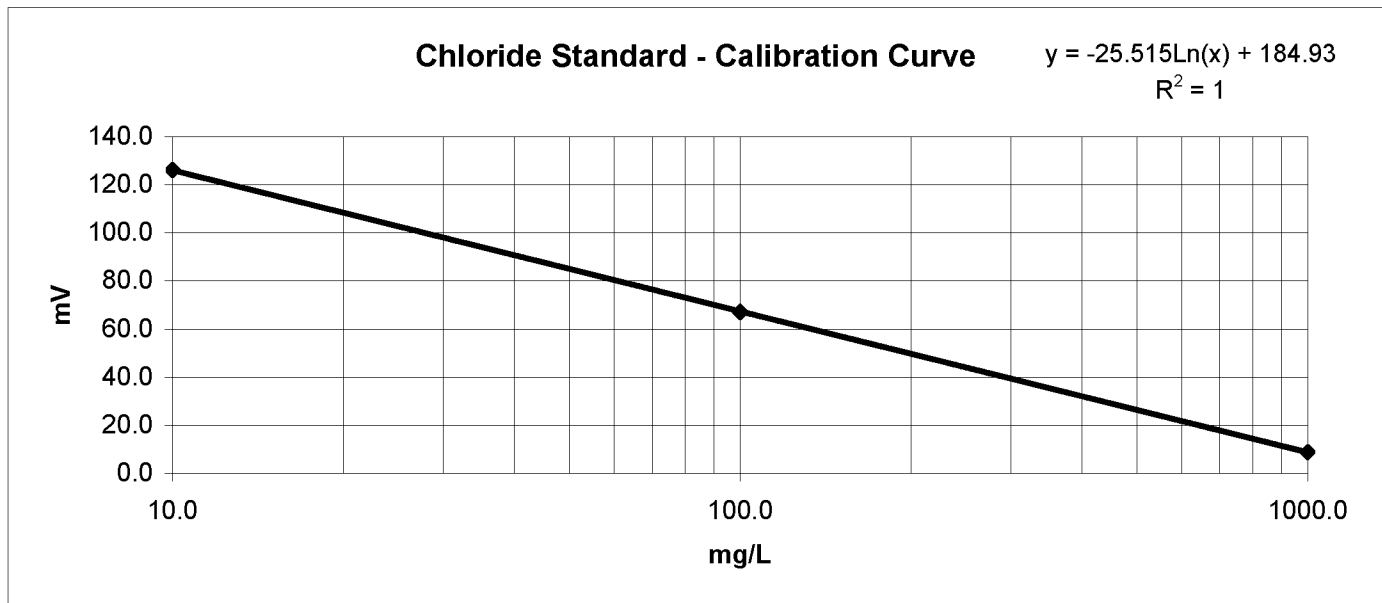
<u>STANDARD</u>	<u>MILLIVOLTS</u> (mV)
10.0 mg/L	126.3
100.0 mg/L	67.2
1000.0 mg/L	8.8

**MEASUREMENT OF CHLORIDES**

Sample Weight: <u>100.0</u> grams	CONCENTRATION	CONCENTRATION
Water added to Sample: <u>100.0</u> ml	(mg/L)	(mg/kg)
Size of Sample Aliquot: <u>40.0</u> ml	2765.52	2765.52
Sample Reading: <u>18.1</u> mV		

**Note: 10 ml of sample diluted to 40 ml = Dilution Factor of 4.**

Notes: Samples and standards were buffered by the addition of an equal volume of the 0.2 M KNO<sub>3</sub> solution (one to one volume).  
 Samples were dried for a minimum of 12 hours at 110 ± 5°C.



Notes:

Tested By JAM      Date 12/18/13      Checked By KC      Date 12/19/13

**Water Soluble Chloride Ion Content in Soil**

AASHTO T 291-94 (2008)

**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
Meter	G940	7/9/14
Electrode	G1333	As Used
100 ml Volumetric Flask	G1328	Initial Only
100 ml Volumetric Flask	G1327	Initial Only
1000 ml Volumetric Flask	G1338	Initial Only
1000 ml Volumetric Flask	G1337	Initial Only
50 ml Graduated Cylinder	G1330	Initial Only
Stopwatch	G1277	5/13/14
#10 Sieve	G884	8/20/14
Balance	G1485	11/11/14