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REFERENCE: R-5819/R-5820

PROJECT: 47091/47092

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 GEOTECHNICAL ENGINEERING UNIT  
 SUBSURFACE INVESTIGATION  
 APPENDIX A  
 LABORATORY RESULTS

DocuSigned by:

Thomas R. Wells

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Prepared in the Office of:



**LABORATORY SUMMARY SHEET FOR SOIL SAMPLES**

**SHEET 289**

**PROJECT NO.: 47091.1.1 / 47092.1.1 (R-5819 & R-5820)**  
**COUNTY: COLUMBUS**  
**DESCRIPTION: US 74 at Lake Waccamaw**

Sample No.	Boring Number	Alignment	Station	Offset	Sample Depth (ft.)	Natural Moisture Content (%)	Organic Content (%)	AASHTO Class.	Atterberg Limits			Gradation Results							
									L.L.	P.L.	P.I.	Retained #4 Sieve	Pass #10 Sieve	Pass #40 Sieve	Pass #200 Sieve	Coarse Sand (%)	Fine Sand (%)	Silt (%)	Clay (%)
S-1	LWB_2550	-LWB-	25+50	140' RT	0.5-1.0	16.5	--	A-4	NP	NP	NP	0.0	99.7	97.3	37.0	5.0	64.7	14.3	16.1
S-2	LWB_2550	-LWB-	25+50	140' RT	3.0-3.5	21.8	--	A-4	22	19	3	0.0	99.9	96.9	44.1	4.7	60.7	18.0	16.7
S-3	LWB_2950	-LWB-	29+50	140' RT	0.5-1.0	17.0	--	A-4	21	16	5	0.0	99.8	98.6	48.7	2.2	56.7	19.2	21.9
S-4	LWB_2950	-LWB-	29+50	140' RT	2.0-2.5	7.6	7.5	A-4	NP	NP	NP	0.0	100.0	89.3	42.4	14.3	52.7	18.4	14.7
S-5	LWB_3150	-LWB-	31+50	40' LT	5.0-5.5	24.2	6.2	A-4	30	22	8	0.0	100.0	98.4	51.6	2.6	55.1	27.4	14.9
S-6	LWB_3350	-LWB-	33+50	140' RT	0.5-1.0	20.2	--	A-6	25	12	13	0.0	100.0	99.1	54.2	1.9	52.1	16.7	29.3
S-7	LWB_3350	-LWB-	33+50	140' RT	2.0-2.5	--	--	A-4	20	11	9	0.0	100.0	99.6	61.1	1.0	46.4	19.5	33.1
S-8	LWB_3554	-LWB-	35+54	70' LT	0.0-1.5	14.7	2.1	A-4	19	16	3	0.0	0.1	99.0	51.0	2.1	55.8	22.9	19.3
S-9	LWB_3750_LT	-LWB-	37+50	150' LT	0.5-1.0	14.5	--	A-4	NP	NP	NP	0.0	100.0	98.5	43.5	2.8	62.7	19.8	14.7
S-10	LWB_3750_RT	-LWB-	37+50	200' RT	0.5-1.0	14.3	--	A-4	15	13	2	0.0	100.0	99.1	50.8	1.9	53.8	23.7	20.6
S-11	L_1450	-L-	14+50	80' RT	0.5-1.0	11.0	--	A-6	27	14	13	0.0	99.8	98.5	46.7	3.0	59.0	16.4	21.7
S-12	L_1450	-L-	14+50	80' RT	1.5-2.0	15.7	--	A-4	23	13	10	0.0	100.0	99.4	47.5	1.8	56.9	18.1	23.2
S-13	L_1850	-L-	18+50	80' RT	0.5-1.0	21.5	--	A-6	28	13	15	0.0	99.9	98.3	60.9	4.0	38.6	21.2	36.1
S-14	L_2450	-L-	24+50	80' RT	1.5-2.0	15.4	3.0	A-4	19	14	5	0.0	99.9	97.5	66.2	4.2	33.7	46.8	15.3
S-15	L_2650	-L-	26+50	80' LT	3.5-4.0	7.6	1.8	A-2-4	NP	NP	NP	0.0	100.0	99.2	12.7	6.0	82.1	2.9	9.0
S-16	L_2850	-L-	28+50	80' RT	0.5-1.0	--	--	A-2-4	19	15	4	0.0	99.9	96.2	33.5	8.9	60.0	10.9	20.3
S-17	L_3250	-L-	32+50	80' RT	2.0-2.5	22.3	7.3	A-4	NP	NP	NP	0.0	99.4	96.0	51.9	6.4	46.3	31.8	15.5
S-18	L_3460_LT	-L-	34+60	178' LT	0.5-1.0	14.0	--	A-4	19	14	5	0.5	97.9	94.2	50.1	6.8	48.0	27.0	18.2
S-19	L_3460_LT	-L-	34+60	178' LT	5.5-6.0	29.7	--	A-7-6	55	13	42	0.0	100.0	98.8	74.6	2.7	26.7	23.7	46.9
S-20	L_3450_RT	-L-	34+50	200' RT	0.5-1.0	18.0	--	A-4	19	14	5	0.1	99.9	97.5	55.7	4.5	43.5	24.1	27.9
S-21	L_3450_RT	-L-	34+50	200' RT	4.0-4.5	--	--	A-7-6	49	13	36	0.0	100.0	97.7	59.0	4.9	39.0	10.5	45.6
S-22	L_3650	-L-	36+50	140' LT	0.5-1.0	13.0	--	A-4	15	11	4	1.0	98.7	90.9	50.6	13.6	40.6	27.9	17.9
S-23	L_3850	-L-	38+50	140' RT	0.5-1.0	15.2	--	A-4	NP	NP	NP	0.0	99.8	97.4	50.8	5.6	53.8	29.3	11.3
S-24	L_3850	-L-	38+50	140' LT	2.0-2.5	--	--	A-6	36	17	19	0.0	100.0	98.5	63.9	3.7	39.6	21.8	34.9
S-25	L_4050	-L-	40+50	110' LT	0.5-1.0	14.2	--	A-4	21	11	10	0.4	98.3	94.2	62.6	8.1	31.1	32.9	27.9
S-26	L_4260	-L-	42+60	109' LT	2.0-2.5	19.4	3.4	A-2-4	NP	NP	NP	0.0	99.2	93.6	32.9	12.9	57.8	19.4	9.9
S-27	L_4450	-L-	44+50	110' RT	0.5-1.0	--	--	A-6	37	13	24	0.0	99.7	94.3	62.9	9.5	29.7	25.3	35.6
S-28	L_4842	-L-	48+42	94' RT	0.5-1.0	--	--	A-4	19	13	6	0.0	99.5	94.1	53.5	10.7	39.7	27.6	22.0
S-29	L_5250	-L-	52+50	80' RT	0.5-1.0	--	--	A-6	32	13	19	0.1	99.8	92.3	49.8	15.1	38.4	15.2	31.4
S-30	L_5250	-L-	52+50	80' RT	2.5-3.0	15.8	3.2	A-4	NP	NP	NP	0.3	98.6	90.8	45.6	17.2	40.6	26.7	15.5
S-31	L_5850	-L-	58+50	80' LT	0.5-1.0	--	--	A-3	NP	NP	NP	0.0	100.0	96.6	8.9	10.8	81.4	1.3	6.6
S-32	L_6650	-L-	66+50	80' LT	0.5-1.0	--	--	A-2-4	NP	NP	NP	0.2	99.6	94.2	12.2	12.3	77.5	2.6	7.6
S-33	L_7650	-L-	76+50	80' RT	0.5-1.0	--	--	A-2-4	NP	NP	NP	0.2	99.5	96.9	14.8	7.6	79.4	3.2	9.9
S-34	L_8650	-L-	86+50	80' LT	0.5-1.0	--	--	A-2-4	NP	NP	NP	0.0	99.7	94.2	10.9	9.0	80.7	1.7	8.7
S-35	L_8850	-L-	88+50	100' RT	0.5-1.0	13.8	--	A-7-6	47	15	32	0.0	100.0	93.5	50.5	12.4	39.4	12.4	35.8
S-36	L_8850	-L-	88+50	100' RT	1.5-2.0	14.8	4.2	A-4	NP	NP	NP	0.0	99.8	92.7	43.1	15.0	45.9	23.7	15.5

**LABORATORY SUMMARY SHEET FOR SOIL SAMPLES**

**SHEET 290**

**PROJECT NO.: 47091.1.1 / 47092.1.1 (R-5819 & R-5820)**

**COUNTY: COLUMBUS**

**DESCRIPTION: US 74 at Lake Waccamaw**

Sample No.	Boring Number	Alignment	Station	Offset	Sample Depth (ft.)	Natural Moisture Content (%)	Organic Content (%)	AASHTO Class.	Atterberg Limits			Gradation Results							
									L.L.	P.L.	P.I.	Retained #4 Sieve	Pass #10 Sieve	Pass #40 Sieve	Pass #200 Sieve	Coarse Sand (%)	Fine Sand (%)	Silt (%)	Clay (%)
S-37	L_9050	-L-	90+50	100' LT	2.0-2.5	16.5	--	A-3	NP	NP	NP	0.0	100.0	91.4	9.9	21.5	69.1	0.3	9.1
S-38	L_9250	-L-	92+50	80' RT	0.5-1.0	--	--	A-4	22	13	9	0.0	99.8	94.9	48.0	10.9	44.5	20.0	24.7
S-39	L_9250	-L-	92+50	80' RT	3.0-3.5	24.8	8.9	A-4	NP	NP	NP	0.0	100.0	94.6	38.4	12.3	54.1	15.6	18.1
S-40	L_9451	-L-	94+51	95' LT	0.5-1.0	11.1	--	A-6	24	13	11	0.2	99.6	95.8	45.6	9.2	48.9	16.9	25.1
S-41	L_9451	-L-	94+51	95' LT	2.5-3.0	14.0	9.2	A-4	NP	NP	NP	0.0	99.9	93.5	40.2	13.4	51.0	20.5	15.1
S-42	L_9650	-L-	96+50	80' LT	0.5-1.0	26.8	--	A-3	NP	NP	NP	0.0	99.9	95.6	7.2	9.3	83.9	0.7	6.1
S-43	L_9850	-L-	98+50	80' RT	0.5-1.0	--	--	A-4	19	13	6	0.1	99.6	88.7	37.4	51.8	15.8	11.8	20.6
S-44	L_10050	-L-	100+50	70' LT	0.5-1.0	10.8	--	A-3	NP	NP	NP	0.1	99.9	95.3	10.4	8.4	82.1	1.6	7.9
S-45	L_10250	-L-	102+50	80' RT	0.5-1.0	--	--	A-6	30	12	18	0.0	99.9	96.2	38.0	7.1	58.4	3.7	30.9
S-46	L_10450	-L-	104+50	80' LT	0.5-1.0	10.3	--	A-2-6	25	14	11	0.2	99.5	85.5	29.1	28.8	43.6	5.1	22.5
S-47	Y1_1250	-Y1-	12+50	50' LT	0.5-1.0	16.7	--	A-4	NP	NP	NP	0.0	100.0	96.9	46.8	5.7	55.2	23.8	15.3
S-48	Y1_1250	-Y1-	12+50	50' LT	2.5-3.0	--	--	A-6	30	14	16	0.0	99.9	98.3	63.1	3.4	38.7	23.3	34.5
S-49	Y1_1450	-Y1-	14+50	40' RT	1.5-2.0	20.0	--	A-6	25	12	13	0.1	99.6	98.1	54.8	3.2	46.0	21.9	29.0
S-50	Y1_1650	-Y1-	16+50	40' LT	0.5-1.0	20.3	--	A-6	35	13	22	0.0	99.9	98.2	64.9	3.6	35.1	16.6	44.7
S-51	Y1_1650	-Y1-	16+50	40' LT	2.5-3.0	26.5	--	A-7-6	60	19	41	0.0	100.0	98.5	68.7	3.2	31.2	12.9	52.8
S-52	Y1_1850	-Y1-	18+50	40' RT	0.5-1.0	16.2	--	A-4	NP	NP	NP	0.0	99.9	98.0	46.3	4.6	55.6	21.8	18.0
S-53	Y1_2050	-Y1-	20+50	40' LT	0.5-1.0	14.4	--	A-4	21	12	9	0.0	100.0	98.2	51.3	4.1	51.1	21.1	23.7
S-54	Y1_2050	-Y1-	20+50	40' LT	2.0-2.5	21.9	--	A-6	25	12	13	0.0	100.0	98.2	53.9	4.0	48.7	20.4	27.0
S-55	Y1_2250	-Y1-	22+50	40' RT	0.5-1.0	16.1	--	A-6	25	14	11	0.1	99.4	98.5	52.9	3.1	52.0	21.2	23.8
S-56	Y1_2450	-Y1-	24+50	40' LT	1.0-1.5	15.3	--	A-4	NP	NP	NP	0.1	99.4	97.4	44.3	5.5	55.1	24.1	15.3
S-57	Y1_2450	-Y1-	24+50	40' LT	2.5-3.0	16.8	--	A-4	21	11	10	0.3	99.0	96.8	48.8	6.0	48.7	20.8	24.5
S-58	Y1_2650	-Y1-	26+50	30' RT	1.5-2.0	16.7	--	A-6	27	13	14	0.0	98.2	92.9	50.2	13.5	38.6	22.9	25.0
S-59	Y1_2946	-Y1-	29+46	50' LT	0.0-1.5	15.9	3.7	A-2-4	NP	NP	NP	0.7	1.6	92.2	16.3	14.4	69.8	7.5	8.2
S-60	Y1_3489	-Y1-	34+89	35' RT	0.0-1.5	20.9	4.7	A-4	NP	NP	NP	0.0	0.0	97.4	42.9	6.7	56.3	25.4	11.7
S-61	Y1_4262	-Y1-	42+62	43' LT	0.0-1.5	15.5	2.4	A-4	NP	NP	NP	0.0	0.1	96.5	51.3	5.7	49.8	29.4	15.2
S-62	Y1_4779	-Y1-	47+79	48' RT	0.0-1.5	14.9	2.3	A-4	NP	NP	NP	0.0	0.1	97.6	48.1	5.0	53.6	23.5	17.9
S-63	Y1_4950	-Y1-	49+50	35' LT	0.5-1.0	26.2	--	A-6	38	14	24	0.2	99.8	98.3	72.3	3.0	28.1	20.7	48.3
S-64	Y1_5150	-Y1-	51+50	35' RT	0.5-1.0	20.3	--	A-6	29	15	14	0.1	99.8	98.3	54.9	3.3	47.6	25.7	23.4
S-65	Y1A_1500	-Y1A-	15+00	20' LT	0.5-1.0	--	--	A-4	22	12	10	0.0	100.0	97.7	54.0	4.7	45.8	23.8	25.7
S-66	Y1RPA_1900	-Y1RPA-	19+00	CL	0.5-1.0	19.0	--	A-6	37	15	22	0.0	99.9	97.5	63.2	5.0	36.9	24.6	33.6
S-67	Y1RPA_2500	-Y1RPA-	25+00	CL	0.0-0.5	17.4	1.8	A-4	NP	NP	NP	0.0	0.4	96.7	46.1	6.4	55.4	27.4	10.9
S-68	Y1RPA_2800	-Y1RPA-	28+00	CL	0.0-0.4	13.3	1.4	A-4	NP	NP	NP	0.0	0.0	97.8	44.2	5.2	58.9	24.2	11.8
S-69	Y1RPB_2000	-Y1RPB-	20+00	40' LT	0.5-1.0	13.8	--	A-4	19	16	3	0.0	100.0	98.1	42.6	3.5	61.0	15.9	19.7
S-70	Y1RPB_2500	-Y1RPB-	25+00	CL	0.0-1.2	25.2	5.4	A-4	NP	NP	NP	0.0	0.0	98.6	44.5	2.7	64.1	18.9	14.4
S-71	Y1RPB_2800	-Y1RPB-	28+00	CL	0.0-1.0	17.5	2.5	A-4	NP	NP	NP	0.0	0.0	98.4	44.3	3.2	61.7	22.0	13.1
S-72	Y1RPB_3100	-Y1RPB-	31+00	CL	0.0-1.0	13.4	2.4	A-4	NP	NP	NP	0.0	0.1	97.8	43.0	4.8	59.4	24.7	11.0
S-73	Y1RPC_2000	-Y1RPC-	20+00	50' RT	0.5-1.0	16.1	3.2	A-4	19	15	4	11.0	88.1	84.2	40.3	7.7	53.8	18.3	20.2



**LABORATORY SUMMARY SHEET FOR SOIL SAMPLES**

**SHEET 291**

**PROJECT NO.: 47091.1.1 / 47092.1.1 (R-5819 & R-5820)**

**COUNTY: COLUMBUS**

**DESCRIPTION: US 74 at Lake Waccamaw**

Sample No.	Boring Number	Alignment	Station	Offset	Sample Depth (ft.)	Natural Moisture Content (%)	Organic Content (%)	AASHTO Class.	Atterberg Limits			Gradation Results							
									L.L.	P.L.	P.I.	Retained #4 Sieve	Pass #10 Sieve	Pass #40 Sieve	Pass #200 Sieve	Coarse Sand (%)	Fine Sand (%)	Silt (%)	Clay (%)
S-74	Y1RPC_2200	-Y1RPC-	22+00	CL	0.0-1.5	13.3	2.2	A-4	NP	NP	NP	1.4	2.2	95.3	42.8	4.5	58.8	18.1	18.6
S-75	Y1RPC_2500	-Y1RPC-	25+00	CL	0.0-1.5	13.9	2.0	A-2-4	NP	NP	NP	0.1	0.4	92.7	32.5	12.5	59.9	16.2	11.4
S-76	Y1RPD_2040	-Y1RPD-	20+40	38' LT	0.5-1.0	13.6	--	A-4	NP	NP	NP	0.0	100.0	98.0	48.0	4.5	52.0	26.2	17.2
S-77	Y1RPD_2040	-Y1RPD-	20+40	38' LT	2.0-2.5	--	--	A-7-6	46	18	28	0.0	99.7	98.6	63.3	3.2	37.3	20.2	39.3
S-78	Y2_5200	-Y2-	52+00	50' RT	0.5-1.0	12.5	--	A-4	14	11	3	0.0	99.9	96.5	47.7	8.5	50.0	23.7	17.8
S-79	Y2_5200	-Y2-	52+00	50' RT	2.0-2.5	17.3	--	A-6	32	15	17	0.0	99.9	97.0	59.7	6.6	38.6	21.0	33.8
S-80	Y2_5200	-Y2-	52+00	50' RT	4.5-5.0	23.5	--	A-7-6	45	16	29	0.0	100.0	96.6	54.2	8.1	41.6	10.1	40.2
S-81	Y2_5400	-Y2-	54+00	45' RT	0.5-1.0	12.5	--	A-4	19	11	8	0.0	100.0	96.6	52.2	8.5	43.9	24.1	23.5
S-82	Y2_5600	-Y2-	56+00	40' RT	0.0-0.5	23.5	4.7	A-6	27	16	11	0.0	0.1	91.2	51.0	18.2	34.9	18.8	28.1
S-83	Y2_5600	-Y2-	56+00	40' RT	0.5-6.0	--	--	A-7-6	43	17	26	0.0	100.0	97.1	64.1	6.7	32.7	13.5	47.2
S-84	Y2_6001	-Y2-	60+01	64' LT	0.0-0.5	25.3	4.8	A-6	26	6	20	0.4	1.1	97.5	42.2	13.1	48.3	21.8	16.7
S-85	Y2_6204	-Y2-	62+04	68' LT	0.0-1.5	30.7	7.5	A-2-4	27	23	4	28.0	34.0	56.6	22.4	22.3	47.0	16.4	14.3
S-86	Y2_6204	-Y2-	62+04	68' LT	1.5-6.0			A-6	34	15	19	0.2	99.0	95.4	56.3	7.1	40.7	16.2	36.0
S-87	Y2_6400	-Y2-	64+00	20' RT	0.0-6.0	--	--	A-7-6	49	17	32	0.0	99.9	95.3	55.6	10.0	37.3	9.9	42.7
S-88	Y2_6609	-Y2-	66+09	68' LT	0.0-2.5	23.2	4.5	A-4	25	19	6	0.0	0.1	88.4	38.1	23.0	42.9	3.1	31.1
S-89	Y2_6800	-Y2-	68+00	20' RT	0.0-1.0	22.4	3.8	A-4	NP	NP	NP	0.0	0.0	95.3	43.3	11.1	51.4	25.2	12.3
S-90	Y2_7100	-Y2-	71+00	CL	0.0-0.5	26.1	3.3	A-4	NP	NP	NP	0.6	1.2	89.5	35.6	18.8	49.5	20.9	10.8
S-91	Y2_7700	-Y2-	77+00	17' LT	1.0-6.0	21.1	--	A-6	34	13	21	1.0	1.1	94.6	40.6	14.4	47.4	8.6	29.6
S-92	Y3_1408	-Y3-	14+08	29' LT	2.0-2.5	9.9	--	A-4	17	11	6	0.7	99.1	94.5	48.3	7.7	47.6	21.5	23.1
S-93	Y3_2000	-Y3-	20+00	40' RT	0.5-1.0	28.1	7.8	A-4	31	25	6	3.8	92.2	77.8	55.6	21.7	22.5	29.9	25.9
S-94	Y7_1350	-Y7-	13+50	20' RT	0.0-1.0	55.2	10.6	A-5	44	34	10	0.0	100.0	96.3	70.7	7.3	26.0	39.5	27.2
S-95	Y7_1350	-Y7-	13+50	20' RT	1.0-6.0	--	--	A-4	24	14	10	0.1	99.9	97.9	61.4	3.4	41.8	30.3	24.1
S-96	Y7_1650	-Y7-	16+50	20' LT	0.0-0.5	35.9	5.8	A-4	40	31	9	0.0	100.0	94.6	55.9	9.8	40.3	32.1	17.7
S-97	Y7_1950	-Y7-	19+50	10' RT	0.0-1.0	47.7	6.3	A-7-6	50	24	26	0.5	99.3	89.5	52.7	17.0	35.1	34.8	13.1
S-98	Y7_1950	-Y7-	19+50	10' RT	1.0-6.0	--	--	A-4	24	15	9	2.6	95.0	86.8	46.9	15.9	40.3	25.7	18.1
S-99	Y7_2250	-Y7-	22+50	10' LT	0.0-1.0	15.3	1.5	A-2-4	NP	NP	NP	27.8	35.1	52.0	24.1	37.3	30.7	7.8	24.2
S-100	Y7_2550	-Y7-	25+50	10' RT	0.0-1.0	29.3	4.5	A-4	28	23	5	0.2	0.4	95.1	51.4	8.6	47.1	32.0	12.4
S-101	Y7_2850	-Y7-	28+50	10' LT	0.0-1.0	21.9	3.6	A-2-4	32	27	5	4.5	12.5	64.3	30.9	37.0	31.6	17.8	13.6
S-102	Y7_2850	-Y7-	28+50	10' LT	1.0-5.0	--	--	A-6	29	11	18	0.0	100.0	95.8	68.7	7.3	27.5	27.0	38.2
S-103	Y7_3150	-Y7-	31+50	20' LT	0.0-0.5	21.9	2.9	A-2-4	NP	NP	NP	19.2	24.4	62.7	28.0	26.5	41.4	18.5	13.7
S-104	Y7_3450	-Y7-	34+50	20' RT	0.0-0.5	31.2	5.5	A-4	28	20	8	1.8	2.9	90.6	41.6	14.0	47.3	20.0	18.7
S-105	Y7_3750	-Y7-	37+50	10' LT	0.0-0.5	32.7	5.9	A-4	29	20	9	0.7	2.1	88.8	44.8	18.5	39.4	23.1	19.0
S-106	Y7_3750	-Y7-	37+50	10' LT	0.5-2.5	12.9	2.2	A-4	18	13	5	0.2	1.9	81.0	37.4	30.8	34.0	19.0	16.3
S-107	Y7_4050	-Y7-	40+50	20' LT	0.0-1.0	16.1	2.8	A-2-4	NP	NP	NP	2.7	92.5	80.6	32.1	24.4	45.1	20.2	10.3
S-108	Y7_4650	-Y7-	46+50	20' LT	0.0-0.5	21.9	3.7	A-2-4	NP	NP	NP	0.5	97.4	86.0	32.6	23.5	47.2	19.5	9.8
S-109	Y7_4950	-Y7-	49+50	20' RT	0.0-1.5	21.3	3.4	A-4	15	11	4	0.2	99.0	91.5	47.3	15.4	41.0	23.0	20.6
S-110	Y7_5550	-Y7-	55+50	20' LT	0.0-0.5	21.0	4.0	A-4	24	19	5	0.0	99.9	94.4	54.1	13.0	37.8	32.9	16.4

**LABORATORY SUMMARY SHEET FOR SOIL SAMPLES**

**SHEET 292**

**PROJECT NO.: 47091.1.1 / 47092.1.1 (R-5819 & R-5820)**

**COUNTY: COLUMBUS**

**DESCRIPTION: US 74 at Lake Waccamaw**

Sample No.	Boring Number	Alignment	Station	Offset	Sample Depth (ft.)	Natural Moisture Content (%)	Organic Content (%)	AASHTO Class.	Atterberg Limits			Gradation Results							
									L.L.	P.L.	P.I.	Retained #4 Sieve	Pass #10 Sieve	Pass #40 Sieve	Pass #200 Sieve	Coarse Sand (%)	Fine Sand (%)	Silt (%)	Clay (%)
S-111	Y7_5850	-Y7-	58+50	20' RT	0.0-0.5	26.3	3.5	A-4	NP	NP	NP	0.5	99.3	95.2	45.2	8.8	50.7	26.1	14.4
S-112	Y7_5850	-Y7-	58+50	20' RT	1.5-2.0	19.6	4.0	A-4	NP	NP	NP	0.0	100.0	96.8	46.8	8.4	50.0	24.2	17.4
S-113	Y7_6150	-Y7-	61+50	10' LT	0.0-0.5	18.4	2.8	A-4	NP	NP	NP	0.0	99.9	96.7	54.2	7.1	44.1	30.9	17.9
S-114	Y7_6150	-Y7-	61+50	10' LT	0.5-4.5	--	--	A-6	29	14	15	0.0	0.1	97.3	63.5	5.7	35.6	29.1	29.6
S-115	Y7_6450	-Y7-	64+50	20' RT	0.0-0.5	29.0	3.7	A-4	NP	NP	NP	0.0	99.5	96.4	52.5	8.2	46.0	32.8	13.1
S-116	Y7_6750	-Y7-	67+50	CL	0.0-0.5	40.4	5.4	A-4	30	21	9	0.2	99.7	94.1	53.3	13.9	34.8	39.5	11.8
S-117	Y7_7050	-Y7-	70+50	CL	0.0-1.0	31.5	5.1	A-4	NP	NP	NP	0.0	99.9	97.0	52.2	8.0	44.0	31.6	16.3
S-118	Y7_7350	-Y7-	73+50	CL	0.0-1.5	36.8	6.6	A-4	NP	NP	NP	0.0	100.0	96.9	50.1	8.3	46.8	33.8	11.2
S-119	Y7_7950	-Y7-	79+50	CL	0.0-1.0	22.8	4.9	A-4	24	18	6	0.0	0.1	94.2	50.6	11.9	42.7	31.2	14.2
S-120	Y7_8250	-Y7-	82+50	CL	0.0-1.0	50.6	10.4	A-4	27	22	5	0.0	0.0	93.1	43.2	14.8	45.7	24.9	14.5
S-121	Y7_8550	-Y7-	85+50	CL	0.0-0.5	33.8	5.9	A-4	NP	NP	NP	0.0	0.0	95.1	45.0	12.7	45.7	26.4	15.3
S-122	Y7_8850	-Y7-	88+50	CL	0.0-1.0	21.5	5.5	A-4	NP	NP	NP	0.0	0.0	96.4	47.3	8.9	50.2	25.7	15.1
S-123	Y7_9150	-Y7-	91+50	CL	0.0-1.5	38.4	6.3	A-6	29	18	11	0.5	1.6	84.7	42.4	26.7	33.4	24.6	15.2
S-124	Y7_9150	-Y7-	91+50	CL	1.5-6.0	--	--	A-6	29	18	11	0.2	1.1	95.5	62.5	6.7	34.6	28.1	30.5
S-125	Y7_9447	-Y7-	94+47	17' LT	1.0-6.0	--	--	A-7-6	47	13	34	0.0	99.8	95.2	58.4	8.8	37.0	16.7	37.6
S-126	DET1_1917	-DET1-	19+17	35' LT	0.0-1.5	21.3	5.9	A-4	NP	NP	NP	0.0	0.0	2.8	57.3	5.6	57.7	21.2	15.5
S-127	DET1_2235	-DET1-	22+35	23' RT	0.5-1.0	22.0	--	A-6	34	13	21	0.0	100.0	99.5	55.4	1.5	49.0	10.4	39.1
S-128	DET1_2350	-DET1-	23+50	CL	0.5-1.0	--	--	A-6	37	11	26	0.0	100.0	98.9	51.4	3.2	50.3	11.5	35.0
S-129	DET1_2900	-DET1-	29+00	CL	0.0-1.0	19.1	2.8	A-4	16	14	2	0.0	0.0	98.3	51.3	3.3	52.9	27.8	16.0
S-130	DET1_3200	-DET1-	32+00	CL	0.0-1.5	17.1	2.2	A-4	NP	NP	NP	0.2	0.3	97.8	50.9	4.2	51.6	31.0	13.2
S-131	DET1_3500	-DET1-	35+00	CL	0.0-1.5	19.0	1.6	A-4	17	13	4	0.0	0.1	98.6	55.6	2.7	49.8	26.0	21.5
S-132	DET1_3900	-DET1-	39+00	CL	0.5-1.0	17.0	--	A-4	19	14	5	0.0	99.7	91.6	46.4	10.6	49.6	21.6	18.3
S-133	DET2_1400	-DET2-	14+00	CL	0.0-1.5	33.3	4.9	A-6	33	21	12	2.4	6.5	85.9	49.4	15.8	35.8	29.1	19.3
S-134	DET2_1400	-DET2-	14+00	CL	1.5-5.0	--	--	A-2-6	25	15	10	0.0	99.9	92.0	30.6	21.0	51.8	7.0	20.2
S-135	DET2_1593	-DET2-	15+93	11' RT	0.5-1.0	--	--	A-4	22	13	9	0.0	100.0	80.1	39.3	30.9	33.4	16.2	19.6
S-136	DET2_1792	-DET2-	17+92	20' RT	0.5-1.0	12.3	--	A-4	NP	NP	NP	0.0	99.9	94.8	40.6	13.9	49.9	18.7	17.5
S-137	DET2_1792	-DET2-	17+92	20' RT	1.5-2.0	--	--	A-6	32	14	18	0.0	99.9	94.9	48.5	12.6	42.3	16.4	28.7
S-138	DET2_1992	-DET2-	19+92	CL	0.5-1.0	--	--	A-4	NP	NP	NP	0.0	99.9	91.0	41.3	17.5	46.9	21.3	14.4
S-139	DET2_2192	-DET2-	21+92	20' LT	0.5-1.0	17.6	--	A-4	21	13	8	0.1	99.9	96.0	41.7	10.6	51.8	16.4	21.2
S-140	DET2_2792	-DET2-	27+92	20' LT	0.5-1.0	10.7	--	A-3	NP	NP	NP	0.0	99.9	94.8	7.7	10.1	82.6	0.1	7.2
S-141	DET2_2792	-DET2-	27+92	20' LT	2.0-2.5	13.4	--	A-6	27	12	15	0.0	100.0	96.0	48.5	9.8	45.5	19.2	25.5
S-142	DET2_2992	-DET2-	29+92	20' RT	0.5-1.0	11.6	--	A-4	16	12	4	0.0	100.0	93.1	45.2	14.1	44.3	21.2	20.4
S-143	DET2_2992	-DET2-	29+92	20' RT	1.5-2.0	19.2	--	A-6	31	13	18	0.0	100.0	95.3	59.1	10.1	34.5	18.1	37.3
S-144	DET2_3192	-DET2-	31+92	20' LT	0.5-1.0	16.4	--	A-4	22	12	10	0.0	99.9	95.6	55.3	9.9	38.6	22.5	29.1
S-145	DET2_3192	-DET2-	31+92	20' LT	4.0-4.5	16.9	--	A-6	27	13	14	0.0	100.0	94.3	48.9	13.9	39.4	16.0	30.7
S-146	DET2_3392	-DET2-	33+92	CL	0.5-1.0	19.3	--	A-6	34	16	18	0.0	99.9	96.5	54.6	7.9	40.8	24.5	26.8
ST-1	Y1_3704	-Y1-	37+04	15' LT	15.0 - 17.0	34.1	--	A-2-4	31	24	7	42.1	50.2	34.5	14.2	50.3	23.1	4.9	21.7

**LABORATORY SUMMARY SHEET FOR SOIL SAMPLES**

**SHEET 293**

**PROJECT NO.: 47091.1.1 / 47092.1.1 (R-5819 & R-5820)**  
**COUNTY: COLUMBUS**  
**DESCRIPTION: US 74 at Lake Waccamaw**

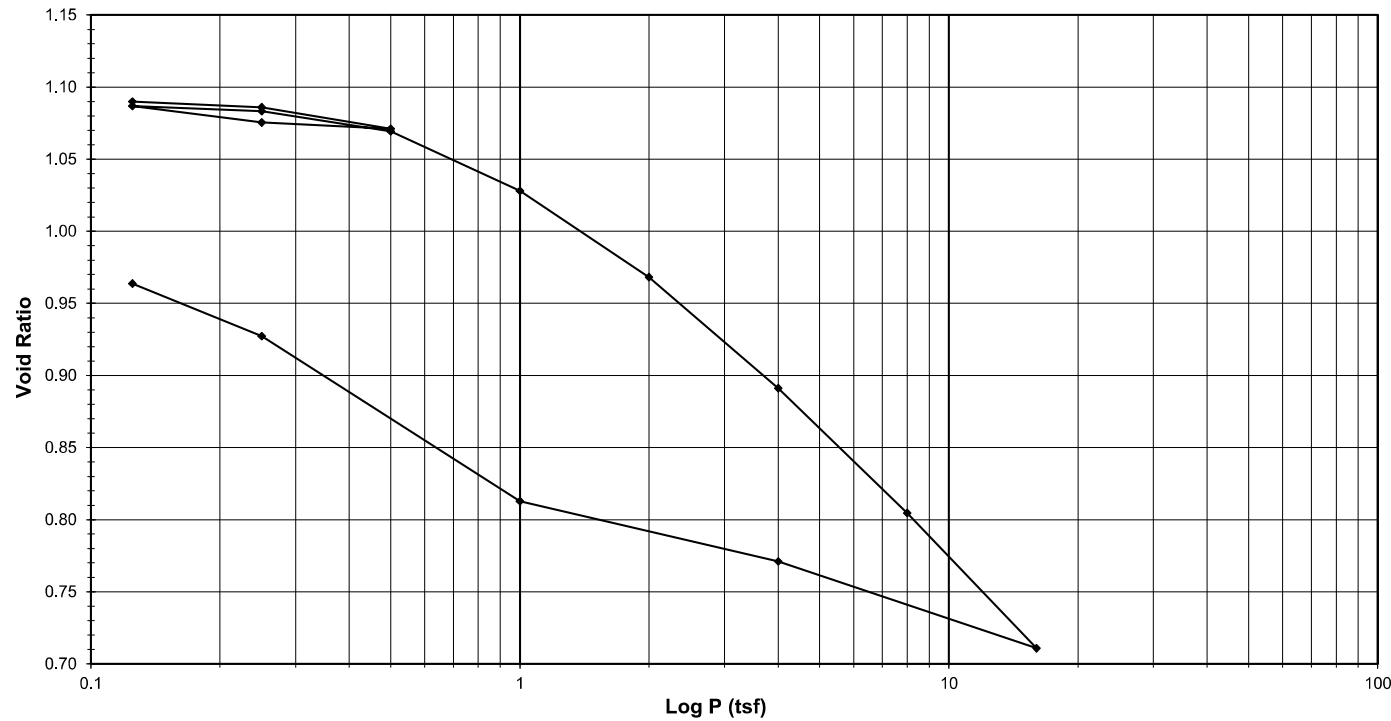
Sample No.	Boring Number	Alignment	Station	Offset	Sample Depth (ft.)	Natural Moisture Content (%)	Organic Content (%)	AASHTO Class.	Atterberg Limits			Gradation Results							
									L.L.	P.L.	P.I.	Retained #4 Sieve	Pass #10 Sieve	Pass #40 Sieve	Pass #200 Sieve	Coarse Sand (%)	Fine Sand (%)	Silt (%)	Clay (%)
ST-2	Y1_3954	-Y1-	39+54	15' RT	10.0 - 12.0	43.5	--	A-7-6	84	17	67	0.0	100.0	99.1	84.5	2.0	15.4	19.6	63.0
ST-3	Y1_4262	-Y1-	42+62	43' LT	10.0 - 12.1	63.7	--	A-7-6	99	25	74	0.0	100.0	99.7	97.5	0.4	3.3	17.4	78.9
ST-4	Y1RPA_2800	-Y1RPA-	28+00	CL	5.0 - 7.0	18.0	--	A-7-6	49	14	35	0.0	100.0	99.2	44.5	3.3	55.7	5.8	35.2
ST-5	Y1RPC_2800	-Y1RPC-	28+00	CL	10.0 - 12.0	18.5	--	A-2-6	35	14	21	0.0	99.4	96.7	33.5	7.8	60.7	3.1	28.5
ST-6	Y2_3590	-Y2-	35+90	3' RT	5.0 - 7.0	34.9	--	A-7-6	80	15	65	0.1	99.2	97.0	88.2	3.5	9.0	20.6	66.9



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 2/3/2020 Approved By MPS Date 2/18/2020

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R-470  
 1 Division = 0.0001 (in.)

**Sample Properties**

	Initial	Final
<i>Water Content</i>		
Tare Number	SS-1	SS-1
Wt. Tare & WS (g)	404.36	241.06
Wt. Tare & DS (g)	321.05	203.15
Wt. Water (g)	83.31	37.91
Wt. Tare (g)	100.62	100.70
Wt. DS (g)	220.43	102.45
Water Content (%)	37.79	37.00
<i>Sample Parameters</i>		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9394
Sample Volume (cc)	80.44	75.57
Wt. Wet Sample + Ring (g)	356.74	355.92
Wt. of Ring (g)	213.57	213.57
Wt. of Wet Sample (g)	143.17	142.35
Wet Density (pcf)	111.06	117.55
Wet Density (g/cc)	1.78	1.88
Water Content (%)	37.79	37.00
Wt. of Dry Sample (g)	103.90	103.90
Dry Density (pcf)	80.60	85.80
Dry Density (g/cc)	1.29	1.37
Void Ratio	1.0903	0.9637
Saturation (%)	93.59	103.67
Specific Gravity	2.70	Measured

**Test Data Summary**

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cc)	Dry Density (g/cc)	Void Ratio
Seating	0	0	0	25.400	80.440	1.29166	<b>1.09033</b>
0.125	12.5	11.2	1.3	25.397	80.429	1.29183	<b>1.09005</b>
0.25	39.7	19.3	20.4	25.348	80.276	1.29430	<b>1.08607</b>
0.5	123.5	31.1	92.4	25.165	79.697	1.30371	<b>1.07101</b>
0.25	94.5	23.6	70.9	25.220	79.870	1.30088	<b>1.07552</b>
0.125	35.8	19.4	16.4	25.358	80.308	1.29379	<b>1.08689</b>
0.25	54.8	21.6	33.2	25.316	80.172	1.29597	<b>1.08338</b>
0.5	129.9	29.5	100.4	25.145	79.633	1.30476	<b>1.06935</b>
1	349.6	51.7	297.9	24.643	78.044	1.33132	<b>1.02806</b>
2	655.1	70.7	584.4	23.916	75.739	1.37184	<b>0.96816</b>
4	1055.0	102.1	952.9	22.980	72.775	1.42771	<b>0.89114</b>
8	1516.6	149.8	1366.8	21.928	69.445	1.49616	<b>0.80462</b>
16	2025.6	210.0	1815.6	20.788	65.835	1.57821	<b>0.71080</b>
4	1666.4	139.4	1527.0	21.522	68.157	1.52444	<b>0.77114</b>
1	1403.2	76.0	1327.2	22.029	69.764	1.48932	<b>0.81291</b>
0.25	829.1	49.3	779.8	23.419	74.167	1.40091	<b>0.92732</b>
0.125	640.0	34.2	605.8	23.861	75.567	1.37496	<b>0.96370</b>

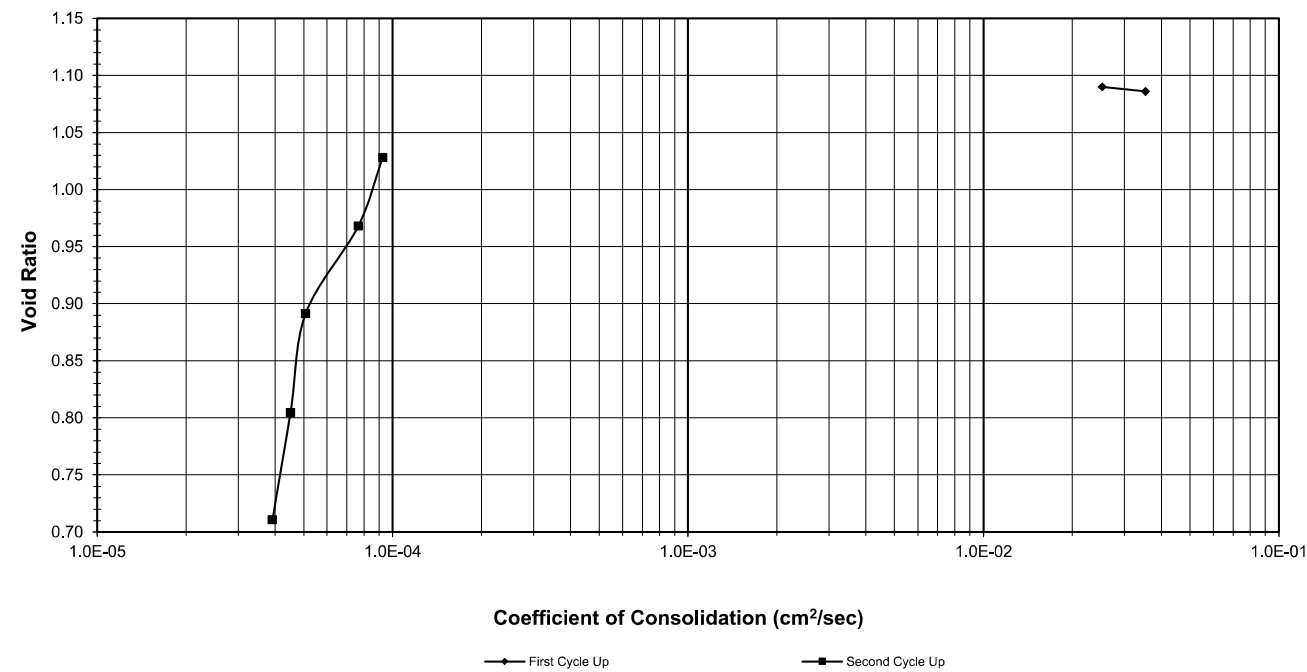
Tested By 129-07-0411 Date 2/3/2020 Input Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 2/3/2020 Input Checked By GEM Date 2/18/2020

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R-470  
 1 Division = 0.0001 (in.)

Sample Properties	Initial	Final	C <sub>v</sub> Test Data Summary				Time t <sub>50</sub> (min.)	C <sub>v</sub> (cm <sup>2</sup> /sec)
			Load Increment (tsf)	Dial Reading @ t <sub>50</sub> (div)	Machine Deflection (div)	Corrected Dial Reading @ t <sub>50</sub> (div)		
Water Content								
Tare Number	SS-1	SS-1						
Wt. Tare & WS (g)	404.36	241.06						
Wt. Tare & DS (g)	321.05	203.15						
Wt. Water (g)	83.31	37.91	0 - 0.125	12.1	11.2	0.9	2.540	0.21
Wt. Tare (g)	100.62	100.70	0.125 - 0.25	21.5	19.3	2.1	2.539	0.15
Wt. DS (g)	220.43	102.45	0.25 - 0.5	NA	31.1	NA	NA	NA
Water Content (%)	37.79	37.00	0.5 - 0.25	NA	23.6	NA	NA	NA
			0.25 - 0.125	NA	19.4	NA	NA	NA
			0.125 - 0.25	43.9	21.6	22.3	2.534	1.50
Sample Parameters			0.25 - 0.5	92.2	29.5	62.6	2.524	21.00
Sample Diameter (in)	2.5	2.5	0.5 - 1.0	247.7	51.7	196.0	2.490	55.00
Sample Height (in)	1.000	0.939	1.0 - 2.0	531.0	70.7	460.3	2.423	63.00
Sample Volume (cc)	80.44	75.57	2.0 - 4.0	867.9	102.1	765.8	2.345	89.00
Wt. Wet Sample + Ring (g)	356.74	355.92	4.0 - 8.0	1296.4	149.8	1146.6	2.249	92.00
Wt. of Ring (g)	213.57	213.57	8.0 - 16.0	1785.0	210.0	1575.0	2.140	96.00
Wt. of Wet Sample (g)	143.17	142.35	16.0 - 4.0	NA	139.4	NA	NA	NA
Wet Density (pcf)	111.06	117.55	4.0 - 1.0	NA	76.0	NA	NA	NA
Wet Density (g/cc)	1.78	1.88	1.0 - 0.25	NA	49.3	NA	NA	NA
Water Content (%)	37.79	37.00	0.25 - 0.125	NA	34.2	NA	NA	NA
Wt. of Dry Sample (g)	103.90	103.90						
Dry Density (pcf)	80.60	85.80						
Dry Density (g/cc)	1.29	1.37						
Void Ratio	1.0903	0.9637						
Saturation (%)	93.59	103.67						
Specific Gravity	2.7	Measured						

page 4 of 4

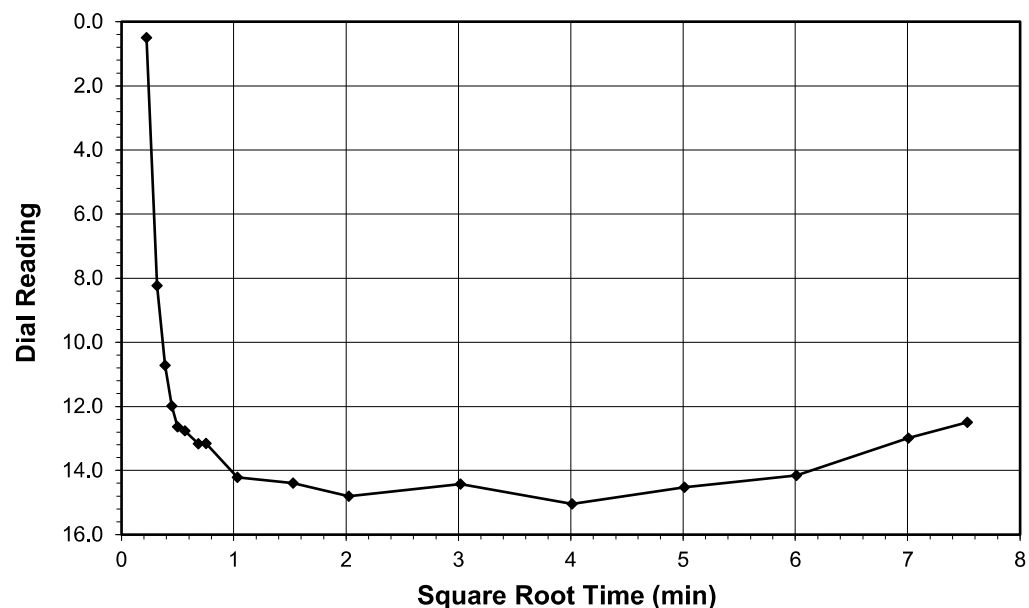
DCN: CT-24E Date: 5/3/12 Revision: CENTRALSTATION\DATA Drive\2020 PROJECTS\Kleinfelder\2020-024 Kleinfelder - R5819&R5820\2020-024-001\2020-024-001-002 DOT GEOJAC-16TSF1 Cv.xlsm\STEP 1



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

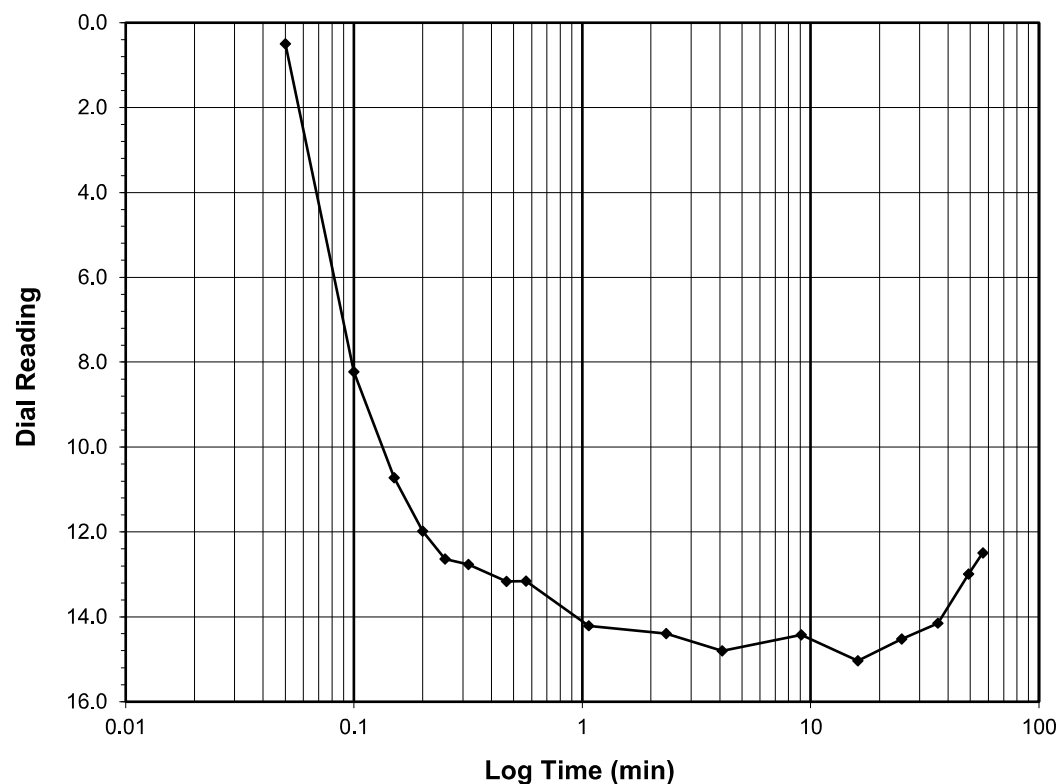
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.0-0.125**  
 Final Reading (div) **12.5**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/3/2020  
 Start Time 16:18:38

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>0.0</b>
0.05	0.5
0.10	8.2
0.15	10.7
0.20	12.0
0.25	12.6
0.32	12.8
0.47	13.2
0.57	13.2
1.07	14.2
2.33	14.4
4.10	14.8
9.10	14.4
16.10	15.0
25.12	14.5
36.12	14.2
49.12	13.0
56.73	12.5



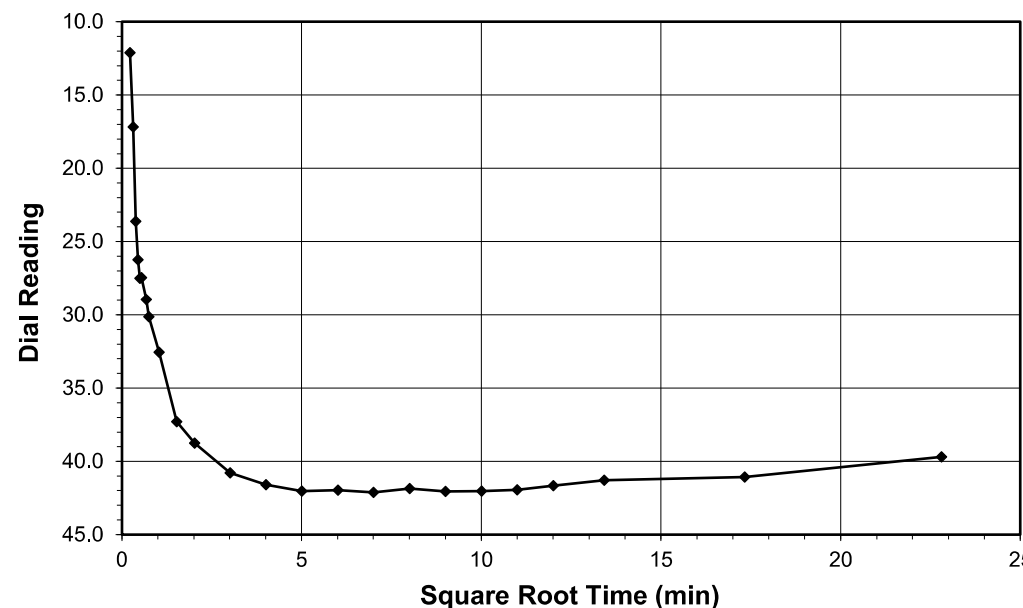
Tested By 129-07-0411 Date 2/3/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

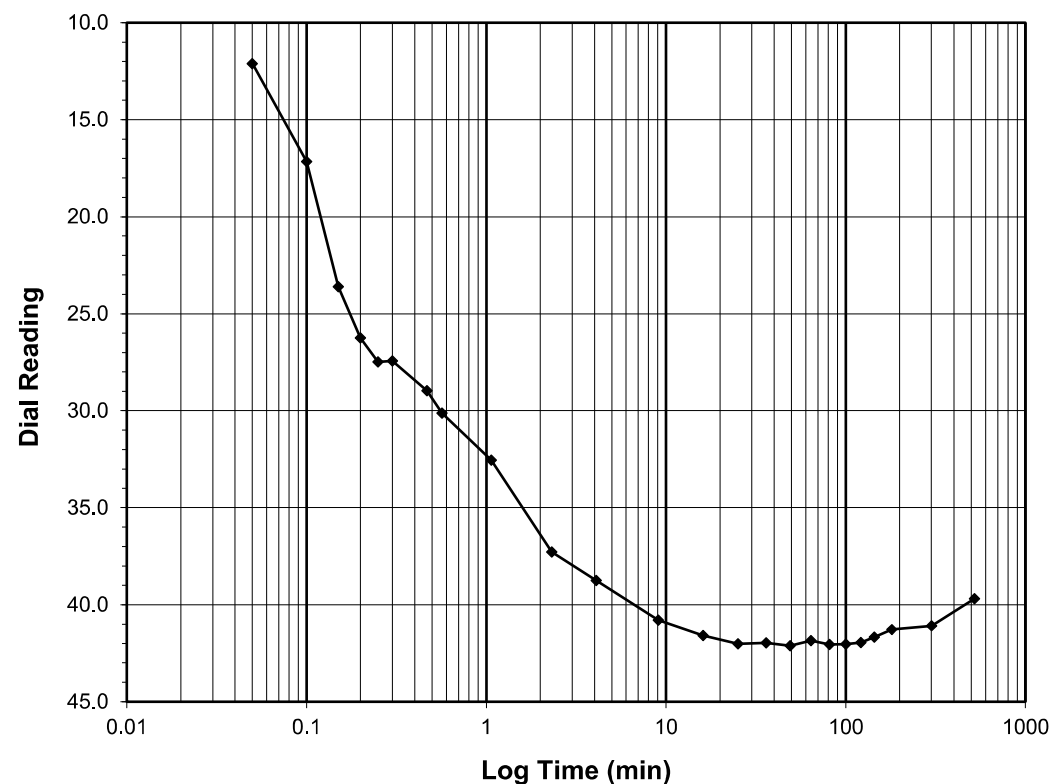
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.125-0.25**  
 Final Reading (div) **39.7**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/3/2020  
 Start Time 17:15:23

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>12.5</b>
0.05	12.1
0.10	17.2
0.15	23.6
0.20	26.2
0.25	27.5
0.30	27.5
0.47	29.0
0.57	30.1
1.07	32.5
2.32	37.3
4.08	38.8
9.08	40.8
16.08	41.6
25.08	42.0
36.08	42.0
49.08	42.1
64.08	41.9
81.08	42.1
100.08	42.0
121.08	42.0
144.08	41.7
180.10	41.3
300.10	41.1
520.10	39.7



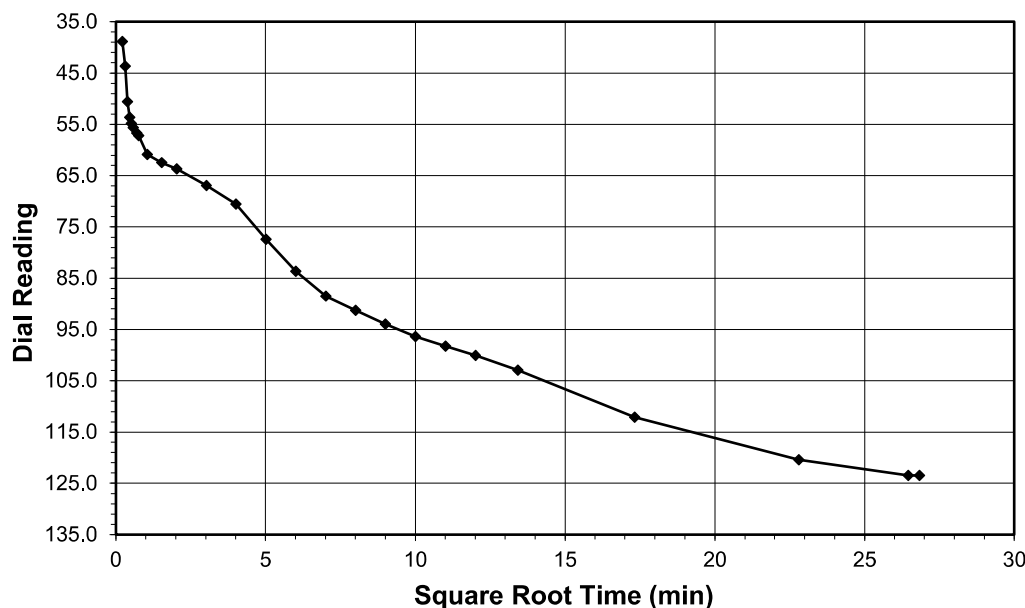
Tested By 129-07-0411 Date 2/3/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

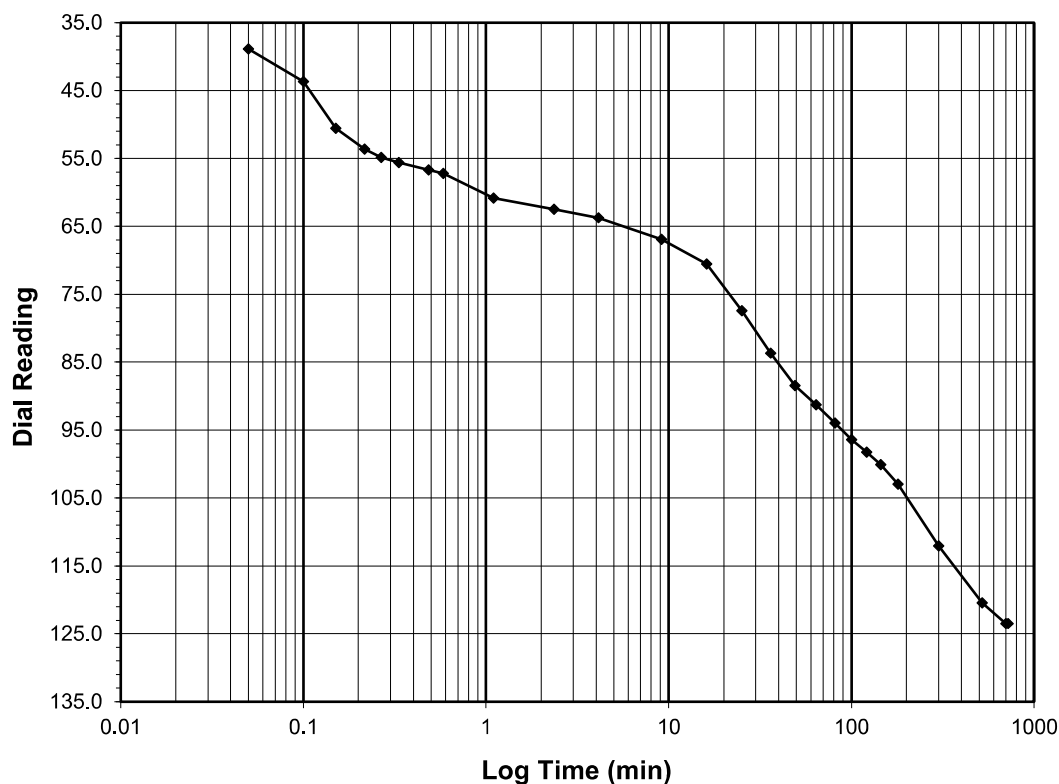
Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



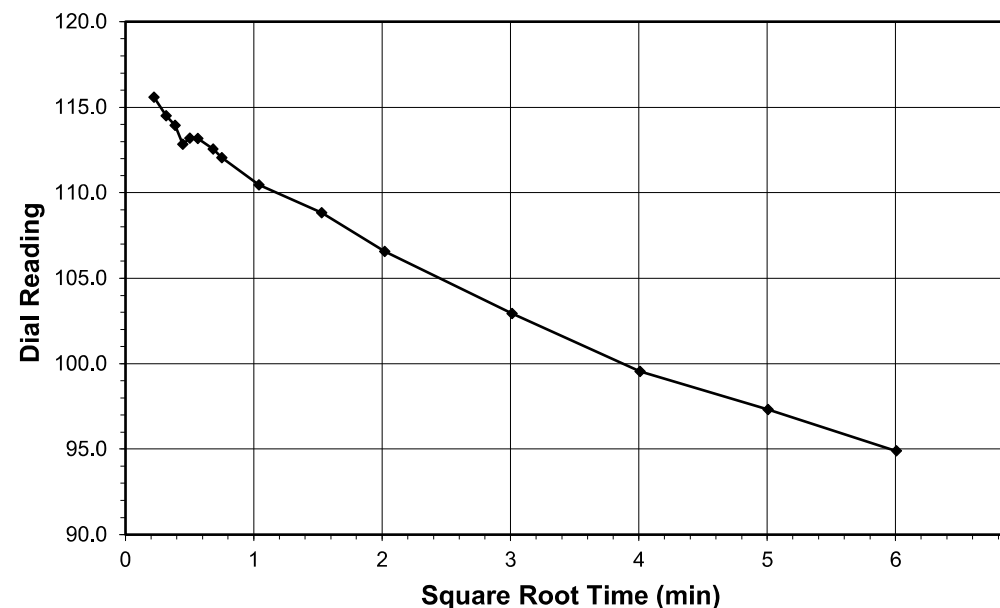
Test Load (tsf) 0.25-0.5  
 Final Reading (div) 123.5  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/4/2020  
 Start Time 5:15:28

Elapsed Time (min)	Dial Reading (div)
Initial	39.7
0.05	38.9
0.10	43.7
0.15	50.6
0.22	53.6
0.27	54.8
0.33	55.6
0.48	56.7
0.58	57.2
1.10	60.8
2.35	62.4
4.12	63.7
9.12	66.9
16.12	70.5
25.12	77.4
36.12	83.7
49.12	88.5
64.13	91.3
81.13	94.0
100.13	96.4
121.13	98.3
144.13	100.1
180.13	102.9
300.15	112.1
520.15	120.4
700.15	123.5
720.25	123.5



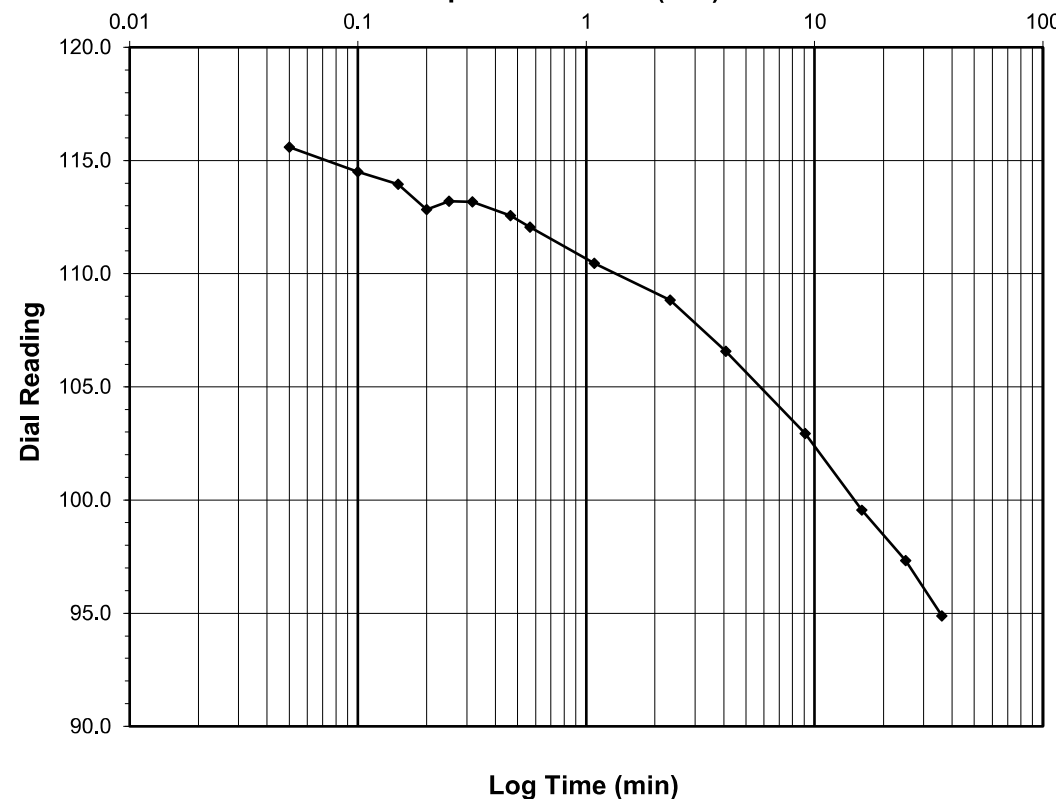
Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5-0.25  
 Final Reading (div) 94.5  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/4/2020  
 Start Time 17:15:43

Elapsed Time (min)	Dial Reading (div)
Initial	123.5
0.05	115.6
0.10	114.5
0.15	114.0
0.20	112.8
0.25	113.2
0.32	113.2
0.47	112.6
0.57	112.1
1.08	110.5
2.33	108.8
4.08	106.6
9.08	102.9
16.08	99.5
25.08	97.3
36.08	94.9



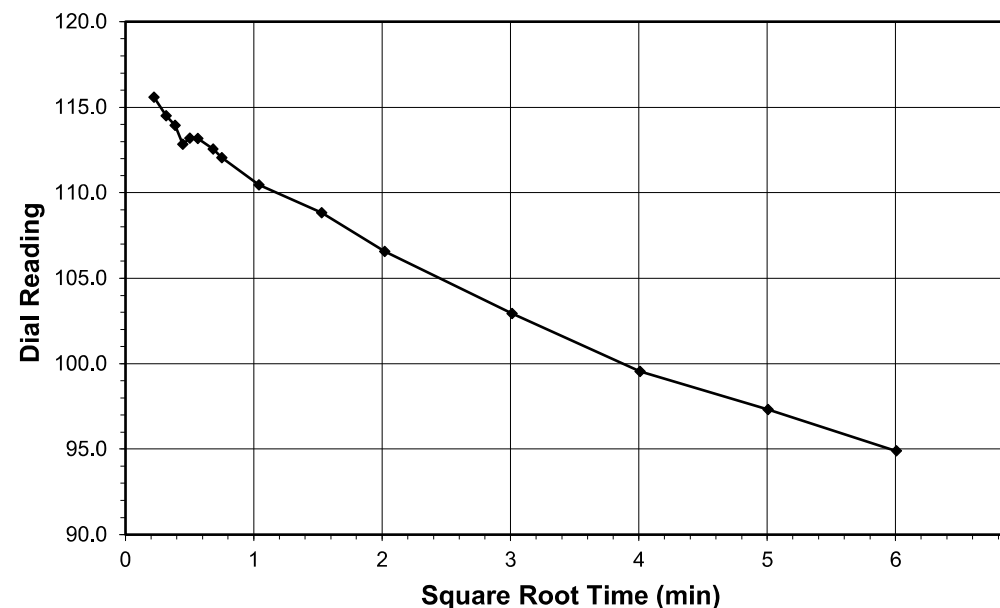
Tested By 129-07-0411 Date 2/4/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

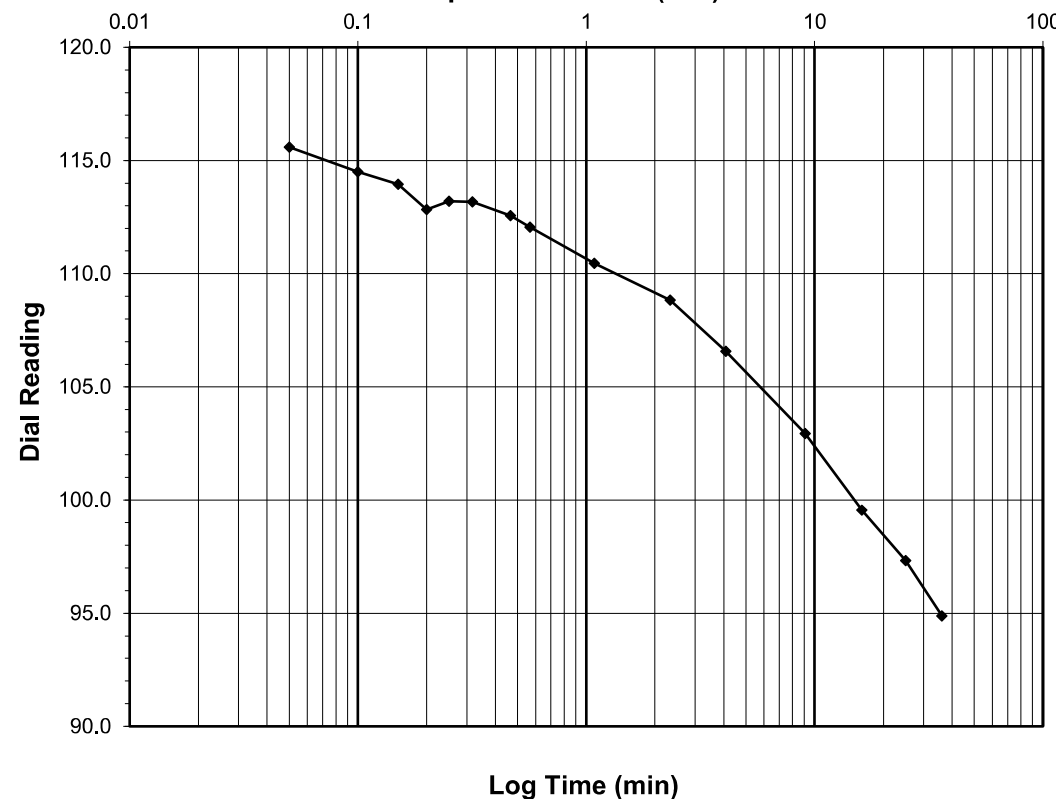
Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5-0.25  
 Final Reading (div) 94.5  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/4/2020  
 Start Time 17:15:43

Elapsed Time (min)	Dial Reading (div)
Initial	123.5
0.05	115.6
0.10	114.5
0.15	114.0
0.20	112.8
0.25	113.2
0.32	113.2
0.47	112.6
0.57	112.1
1.08	110.5
2.33	108.8
4.08	106.6
9.08	102.9
16.08	99.5
25.08	97.3
36.08	94.9



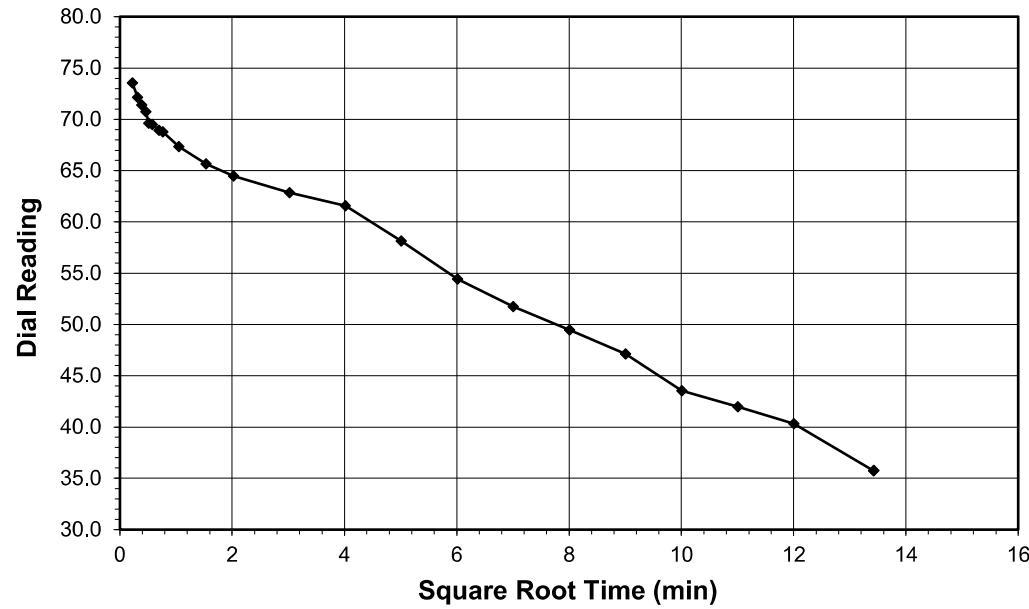
Tested By 129-07-0411 Date 2/4/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

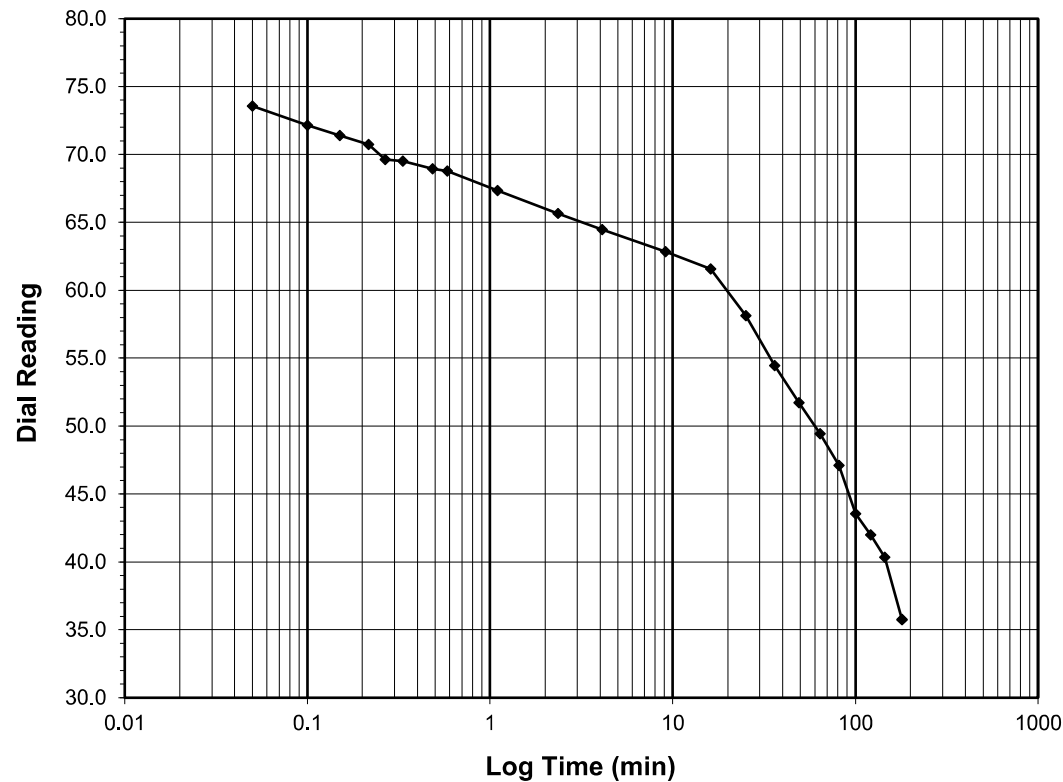
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.125  
 Final Reading (div) 35.8  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

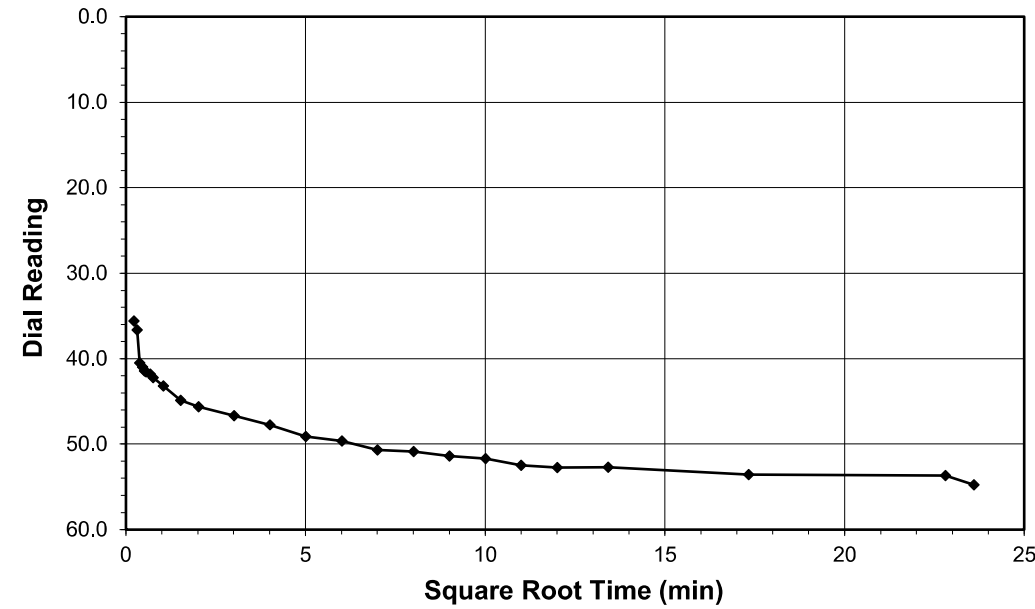
Start Date 2/4/2020  
 Start Time 20:15:47

Elapsed Time (min)	Dial Reading (div)
Initial	94.5
0.05	73.6
0.10	72.1
0.15	71.4
0.22	70.7
0.27	69.6
0.33	69.5
0.48	69.0
0.58	68.8
1.10	67.3
2.35	65.7
4.10	64.5
9.12	62.8
16.12	61.6
25.12	58.1
36.12	54.4
49.13	51.7
64.13	49.4
81.13	47.1
100.13	43.5
121.13	42.0
144.15	40.4
180.15	35.7
180.18	35.8



Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

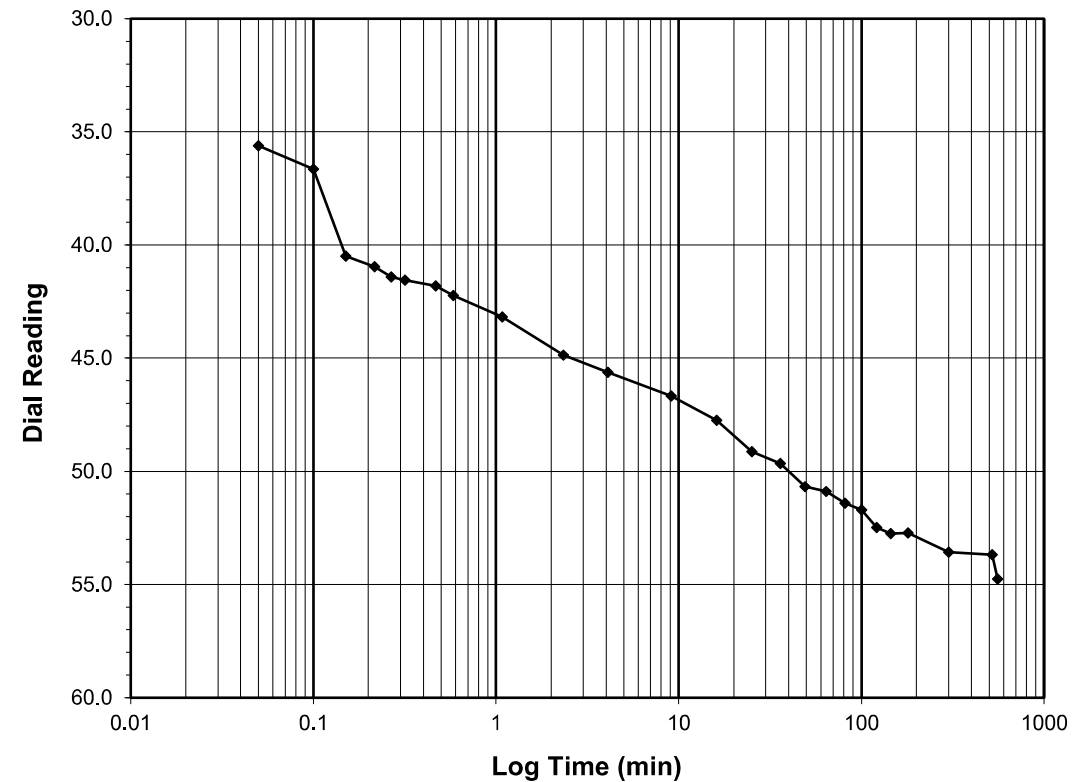
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.125-0.25  
 Final Reading (div) 54.8  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/4/2020  
 Start Time 23:15:58

Elapsed Time (min)	Dial Reading (div)
Initial	35.8
0.05	35.6
0.10	36.6
0.15	40.5
0.22	41.0
0.27	41.4
0.32	41.6
0.47	41.8
0.58	42.2
1.08	43.2
2.33	44.9
4.08	45.6
9.10	46.7
16.10	47.7
25.10	49.1
36.10	49.6
49.10	50.7
64.12	50.9
81.12	51.4
100.12	51.7
121.13	52.5
144.13	52.7
180.15	52.7
300.15	53.6
520.17	53.7
556.70	54.8



Tested By 129-07-0411 Date 2/4/2020 Checked By GEM Date 2/18/2020

Tested By 129-07-0411 Date 2/4/2020 Checked By GEM Date 2/18/2020

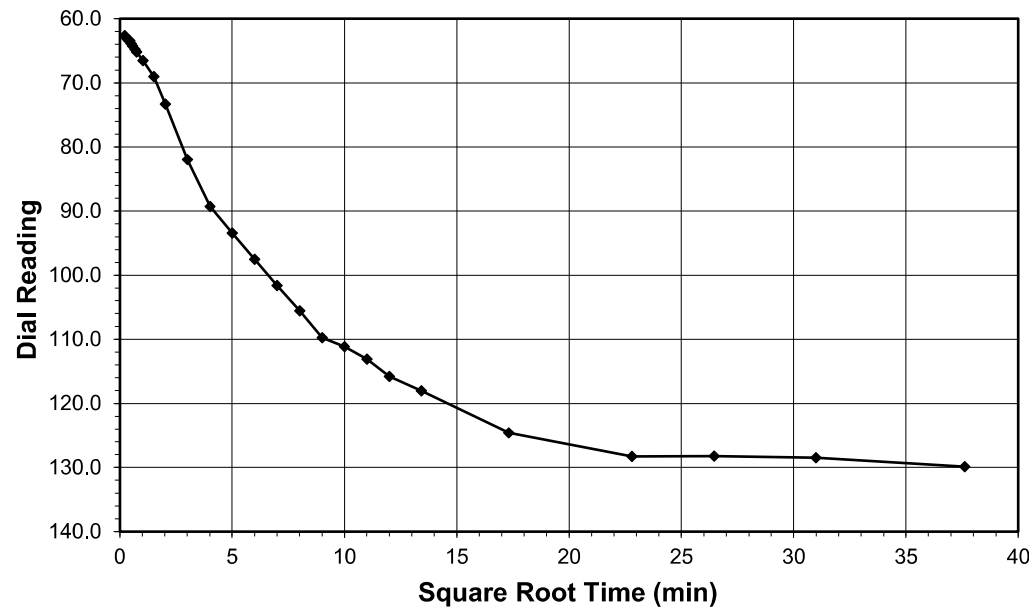




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

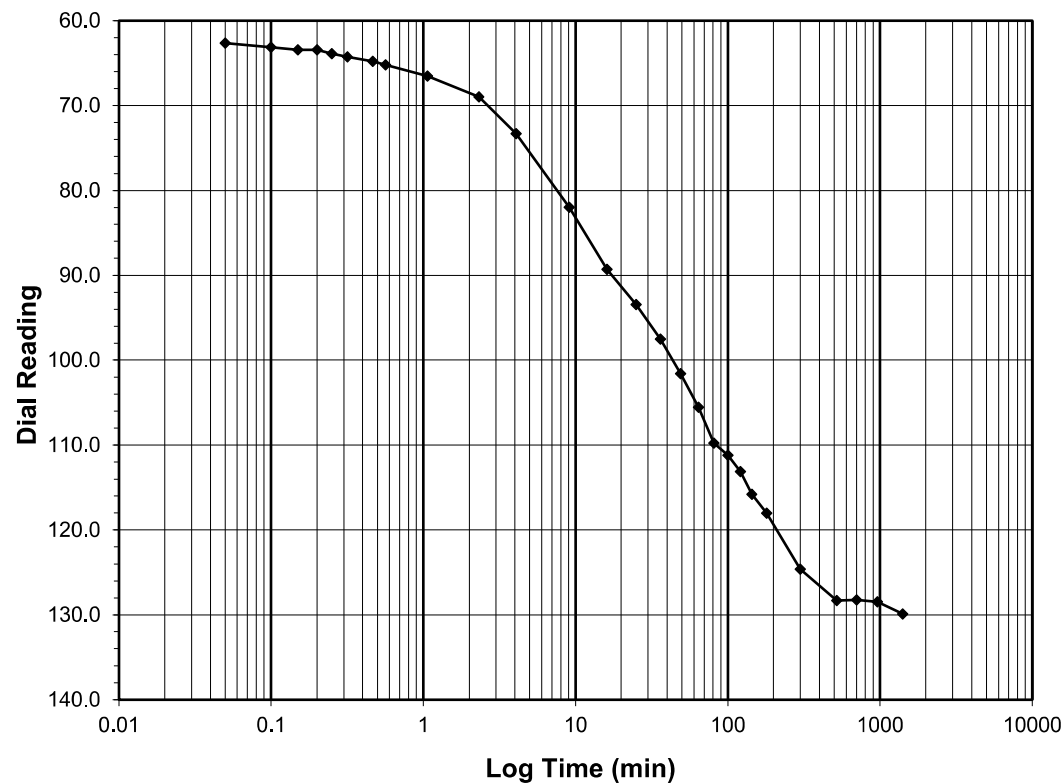
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.5  
 Final Reading (div) 129.9  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/5/2020  
 Start Time 8:32:41

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>54.8</b>
0.05	62.6
0.10	63.1
0.15	63.4
0.20	63.4
0.25	63.9
0.32	64.2
0.47	64.8
0.57	65.2
1.07	66.5
2.32	69.0
4.08	73.3
9.08	82.0
16.08	89.3
25.08	93.4
36.08	97.5
49.08	101.6
64.10	105.6
81.10	109.8
100.10	111.2
121.10	113.1
144.12	115.8
180.12	118.0
300.12	124.6
520.12	128.3
700.13	128.2
960.13	128.5
1414.73	129.9



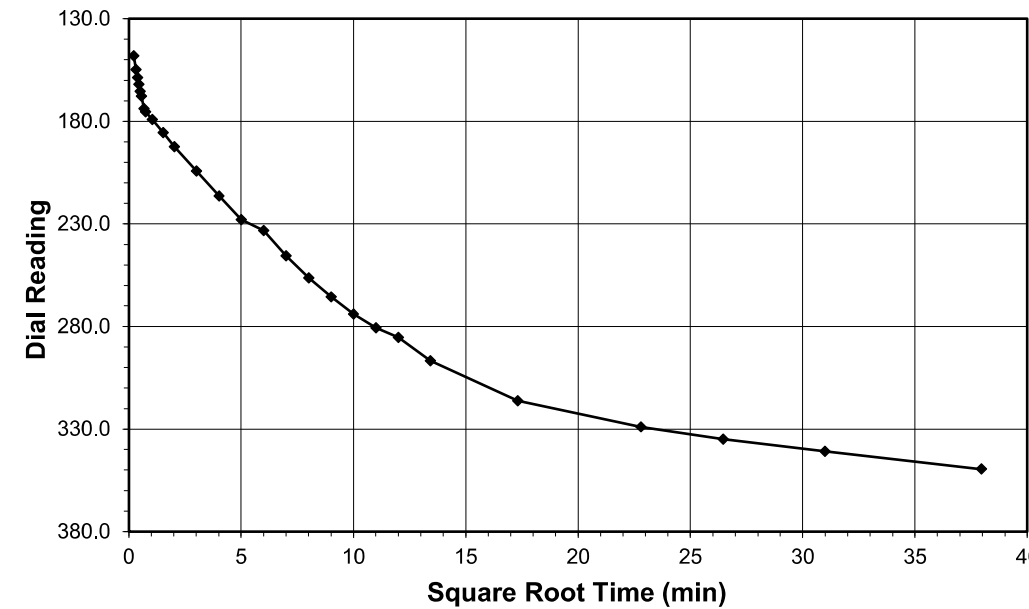
Tested By 129-07-0411 Date 2/5/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

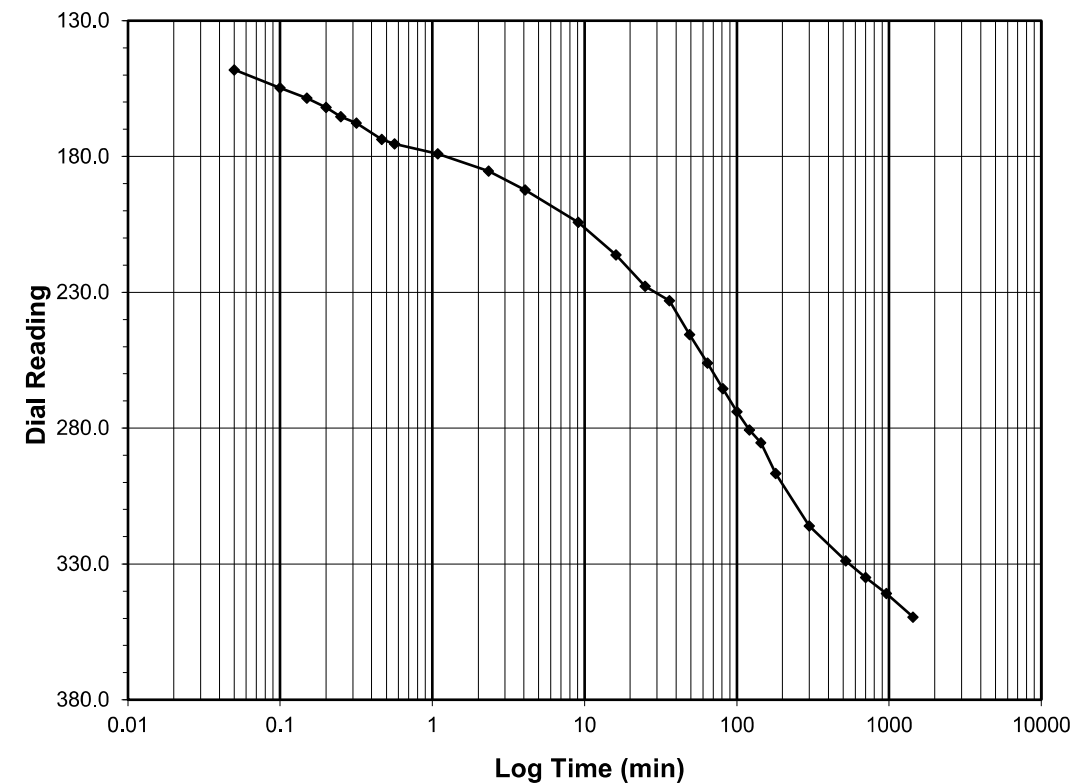
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5-1.0  
 Final Reading (div) 349.6  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/6/2020  
 Start Time 8:07:25

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>129.9</b>
0.05	148.1
0.10	154.8
0.15	158.6
0.20	162.0
0.25	165.4
0.32	167.7
0.47	173.7
0.57	175.3
1.08	179.1
2.33	185.4
4.08	192.3
9.08	204.2
16.08	216.3
25.08	227.9
36.08	233.1
49.08	245.5
64.10	256.2
81.10	265.5
100.12	274.0
121.12	280.7
144.12	285.4
180.13	296.7
300.13	316.1
520.13	328.9
700.13	335.1
960.13	340.9
1440.02	349.6



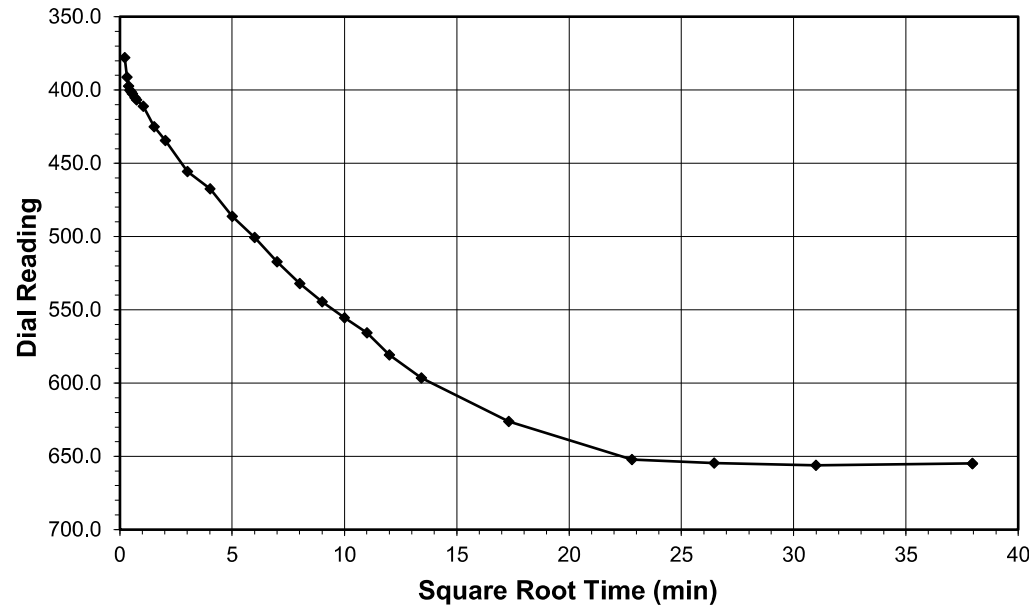
Tested By 129-07-0411 Date 2/6/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

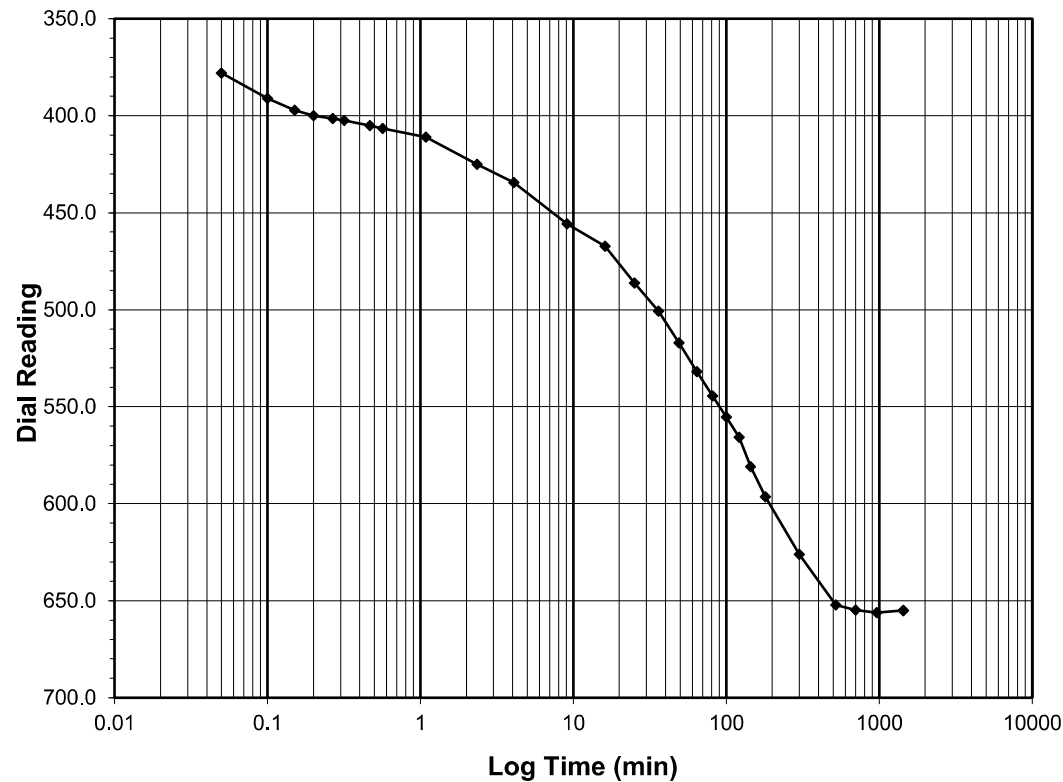
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-2.0  
 Final Reading (div) 655.1  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

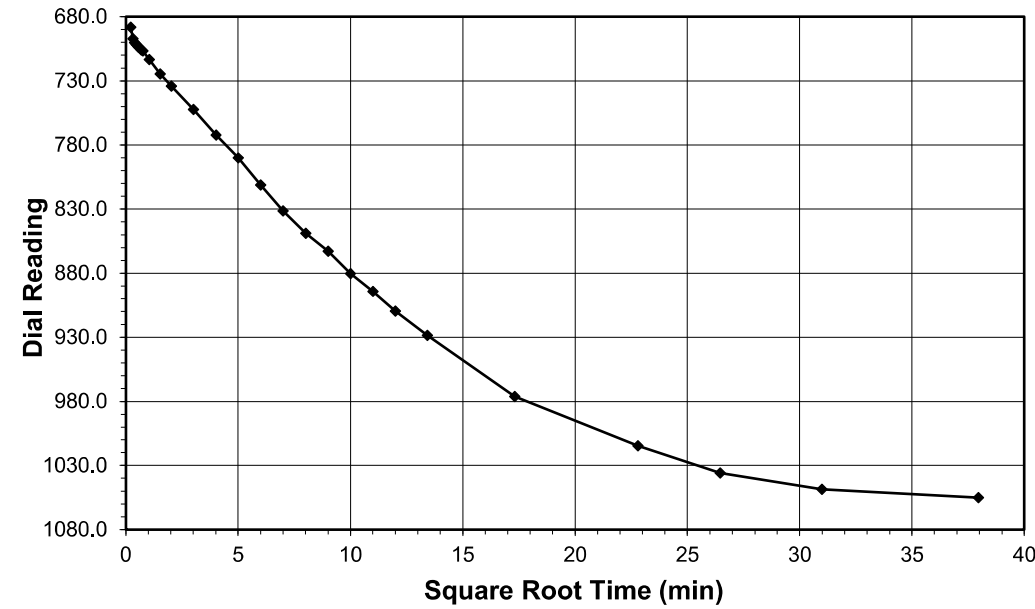
Start Date 2/7/2020  
 Start Time 8:07:27

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>349.6</b>
0.05	378.0
0.10	391.2
0.15	397.2
0.20	400.1
0.27	401.5
0.32	402.5
0.47	405.1
0.57	406.7
1.08	411.0
2.33	425.0
4.08	434.3
9.08	455.8
16.08	467.4
25.10	486.3
36.10	500.7
49.10	517.1
64.10	532.0
81.10	544.5
100.10	555.4
121.10	565.8
144.10	580.9
180.10	596.4
300.12	626.2
520.12	652.2
700.12	654.7
960.12	656.1
1440.12	654.9
1440.48	655.1



Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

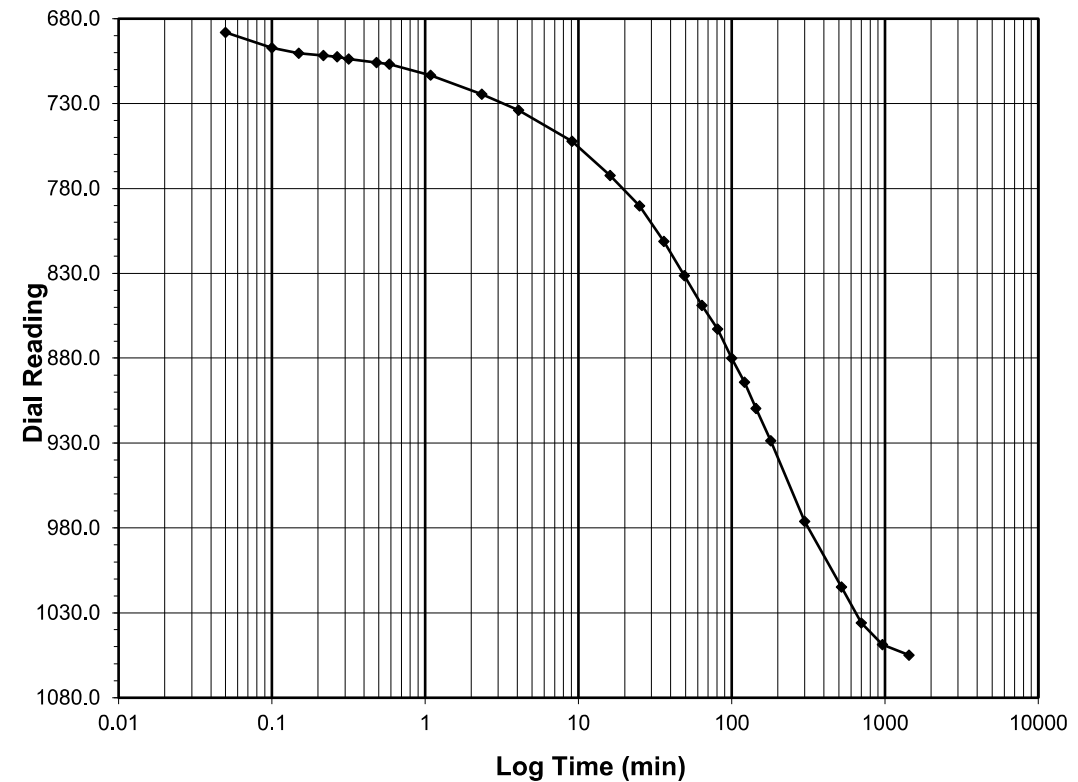
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 1055.0  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/8/2020  
 Start Time 8:07:56

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>655.1</b>
0.05	688.2
0.10	697.1
0.15	700.3
0.22	701.7
0.27	702.3
0.32	703.6
0.48	705.8
0.58	706.7
1.08	713.3
2.33	724.5
4.08	734.0
9.08	752.2
16.08	772.3
25.10	790.2
36.10	811.2
49.10	831.4
64.10	848.9
81.10	862.8
100.12	880.1
121.12	894.3
144.12	909.7
180.12	928.7
300.13	976.1
520.13	1014.8
700.13	1035.9
960.13	1048.7
1440.07	1055.0



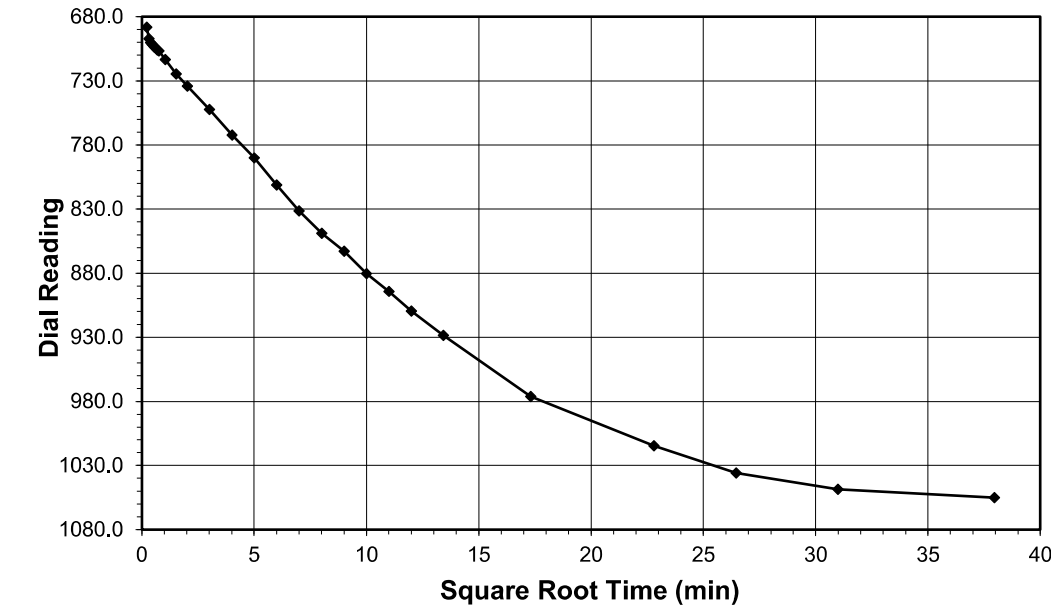
Tested By 129-07-0411 Date 2/7/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

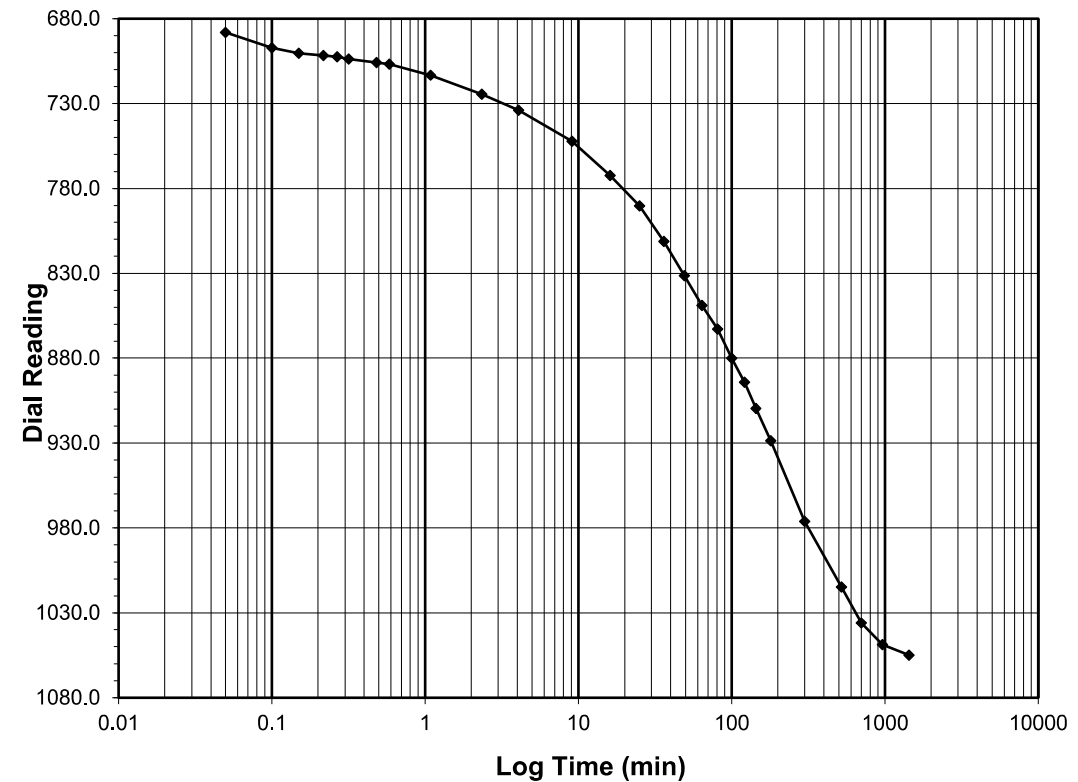
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 1055.0  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/8/2020  
 Start Time 8:07:56

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>655.1</b>
0.05	688.2
0.10	697.1
0.15	700.3
0.22	701.7
0.27	702.3
0.32	703.6
0.48	705.8
0.58	706.7
1.08	713.3
2.33	724.5
4.08	734.0
9.08	752.2
16.08	772.3
25.10	790.2
36.10	811.2
49.10	831.4
64.10	848.9
81.10	862.8
100.12	880.1
121.12	894.3
144.12	909.7
180.12	928.7
300.13	976.1
520.13	1014.8
700.13	1035.9
960.13	1048.7
1440.07	1055.0



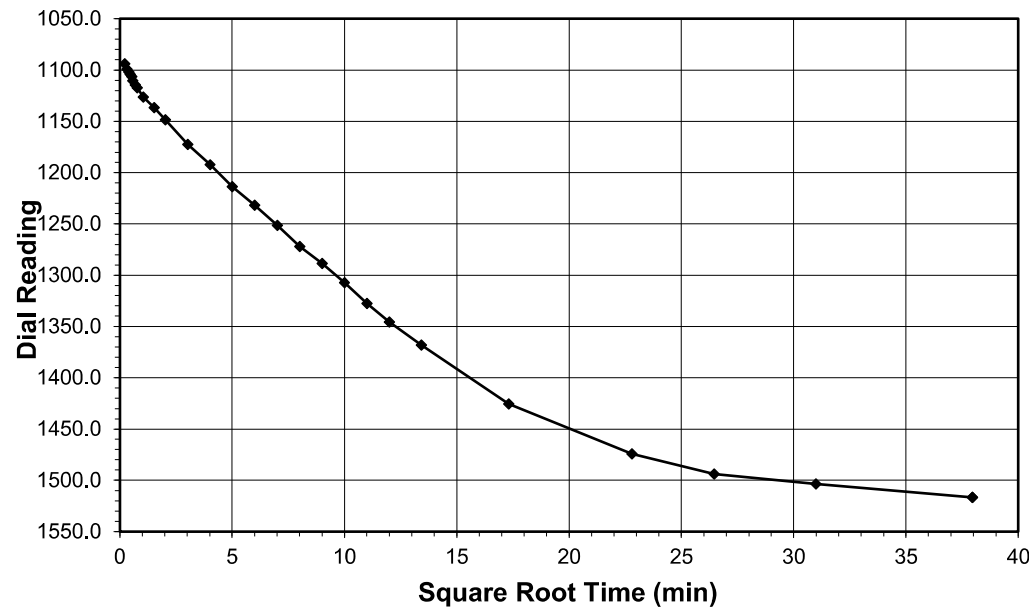
Tested By 129-07-0411 Date 2/8/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

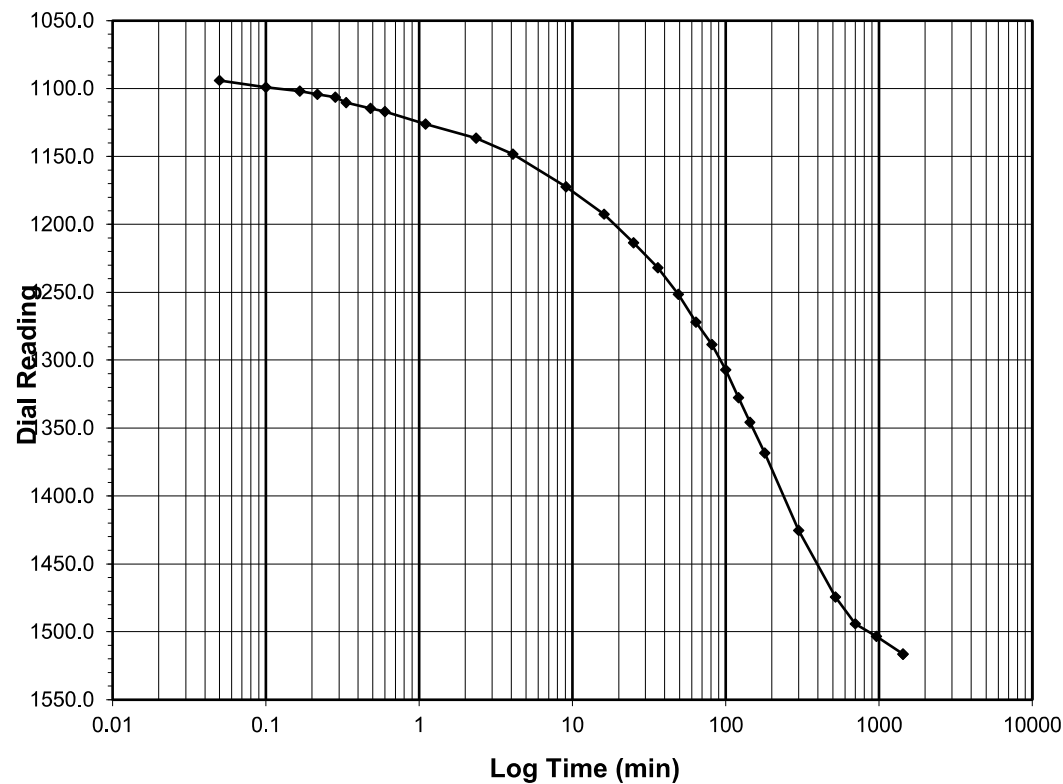
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **4.0-8.0**  
 Final Reading (div) **1516.6**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

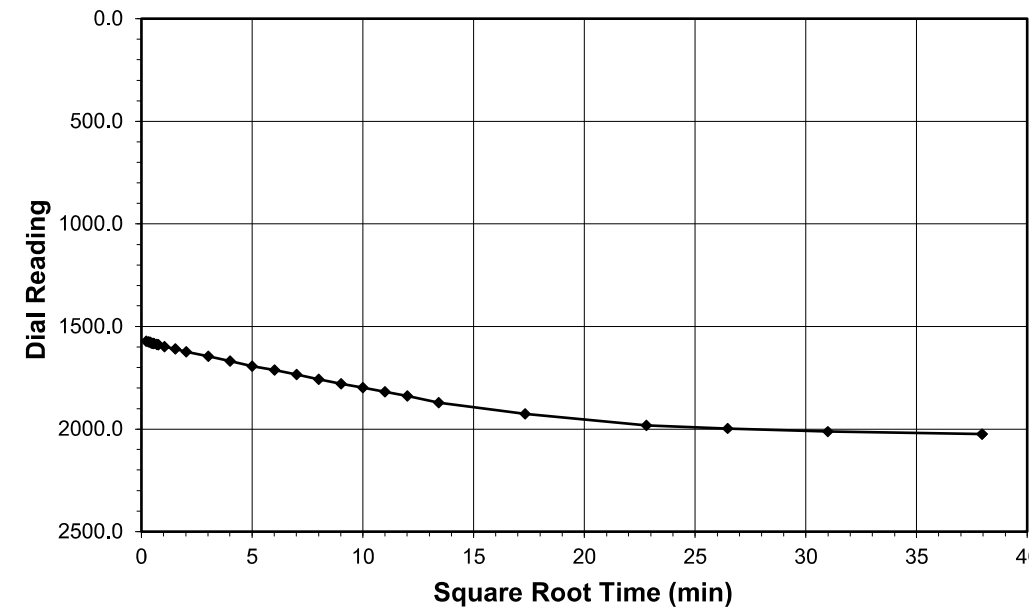
Start Date 2/9/2020  
 Start Time 8:08:00

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>1055.0</b>
0.05	1094.1
0.10	1099.3
0.17	1102.1
0.22	1104.3
0.28	1106.4
0.33	1110.5
0.48	1114.6
0.60	1117.1
1.10	1126.2
2.35	1136.5
4.10	1148.3
9.10	1172.4
16.10	1192.4
25.12	1213.7
36.12	1231.9
49.12	1251.5
64.13	1272.0
81.13	1288.3
100.13	1307.1
121.13	1327.6
144.13	1345.7
180.13	1368.3
300.13	1425.4
520.13	1474.3
700.13	1494.1
960.13	1503.5
1440.13	1516.5
1440.33	1516.6



Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

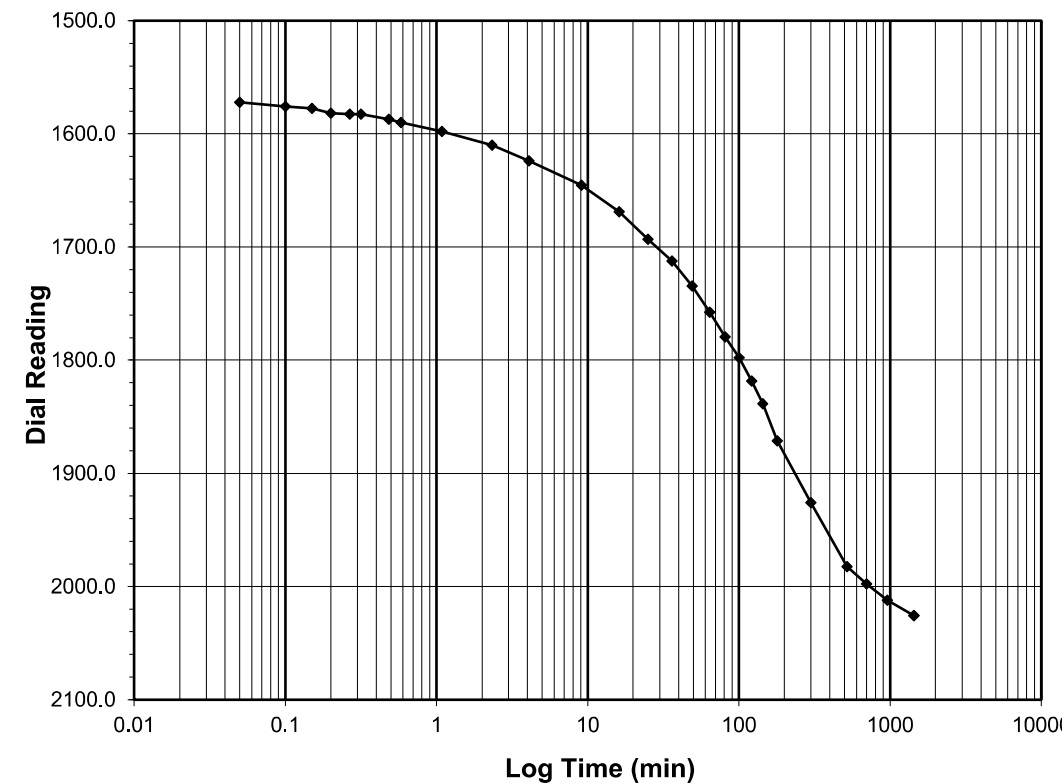
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **8.0-16.0**  
 Final Reading (div) **2025.6**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/10/2020  
 Start Time 8:08:21

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>1516.6</b>
0.05	1572.3
0.10	1576.0
0.15	1577.5
0.20	1581.8
0.27	1582.6
0.32	1582.6
0.48	1587.2
0.58	1589.9
1.08	1597.9
2.33	1610.1
4.10	1623.9
9.10	1645.3
16.10	1668.7
25.10	1693.1
36.12	1712.5
49.12	1734.5
64.12	1757.5
81.12	1779.2
100.13	1798.0
121.13	1818.6
144.13	1838.4
180.13	1871.1
300.13	1926.1
520.15	1982.3
700.15	1997.6
960.17	2012.1
1440.17	2025.5
1440.37	2025.6



Tested By 129-07-0411 Date 2/9/2020 Checked By GEM Date 2/18/2020

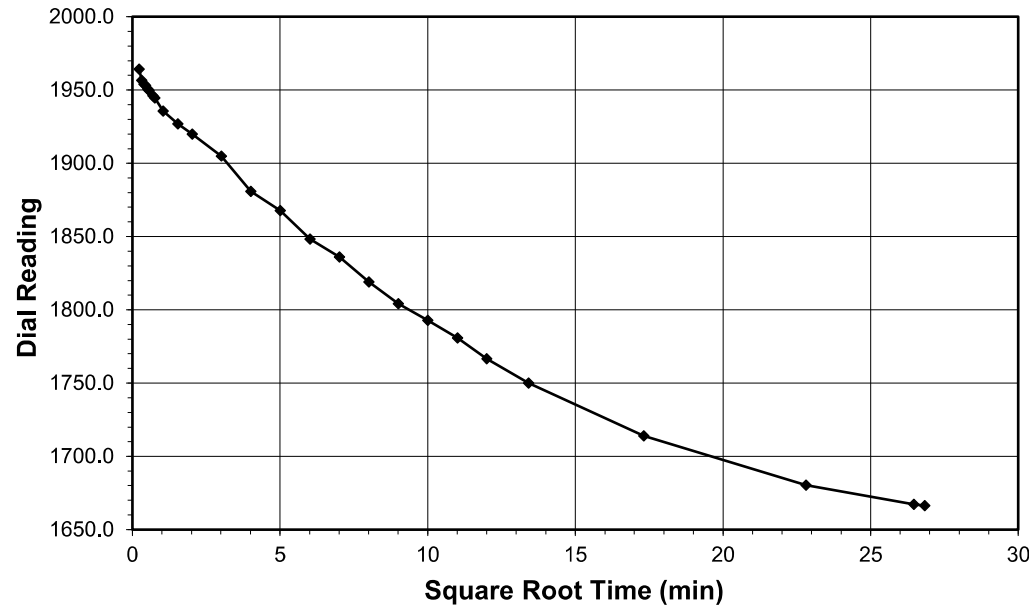
Tested By 129-07-0411 Date 2/10/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

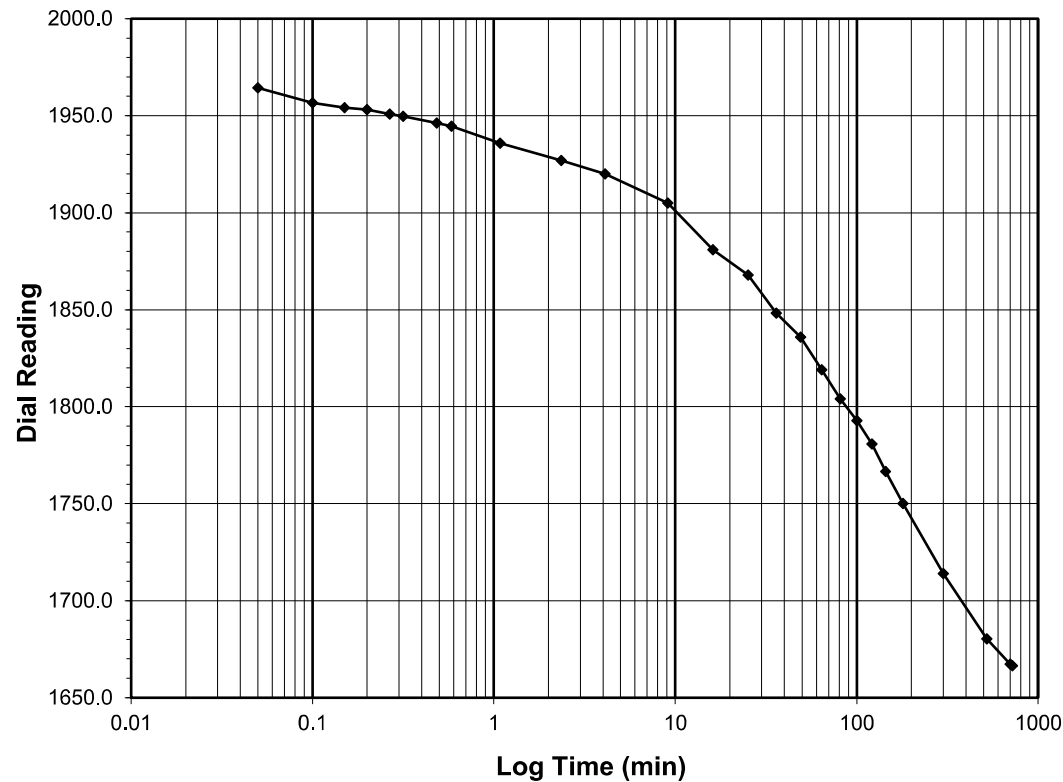
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **16.0-4.0**  
 Final Reading (div) **1666.4**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

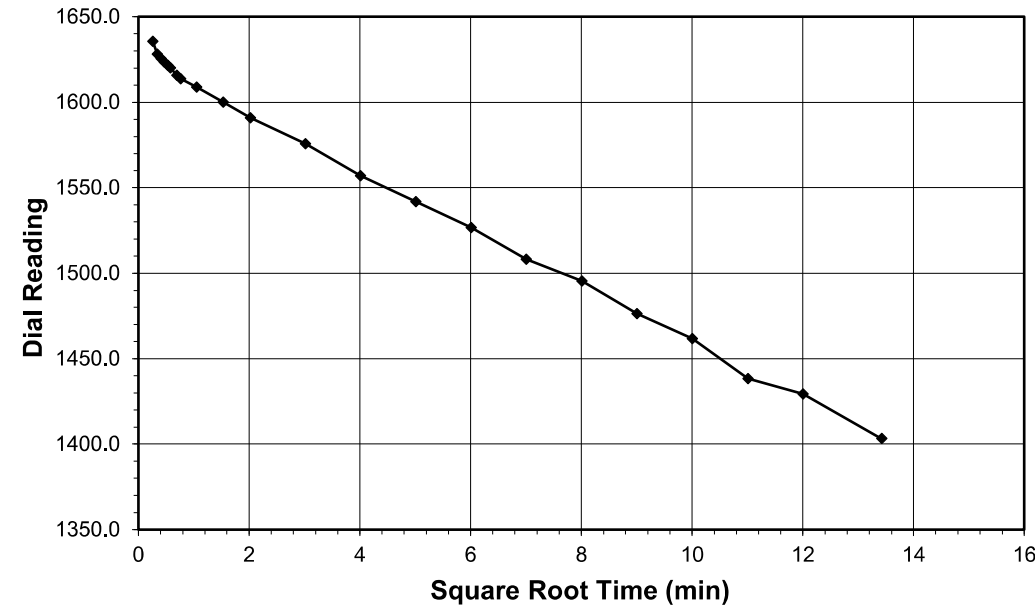
Start Date 2/11/2020  
 Start Time 8:08:43

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>2025.6</b>
0.05	1964.3
0.10	1956.6
0.15	1954.0
0.20	1953.1
0.27	1950.8
0.32	1949.6
0.48	1946.2
0.58	1944.6
1.08	1935.7
2.35	1927.0
4.10	1920.0
9.10	1905.0
16.12	1880.9
25.12	1867.8
36.12	1848.3
49.12	1836.0
64.13	1819.0
81.13	1804.0
100.13	1792.7
121.13	1780.8
144.13	1766.6
180.15	1750.1
300.15	1713.9
520.15	1680.2
700.17	1667.3
720.13	1666.4



Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

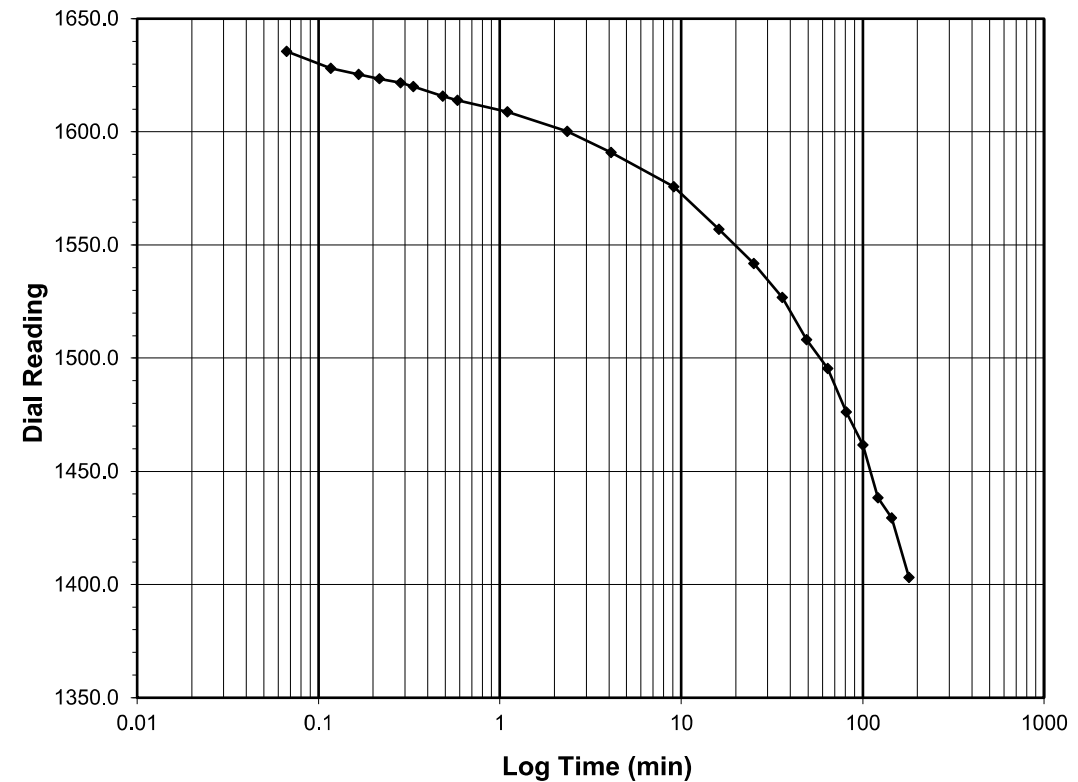
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **4.0-1.0**  
 Final Reading (div) **1403.2**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/11/2020  
 Start Time 20:08:52

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>1666.4</b>
0.07	1635.6
0.12	1628.2
0.17	1625.5
0.22	1623.5
0.28	1621.7
0.33	1620.0
0.48	1615.7
0.58	1613.8
1.10	1608.9
2.35	1600.2
4.10	1590.9
9.10	1575.8
16.10	1557.0
25.10	1541.8
36.12	1526.8
49.12	1508.2
64.12	1495.4
81.12	1476.2
100.12	1461.6
121.12	1438.3
144.13	1429.4
180.13	1403.2



Tested By 129-07-0411 Date 2/11/2020 Checked By GEM Date 2/18/2020

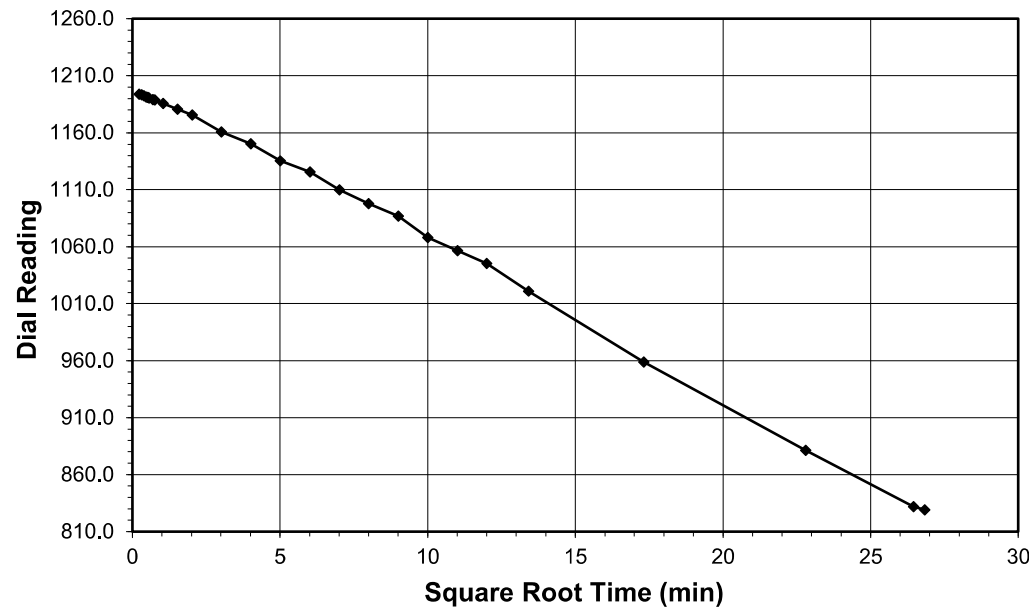
Tested By 129-07-0411 Date 2/11/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

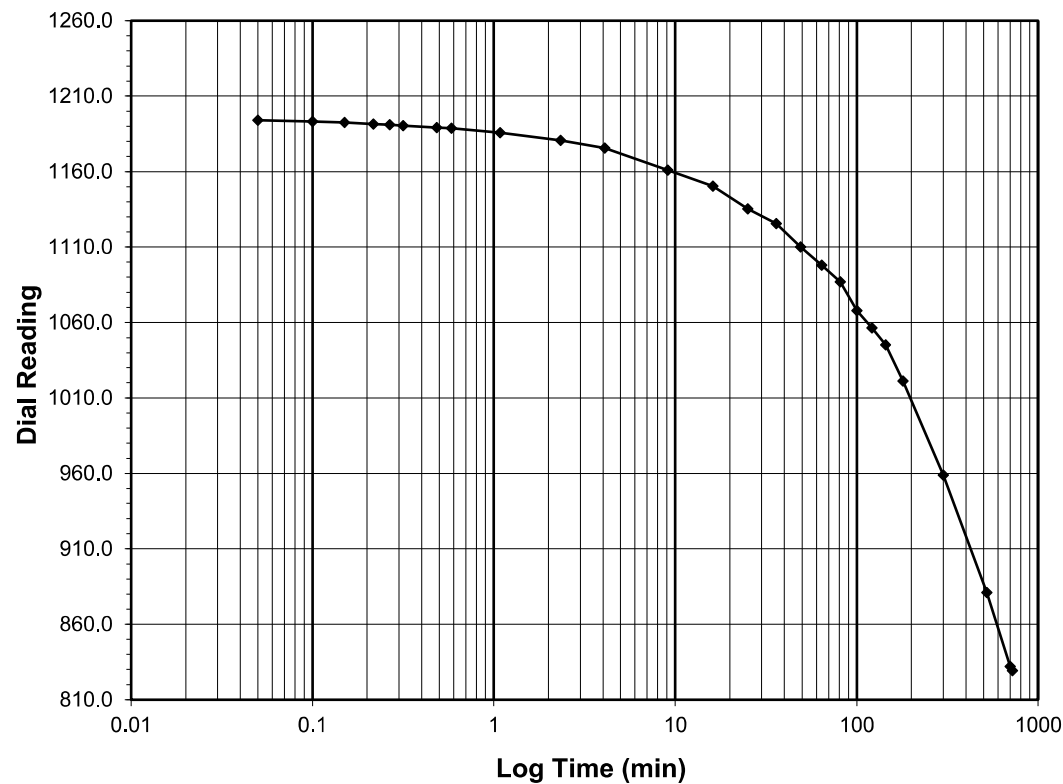
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-0.25  
 Final Reading (div) 829.1  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

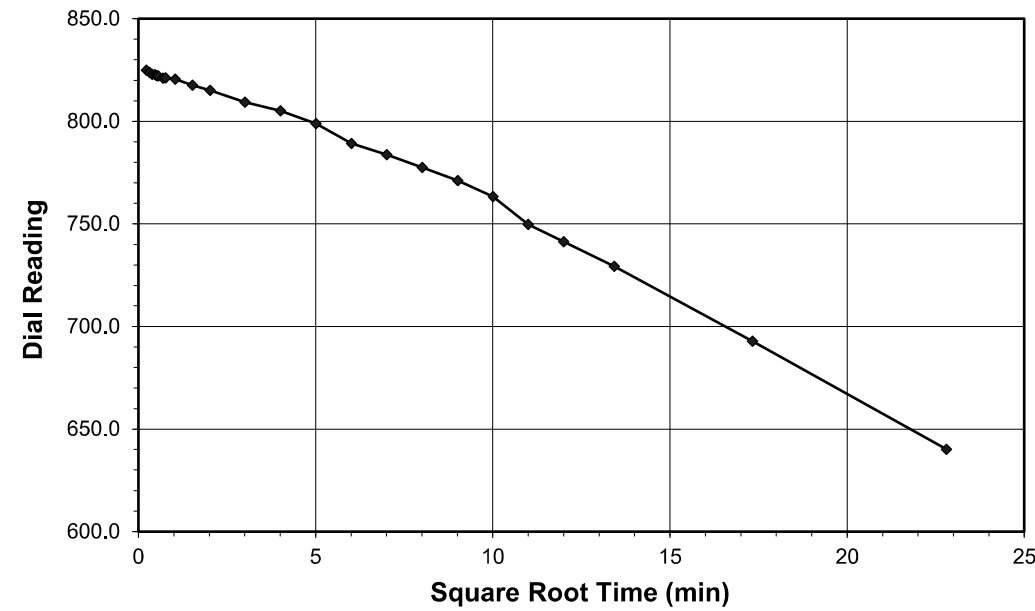
Start Date 2/12/2020  
 Start Time 9:25:28

Elapsed Time (min)	Dial Reading (div)
Initial	1403.2
0.05	1193.9
0.10	1193.2
0.15	1192.4
0.22	1191.4
0.27	1191.1
0.32	1190.5
0.48	1189.2
0.58	1188.8
1.08	1185.8
2.33	1180.6
4.08	1175.6
9.08	1160.9
16.08	1150.4
25.10	1135.3
36.10	1125.4
49.10	1109.9
64.10	1097.9
81.10	1086.9
100.10	1068.0
121.12	1056.5
144.12	1045.2
180.12	1021.1
300.12	958.9
520.12	881.1
700.12	832.0
720.32	829.1



Client Kleinfelder Boring No. Y1\_3954  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-2  
 Lab ID R-2020-024-001-002 Visual Description Gray Clay with Sand

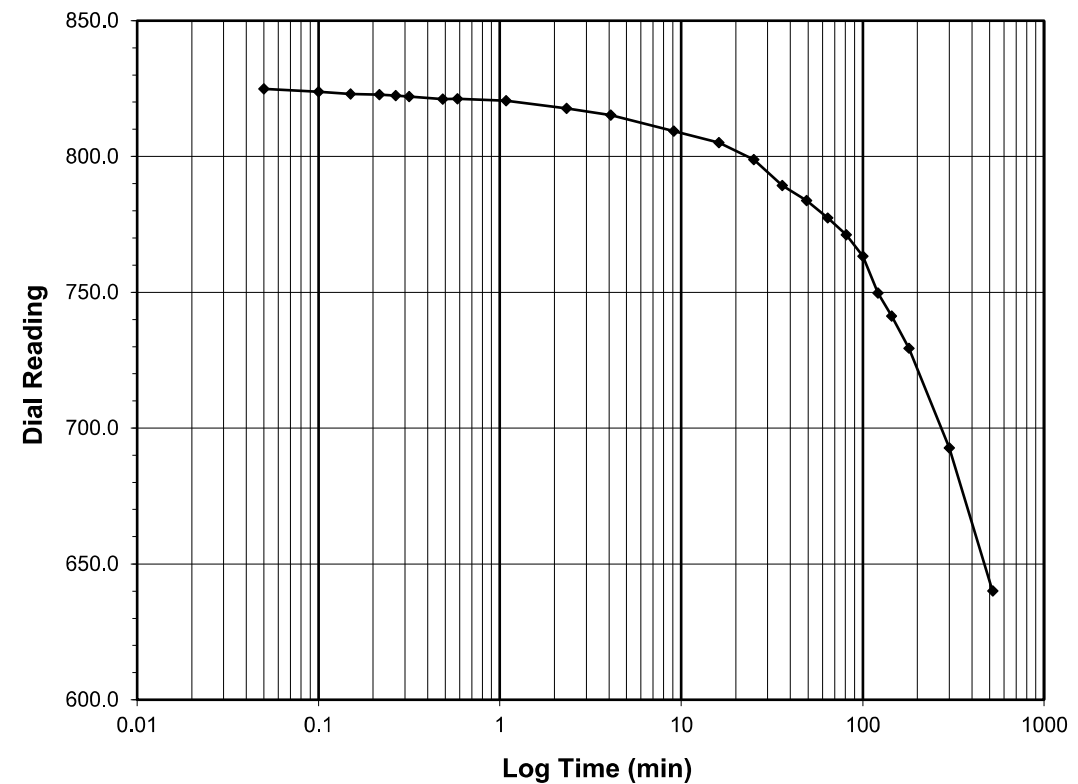
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.125  
 Final Reading (div) 640.0  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/12/2020  
 Start Time 21:25:47

Elapsed Time (min)	Dial Reading (div)
Initial	829.1
0.05	824.9
0.10	823.8
0.15	823.0
0.22	822.8
0.27	822.3
0.32	822.1
0.48	821.1
0.58	821.2
1.08	820.5
2.33	817.7
4.08	815.2
9.08	809.3
16.08	805.1
25.10	798.9
36.10	789.3
49.10	783.8
64.12	777.4
81.12	771.1
100.12	763.2
121.12	749.7
144.12	741.3
180.12	729.4
300.12	692.7
520.13	640.0



Tested By 129-07-0411 Date 2/12/2020 Checked By GEM Date 2/18/2020

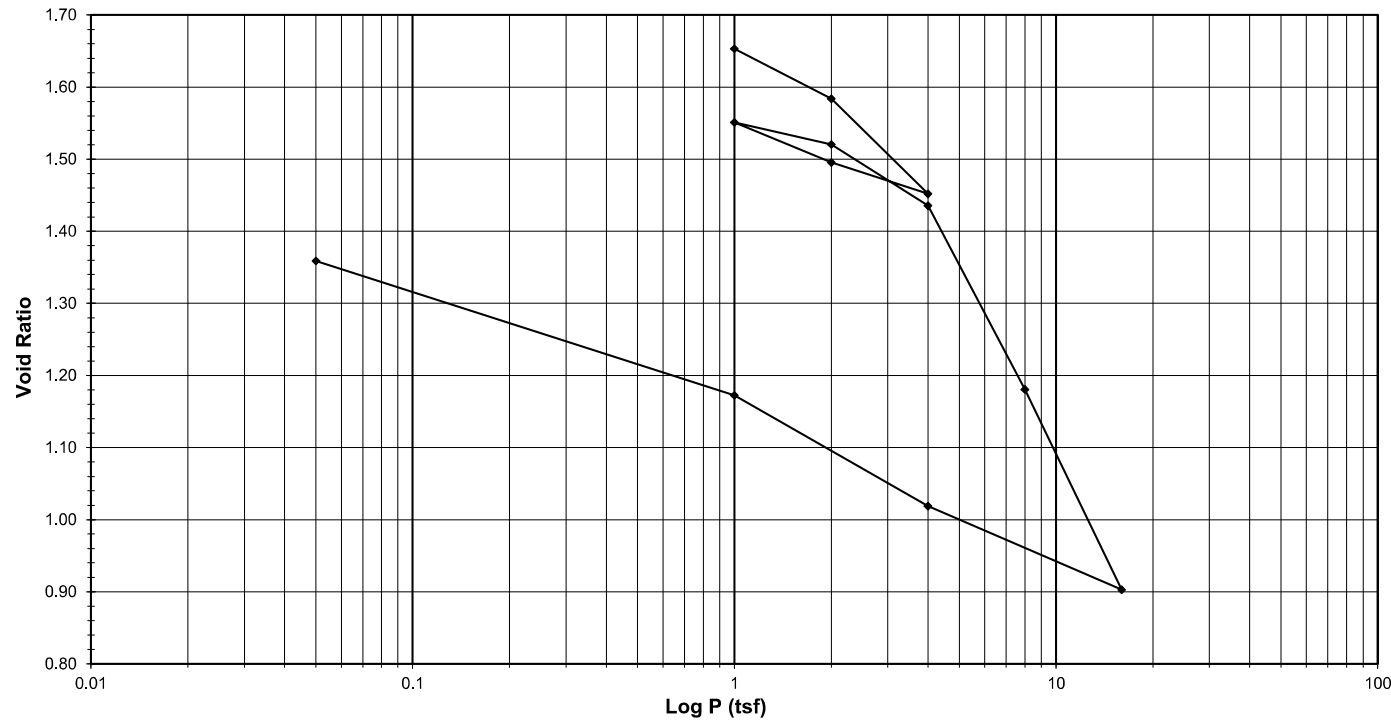
Tested By 129-07-0411 Date 2/12/2020 Checked By GEM Date 2/18/2020



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 3/2/20 Approved By MPS Date 3/13/20

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R554  
 1 Division = 0.0001 (in.)

**Sample Properties**

	Initial	Final
<i>Water Content</i>		
Tare Number	TB-09	855
Wt. Tare & WS (g)	335.96	256.74
Wt. Tare & DS (g)	257.67	216.11
Wt. Water (g)	78.29	40.63
Wt. Tare (g)	134.73	135.91
Wt. DS (g)	122.94	80.20
Water Content (%)	63.68	50.66
<i>Sample Parameters</i>		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.8702
Sample Volume (cc)	80.44	70.00
Wt. Wet Sample + Ring (g)	344.39	334.04
Wt. of Ring (g)	214.22	214.22
Wt. of Wet Sample (g)	130.17	119.82
Wet Density (pcf)	100.98	106.81
Wet Density (g/cc)	1.62	1.71
Water Content (%)	63.68	50.66
Wt. of Dry Sample (g)	79.53	79.53
Dry Density (pcf)	61.69	70.89
Dry Density (g/cc)	0.99	1.14
Void Ratio	1.7108	1.3589
Saturation (%)	99.76	99.91
Specific Gravity	2.68	Assumed

**Test Data Summary**

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cc)	Dry Density (g/cc)	Void Ratio
Seating	0	0	0	25.400	80.440	0.98864	1.71078
1	303.7	91.4	212.3	24.861	78.732	1.01009	1.65324
2	594.4	125.9	468.5	24.210	76.671	1.03724	1.58379
4	1120.6	166.3	954.3	22.976	72.764	1.09294	1.45210
2	944.4	150.3	794.1	23.383	74.052	1.07393	1.49552
1	723.4	133.7	589.7	23.902	75.696	1.05060	1.55091
2	845.3	143.2	702.1	23.617	74.792	1.06330	1.52046
4	1182.4	167.1	1015.3	22.821	72.273	1.10036	1.43556
8	2168.2	213.1	1955.1	20.434	64.713	1.22891	1.18080
16	3259.1	278.7	2980.4	17.830	56.466	1.40840	0.90286
4	2762.3	209.7	2552.6	18.917	59.907	1.32750	1.01884
1	2140.2	154.6	1985.7	20.356	64.467	1.23360	1.17251
0.05	1375.1	77.0	1298.0	22.103	69.999	1.13612	1.35892

Tested By 129-07-0411 Date 3/2/20 Input Checked By GEM Date 3/13/20

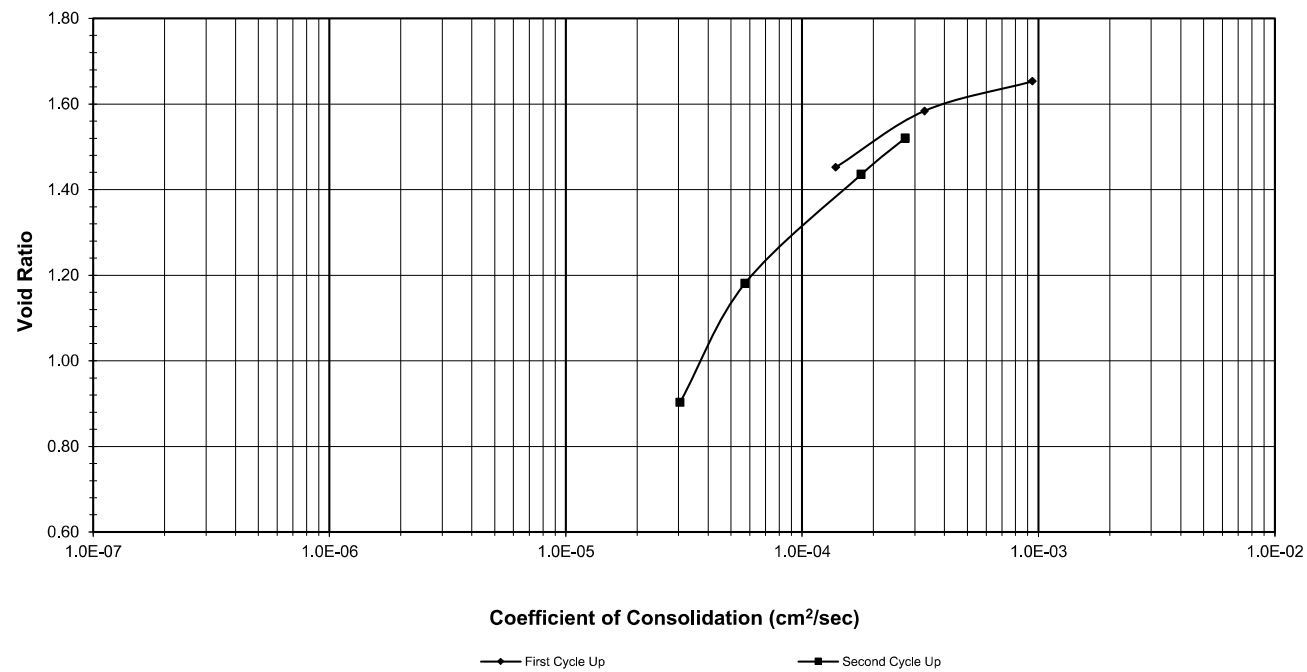




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 3/2/20 Input Checked By GEM Date 3/13/20

DCN: CT-24E Date: 5/3/12 Revision: 6 Z:\2020 PROJECTS\Kleinfelder\2020-024 Kleinfelder - R5819&R5820\2020-024-003\2020-024-003-052 DOT GEOJAC-16TSF1 Cv.xlsm\FINAL PLOT  
 2200 Westinghouse Blvd., Suite 103 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460 • www.geotechnics.net

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R554  
 1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
Water Content		
Tare Number	TB-09	855
Wt. Tare & WS (g)	335.96	256.74
Wt. Tare & DS (g)	257.67	216.11
Wt. Water (g)	78.29	40.63
Wt. Tare (g)	134.73	135.91
Wt. DS (g)	122.94	80.20
Water Content (%)	63.68	50.66
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.000	0.870
Sample Volume (cc)	80.44	70.00
Wt. Wet Sample + Ring (g)	344.39	334.04
Wt. of Ring (g)	214.22	214.22
Wt. of Wet Sample (g)	130.17	119.82
Wet Density (pcf)	100.98	106.81
Wet Density (g/cc)	1.62	1.71
Water Content (%)	63.68	50.66
Wt. of Dry Sample (g)	79.53	79.53
Dry Density (pcf)	61.69	70.89
Dry Density (g/cc)	0.99	1.14
Void Ratio	1.7108	1.3589
Saturation (%)	99.76	99.91
Specific Gravity	2.68	Assumed

Load Increment (tsf)	Dial Reading @ t <sub>50</sub> (div)	Machine Deflection (div)	C <sub>v</sub> Test Data Summary		Time t <sub>50</sub> (min.)	C <sub>v</sub> (cm <sup>2</sup> /sec)
			Corrected Dial Reading @ t <sub>50</sub> (div)	Sample Height @ t <sub>50</sub> (cm)		
0.05 - 1.0	200.2	91.4	108.8	2.512	5.50	0.00094
1.0 - 2.0	470.5	125.9	344.6	2.452	15.00	0.00033
2.0 - 4.0	869.2	166.3	702.9	2.361	33.00	0.00014
4.0 - 2.0	NA	150.3	NA	NA	NA	NA
2.0 - 1.0	NA	133.7	NA	NA	NA	NA
1.0 - 2.0	784.2	143.2	641.0	2.377	17.00	0.00027
2.0 - 4.0	1009.4	167.1	842.3	2.326	25.00	0.00018
4.0 - 8.0	1639.1	213.1	1426.0	2.178	68.00	0.00006
8.0 - 16.0	2699.2	278.7	2420.5	1.925	100.00	0.00003
16.0 - 4.0	NA	209.7	NA	NA	NA	NA
4.0 - 1.0	NA	154.6	NA	NA	NA	NA
1.0 - 0.05	NA	77.0	NA	NA	NA	NA

Tested By 129-07-0411 Date 3/2/20 Input Checked By GEM Date 3/13/20

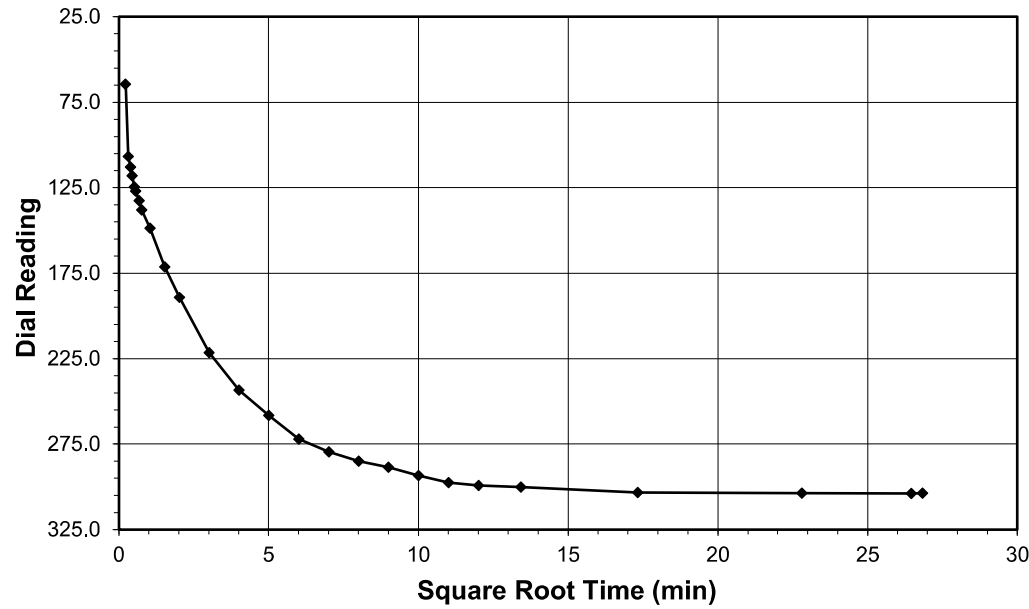
DCN: CT-24E Date: 5/3/12 Revision: 6 Z:\2020 PROJECTS\Kleinfelder\2020-024 Kleinfelder - R5819&R5820\2020-024-003\2020-024-003-052 DOT GEOJAC-16TSF1 Cv.xlsm\FINAL PLOT



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y1\_4262  
 Client Project: R-5819/R-5820      Depth (ft): 10.0-12.1  
 Project No.: R-2020-024-003      Sample No.: ST-3  
 Lab ID: R-2020-024-003-052      Visual Description: Gray Brown Clay with Sand

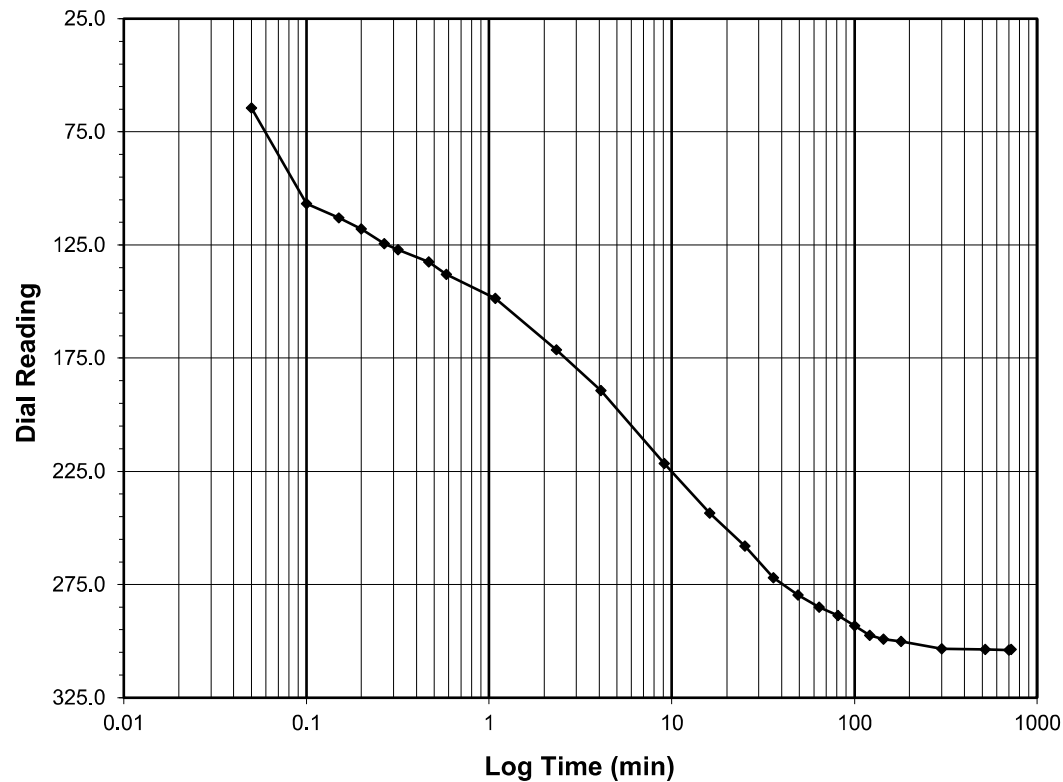
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf): 0.05-1.0**  
**Final Reading (div): 303.7**  
 Consolidometer No.: R554  
 1 Division (in): 0.0001

Start Date: 3/2/20  
 Start Time: 12:47:34

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>0.0</b>
0.05	64.5
0.10	106.7
0.15	113.0
0.20	117.9
0.27	124.5
0.32	127.1
0.47	132.5
0.58	137.9
1.08	148.6
2.33	171.3
4.08	189.3
9.10	221.5
16.10	243.4
25.10	258.1
36.10	272.0
49.10	279.6
64.10	285.0
81.10	288.6
100.10	293.3
121.12	297.5
144.12	299.2
180.13	300.1
300.13	303.4
520.13	303.7
700.13	303.9
720.30	303.7



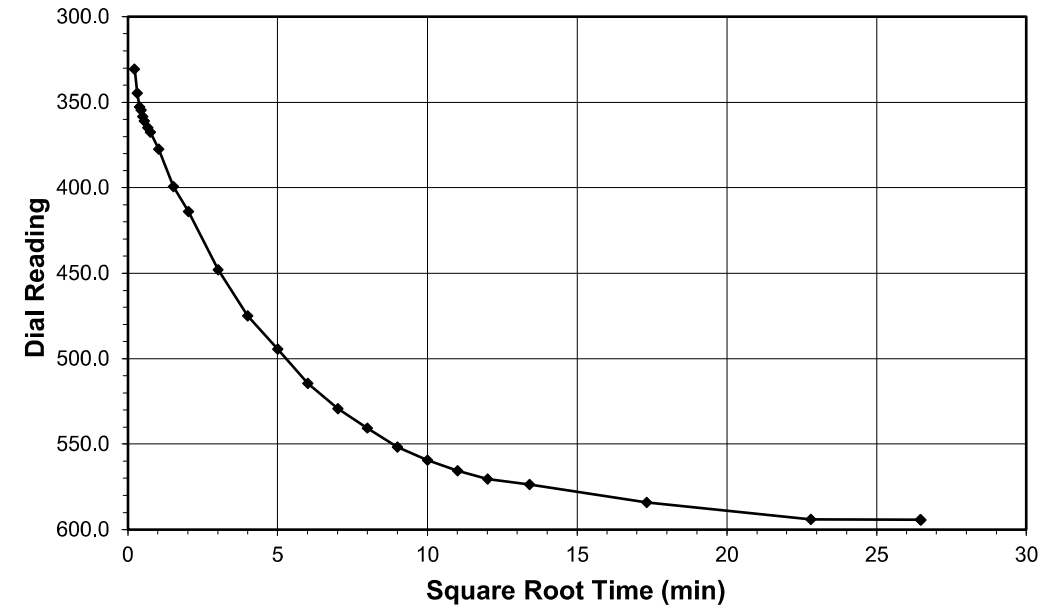
Tested By 129-07-0411 Date 3/2/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y1\_4262  
 Client Project: R-5819/R-5820      Depth (ft): 10.0-12.1  
 Project No.: R-2020-024-003      Sample No.: ST-3  
 Lab ID: R-2020-024-003-052      Visual Description: Gray Brown Clay with Sand

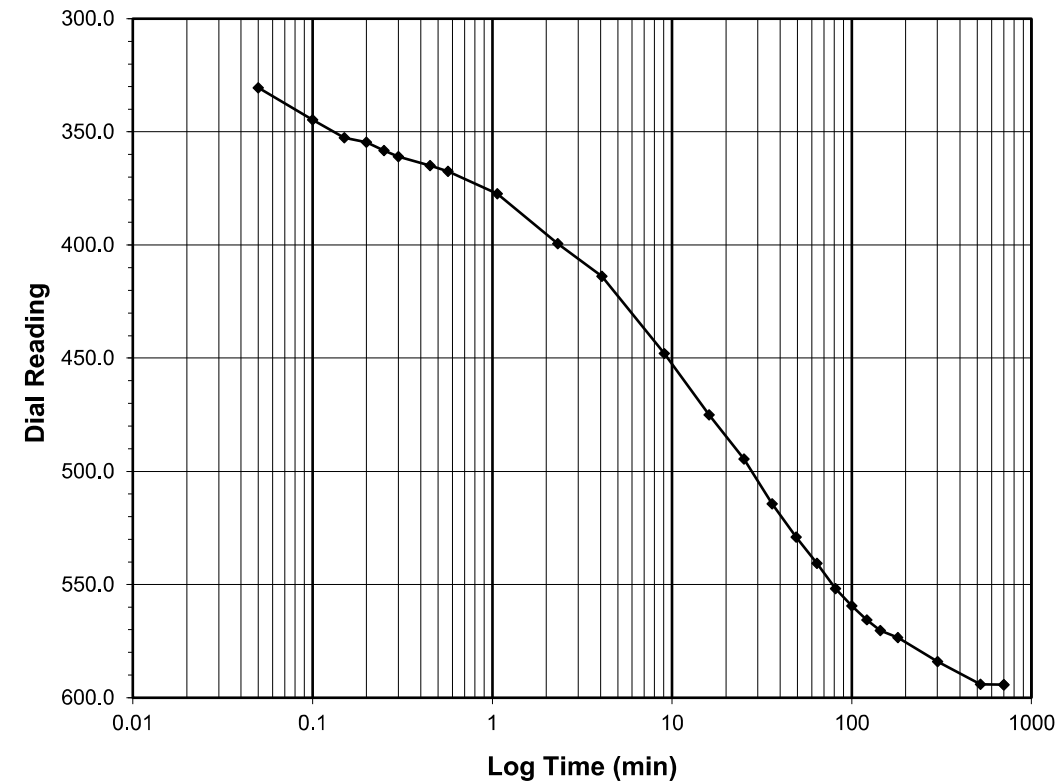
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf): 1.0-2.0**  
**Final Reading (div): 594.4**  
 Consolidometer No.: R554  
 1 Division (in): 0.0001

Start Date: 3/3/20  
 Start Time: 0:47:53

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>303.7</b>
0.05	330.6
0.10	344.7
0.15	352.6
0.20	354.6
0.25	358.3
0.30	360.9
0.45	364.9
0.57	367.5
1.07	377.3
2.32	399.4
4.07	413.9
9.07	447.9
16.07	475.0
25.07	494.4
36.08	514.4
49.08	529.1
64.08	540.7
81.10	551.7
100.10	559.4
121.10	565.6
144.10	570.4
180.12	573.6
300.12	584.0
520.12	594.1
700.12	594.3
701.47	594.4



Tested By 129-07-0411 Date 3/3/20 Checked By GEM Date 3/13/20

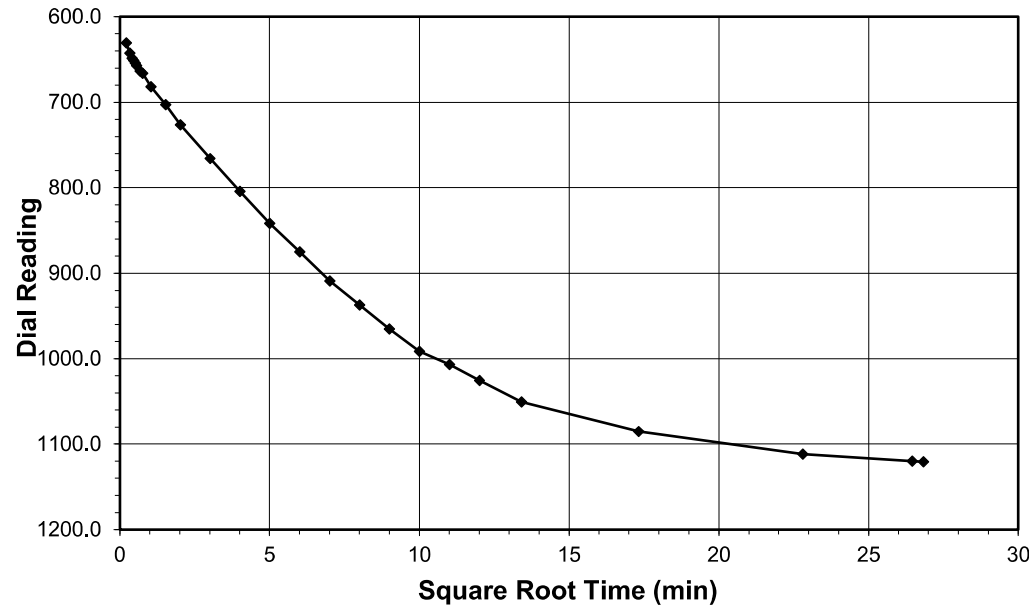




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

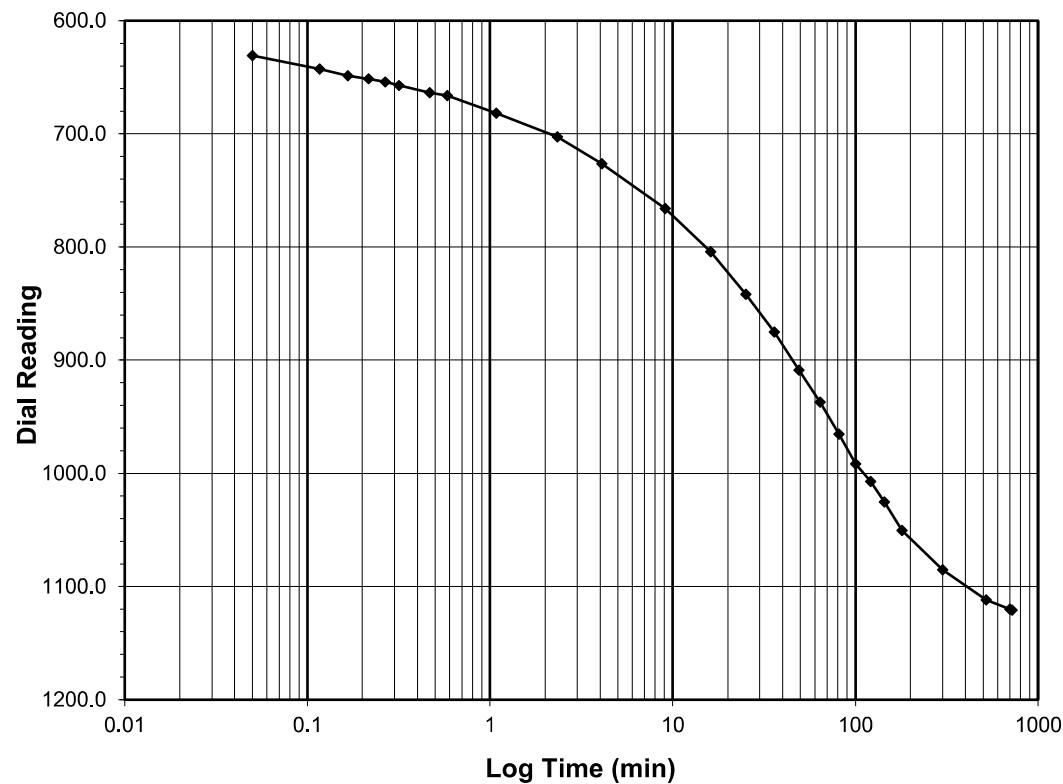
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 1120.6  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 3/3/20  
 Start Time 12:29:21

Elapsed Time (min)	Dial Reading (div)
Initial	594.4
0.05	630.8
0.12	642.6
0.17	648.4
0.22	651.3
0.27	654.2
0.32	657.2
0.47	663.7
0.58	666.2
1.08	681.7
2.33	702.8
4.08	726.3
9.08	765.8
16.10	804.3
25.10	841.8
36.10	875.0
49.10	908.9
64.10	937.2
81.10	965.4
100.10	991.7
121.10	1007.0
144.10	1025.4
180.10	1050.6
300.12	1085.2
520.12	1111.7
700.12	1120.0
720.33	1120.6



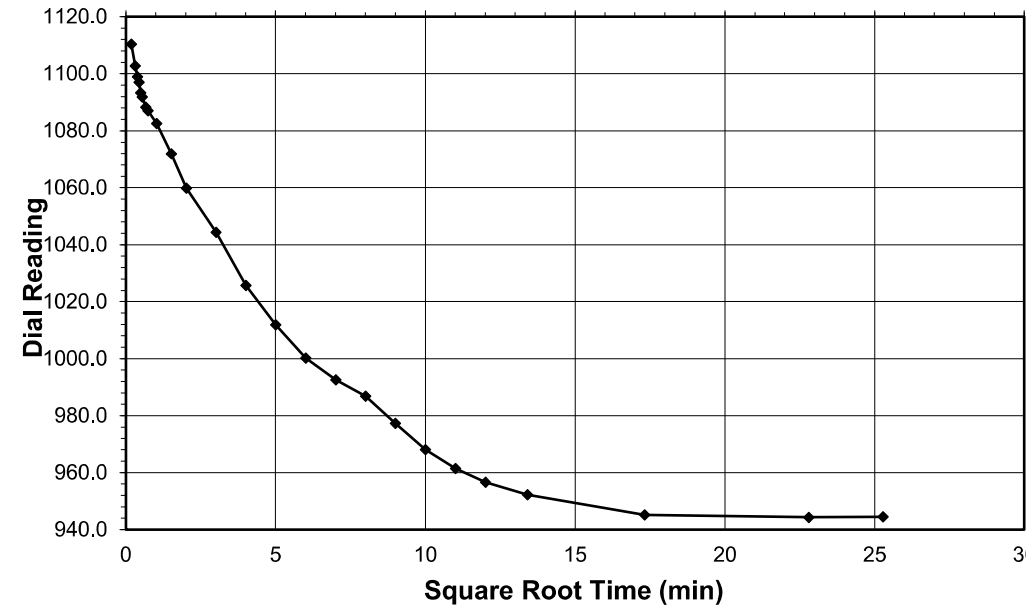
Tested By 129-07-0411 Date 3/3/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

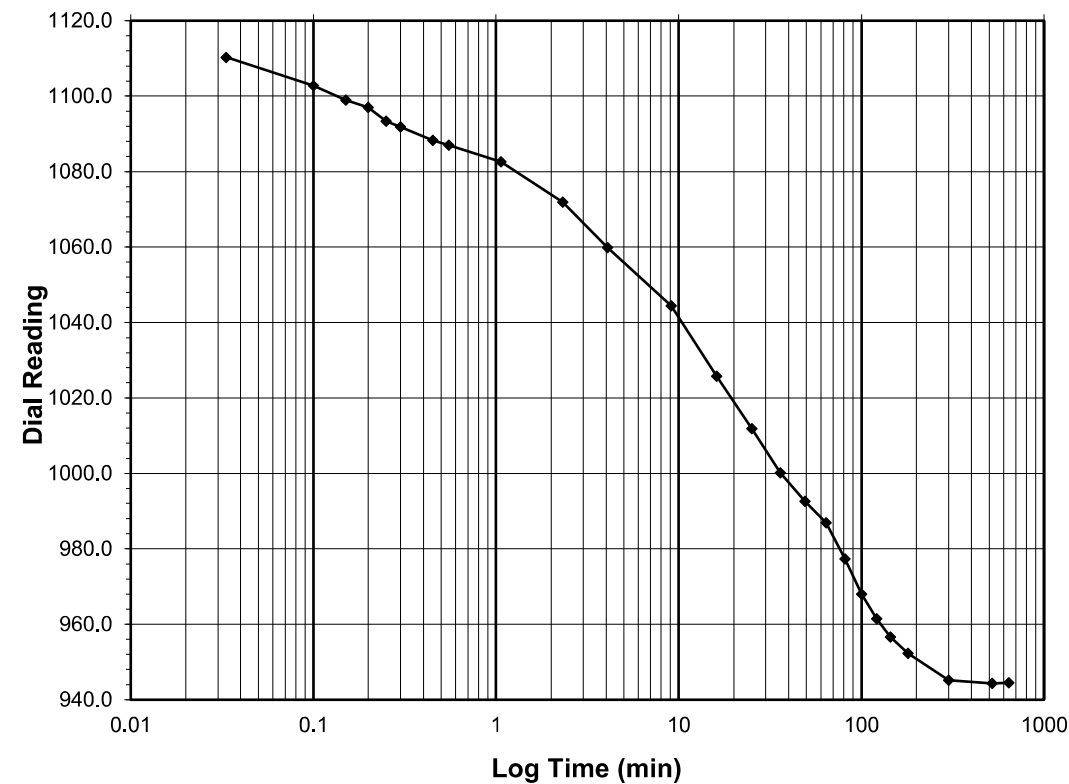
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0-2.0  
 Final Reading (div) 944.4  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 0:29:41

Elapsed Time (min)	Dial Reading (div)
Initial	1120.6
0.03	1110.3
0.10	1102.8
0.15	1099.0
0.20	1097.0
0.25	1093.4
0.30	1091.8
0.45	1088.2
0.55	1087.0
1.07	1082.6
2.32	1071.9
4.07	1059.9
9.08	1044.4
16.08	1025.7
25.08	1011.9
36.08	1000.2
49.10	992.5
64.10	986.9
81.10	977.3
100.10	968.0
121.12	961.4
144.12	956.6
180.12	952.2
300.12	945.1
520.12	944.3
638.98	944.4



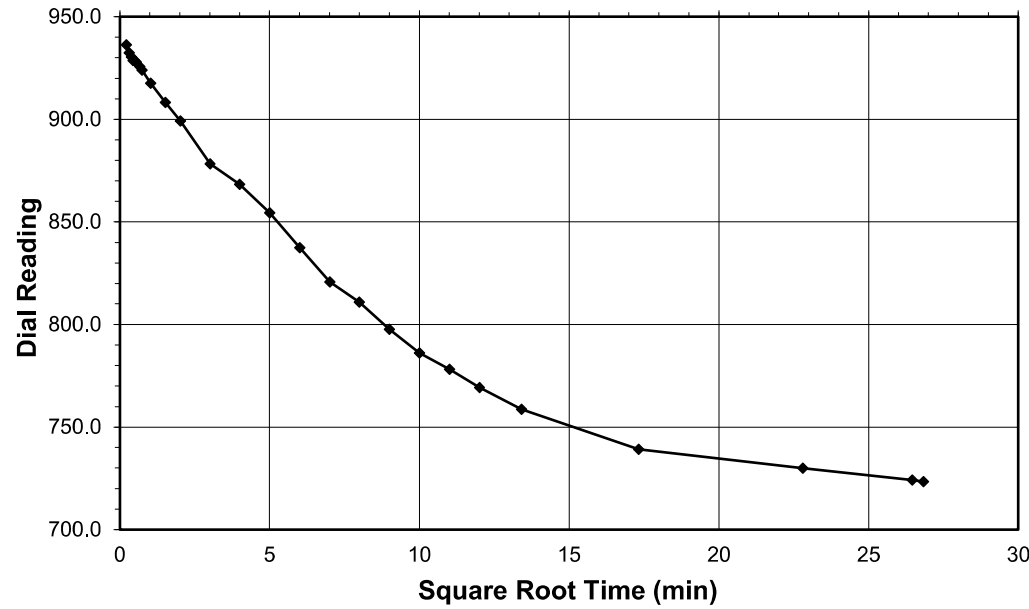
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

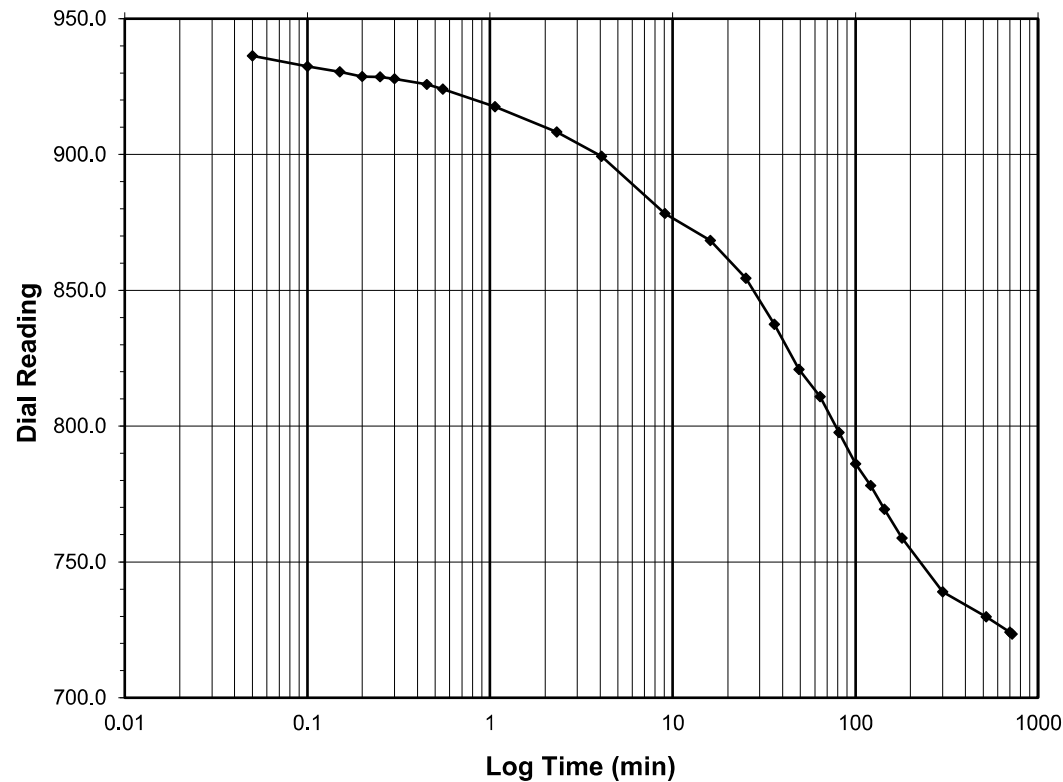
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 2.0-1.0**  
**Final Reading (div) 723.4**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 11:08:42

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>944.4</b>
0.05	936.3
0.10	932.4
0.15	930.4
0.20	928.7
0.25	928.6
0.30	927.9
0.45	925.8
0.55	924.0
1.07	917.6
2.32	908.3
4.07	899.3
9.07	878.3
16.07	868.3
25.07	854.4
36.08	837.5
49.08	820.8
64.08	810.9
81.08	797.6
100.08	786.1
121.10	778.2
144.10	769.3
180.10	758.7
300.12	739.1
520.12	729.9
700.12	724.1
720.12	723.4



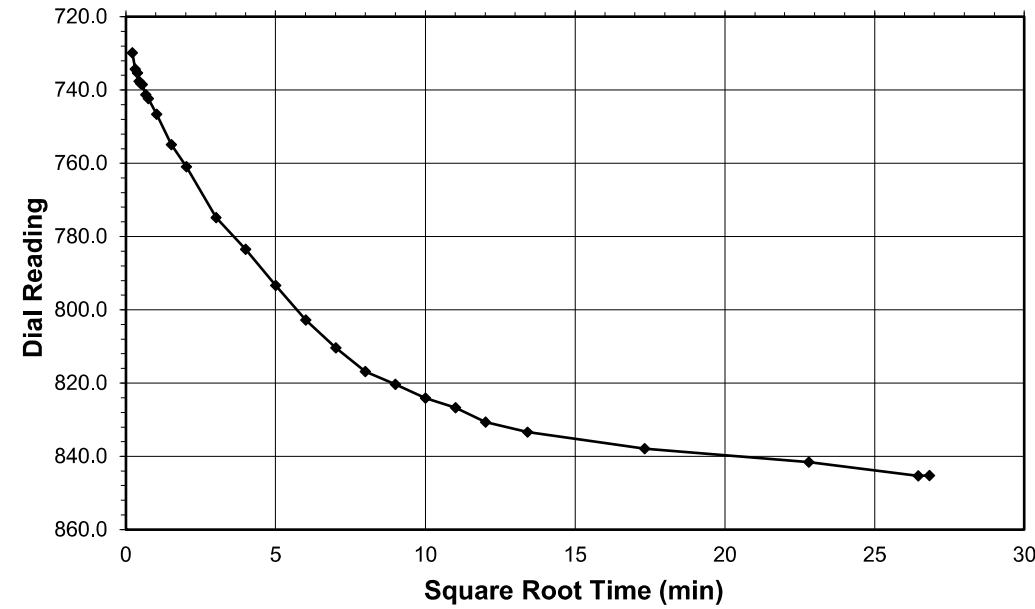
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

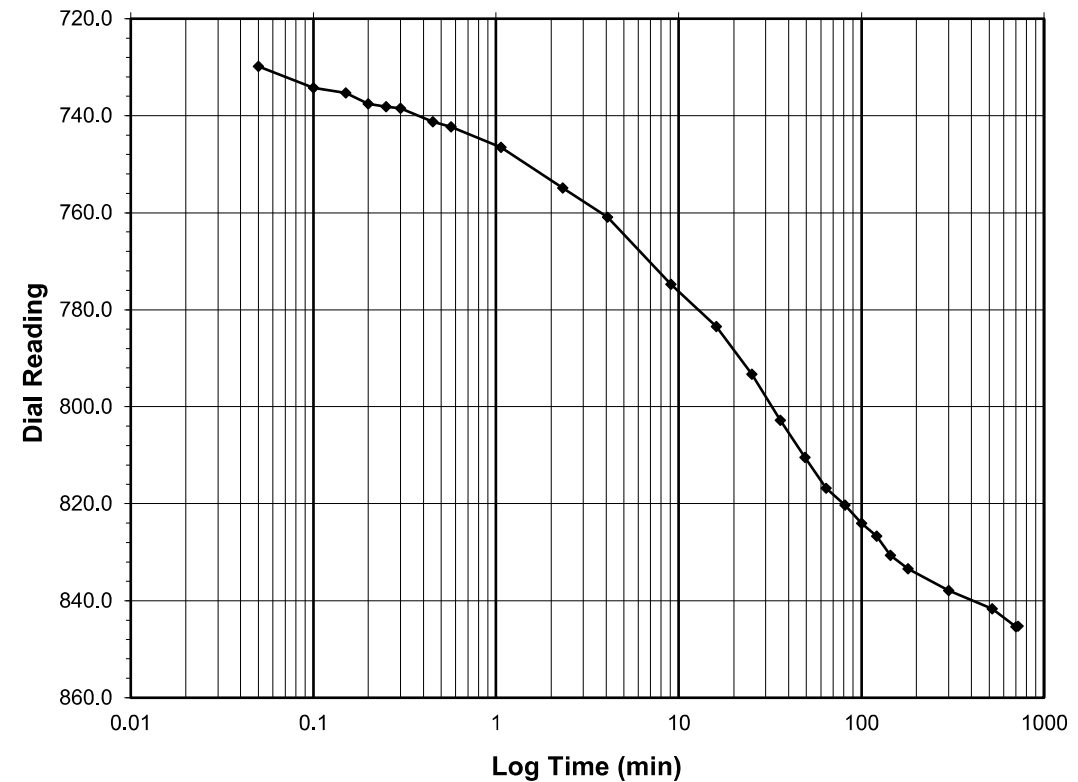
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 1.0-2.0**  
**Final Reading (div) 845.3**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 23:08:49

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>723.4</b>
0.05	729.8
0.10	734.3
0.15	735.3
0.20	737.6
0.25	738.2
0.30	738.5
0.45	741.3
0.57	742.3
1.07	746.6
2.32	754.9
4.07	760.9
9.07	774.8
16.07	783.5
25.07	793.3
36.07	802.8
49.07	810.4
64.07	816.8
81.07	820.3
100.08	824.1
121.08	826.7
144.08	830.6
180.08	833.4
300.08	837.9
520.08	841.6
700.08	845.4
720.08	845.3



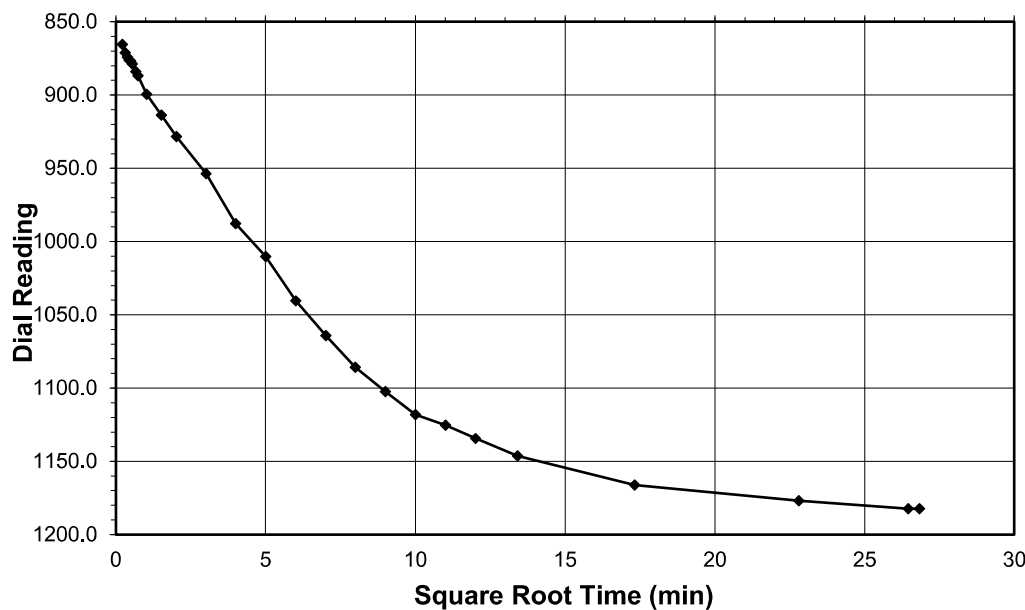
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

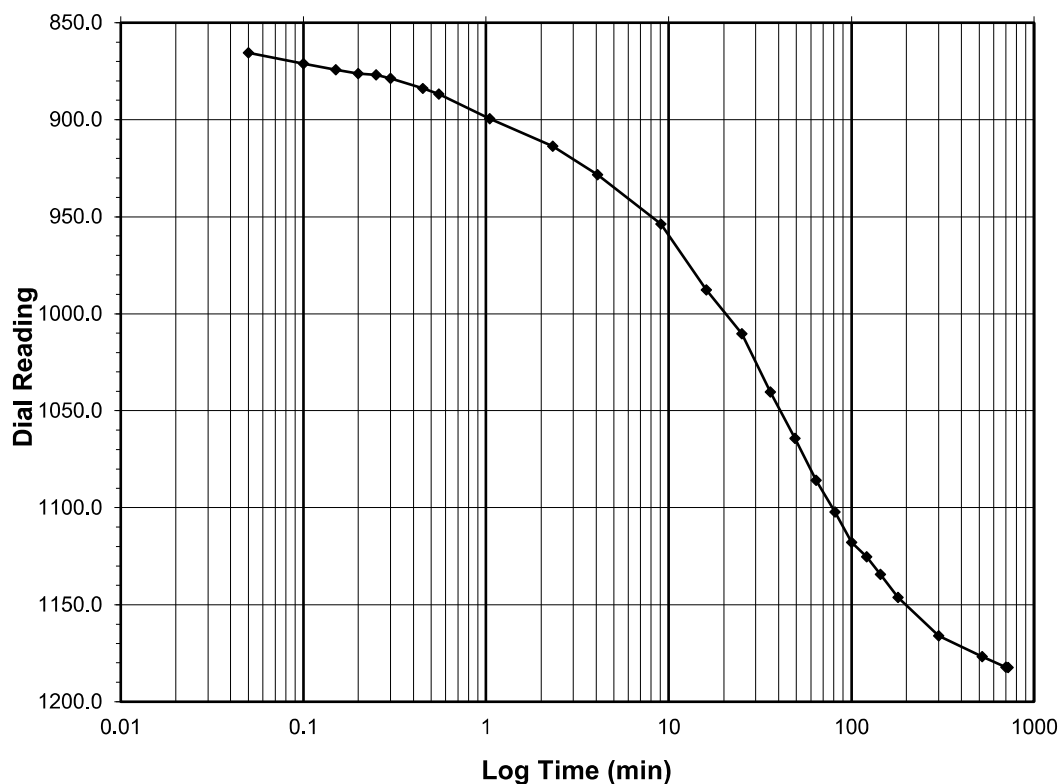
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 1182.4  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 11:08:54

Elapsed Time (min)	Dial Reading (div)
Initial	845.3
0.05	865.5
0.10	871.1
0.15	874.2
0.20	876.2
0.25	876.9
0.30	878.7
0.45	883.9
0.55	886.9
1.05	899.5
2.32	913.6
4.07	928.3
9.07	953.8
16.07	987.8
25.08	1010.2
36.08	1040.5
49.08	1064.3
64.08	1085.8
81.10	1102.3
100.10	1118.0
121.10	1125.3
144.10	1134.4
180.10	1146.3
300.10	1166.1
520.10	1176.8
700.12	1182.3
720.05	1182.4



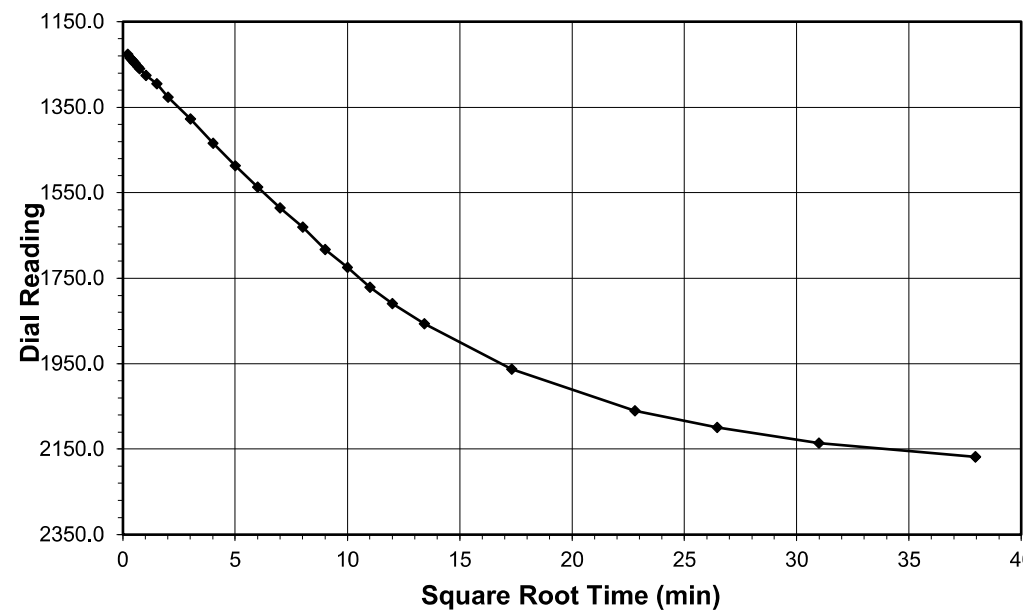
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

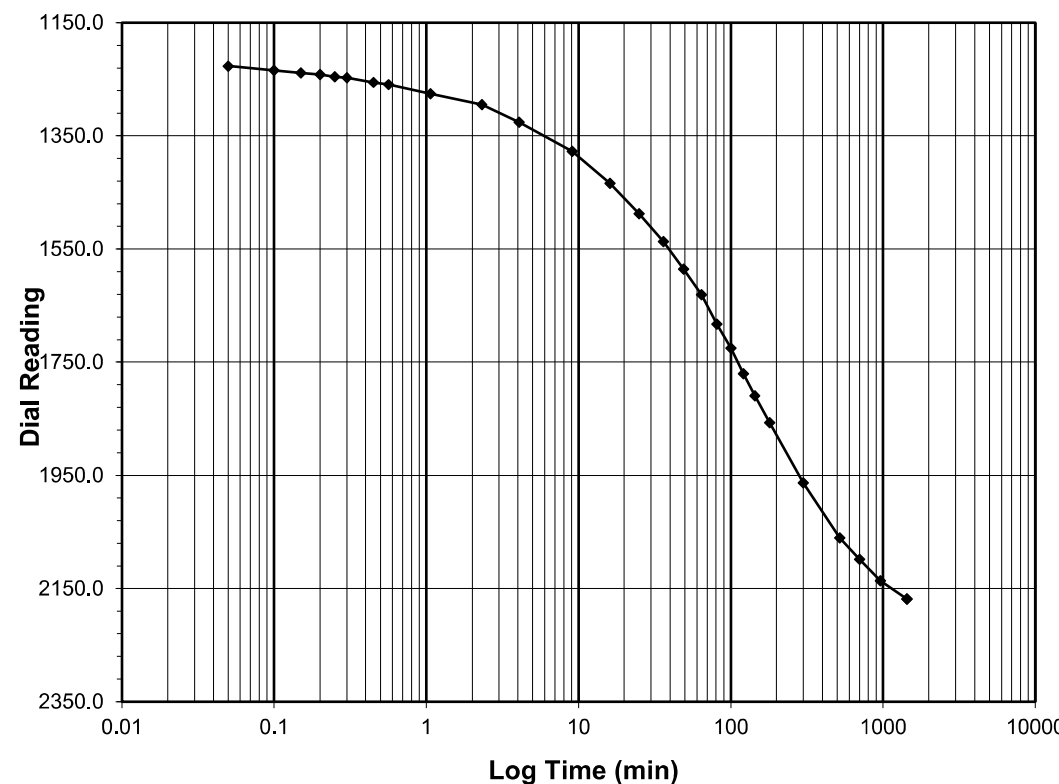
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0-8.0  
 Final Reading (div) 2168.2  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 23:08:57

Elapsed Time (min)	Dial Reading (div)
Initial	1182.4
0.05	1226.5
0.10	1234.2
0.15	1238.4
0.20	1241.4
0.25	1245.6
0.30	1247.1
0.45	1255.6
0.57	1259.5
1.07	1275.6
2.32	1295.3
4.07	1326.1
9.07	1377.5
16.08	1434.0
25.08	1487.2
36.08	1536.9
49.08	1585.6
64.08	1630.6
81.08	1682.5
100.08	1724.8
121.10	1770.9
144.10	1809.7
180.10	1856.7
300.10	1963.3
520.12	2060.4
700.12	2098.7
960.12	2136.2
1440.12	2168.4
1440.38	2168.2



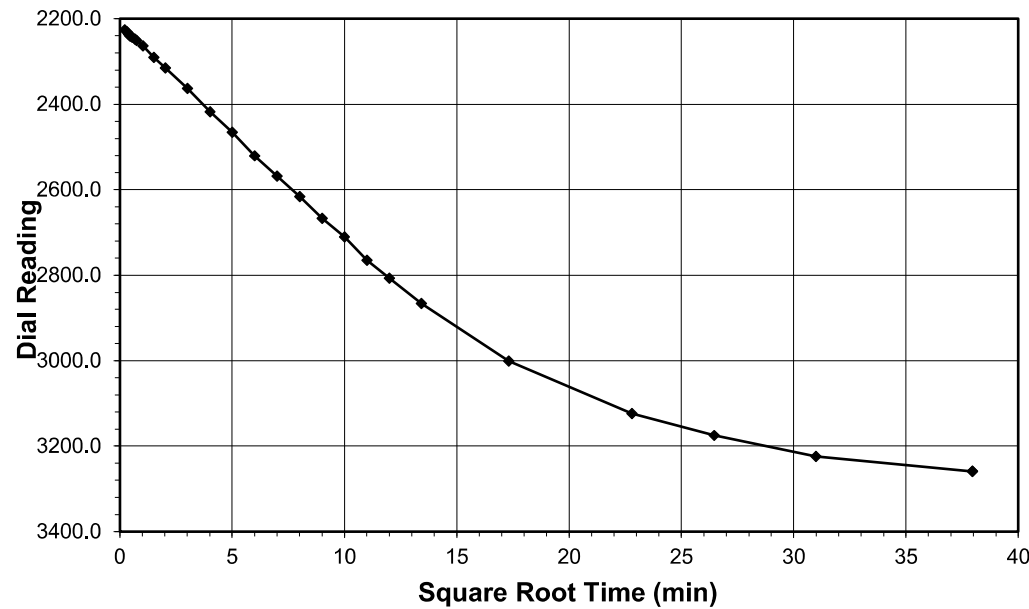
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

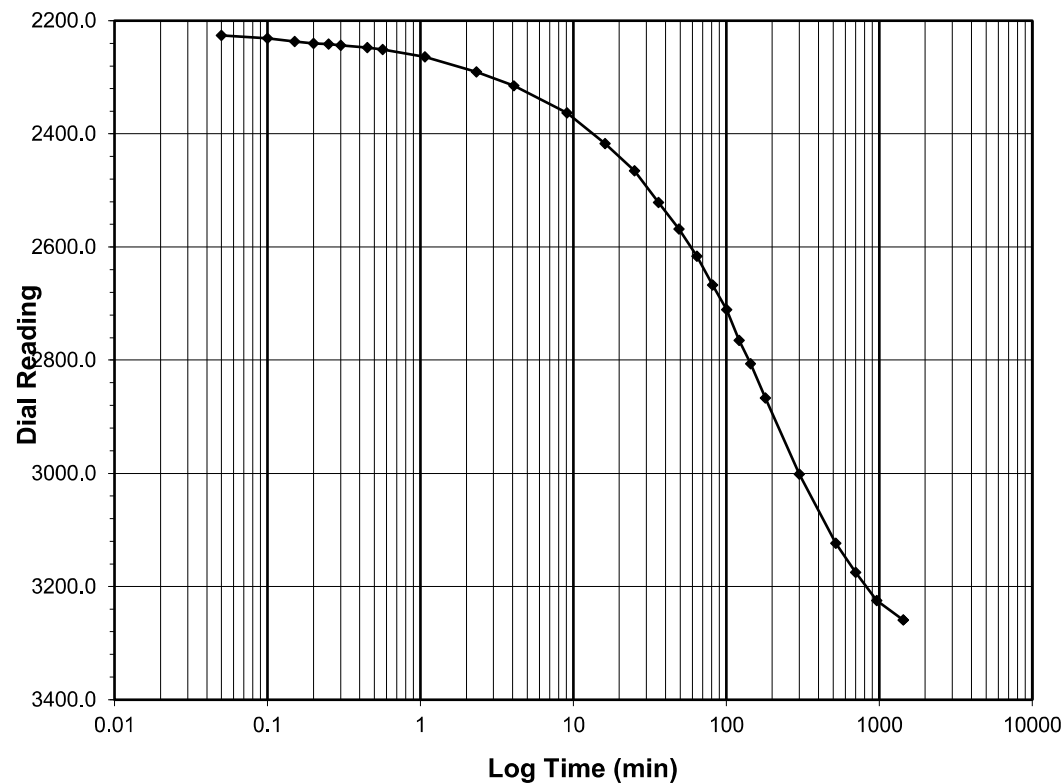
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **8.0-16.0**  
 Final Reading (div) **3259.1**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

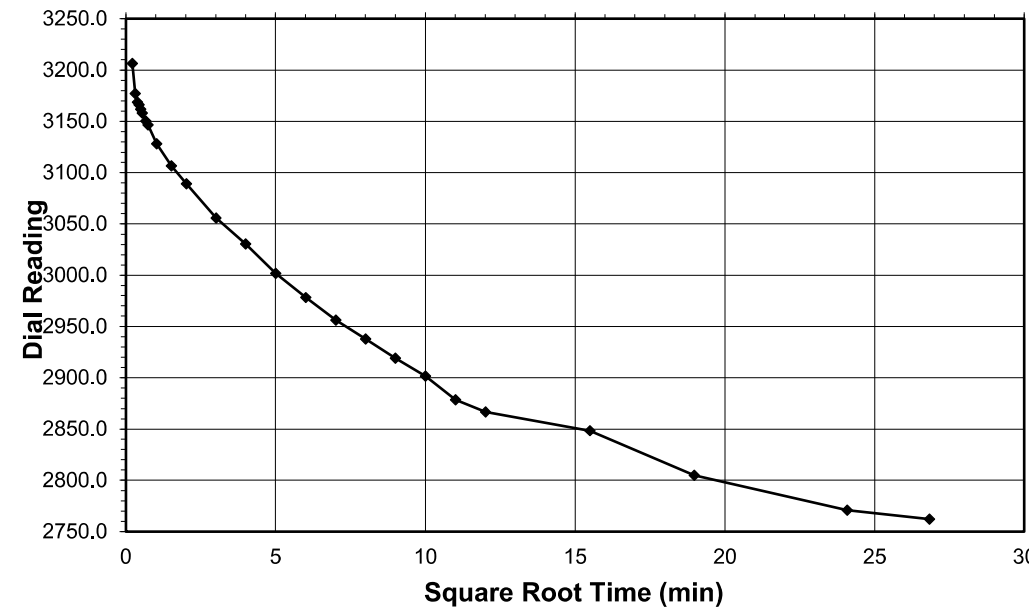
Start Date 3/6/20  
 Start Time 23:09:21

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>2168.2</b>
0.05	2226.1
0.10	2230.9
0.15	2237.0
0.20	2240.1
0.25	2241.5
0.30	2243.6
0.45	2247.7
0.57	2250.8
1.07	2263.7
2.32	2290.6
4.08	2315.2
9.08	2362.8
16.08	2417.5
25.10	2465.2
36.10	2520.9
49.10	2568.6
64.10	2616.6
81.10	2667.0
100.12	2710.7
121.12	2764.8
144.12	2806.6
180.13	2866.9
300.13	3001.0
520.13	3123.7
700.13	3174.8
960.13	3224.7
1440.13	3259.3
1440.25	3259.1



Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

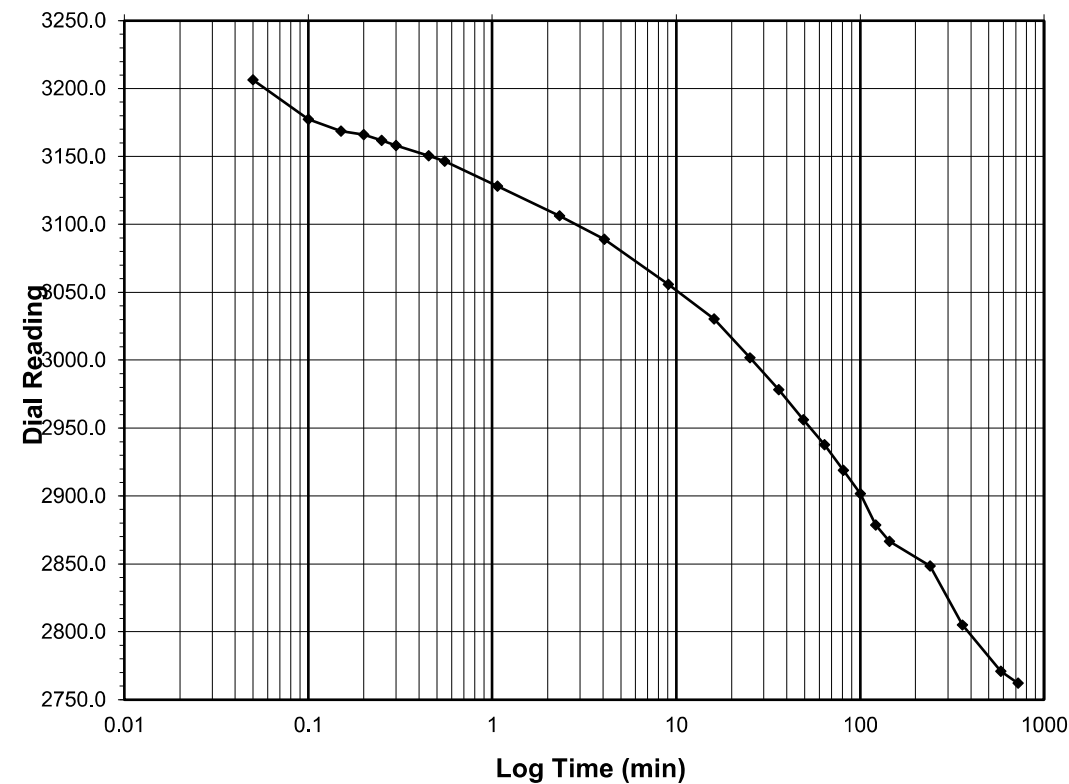
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **16.0-4.0**  
 Final Reading (div) **2762.3**  
 Consolidometer No. **R554**  
 1 Division (in) 0.0001

Start Date 3/7/20  
 Start Time 23:09:36

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>3259.1</b>
0.05	3206.5
0.10	3177.3
0.15	3168.6
0.20	3166.1
0.25	3161.8
0.30	3158.1
0.45	3150.5
0.55	3146.7
1.07	3128.2
2.32	3106.5
4.07	3088.9
9.07	3055.7
16.07	3030.4
25.07	3001.8
36.08	2978.2
49.08	2956.1
64.10	2937.8
81.10	2919.1
100.10	2901.6
121.10	2878.5
144.10	2866.6
240.12	2848.4
360.12	2804.9
580.12	2771.0
720.40	2762.3



Tested By 129-07-0411 Date 3/6/20 Checked By GEM Date 3/13/20

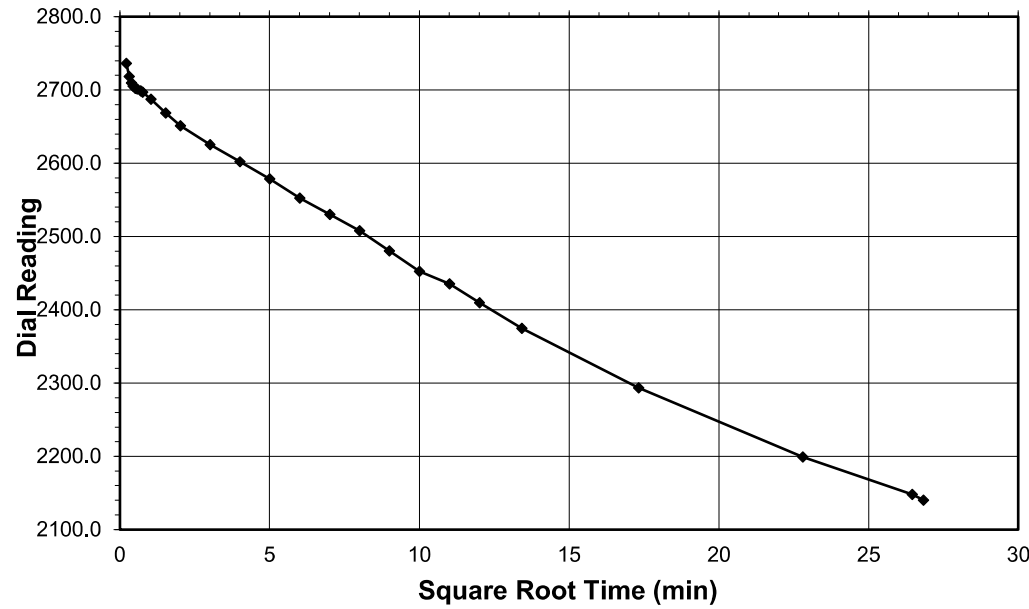
Tested By 129-07-0411 Date 3/7/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

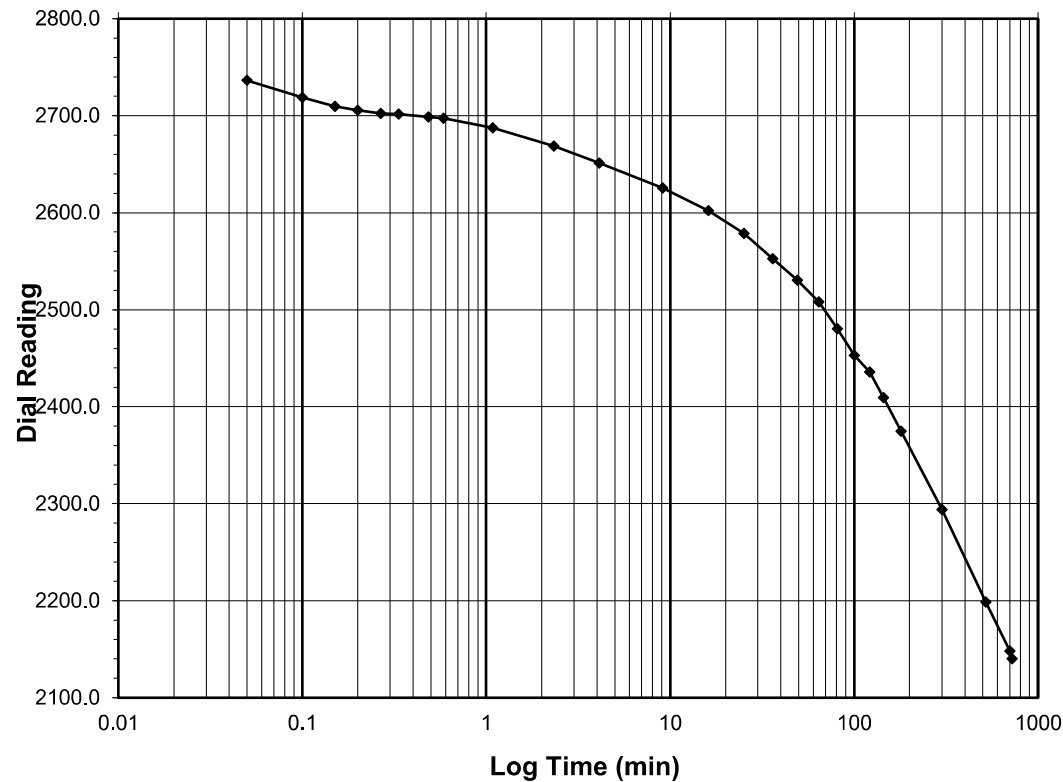
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0-1.0  
 Final Reading (div) 2140.2  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 3/8/20  
 Start Time 11:10:00

Elapsed Time (min)	Dial Reading (div)
Initial	2762.3
0.05	2736.4
0.10	2718.6
0.15	2709.5
0.20	2705.5
0.27	2702.3
0.33	2701.6
0.48	2698.7
0.58	2697.2
1.08	2687.4
2.33	2668.7
4.10	2651.2
9.10	2625.5
16.10	2602.2
25.10	2578.6
36.12	2552.4
49.12	2530.4
64.12	2507.9
81.13	2480.4
100.13	2452.7
121.13	2435.5
144.15	2409.3
180.15	2374.8
300.15	2293.7
520.15	2198.8
700.15	2148.1
720.35	2140.2



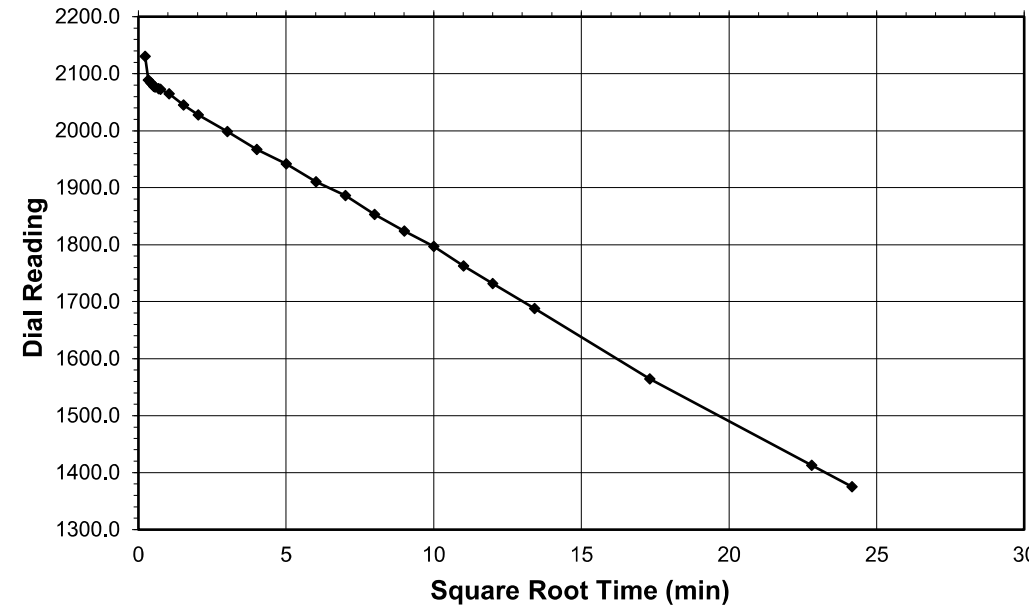
Tested By 129-07-0411 Date 3/8/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1\_4262  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.1  
 Project No. R-2020-024-003 Sample No. ST-3  
 Lab ID R-2020-024-003-052 Visual Description Gray Brown Clay with Sand

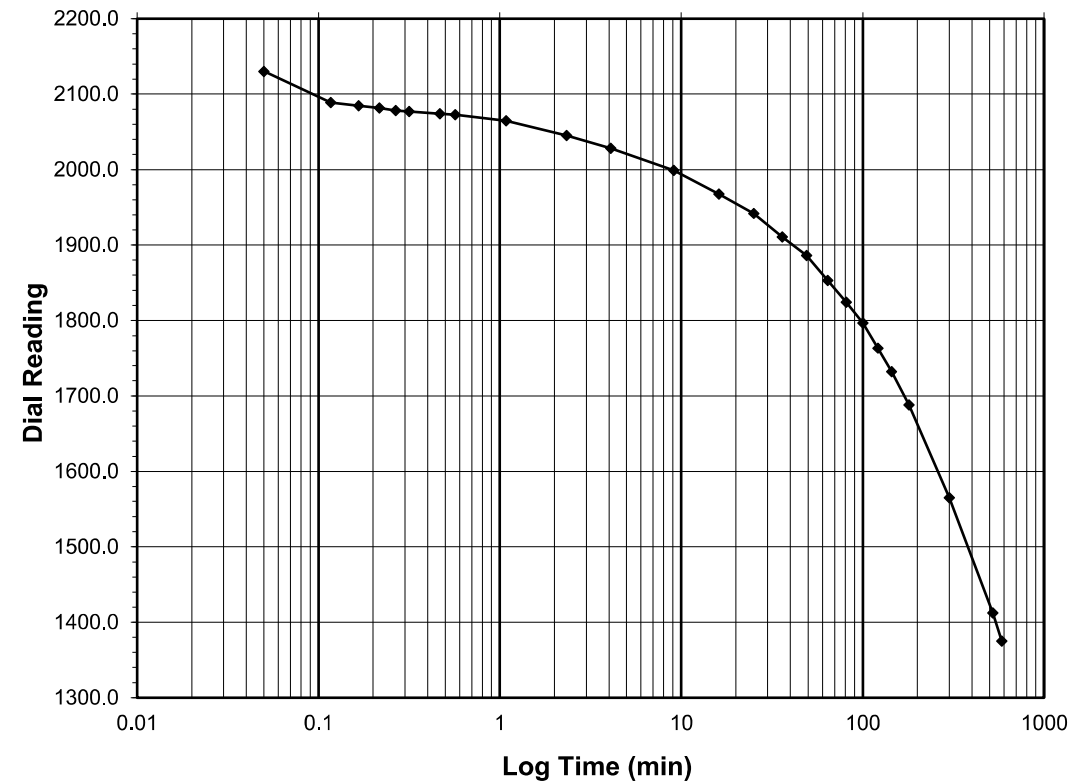
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-0.05  
 Final Reading (div) 1375.1  
 Consolidometer No. R554  
 1 Division (in) 0.0001

Start Date 3/8/20  
 Start Time 23:10:21

Elapsed Time (min)	Dial Reading (div)
Initial	2140.2
0.05	2130.2
0.12	2088.7
0.17	2084.6
0.22	2081.5
0.27	2078.1
0.32	2076.9
0.47	2073.9
0.57	2072.7
1.08	2064.7
2.33	2045.2
4.08	2028.0
9.08	1998.9
16.08	1967.6
25.08	1941.8
36.10	1910.5
49.10	1886.1
64.10	1852.9
81.10	1824.0
100.12	1796.9
121.12	1763.2
144.12	1731.9
180.12	1687.9
300.13	1564.7
520.13	1412.7
583.87	1375.1



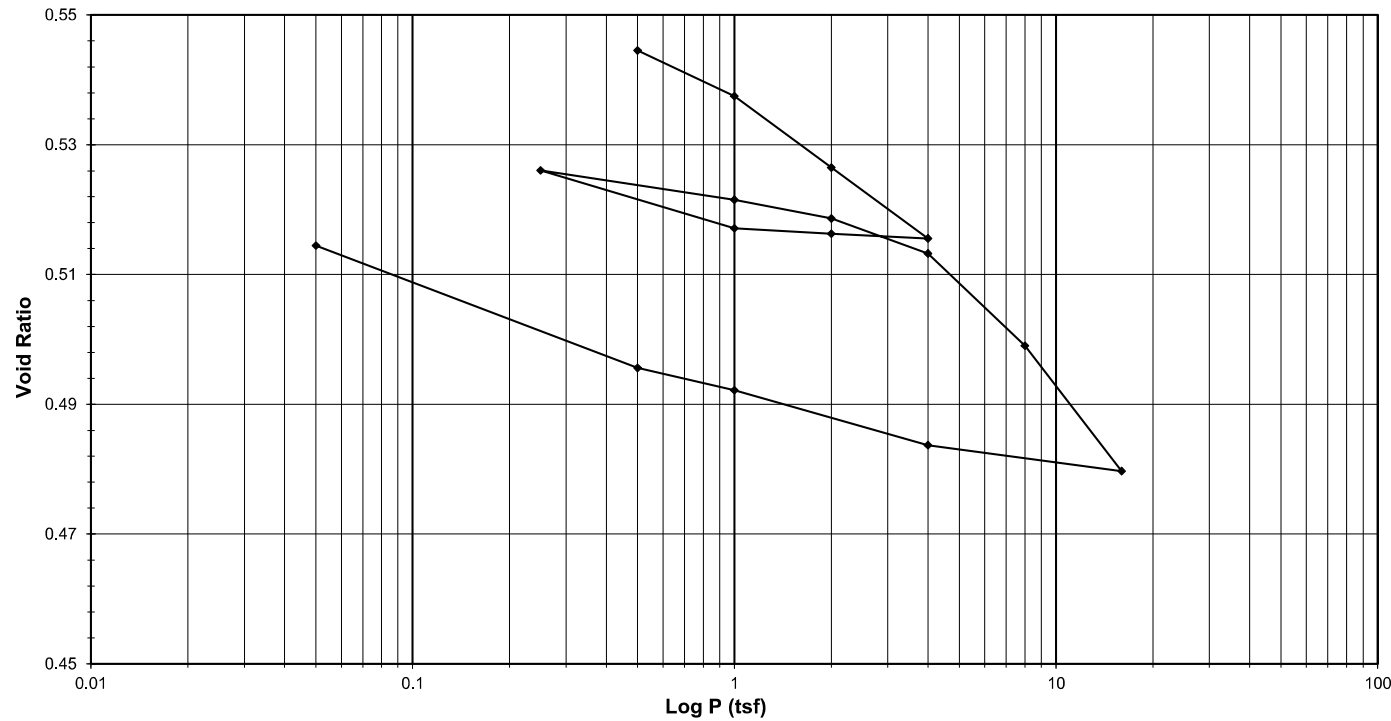
Tested By 129-07-0411 Date 3/8/20 Checked By GEM Date 3/13/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 3/2/20 Approved By MPS Date 3/17/20

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R491  
 1 Division = 0.0001 (in.)

**Sample Properties**

	Initial	Final
<i>Water Content</i>		
Tare Number	SS-4	908
Wt. Tare & WS (g)	352.12	267.12
Wt. Tare & DS (g)	313.57	244.14
Wt. Water (g)	38.55	22.98
Wt. Tare (g)	99.55	102.34
Wt. DS (g)	214.02	141.80
Water Content (%)	18.01	16.21

<i>Sample Parameters</i>		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9744
Sample Volume (cc)	80.44	78.38
Wt. Wet Sample + Ring (g)	377.25	374.74
Wt. of Ring (g)	213.57	213.57
Wt. of Wet Sample (g)	163.68	161.17
Wet Density (pcf)	126.97	128.32
Wet Density (g/cc)	2.03	2.06
Water Content (%)	18.01	16.21
Wt. of Dry Sample (g)	138.70	138.70
Dry Density (pcf)	107.59	110.42
Dry Density (g/cc)	1.72	1.77
Void Ratio	0.5543	0.5145
Saturation (%)	87.09	84.42
Specific Gravity	2.68	Assumed

**Test Data Summary**

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cc)	Dry Density (g/cc)	Void Ratio
Seating	0	0	0	25.400	80.440	1.72424	<b>0.55431</b>
0.5	105.8	42.9	62.9	25.240	79.934	1.73516	<b>0.54453</b>
1	179.5	71.5	108.0	25.126	79.571	1.74307	<b>0.53752</b>
2	266.8	87.7	179.1	24.945	78.999	1.75568	<b>0.52647</b>
4	371.3	121.9	249.4	24.767	78.434	1.76833	<b>0.51555</b>
2	353.0	108.3	244.7	24.779	78.472	1.76748	<b>0.51628</b>
1	328.8	89.6	239.2	24.792	78.516	1.76649	<b>0.51713</b>
0.25	249.4	67.7	181.7	24.939	78.978	1.75614	<b>0.52607</b>
1	289.7	78.8	211.0	24.864	78.743	1.76140	<b>0.52152</b>
2	322.6	93.0	229.6	24.817	78.593	1.76475	<b>0.51863</b>
4	386.6	122.5	264.1	24.729	78.315	1.77101	<b>0.51326</b>
8	512.6	156.8	355.8	24.496	77.578	1.78784	<b>0.49901</b>
16	698.6	218.7	479.9	24.181	76.579	1.81116	<b>0.47972</b>
4	608.1	153.8	454.3	24.246	76.785	1.80630	<b>0.48370</b>
1	509.4	109.7	399.7	24.385	77.225	1.79602	<b>0.49219</b>
0.5	465.0	87.2	377.8	24.440	77.401	1.79193	<b>0.49559</b>
0.05	304.1	47.7	256.4	24.749	78.377	1.76961	<b>0.51446</b>

Tested By 129-07-0411 Date 3/2/20 Input Checked By GEM Date 3/17/20

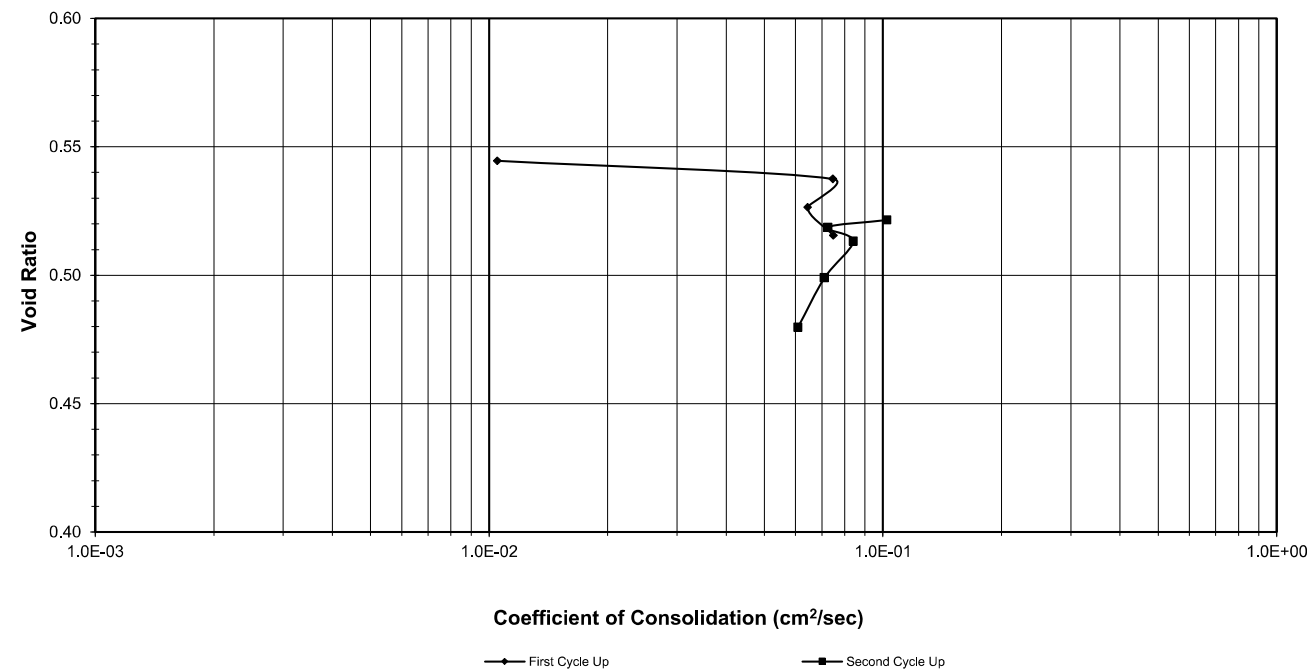




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 3/2/20 Input Checked By GEM Date 3/17/20

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R491  
 1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
Water Content		
Tare Number	SS-4	908
Wt. Tare & WS (g)	352.12	267.12
Wt. Tare & DS (g)	313.57	244.14
Wt. Water (g)	38.55	22.98
Wt. Tare (g)	99.55	102.34
Wt. DS (g)	214.02	141.80
Water Content (%)	18.01	16.21
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.000	0.974
Sample Volume (cc)	80.44	78.38
Wt. Wet Sample + Ring (g)	377.25	374.74
Wt. of Ring (g)	213.57	213.57
Wt. of Wet Sample (g)	163.68	161.17
Wet Density (pcf)	126.97	128.32
Wet Density (g/cc)	2.03	2.06
Water Content (%)	18.01	16.21
Wt. of Dry Sample (g)	138.70	138.70
Dry Density (pcf)	107.59	110.42
Dry Density (g/cc)	1.72	1.77
Void Ratio	0.5543	0.5145
Saturation (%)	87.09	84.42
Specific Gravity	2.68	Assumed

Load Increment (tsf)	Dial Reading @ t <sub>50</sub> (div)	Machine Deflection (div)	C <sub>v</sub> Test Data Summary		Time t <sub>50</sub> (min.)	C <sub>v</sub> (cm <sup>2</sup> /sec)
			Corrected Dial Reading @ t <sub>50</sub> (div)	Sample Height @ t <sub>50</sub> (cm)		
0.0 - 0.5	88.2	42.9	45.3	2.528	0.50	0.01050
0.5 - 1.0	142.4	71.5	70.9	2.522	0.07	0.07458
1.0 - 2.0	221.9	87.7	134.1	2.506	0.08	0.06443
2.0 - 4.0	322.9	121.9	200.9	2.489	0.07	0.07478
4.0 - 2.0	NA	108.3	NA	NA	NA	NA
2.0 - 1.0	NA	89.6	NA	NA	NA	NA
1.0 - 0.25	NA	67.7	NA	NA	NA	NA
0.25 - 1.0	249.6	78.8	170.8	2.497	0.05	0.10233
1.0 - 2.0	309.2	93.0	216.2	2.485	0.07	0.07242
2.0 - 4.0	361.9	122.5	239.4	2.479	0.06	0.08409
4.0 - 8.0	466.1	156.8	309.2	2.461	0.07	0.07105
8.0 - 16.0	627.1	218.7	408.4	2.436	0.08	0.06090
16.0 - 4.0	NA	153.8	NA	NA	NA	NA
4.0 - 1.0	NA	109.7	NA	NA	NA	NA
1.0 - 0.5	NA	87.2	NA	NA	NA	NA
1.0 - 0.05	NA	47.7	NA	NA	NA	NA

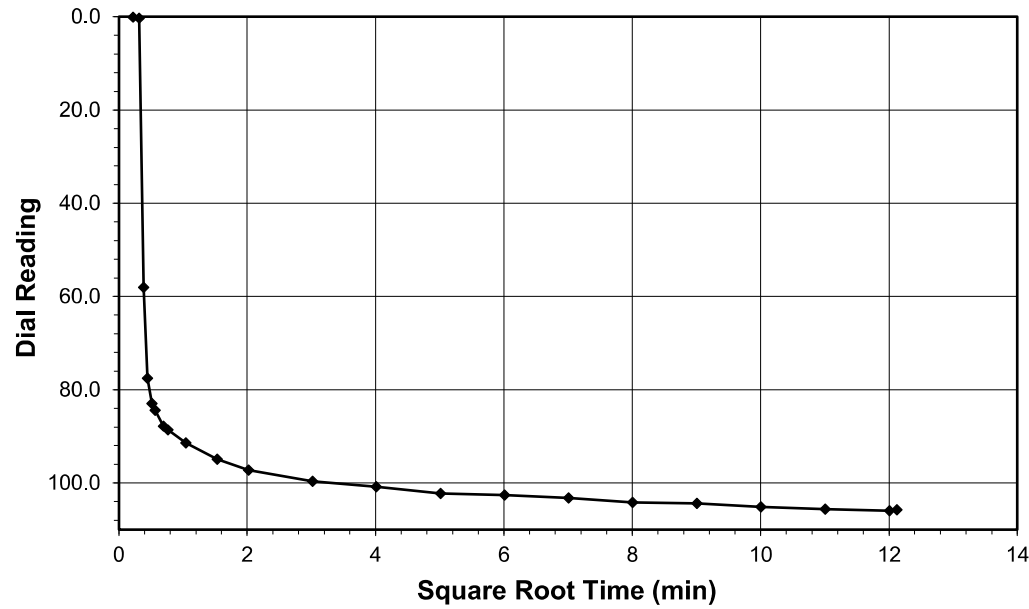
Tested By 129-07-0411 Date 3/2/20 Input Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

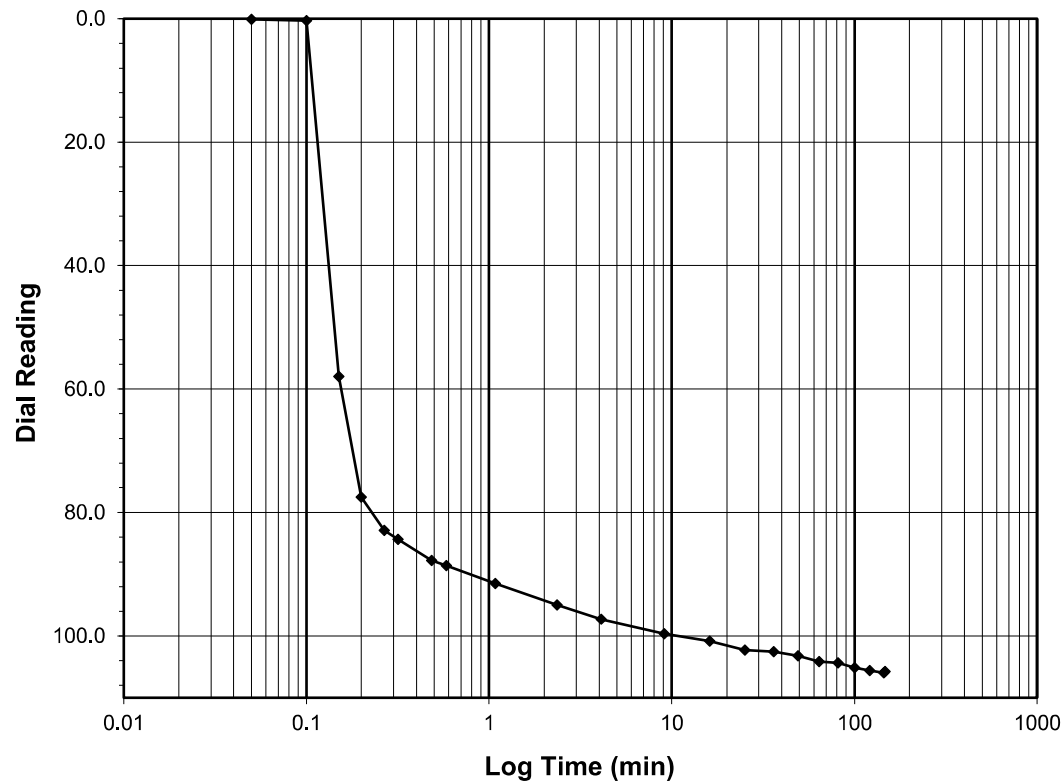
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.05-0.5**  
 Final Reading (div) **105.8**  
 Consolidometer No. **R491**  
 1 Division (in) 0.0001

Start Date 3/2/20  
 Start Time 14:03:23

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>0.0</b>
0.05	0.1
0.10	0.3
0.15	58.0
0.20	77.5
0.27	82.9
0.32	84.4
0.48	87.8
0.58	88.6
1.08	91.5
2.35	95.0
4.10	97.3
9.10	99.7
16.10	100.8
25.10	102.3
36.12	102.6
49.12	103.2
64.13	104.2
81.13	104.4
100.13	105.1
121.13	105.6
144.13	105.9
147.02	105.8



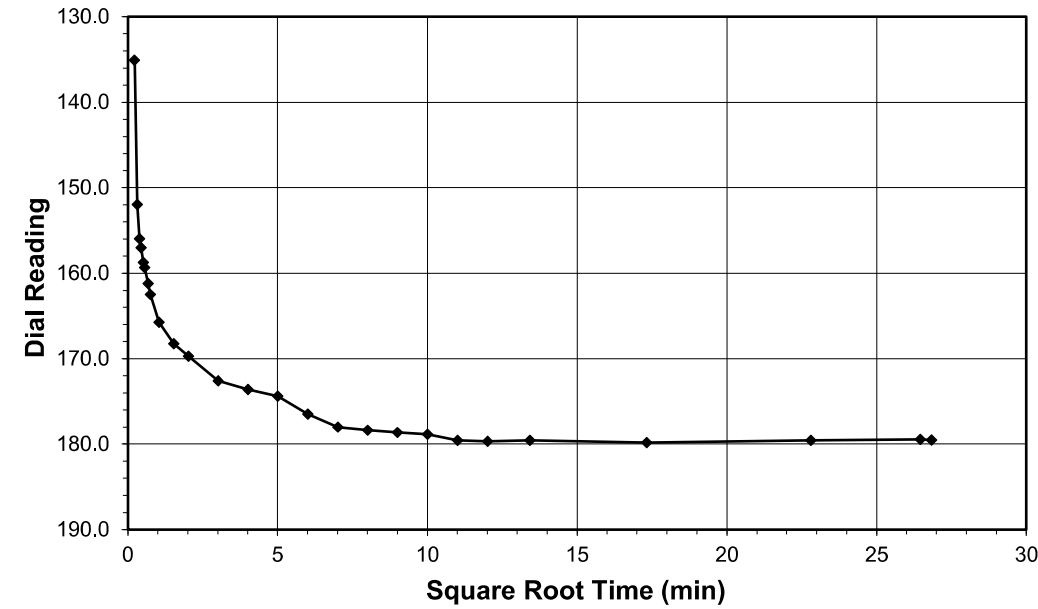
Tested By 129-07-0411 Date 3/2/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

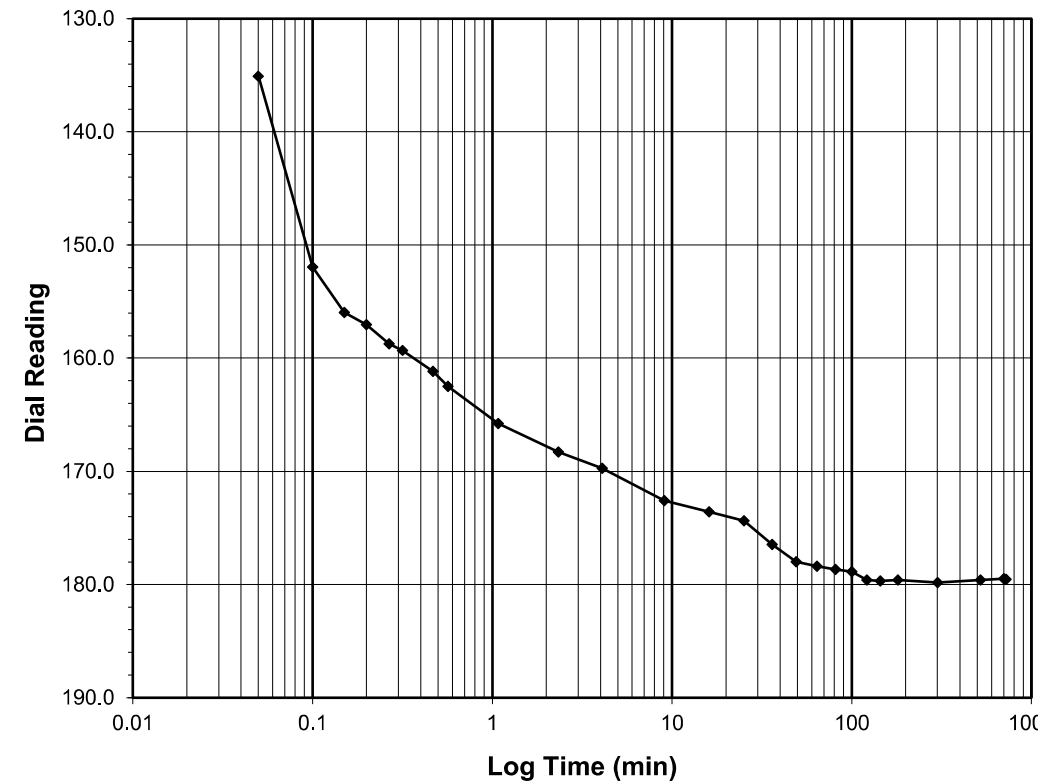
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.5-1.0**  
 Final Reading (div) **179.5**  
 Consolidometer No. **R491**  
 1 Division (in) 0.0001

Start Date 3/2/20  
 Start Time 16:30:25

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>105.8</b>
0.05	135.1
0.10	152.0
0.15	156.0
0.20	157.0
0.27	158.7
0.32	159.3
0.47	161.2
0.57	162.5
1.08	165.8
2.33	168.3
4.08	169.7
9.08	172.6
16.10	173.6
25.10	174.4
36.10	176.5
49.12	178.0
64.12	178.4
81.13	178.6
100.13	178.9
121.13	179.6
144.13	179.7
180.13	179.6
300.15	179.8
520.15	179.6
700.15	179.5
720.08	179.5



Tested By 129-07-0411 Date 3/2/20 Checked By GEM Date 3/17/20

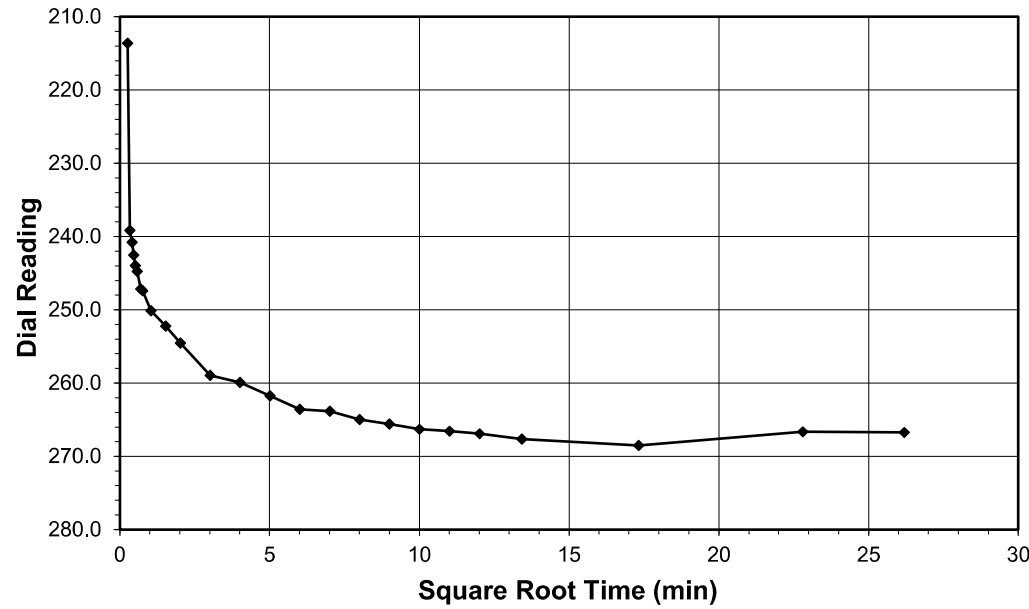




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

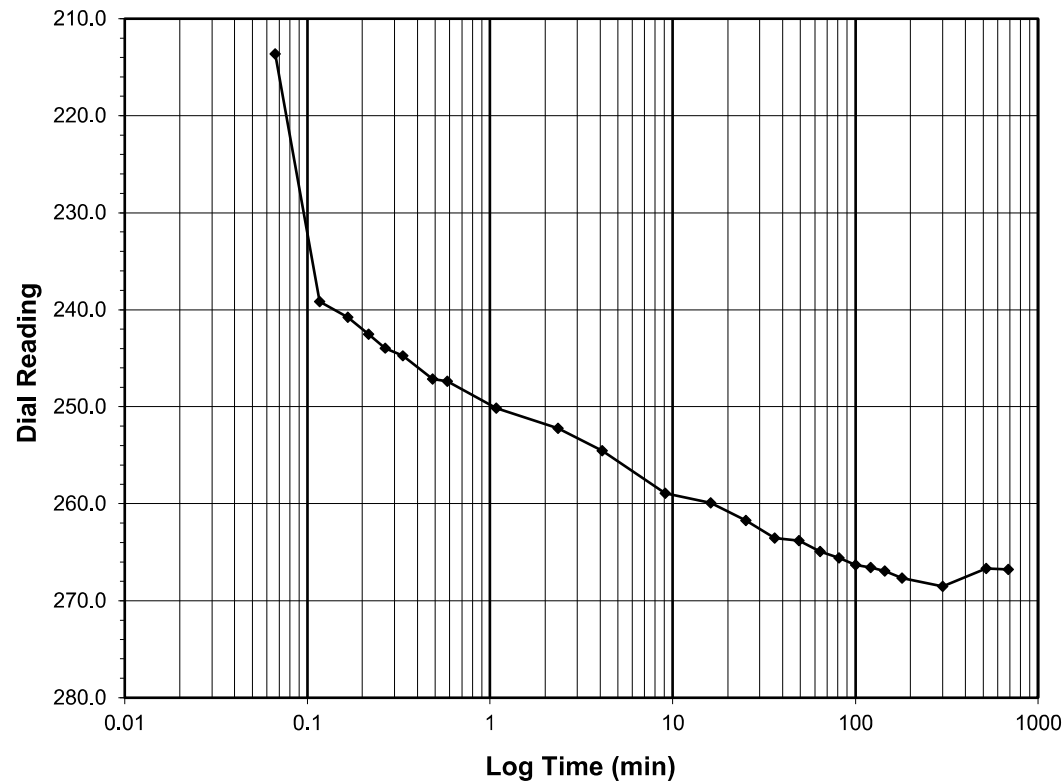
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-2.0  
 Final Reading (div) 266.8  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/3/20  
 Start Time 4:30:31

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>179.5</b>
0.07	213.6
0.12	239.2
0.17	240.8
0.22	242.5
0.27	244.0
0.33	244.7
0.48	247.1
0.58	247.4
1.08	250.2
2.35	252.2
4.10	254.5
9.10	258.9
16.12	259.9
25.12	261.8
36.12	263.6
49.12	263.8
64.12	264.9
81.12	265.6
100.12	266.3
121.13	266.6
144.13	266.9
180.15	267.7
300.15	268.5
520.15	266.7
685.93	266.8



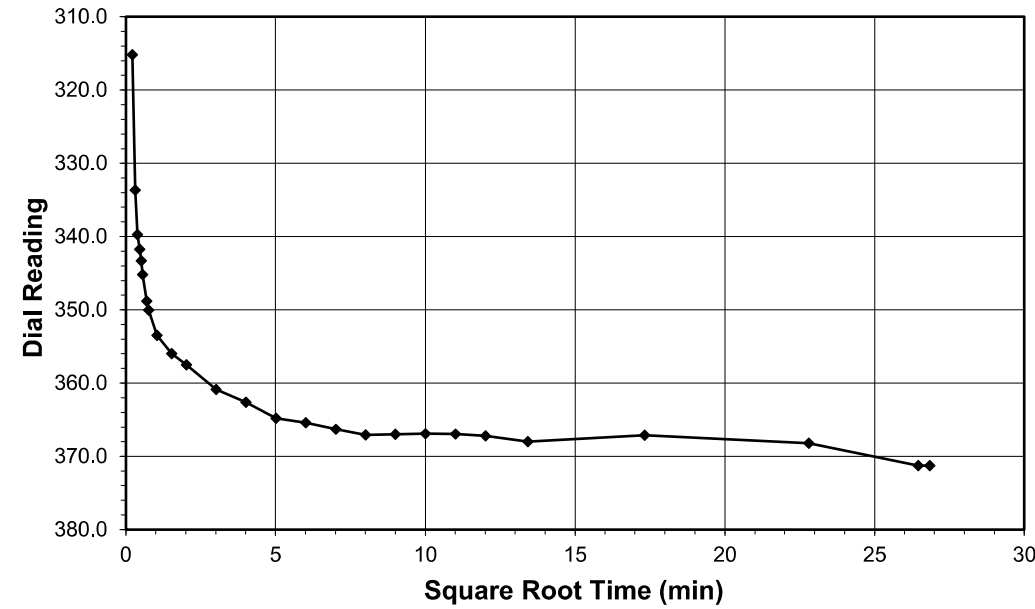
Tested By 129-07-0411 Date 3/3/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

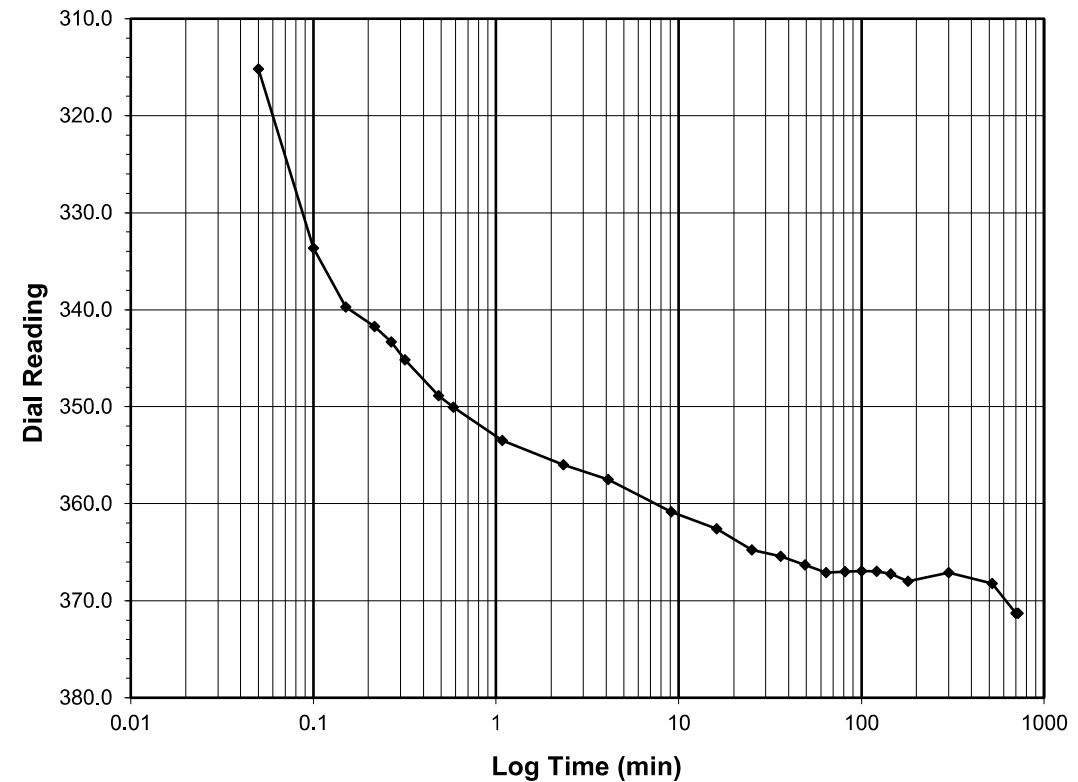
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 371.3  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/3/20  
 Start Time 15:56:26

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>266.8</b>
0.05	315.2
0.10	333.7
0.15	339.7
0.22	341.7
0.27	343.3
0.32	345.2
0.48	348.9
0.58	350.1
1.08	353.5
2.33	356.0
4.10	357.5
9.10	360.8
16.10	362.6
25.12	364.8
36.12	365.4
49.12	366.3
64.12	367.1
81.12	367.0
100.12	366.9
121.13	367.0
144.13	367.2
180.13	368.0
300.13	367.1
520.15	368.2
700.15	371.3
720.50	371.3



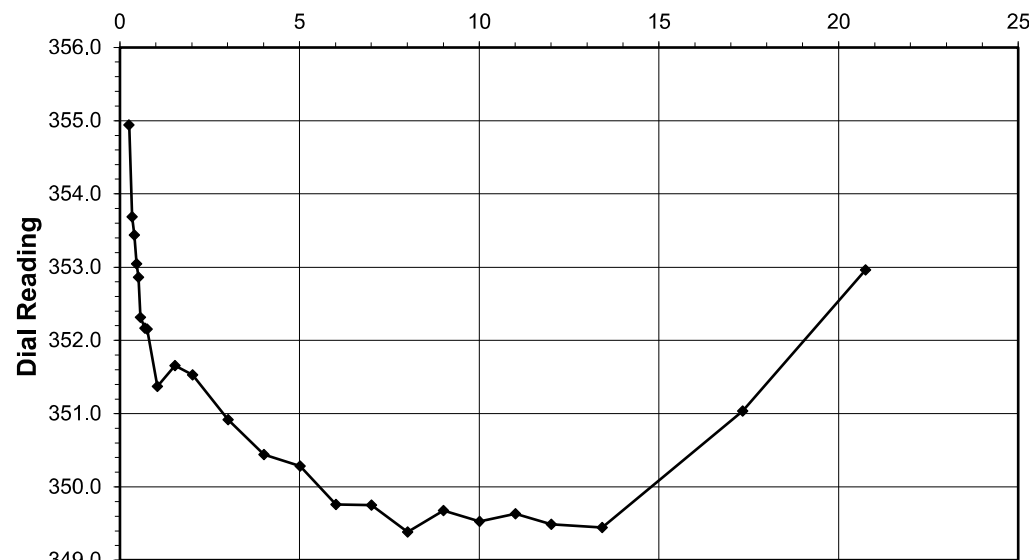
Tested By 129-07-0411 Date 3/3/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder Boring No.: Y1RPA\_2800  
 Client Project: R-5819/R-5820 Depth (ft): 5.0-7.0  
 Project No.: R-2020-024-003 Sample No.: ST-4  
 Lab ID: R-2020-024-003-053 Visual Description: Gray Sandy Clay

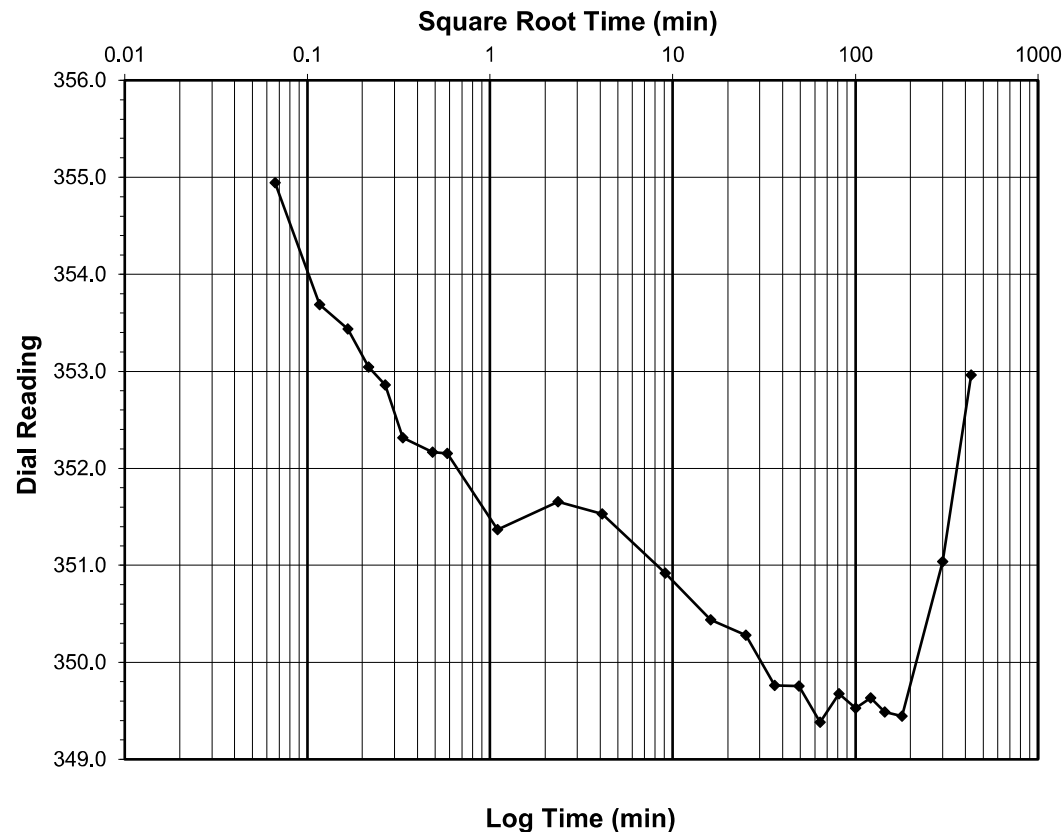
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0-2.0  
 Final Reading (div) 353.0  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 3:56:57

Elapsed Time (min)	Dial Reading (div)
Initial	371.3
0.07	354.9
0.12	353.7
0.17	353.4
0.22	353.0
0.27	352.9
0.33	352.3
0.48	352.2
0.58	352.2
1.10	351.4
2.35	351.7
4.10	351.5
9.10	350.9
16.10	350.4
25.12	350.3
36.12	349.8
49.12	349.8
64.13	349.4
81.13	349.7
100.13	349.5
121.15	349.6
144.15	349.5
180.15	349.4
300.15	351.0
430.33	353.0



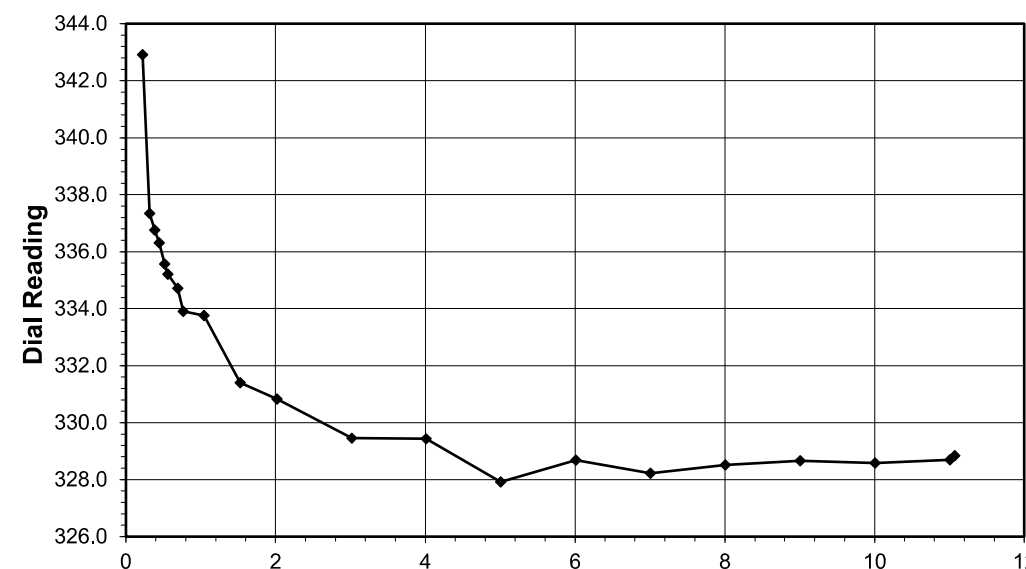
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder Boring No.: Y1RPA\_2800  
 Client Project: R-5819/R-5820 Depth (ft): 5.0-7.0  
 Project No.: R-2020-024-003 Sample No.: ST-4  
 Lab ID: R-2020-024-003-053 Visual Description: Gray Sandy Clay

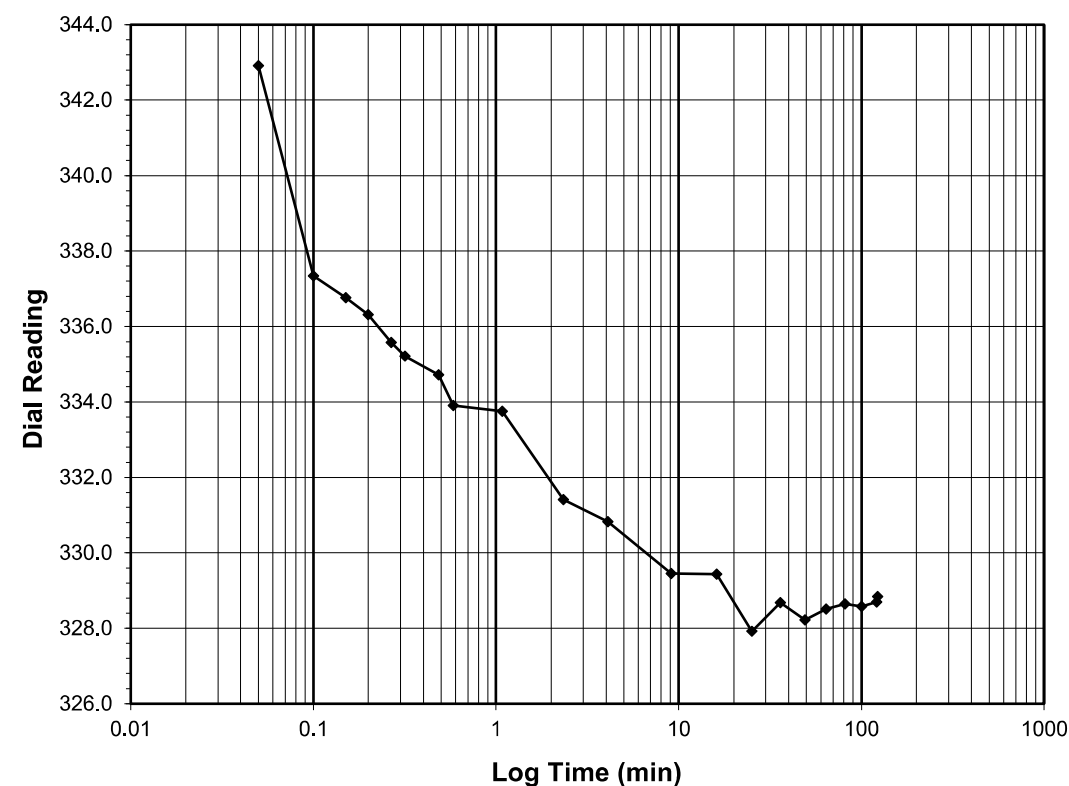
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-1.0  
 Final Reading (div) 328.8  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 11:07:16

Elapsed Time (min)	Dial Reading (div)
Initial	353.0
0.05	342.9
0.10	337.3
0.15	336.8
0.20	336.3
0.27	335.6
0.32	335.2
0.48	334.7
0.58	333.9
1.08	333.8
2.33	331.4
4.08	330.8
9.10	329.5
16.10	329.4
25.10	327.9
36.10	328.7
49.10	328.2
64.10	328.5
81.12	328.7
100.12	328.6
121.12	328.7
122.53	328.8



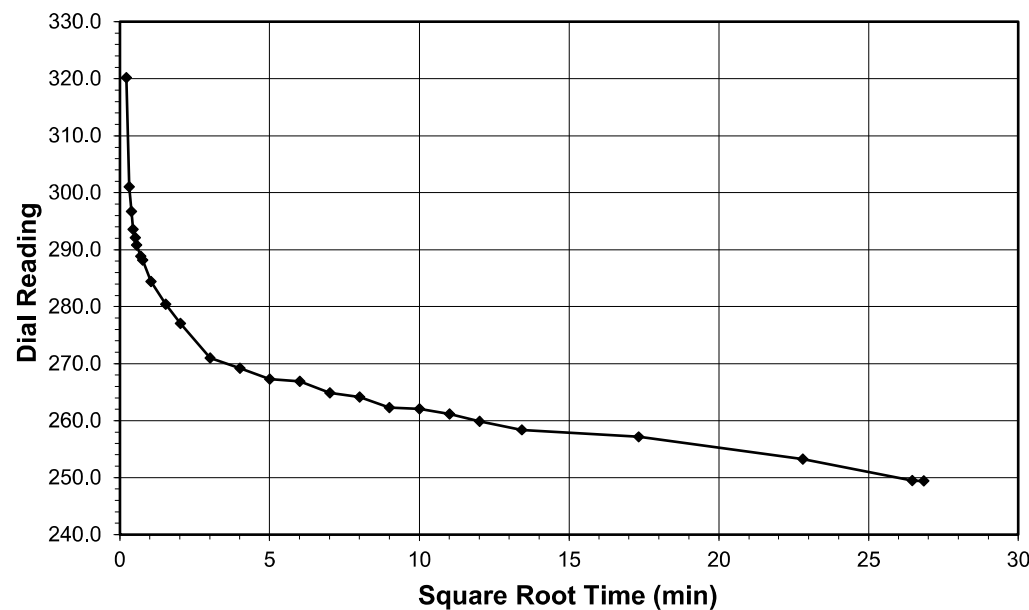
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

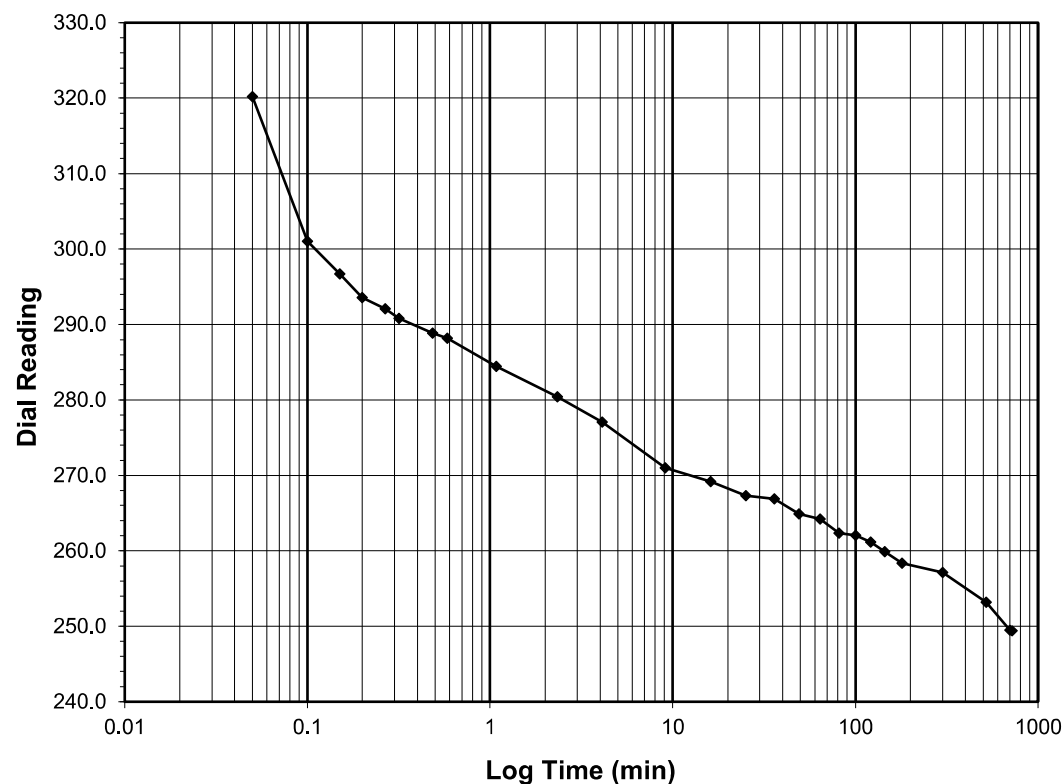
Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-0.25  
 Final Reading (div) 249.4  
 Consolidometer No. R491  
 1 Division (in) 0.0001  
 Start Date 3/4/20  
 Start Time 13:09:48

Elapsed Time (min)	Dial Reading (div)
Initial	328.8
0.05	320.2
0.10	301.0
0.15	296.7
0.20	293.6
0.27	292.1
0.32	290.8
0.48	288.9
0.58	288.2
1.08	284.4
2.33	280.4
4.10	277.1
9.10	271.0
16.10	269.2
25.10	267.3
36.10	266.9
49.10	264.9
64.12	264.2
81.12	262.3
100.12	262.1
121.13	261.2
144.13	259.9
180.13	258.4
300.13	257.2
520.15	253.2
700.15	249.5
720.42	249.4



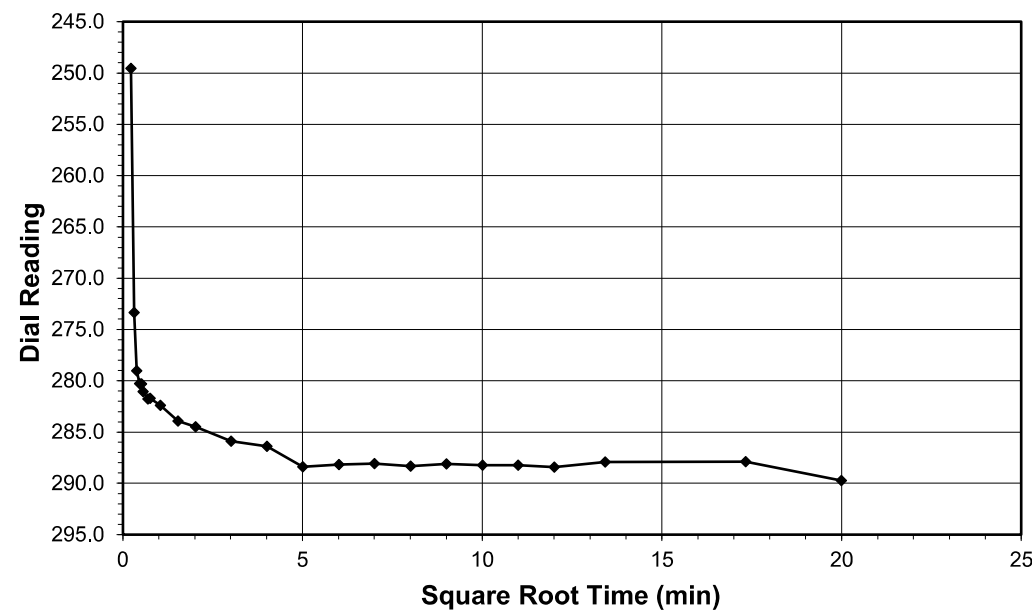
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

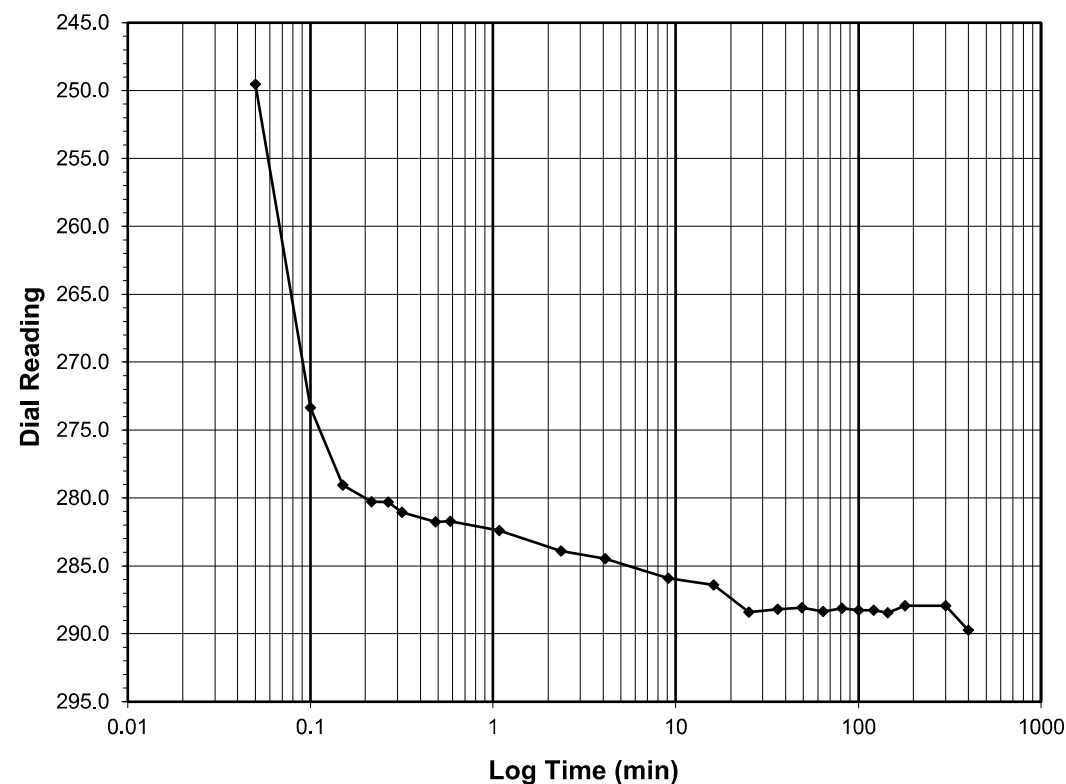
Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-1.0  
 Final Reading (div) 289.7  
 Consolidometer No. R491  
 1 Division (in) 0.0001  
 Start Date 3/5/20  
 Start Time 1:10:13

Elapsed Time (min)	Dial Reading (div)
Initial	249.4
0.05	249.5
0.10	273.3
0.15	279.0
0.22	280.3
0.27	280.3
0.32	281.1
0.48	281.8
0.58	281.7
1.08	282.4
2.35	283.9
4.10	284.5
9.10	285.9
16.10	286.4
25.10	288.4
36.12	288.2
49.12	288.1
64.12	288.3
81.12	288.1
100.12	288.2
121.12	288.2
144.13	288.4
180.13	287.9
300.13	287.9
399.63	289.7



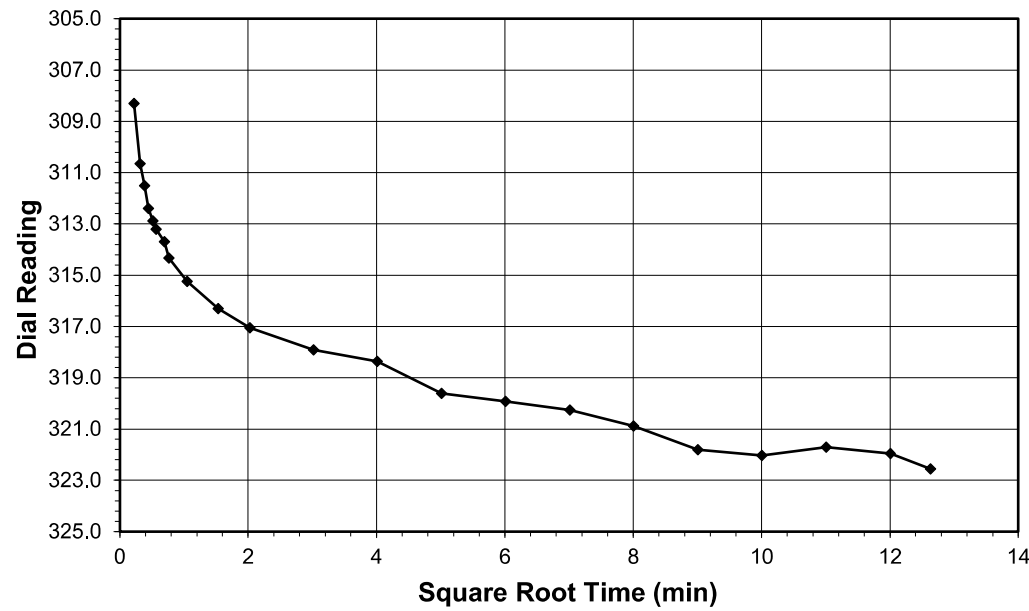
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

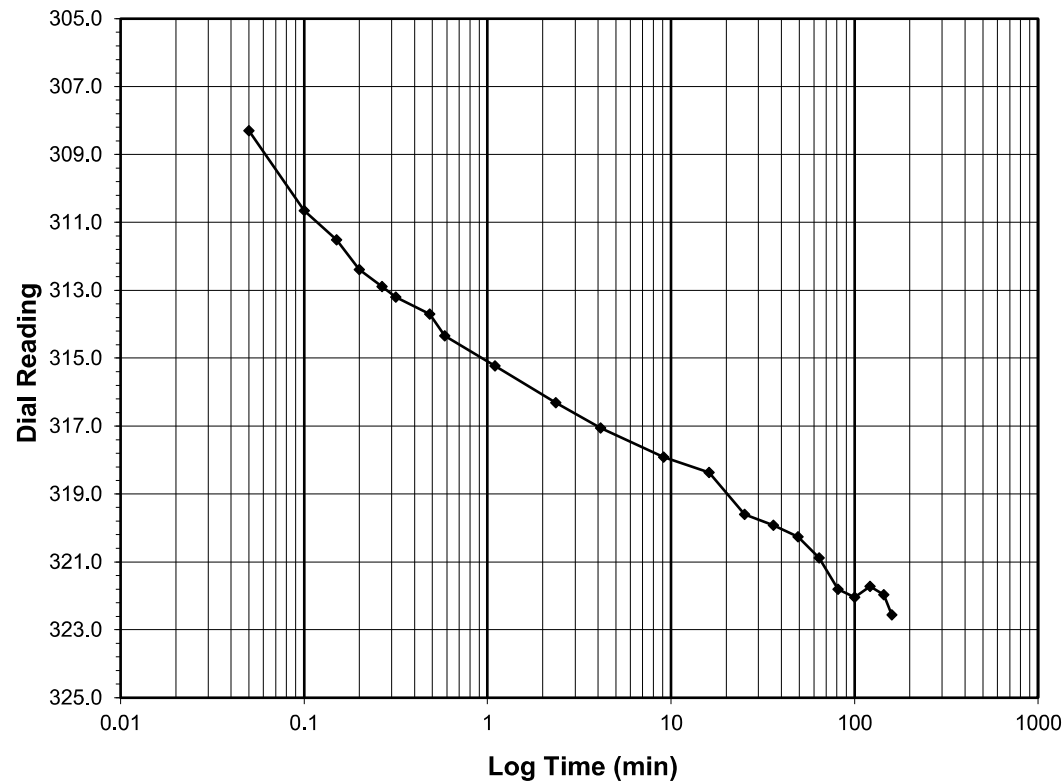
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-2.0  
 Final Reading (div) 322.6  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 7:49:51

Elapsed Time (min)	Dial Reading (div)
Initial	289.7
0.05	308.3
0.10	310.7
0.15	311.5
0.20	312.4
0.27	312.9
0.32	313.2
0.48	313.7
0.58	314.3
1.10	315.2
2.35	316.3
4.12	317.1
9.12	317.9
16.12	318.4
25.12	319.6
36.13	319.9
49.13	320.3
64.13	320.9
81.13	321.8
100.13	322.0
121.13	321.7
144.13	322.0
159.60	322.6



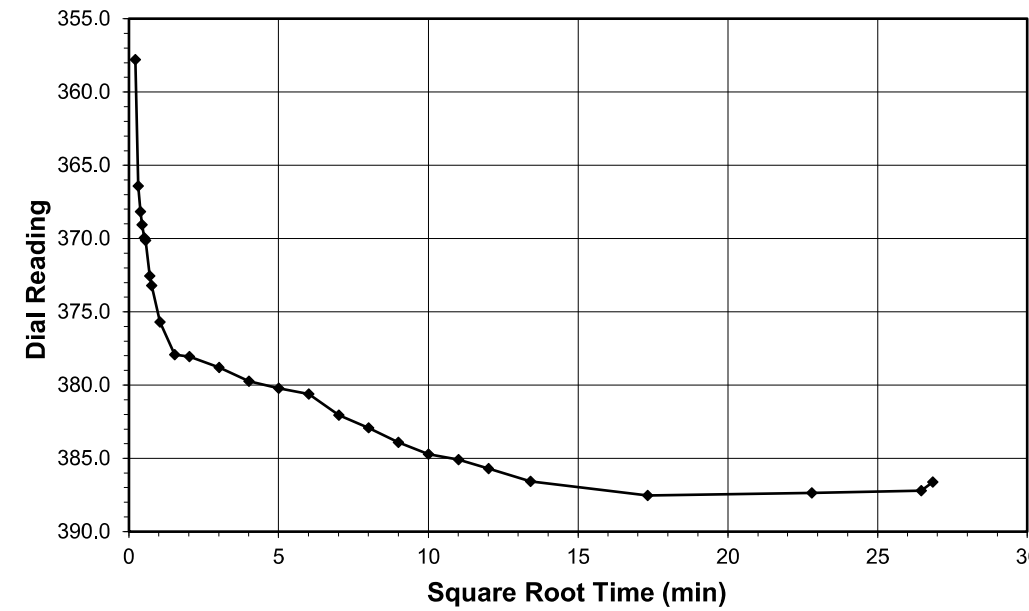
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

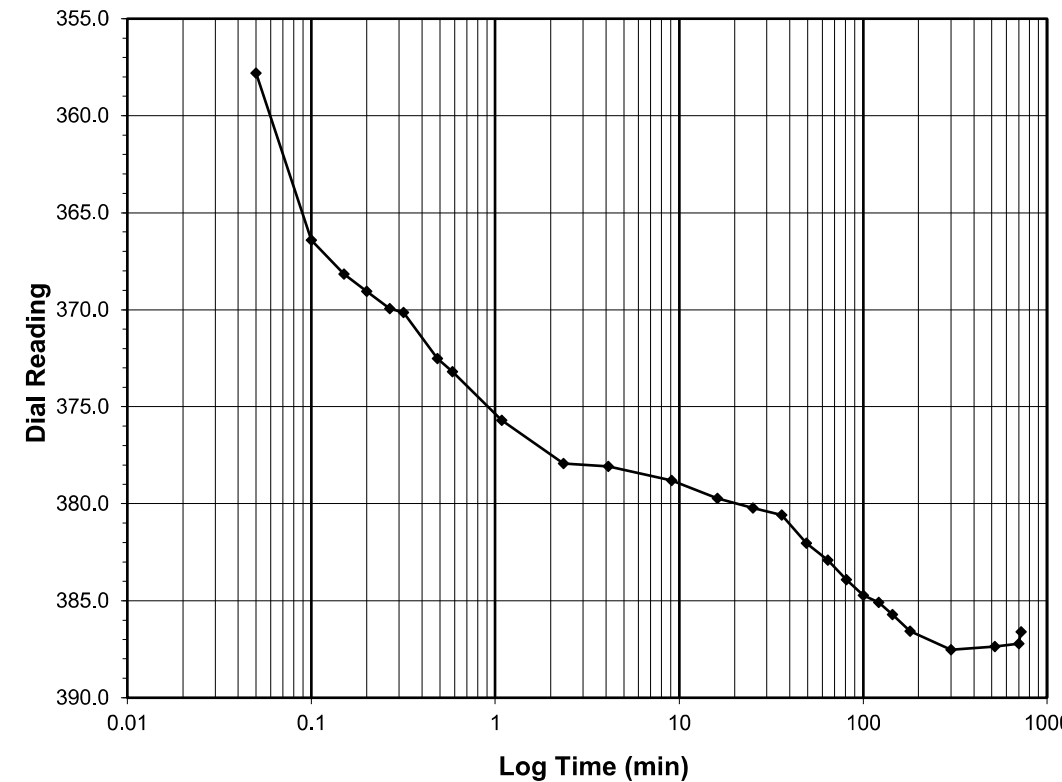
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 386.6  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 10:29:27

Elapsed Time (min)	Dial Reading (div)
Initial	322.6
0.05	357.8
0.10	366.4
0.15	368.2
0.20	369.1
0.27	369.9
0.32	370.1
0.48	372.5
0.58	373.2
1.08	375.7
2.35	377.9
4.10	378.1
9.10	378.8
16.10	379.7
25.10	380.2
36.10	380.6
49.12	382.0
64.12	382.9
81.12	383.9
100.12	384.7
121.12	385.1
144.12	385.7
180.12	386.6
300.13	387.5
520.13	387.4
700.13	387.2
720.43	386.6



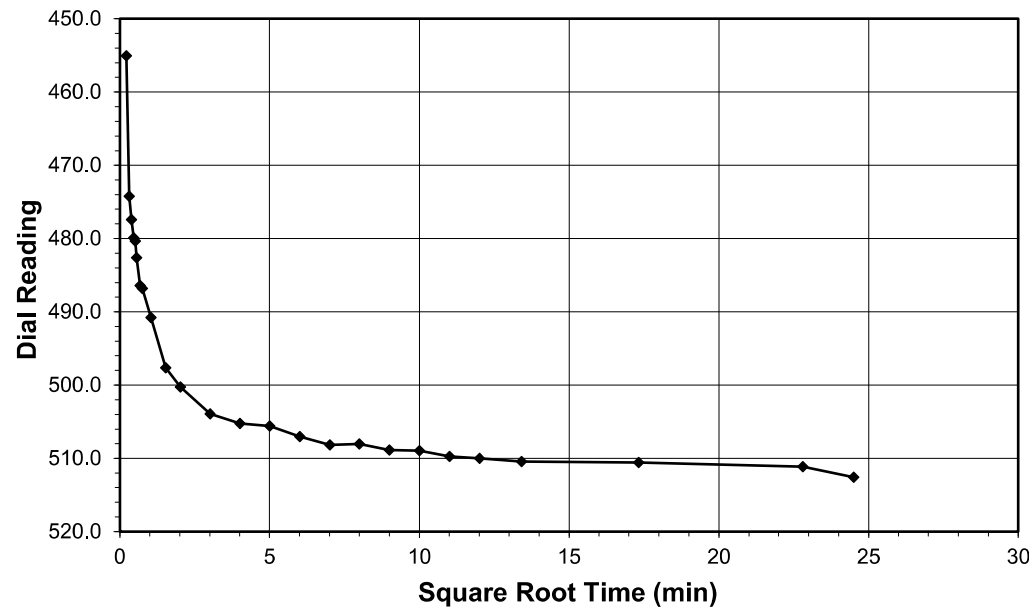
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

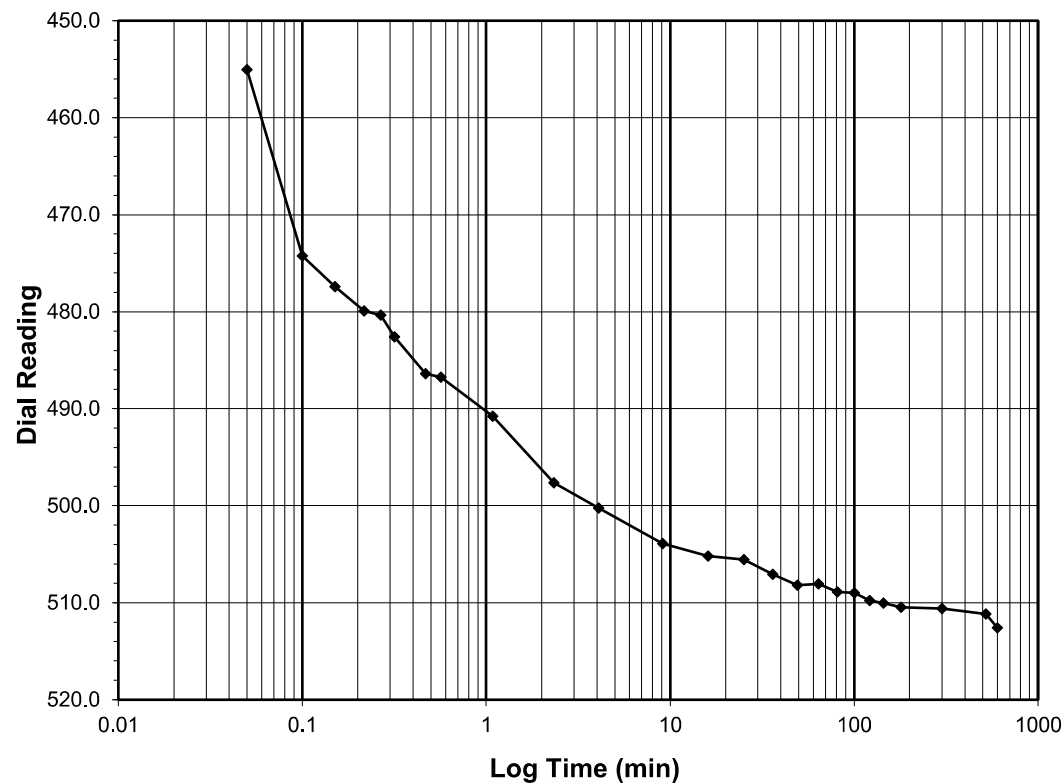
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0-8.0  
 Final Reading (div) 512.6  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 22:29:53

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>386.6</b>
0.05	455.0
0.10	474.3
0.15	477.4
0.22	479.9
0.27	480.3
0.32	482.6
0.47	486.4
0.57	486.8
1.08	490.8
2.33	497.6
4.08	500.2
9.08	503.9
16.08	505.2
25.08	505.6
36.08	507.1
49.08	508.2
64.08	508.0
81.08	508.9
100.10	509.0
121.10	509.8
144.10	510.0
180.10	510.5
300.10	510.6
520.10	511.1
600.20	512.6



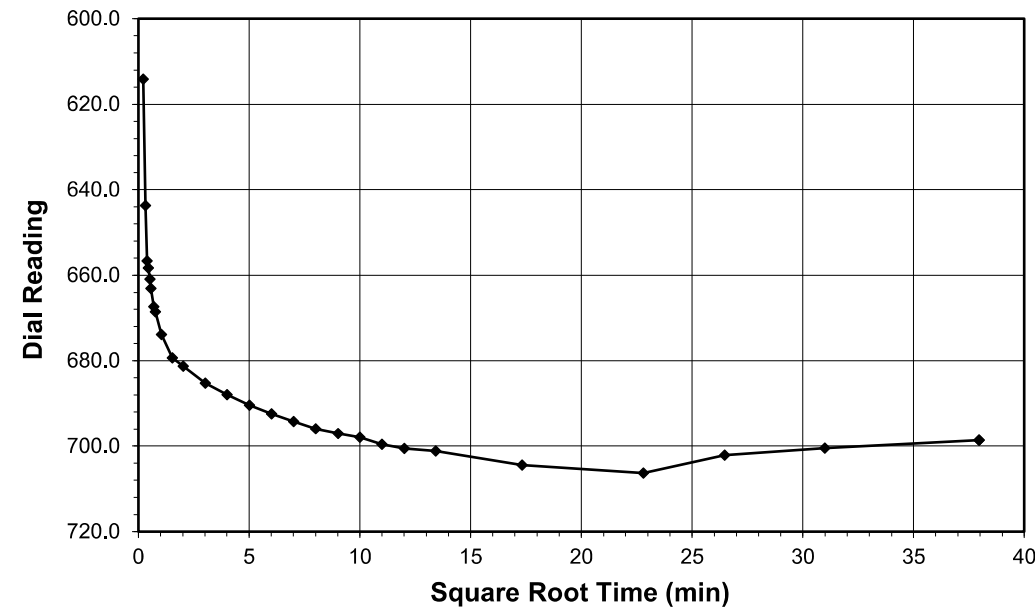
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

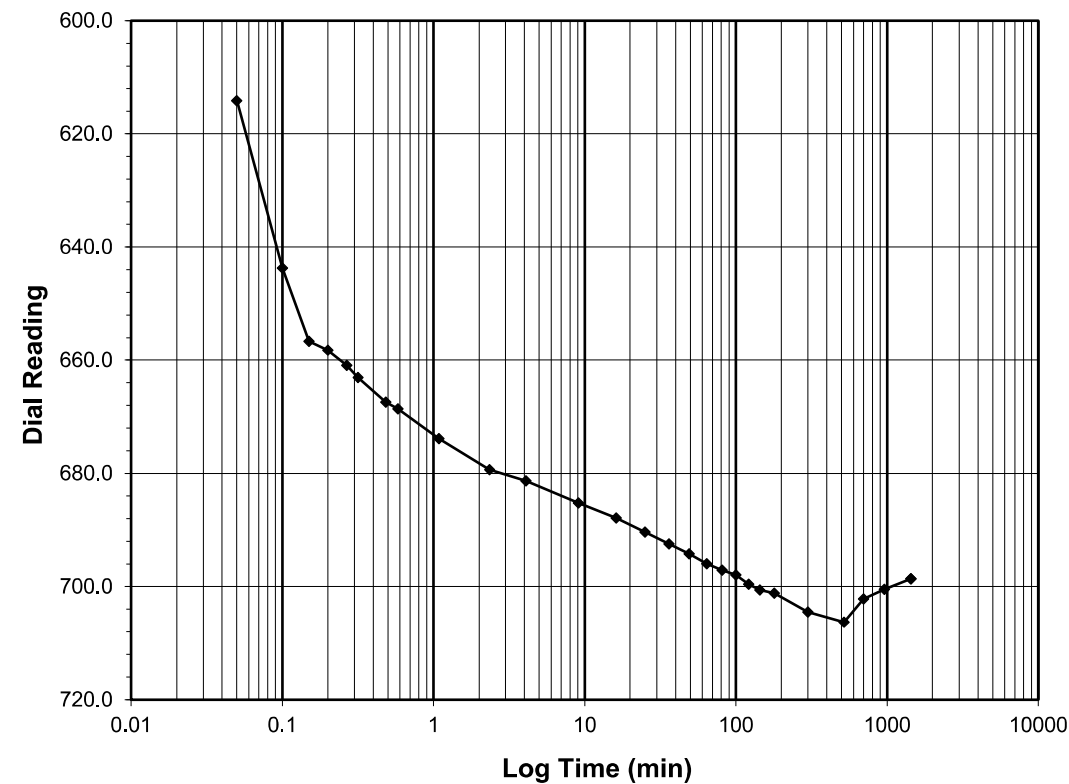
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 8.0-16.0  
 Final Reading (div) 698.6  
 Consolidometer No. R491  
 1 Division (in) 0.0001

Start Date 3/6/20  
 Start Time 8:30:05

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>512.6</b>
0.05	614.2
0.10	643.7
0.15	656.7
0.20	658.3
0.27	660.9
0.32	663.1
0.48	667.4
0.58	668.6
1.08	673.9
2.35	679.3
4.10	681.3
9.10	685.3
16.12	687.9
25.12	690.4
36.12	692.4
49.12	694.2
64.12	696.0
81.12	697.1
100.12	698.0
121.12	699.6
144.13	700.6
180.13	701.1
300.13	704.5
520.13	706.3
700.13	702.2
960.13	700.5
1440.15	698.6
1440.45	698.6



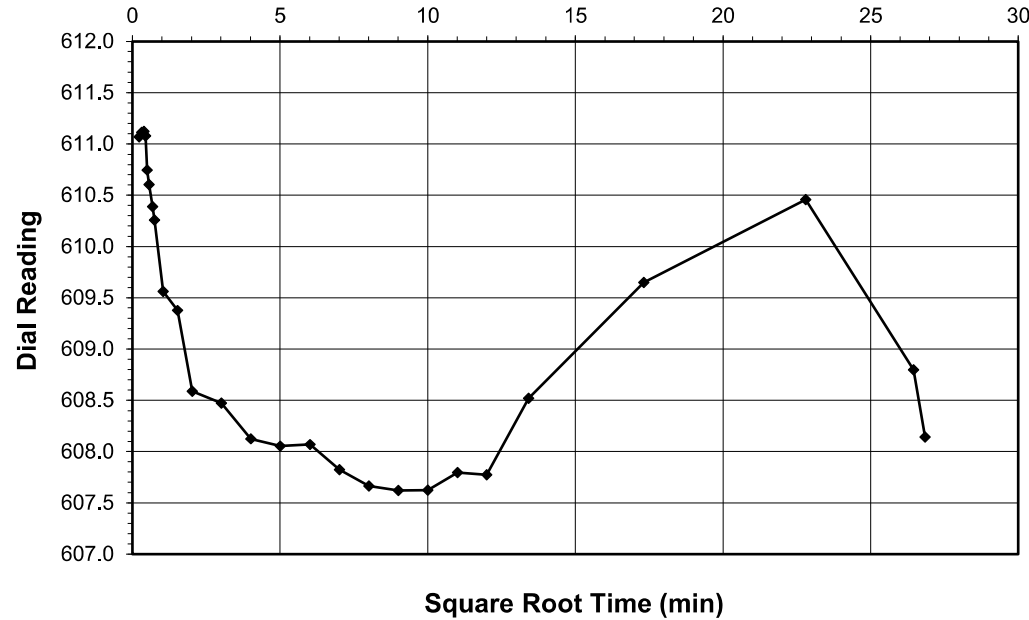
Tested By 129-07-0411 Date 3/6/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

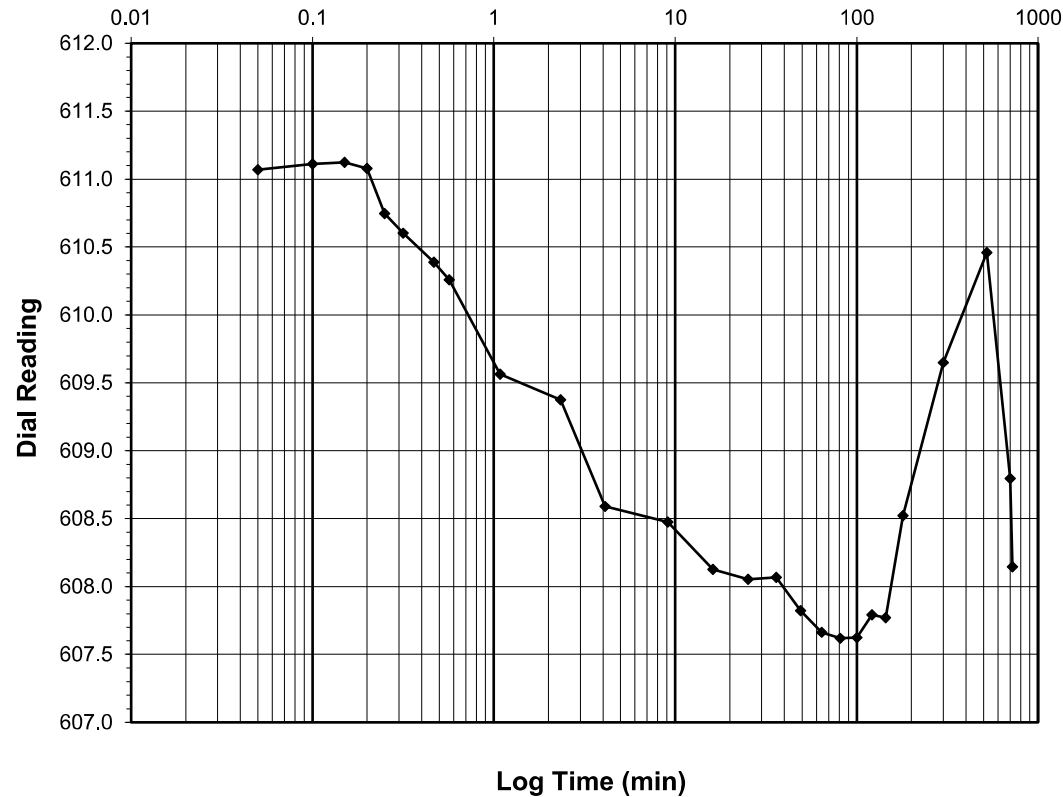
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **16.0-4.0**  
 Final Reading (div) **608.1**  
 Consolidometer No. **R491**  
 1 Division (in) 0.0001

Start Date 3/7/20  
 Start Time 8:30:33

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>698.6</b>
0.05	611.1
0.10	611.1
0.15	611.1
0.20	611.1
0.25	610.7
0.32	610.6
0.47	610.4
0.57	610.3
1.08	609.6
2.33	609.4
4.10	608.6
9.10	608.5
16.10	608.1
25.12	608.1
36.12	608.1
49.12	607.8
64.12	607.7
81.12	607.6
100.12	607.6
121.13	607.8
144.13	607.8
180.13	608.5
300.13	609.7
520.13	610.5
700.13	608.8
720.42	608.1



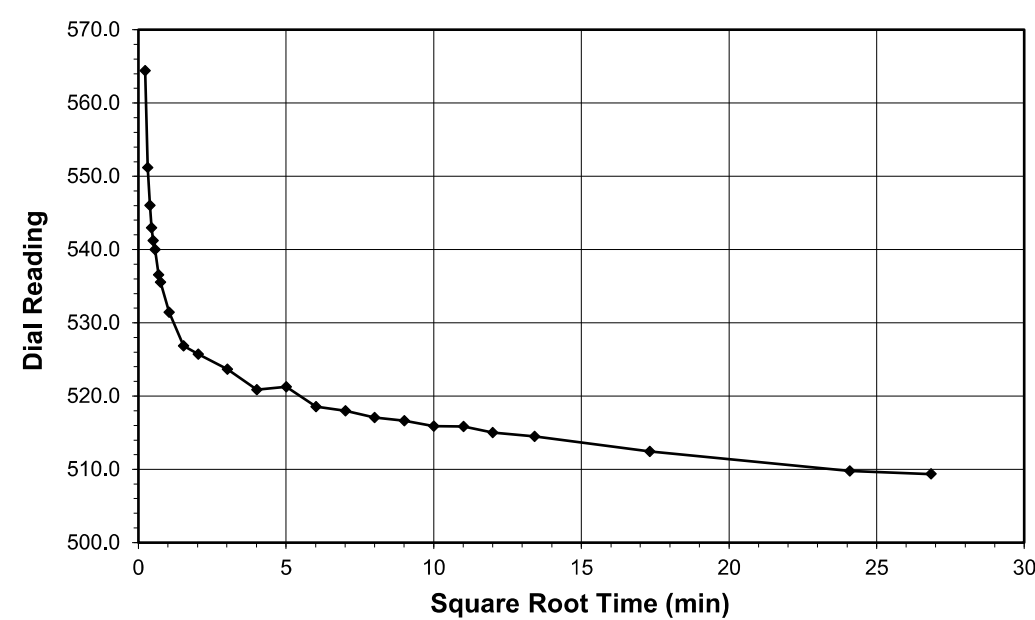
Tested By 129-07-0411 Date 3/7/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

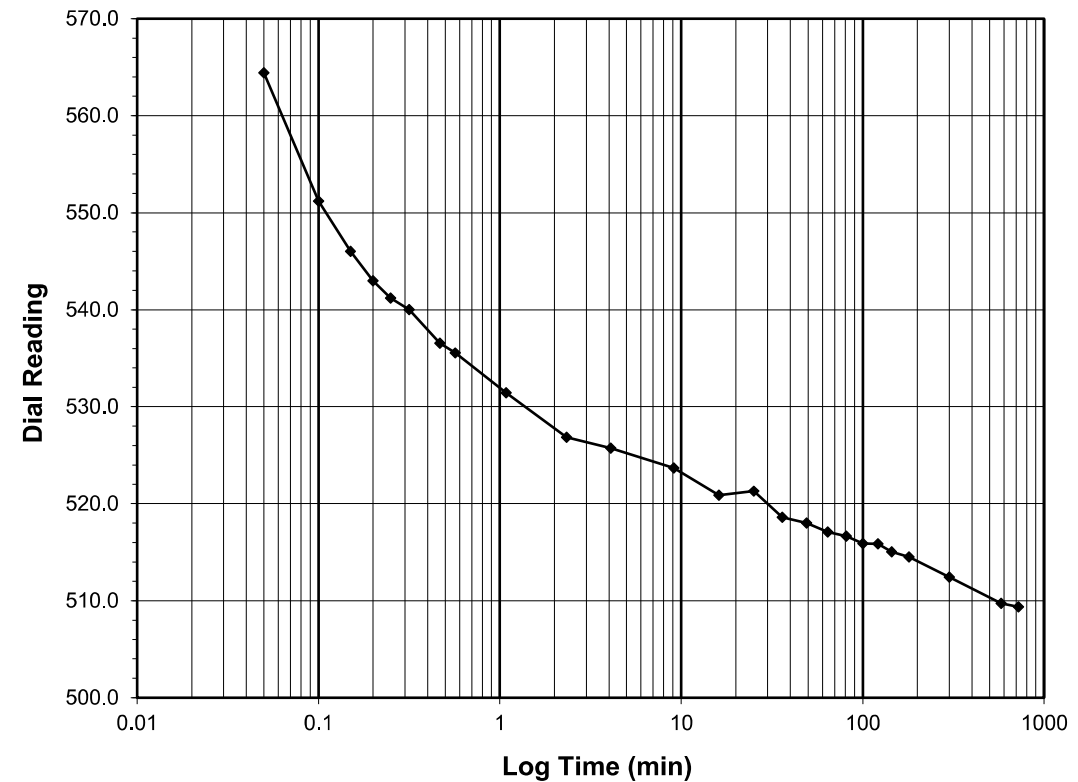
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **4.0-1.0**  
 Final Reading (div) **509.4**  
 Consolidometer No. **R491**  
 1 Division (in) 0.0001

Start Date 3/7/20  
 Start Time 20:30:59

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>608.1</b>
0.05	564.4
0.10	551.2
0.15	546.0
0.20	543.0
0.25	541.2
0.32	540.0
0.47	536.5
0.57	535.6
1.08	531.4
2.33	526.8
4.08	525.7
9.08	523.7
16.08	520.9
25.10	521.3
36.10	518.6
49.10	518.0
64.10	517.1
81.12	516.6
100.12	515.9
121.12	515.9
144.12	515.0
180.12	514.5
300.12	512.4
580.12	509.8
720.35	509.4



Tested By 129-07-0411 Date 3/7/20 Checked By GEM Date 3/17/20

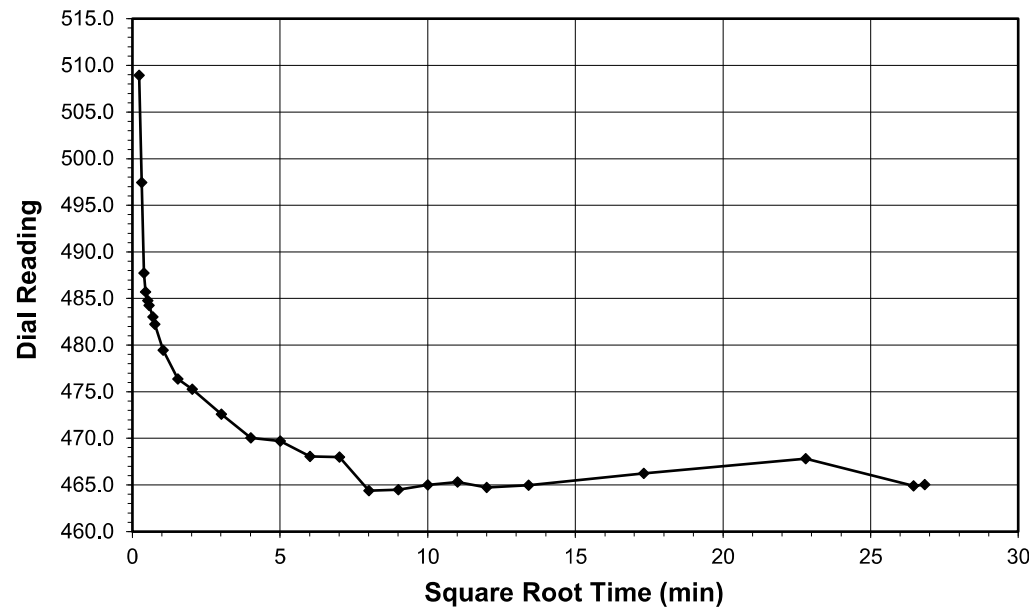




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

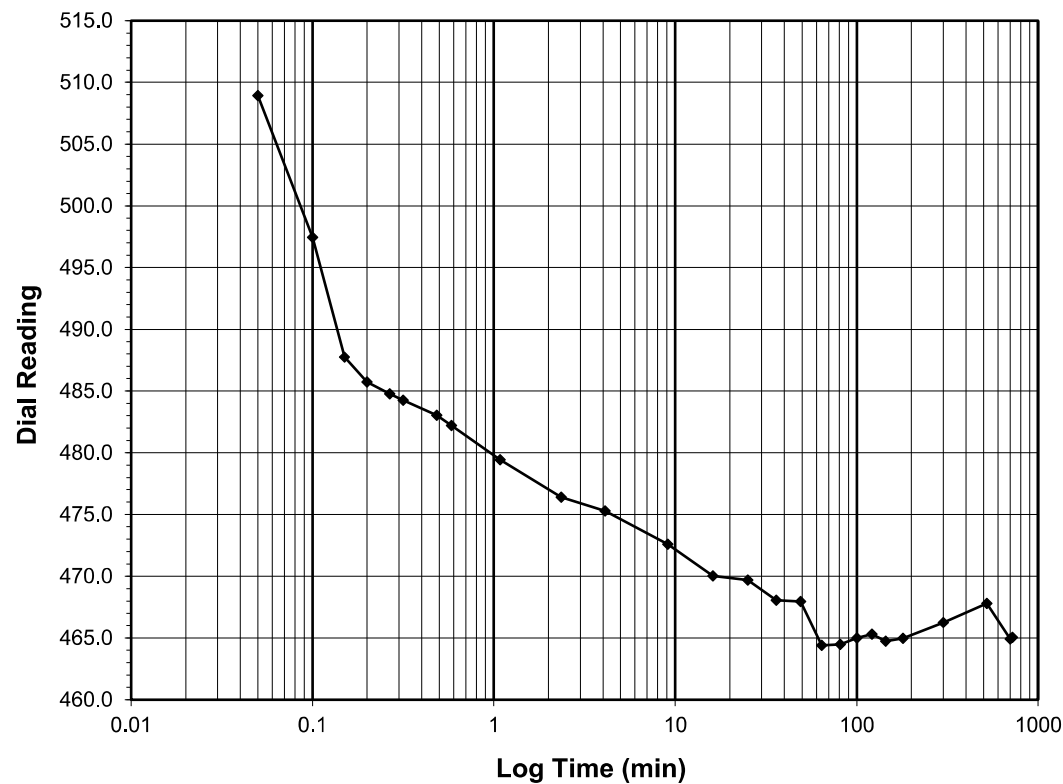
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 1.0-0.5**  
**Final Reading (div) 465.0**  
 Consolidometer No. **R491**  
 1 Division (in) 0.0001

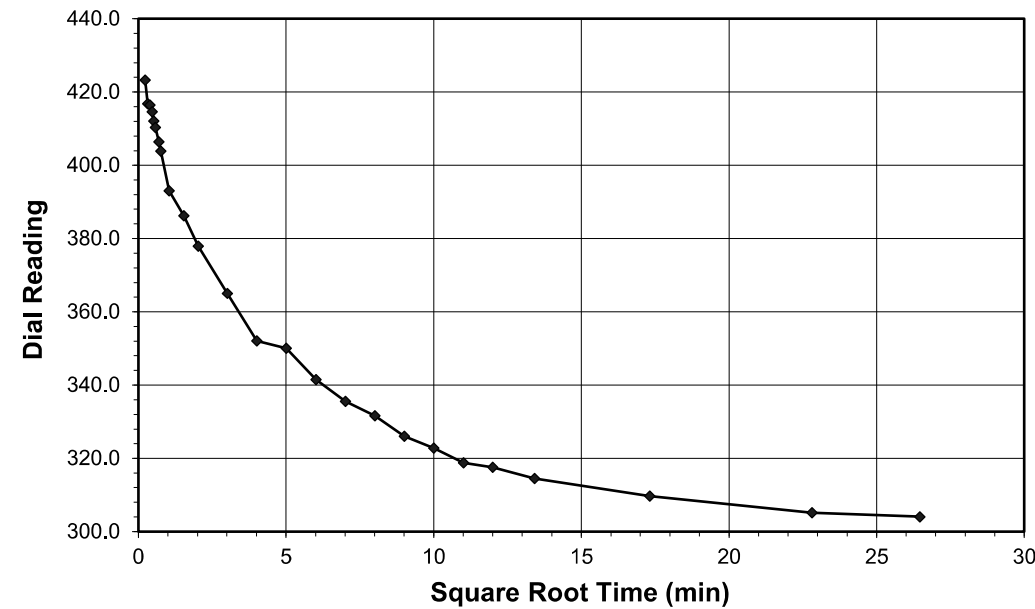
Start Date 3/8/20  
 Start Time 8:31:20

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>509.4</b>
0.05	508.9
0.10	497.4
0.15	487.7
0.20	485.7
0.27	484.8
0.32	484.2
0.48	483.0
0.58	482.2
1.08	479.4
2.35	476.4
4.10	475.3
9.10	472.6
16.10	470.0
25.10	469.7
36.10	468.1
49.12	468.0
64.12	464.4
81.12	464.5
100.12	465.0
121.12	465.3
144.13	464.7
180.13	465.0
300.13	466.2
520.13	467.8
700.13	464.9
720.25	465.0



Client Kleinfelder Boring No. Y1RPA\_2800  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-4  
 Lab ID R-2020-024-003-053 Visual Description Gray Sandy Clay

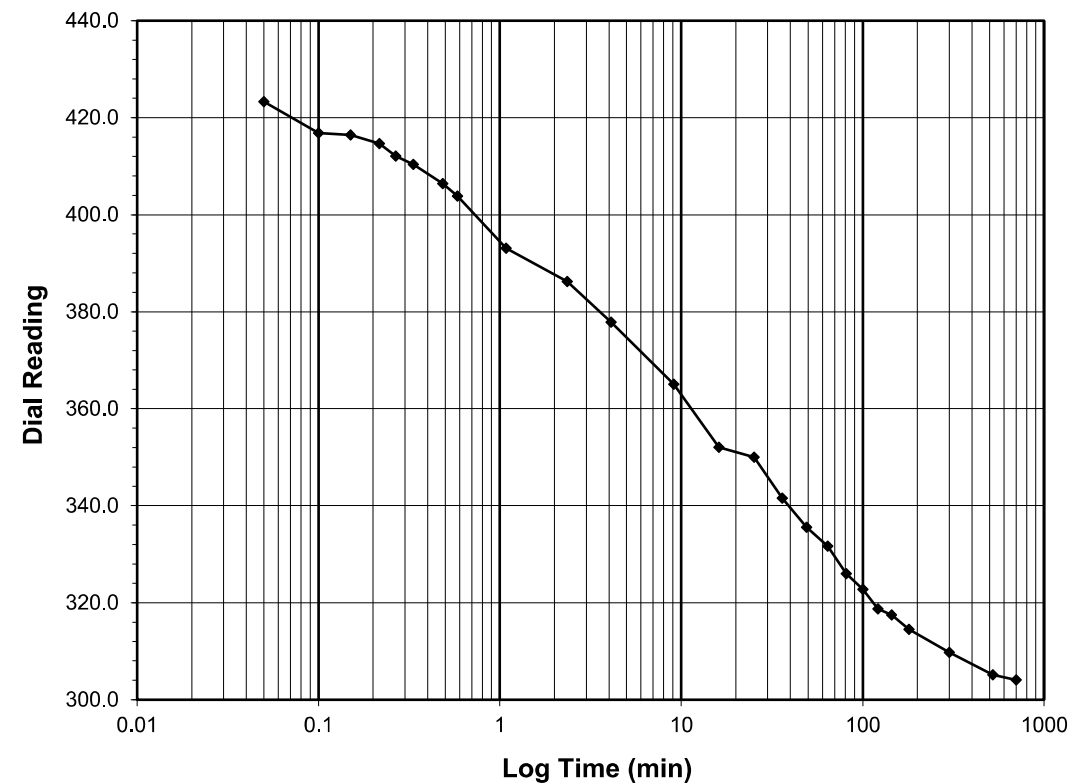
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 0.5-0.05**  
**Final Reading (div) 304.1**  
 Consolidometer No. **R491**  
 1 Division (in) 0.0001

Start Date 3/8/20  
 Start Time 20:31:35

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>465.0</b>
0.05	423.3
0.10	416.8
0.15	416.5
0.22	414.7
0.27	412.1
0.33	410.4
0.48	406.4
0.58	403.9
1.08	393.0
2.35	386.2
4.10	377.9
9.10	365.0
16.12	352.0
25.12	350.0
36.12	341.5
49.12	335.5
64.12	331.7
81.12	326.0
100.13	322.8
121.13	318.7
144.13	317.5
180.15	314.5
300.15	309.7
520.15	305.1
700.17	304.1



Tested By 129-07-0411 Date 3/8/20 Checked By GEM Date 3/17/20

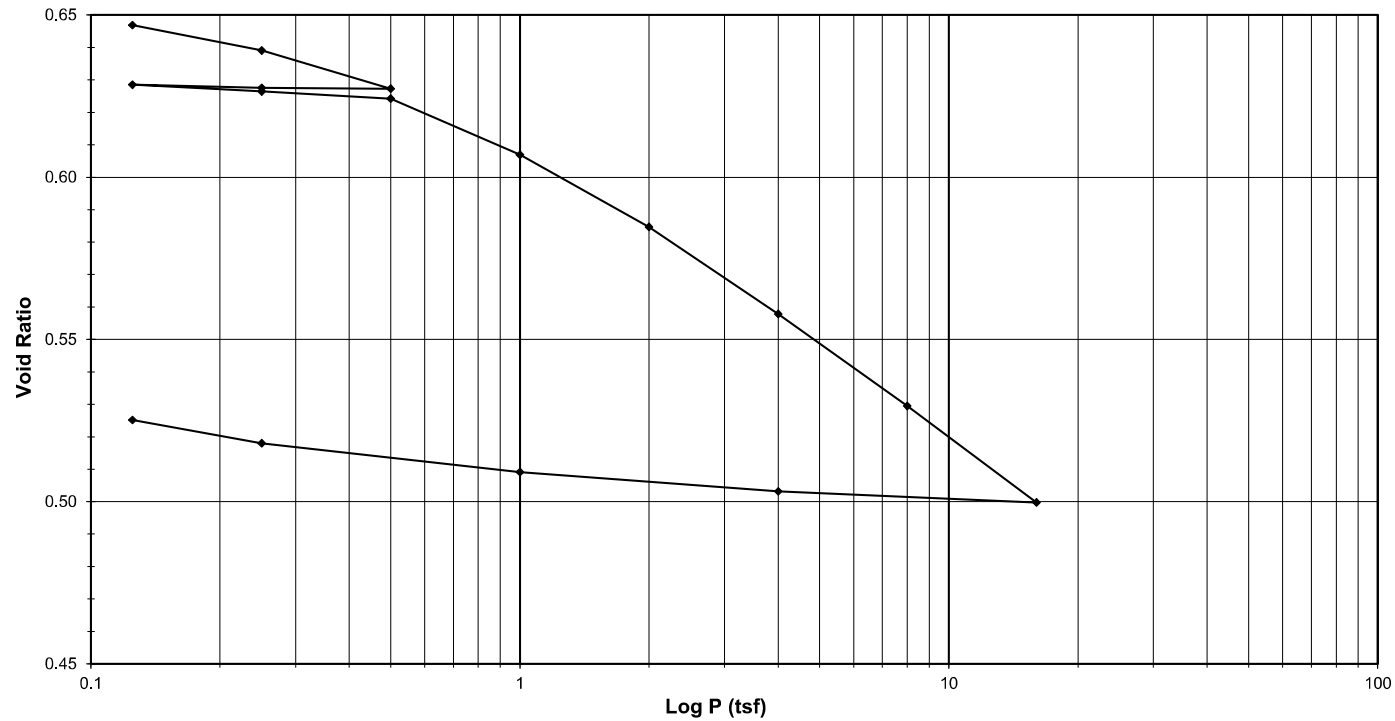
Tested By 129-07-0411 Date 3/8/20 Checked By GEM Date 3/17/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 2/3/20 Approved By MPS Date 2/11/20

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R-470  
 1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
<i>Water Content</i>		
Tare Number	SS-2	SS-1
Wt. Tare & WS (g)	454.43	255.36
Wt. Tare & DS (g)	390.89	230.93
Wt. Water (g)	63.54	24.43
Wt. Tare (g)	100.75	100.57
Wt. DS (g)	290.14	130.36
Water Content (%)	21.90	18.74
<i>Sample Parameters</i>		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9227
Sample Volume (cc)	80.44	74.22
Wt. Wet Sample + Ring (g)	374.88	370.73
Wt. of Ring (g)	214.72	214.72
Wt. of Wet Sample (g)	160.16	156.01
Wet Density (pcf)	124.24	131.17
Wet Density (g/cc)	1.99	2.10
Water Content (%)	21.90	18.74
Wt. of Dry Sample (g)	131.39	131.39
Dry Density (pcf)	101.92	110.46
Dry Density (g/cc)	1.63	1.77
Void Ratio	0.6530	0.5252
Saturation (%)	90.54	96.34
Specific Gravity	2.70	Measured

Test Data Summary							
Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cc)	Dry Density (g/cc)	Void Ratio
Seating	0	0	0	25.400	80.440	1.63335	<b>0.65304</b>
0.125	46.8	9.7	37.1	25.306	80.141	1.63944	<b>0.64691</b>
0.25	104.4	19.7	84.7	25.185	79.758	1.64731	<b>0.63903</b>
0.5	194.0	38.0	156.0	25.004	79.185	1.65923	<b>0.62726</b>
0.25	185.2	30.7	154.5	25.008	79.197	1.65899	<b>0.62750</b>
0.125	170.1	21.8	148.3	25.023	79.247	1.65794	<b>0.62853</b>
0.25	187.2	26.4	160.8	24.991	79.146	1.66005	<b>0.62646</b>
0.5	211.2	37.0	174.2	24.958	79.039	1.66231	<b>0.62425</b>
1	332.9	53.8	279.1	24.691	78.195	1.68025	<b>0.60690</b>
2	496.2	82.7	413.5	24.350	77.114	1.70381	<b>0.58469</b>
4	687.8	112.2	575.6	23.938	75.810	1.73311	<b>0.55789</b>
8	887.7	140.4	747.3	23.502	74.429	1.76527	<b>0.52951</b>
16	1110.4	182.9	927.5	23.044	72.979	1.80032	<b>0.49973</b>
4	1030.6	124.0	906.6	23.097	73.147	1.79619	<b>0.50318</b>
1	952.1	81.3	870.8	23.188	73.435	1.78915	<b>0.50910</b>
0.25	863.7	46.7	817.0	23.325	73.868	1.77867	<b>0.51799</b>
0.125	811.7	38.3	773.4	23.436	74.219	1.77026	<b>0.52520</b>

Tested By 129-07-0411 Date 2/3/20 Input Checked By GEM Date 2/11/20

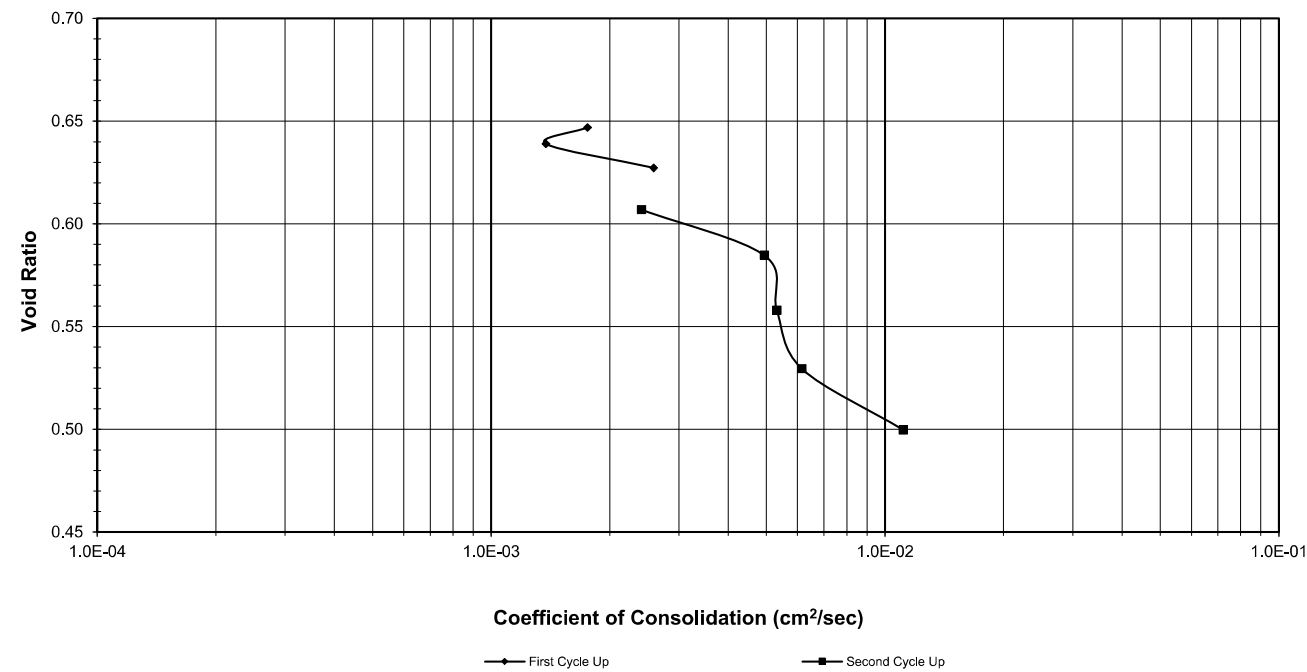




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 2/3/20 Input Checked By GEM Date 2/11/20

DCN: CT-24E Date: 5/3/12 Revision: 6 Z:\2020 PROJECTS\Kleinfelder\2020-024 Kleinfelder - R5819&R5820\2020-024-001\2020-024-001-003 DOT GEOJAC-16TSF1 Cv.xlsm\FINAL PLOT  
 2200 Westinghouse Blvd., Suite 103 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460 • www.geotechnics.net

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Reference R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R-470  
 1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
Water Content		
Tare Number	SS-2	SS-1
Wt. Tare & WS (g)	454.43	255.36
Wt. Tare & DS (g)	390.89	230.93
Wt. Water (g)	63.54	24.43
Wt. Tare (g)	100.75	100.57
Wt. DS (g)	290.14	130.36
Water Content (%)	21.90	18.74
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.000	0.923
Sample Volume (cc)	80.44	74.22
Wt. Wet Sample + Ring (g)	374.88	370.73
Wt. of Ring (g)	214.72	214.72
Wt. of Wet Sample (g)	160.16	156.01
Wet Density (pcf)	124.24	131.17
Wet Density (g/cc)	1.99	2.10
Water Content (%)	21.90	18.74
Wt. of Dry Sample (g)	131.39	131.39
Dry Density (pcf)	101.92	110.46
Dry Density (g/cc)	1.63	1.77
Void Ratio	0.6530	0.5252
Saturation (%)	90.54	96.34
Specific Gravity	2.7	Measured

Load Increment (tsf)	Dial Reading @ t <sub>50</sub> (div)	Machine Deflection (div)	C <sub>v</sub> Test Data Summary		Time t <sub>50</sub> (min.)	C <sub>v</sub> (cm <sup>2</sup> /sec)
			Corrected Dial Reading @ t <sub>50</sub> (div)	Sample Height @ t <sub>50</sub> (cm)		
0 - 0.125	31.6	9.7	21.9	2.534	3.00	0.00176
0.125 - 0.25	77.6	19.7	57.9	2.525	3.80	0.00138
0.25 - 0.5	154.7	38.0	116.7	2.510	2.00	0.00259
0.5 - 0.25	NA	30.7	NA	NA	NA	NA
0.25 - 0.125	NA	21.8	NA	NA	NA	NA
0.125 - 0.25	NA	26.4	NA	NA	NA	NA
0.25 - 0.5	NA	37.0	NA	NA	NA	NA
0.5 - 1.0	277.1	53.8	223.3	2.483	2.10	0.00241
1.0 - 2.0	421.7	82.7	339.0	2.454	1.00	0.00494
2.0 - 4.0	607.3	112.2	495.1	2.414	0.90	0.00532
4.0 - 8.0	804.2	140.4	663.8	2.371	0.75	0.00615
8.0 - 16.0	1012.5	182.9	829.5	2.329	0.40	0.01113
16.0 - 4.0	NA	124.0	NA	NA	NA	NA
4.0 - 1.0	NA	81.3	NA	NA	NA	NA
1.0 - 0.25	NA	46.7	NA	NA	NA	NA
0.25 - 0.125	NA	38.3	NA	NA	NA	NA

Tested By 129-07-0411 Date 2/3/20 Input Checked By GEM Date 2/11/20

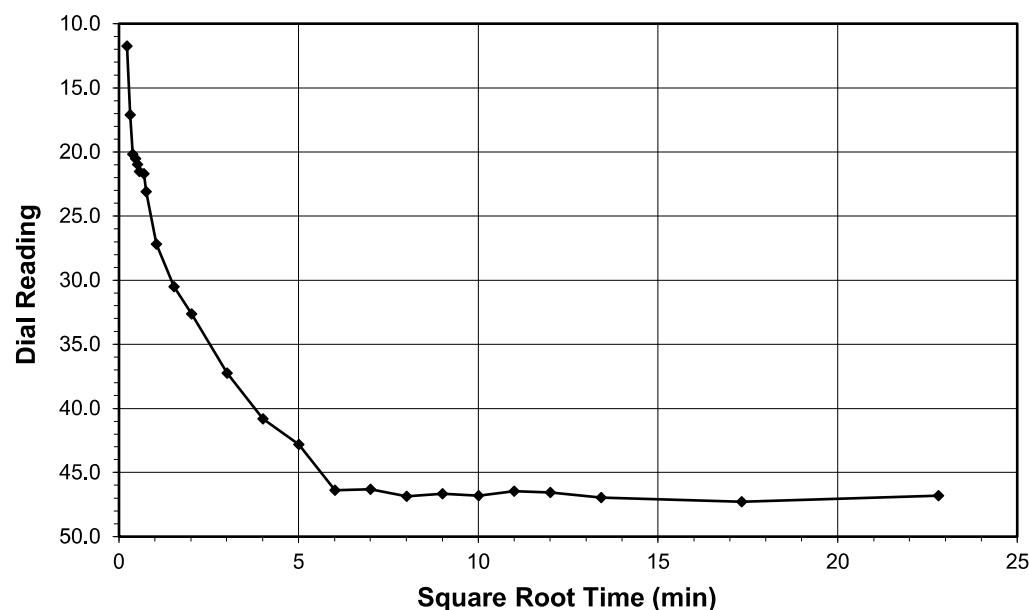
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**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y1RPC\_2800  
 Client Project: R-5819/R-5820      Depth (ft): 10.0-12.0  
 Project No.: R-2020-024-001      Sample No.: ST-5  
 Lab ID: R-2020-024-001-003      Visual Description: Gray Orange Sandy Clay

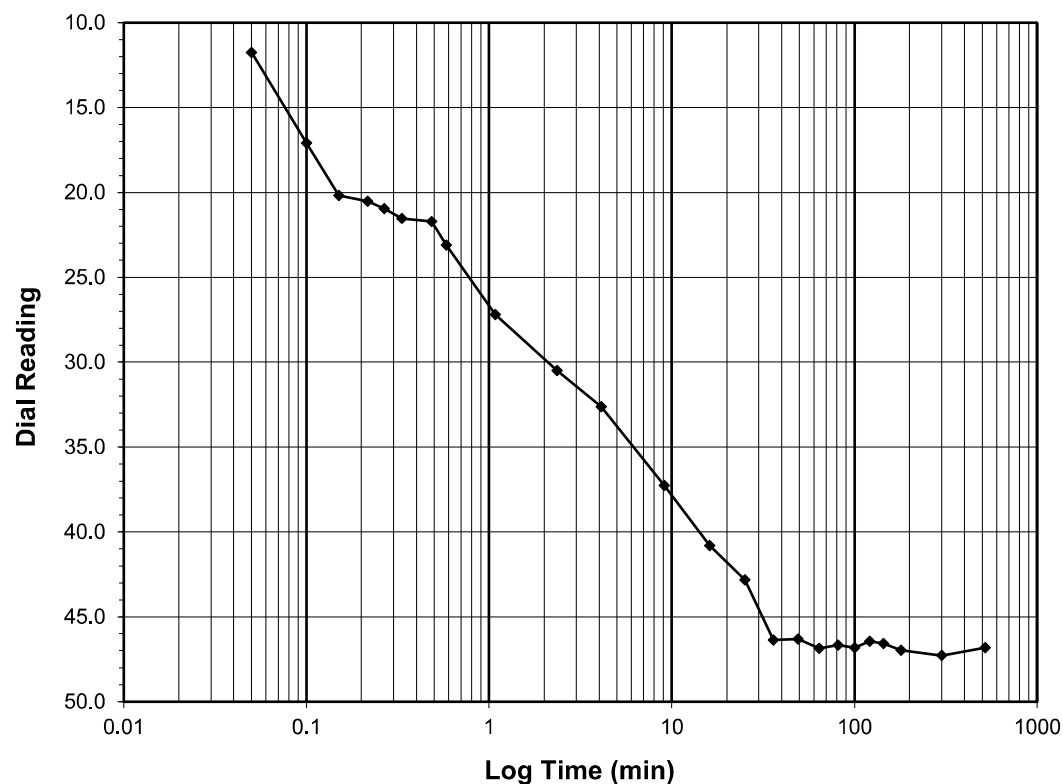
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.0-0.125**  
 Final Reading (div) **46.8**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date: 2/3/20  
 Start Time: 17:04:23

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>0.0</b>
0.05	11.7
0.10	17.1
0.15	20.2
0.22	20.5
0.27	21.0
0.33	21.5
0.48	21.7
0.58	23.1
1.08	27.2
2.35	30.5
4.10	32.6
9.10	37.2
16.10	40.8
25.10	42.8
36.10	46.4
49.10	46.3
64.12	46.9
81.12	46.7
100.12	46.8
121.12	46.5
144.12	46.6
180.12	47.0
300.12	47.3
520.13	46.8



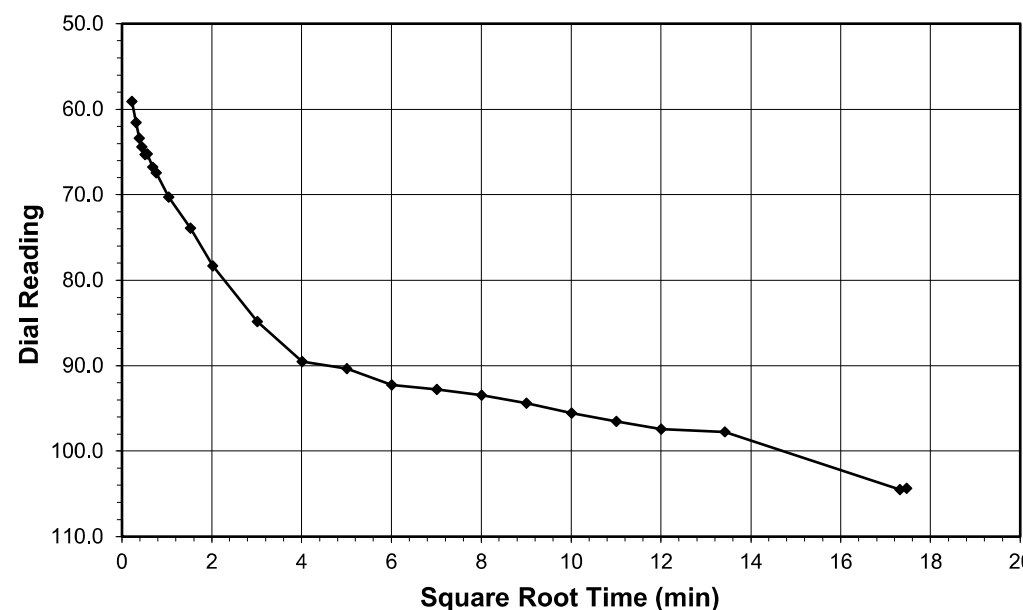
Tested By 129-07-0411 Date 2/3/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y1RPC\_2800  
 Client Project: R-5819/R-5820      Depth (ft): 10.0-12.0  
 Project No.: R-2020-024-001      Sample No.: ST-5  
 Lab ID: R-2020-024-001-003      Visual Description: Gray Orange Sandy Clay

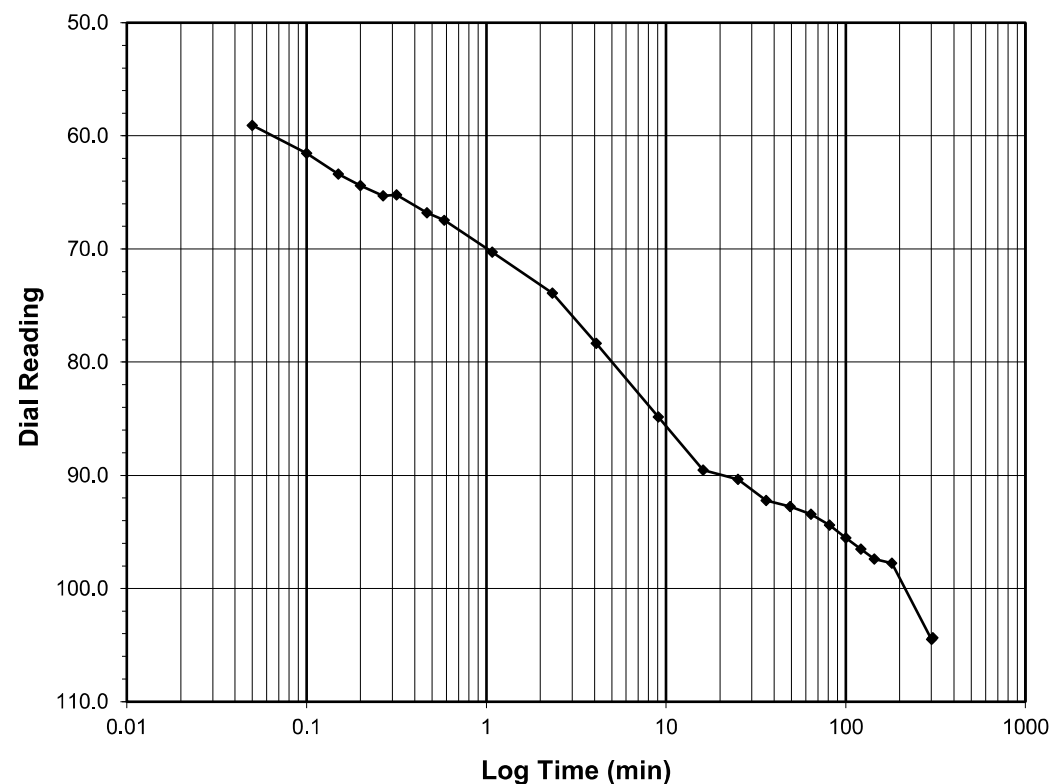
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.125-0.25**  
 Final Reading (div) **104.4**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date: 2/4/20  
 Start Time: 5:04:37

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>46.8</b>
0.05	59.1
0.10	61.6
0.15	63.4
0.20	64.4
0.27	65.3
0.32	65.2
0.47	66.8
0.58	67.5
1.08	70.3
2.33	73.9
4.08	78.3
9.08	84.8
16.08	89.5
25.10	90.3
36.10	92.2
49.12	92.8
64.12	93.4
81.12	94.4
100.13	95.5
121.13	96.5
144.13	97.4
180.15	97.7
300.15	104.5
305.18	104.4



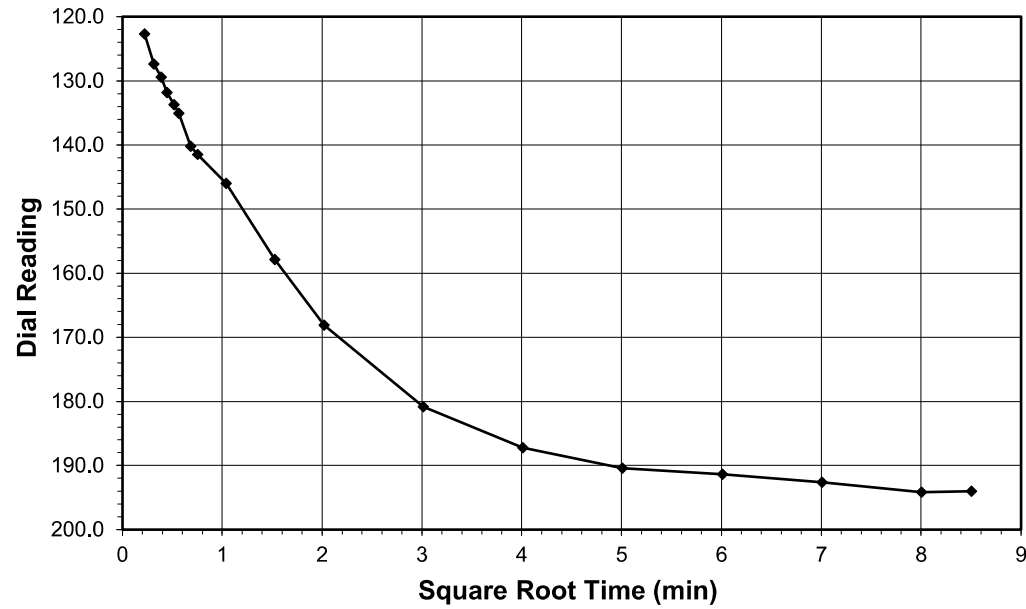
Tested By 129-07-0411 Date 2/4/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

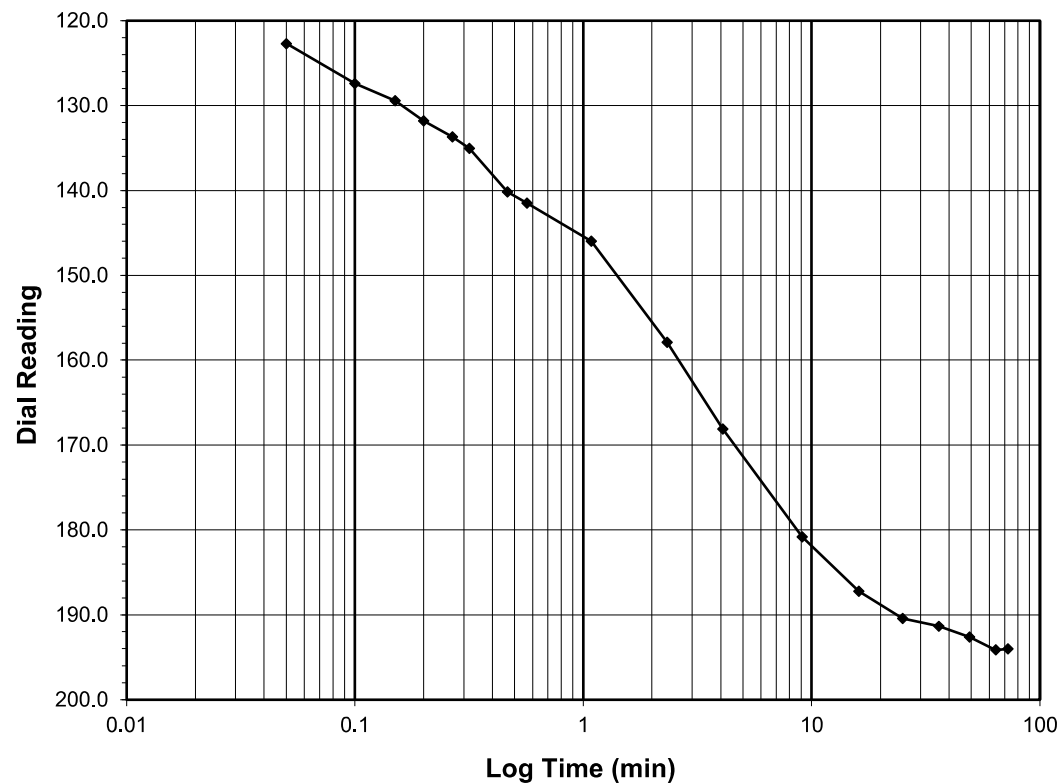
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.5  
 Final Reading (div) 194.0  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/4/20  
 Start Time 10:09:48

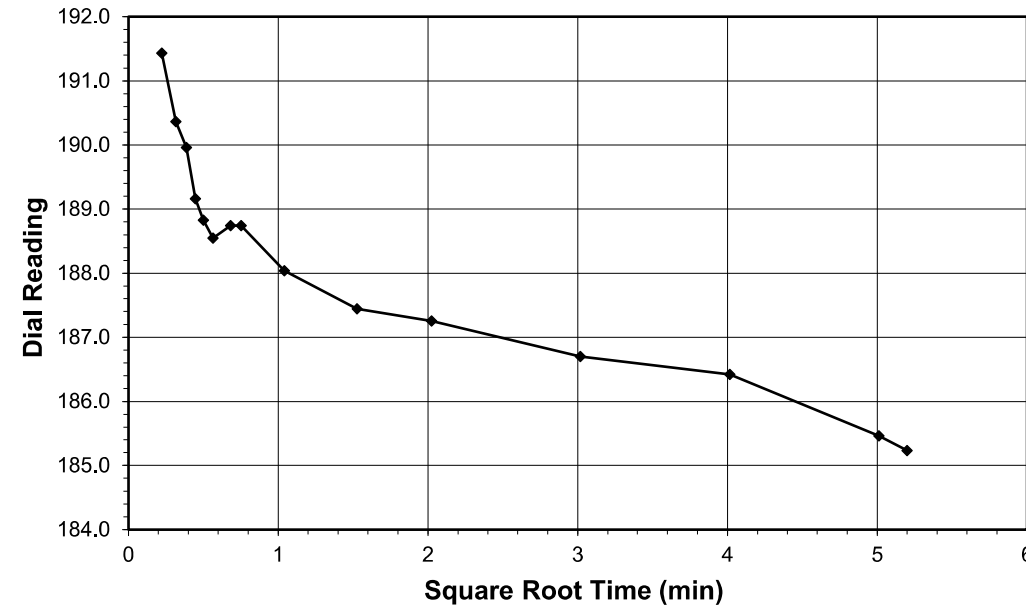
Elapsed Time (min)	Dial Reading (div)
Initial	104.4
0.05	122.7
0.10	127.4
0.15	129.4
0.20	131.8
0.27	133.7
0.32	135.1
0.47	140.2
0.57	141.5
1.08	146.0
2.33	157.9
4.08	168.1
9.08	180.8
16.08	187.2
25.10	190.4
36.10	191.4
49.10	192.6
64.10	194.2
72.30	194.0



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5-0.25  
 Final Reading (div) 185.2  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/4/20  
 Start Time 11:22:07

Elapsed Time (min)	Dial Reading (div)
Initial	194.0
0.05	191.4
0.10	190.4
0.15	190.0
0.20	189.2
0.25	188.8
0.32	188.5
0.47	188.7
0.57	188.7
1.08	188.0
2.33	187.4
4.10	187.3
9.10	186.7
16.12	186.4
25.12	185.5
27.05	185.2



Tested By 129-07-0411 Date 2/4/20 Checked By GEM Date 2/11/20

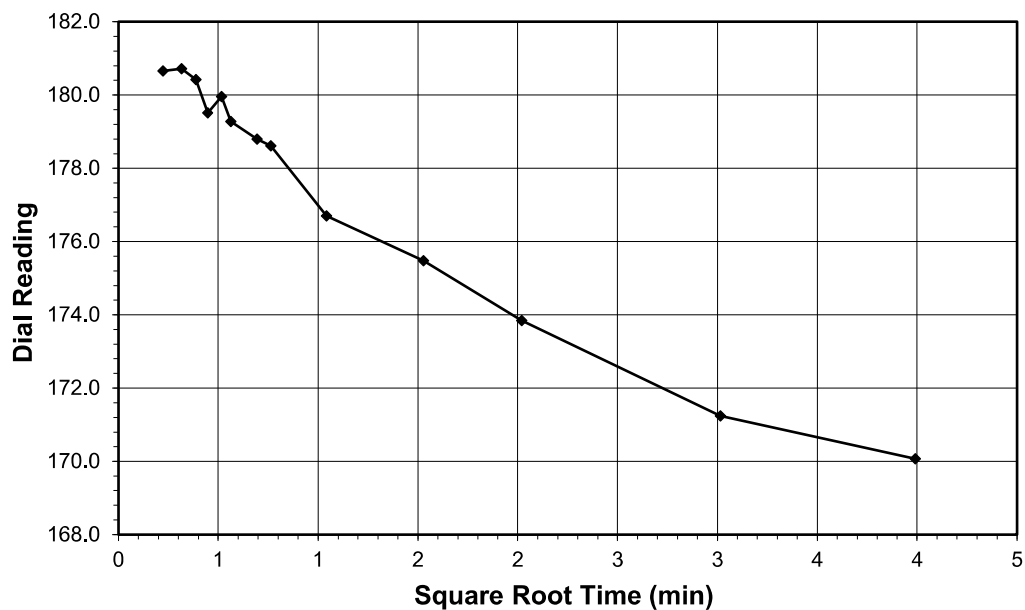
Tested By 129-07-0411 Date 2/4/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

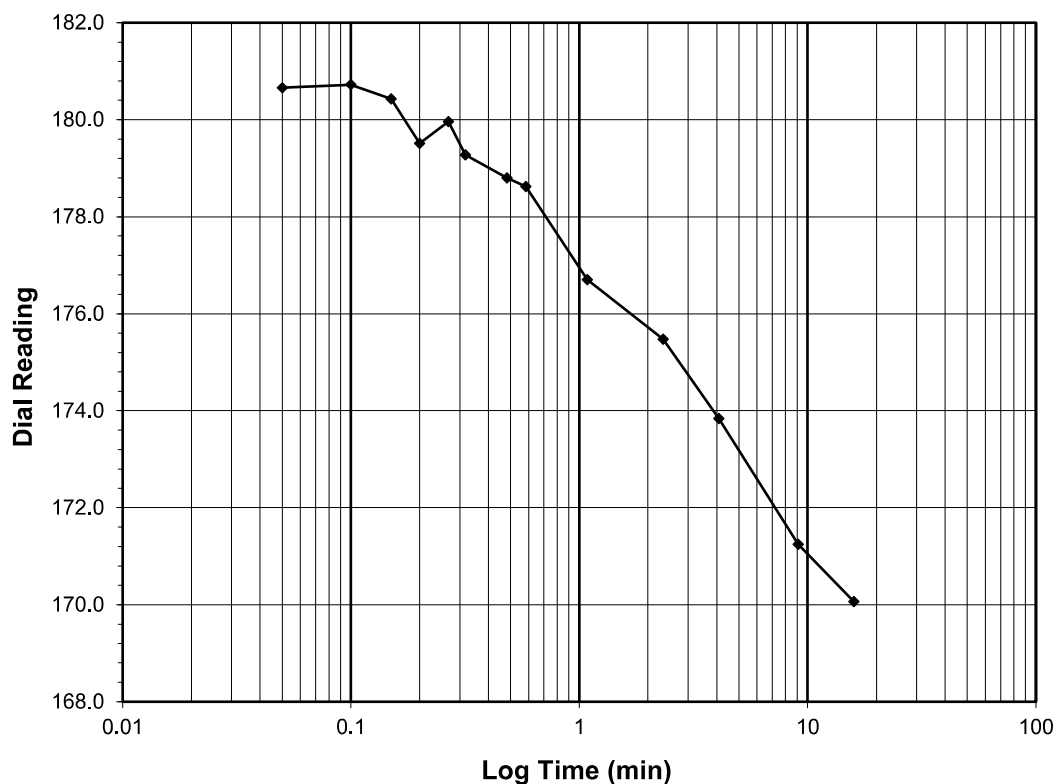
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.125  
 Final Reading (div) 170.1  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/4/20  
 Start Time 11:49:10

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>185.2</b>
0.05	180.7
0.10	180.7
0.15	180.4
0.20	179.5
0.27	180.0
0.32	179.3
0.48	178.8
0.58	178.6
1.08	176.7
2.33	175.5
4.08	173.8
9.08	171.2
15.93	170.1



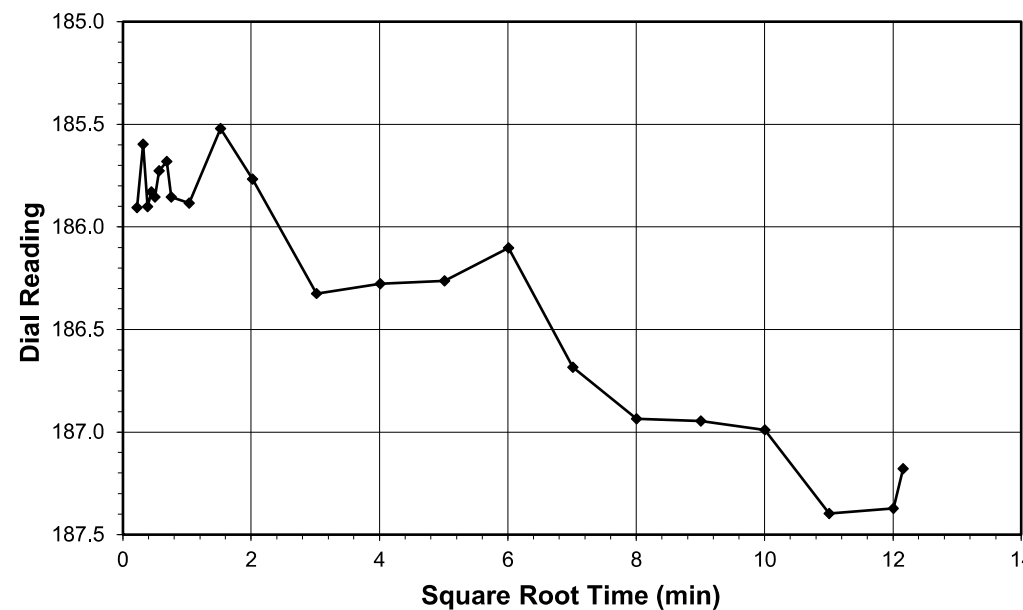
Tested By 129-07-0411 Date 2/4/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

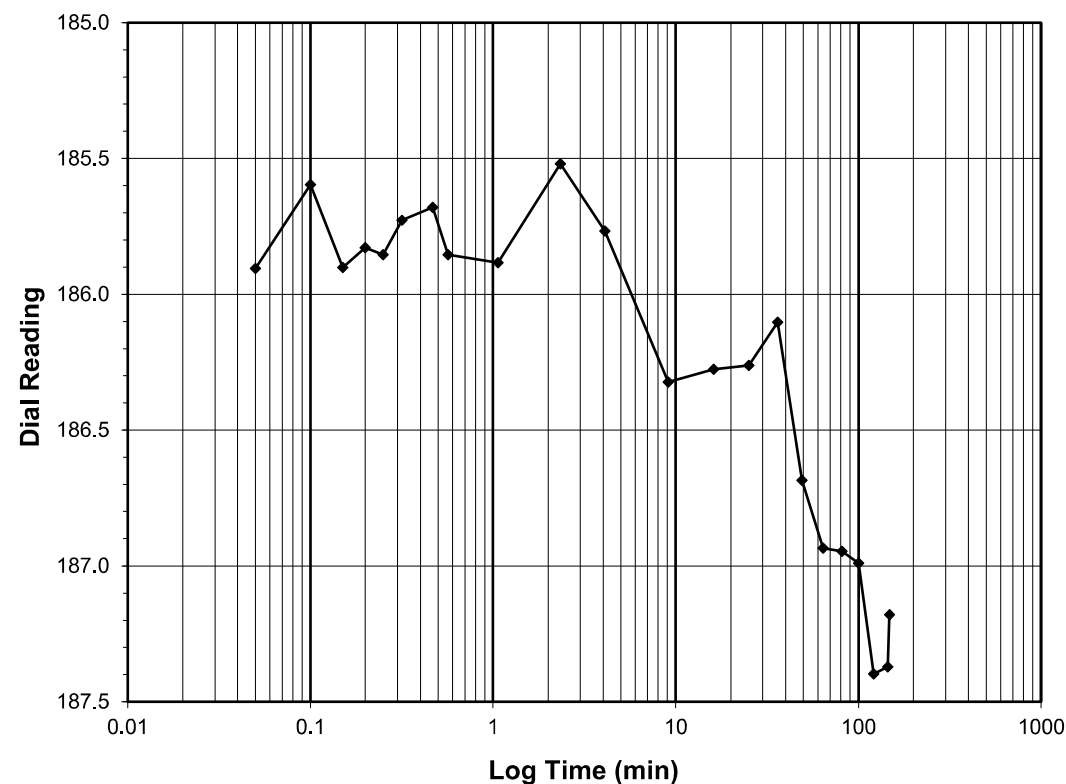
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.125-0.25  
 Final Reading (div) 187.2  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/4/20  
 Start Time 12:05:06

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>170.1</b>
0.05	185.9
0.10	185.6
0.15	185.9
0.20	185.8
0.25	185.9
0.32	185.7
0.47	185.7
0.57	185.9
1.07	185.9
2.33	185.5
4.08	185.8
9.10	186.3
16.10	186.3
25.10	186.3
36.12	186.1
49.13	186.7
64.13	186.9
81.13	186.9
100.15	187.0
121.15	187.4
144.15	187.4
147.87	187.2



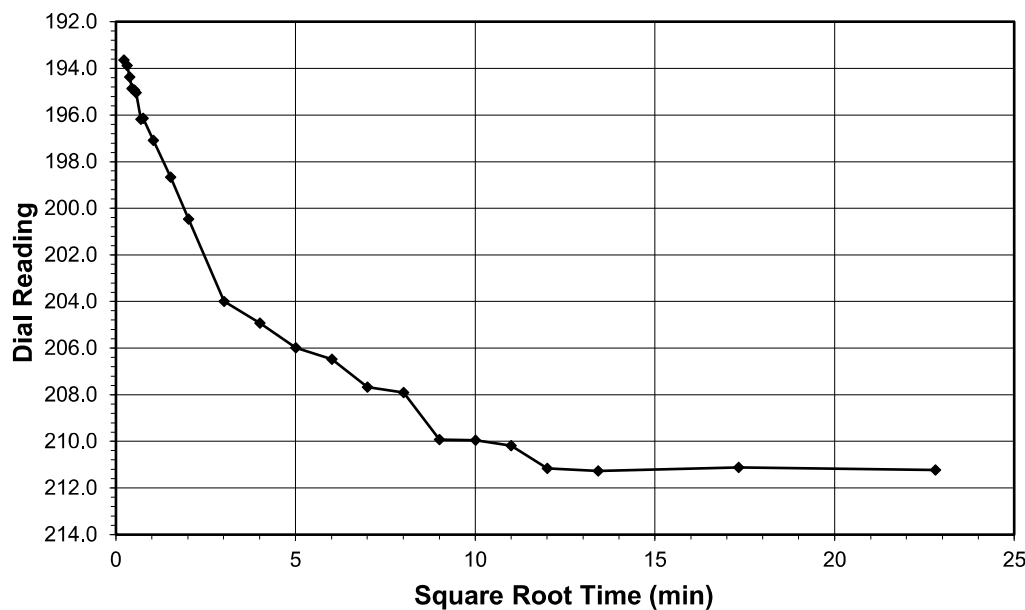
Tested By 129-07-0411 Date 2/4/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y1RPC\_2800  
 Client Project: R-5819/R-5820      Depth (ft): 10.0-12.0  
 Project No.: R-2020-024-001      Sample No.: ST-5  
 Lab ID: R-2020-024-001-003      Visual Description: Gray Orange Sandy Clay

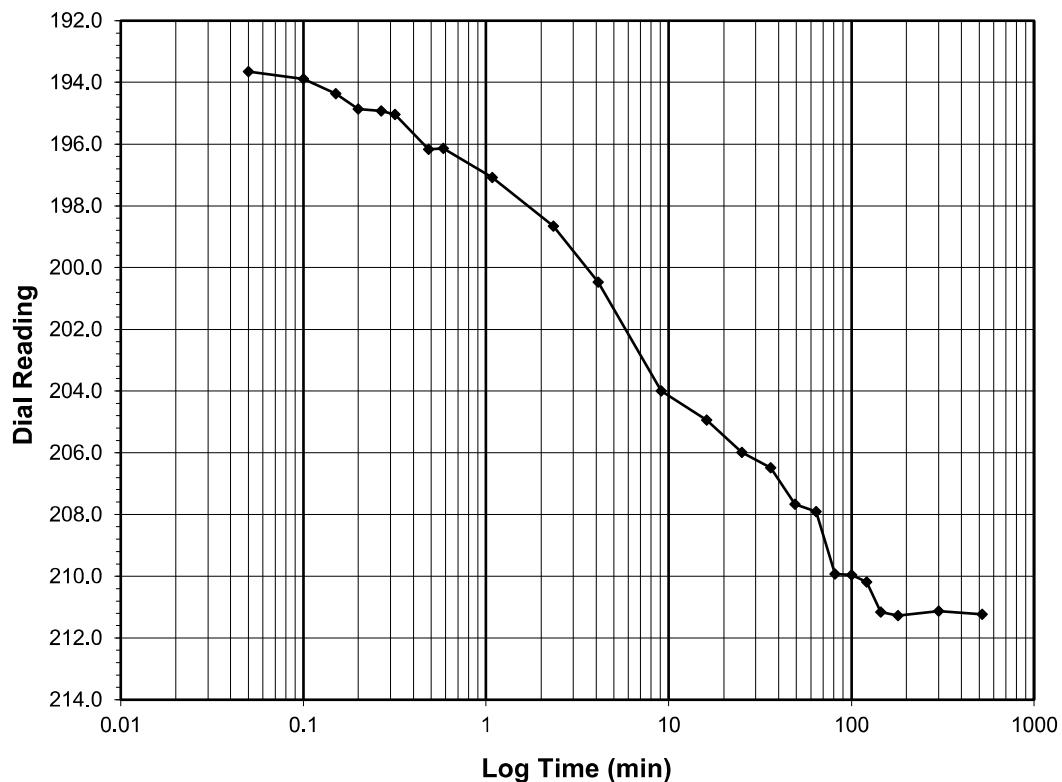
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.5  
 Final Reading (div) 211.2  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

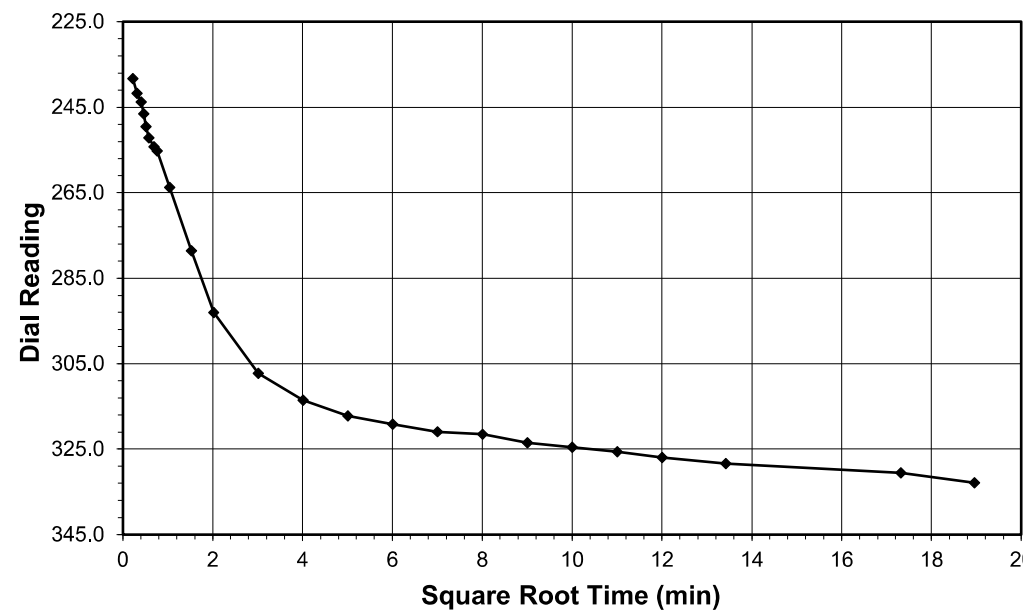
Start Date 2/4/20  
 Start Time 14:32:58

Elapsed Time (min)	Dial Reading (div)
Initial	187.2
0.05	193.6
0.10	193.9
0.15	194.4
0.20	194.9
0.27	194.9
0.32	195.0
0.48	196.2
0.58	196.1
1.08	197.1
2.33	198.7
4.10	200.5
9.10	204.0
16.10	204.9
25.10	206.0
36.12	206.5
49.12	207.7
64.12	207.9
81.12	209.9
100.13	210.0
121.13	210.2
144.13	211.2
180.15	211.3
300.15	211.1
520.15	211.2



Client: Kleinfelder      Boring No.: Y1RPC\_2800  
 Client Project: R-5819/R-5820      Depth (ft): 10.0-12.0  
 Project No.: R-2020-024-001      Sample No.: ST-5  
 Lab ID: R-2020-024-001-003      Visual Description: Gray Orange Sandy Clay

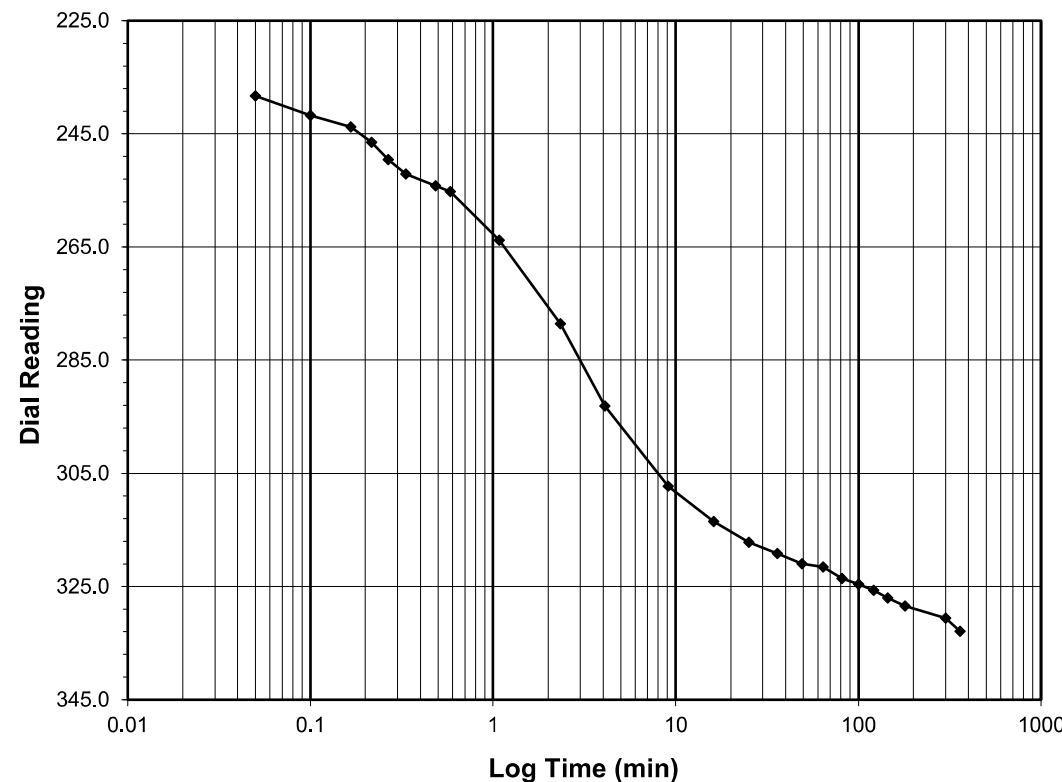
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5-1.0  
 Final Reading (div) 332.9  
 Consolidometer No. R-470  
 1 Division (in) 0.0001

Start Date 2/5/20  
 Start Time 2:33:11

Elapsed Time (min)	Dial Reading (div)
Initial	211.2
0.05	238.3
0.10	241.7
0.17	243.8
0.22	246.5
0.27	249.5
0.33	252.1
0.48	254.2
0.58	255.2
1.08	263.8
2.33	278.6
4.08	293.1
9.08	307.3
16.10	313.5
25.10	317.2
36.10	319.2
49.10	320.9
64.10	321.6
81.12	323.6
100.12	324.6
121.13	325.7
144.13	327.0
180.13	328.4
300.13	330.6
359.35	332.9



Tested By 129-07-0411 Date 2/4/20 Checked By GEM Date 2/11/20

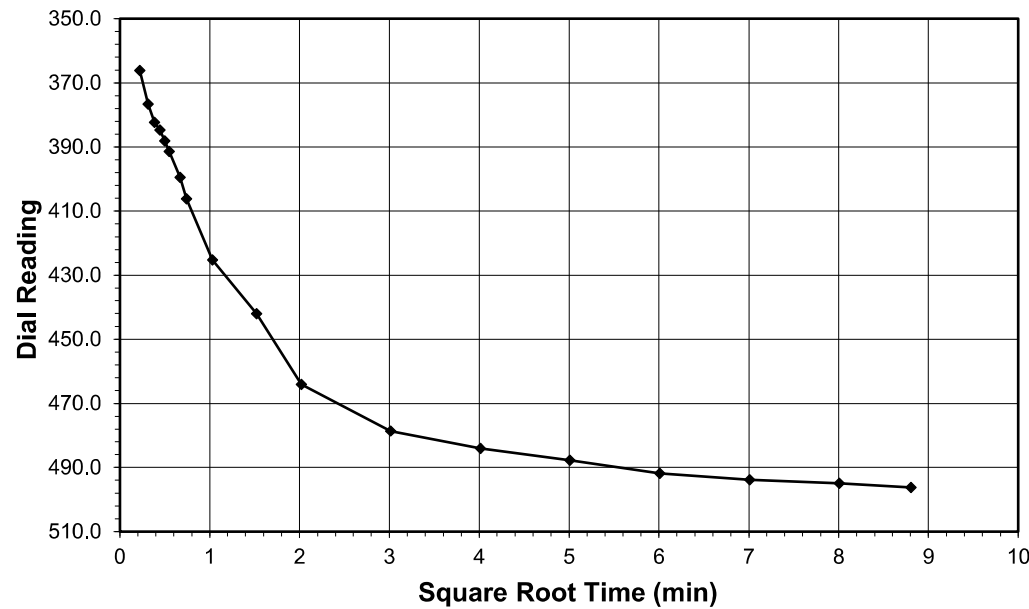
Tested By 129-07-0411 Date 2/5/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

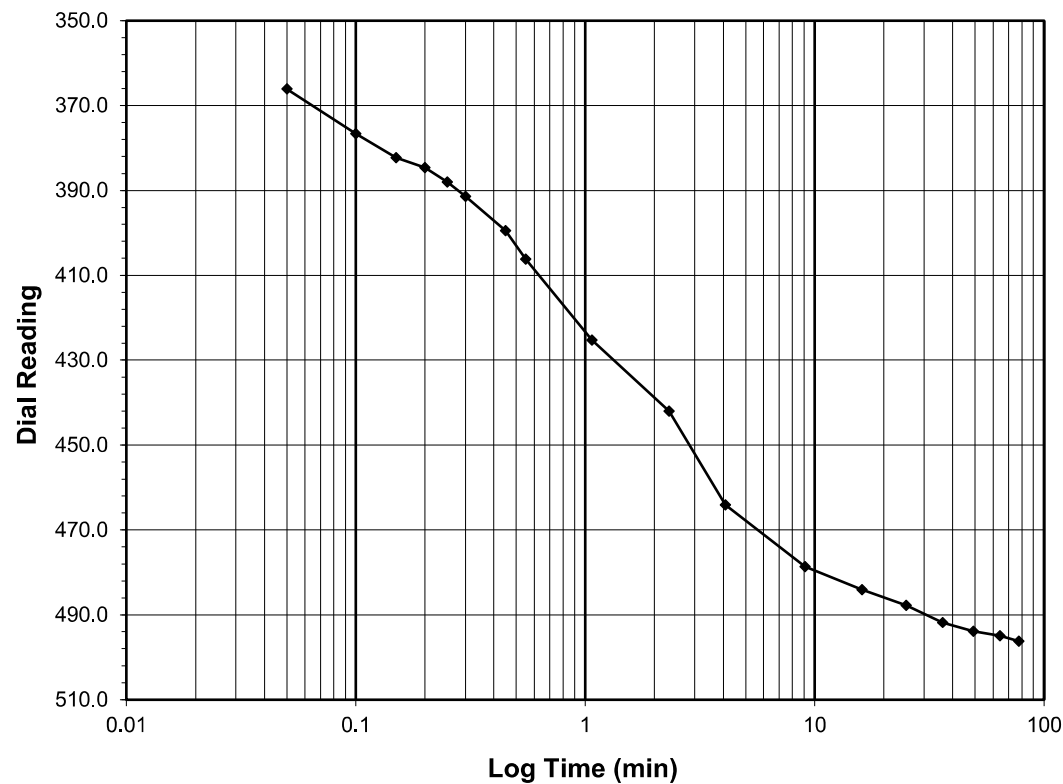
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 1.0-2.0**  
**Final Reading (div) 496.2**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

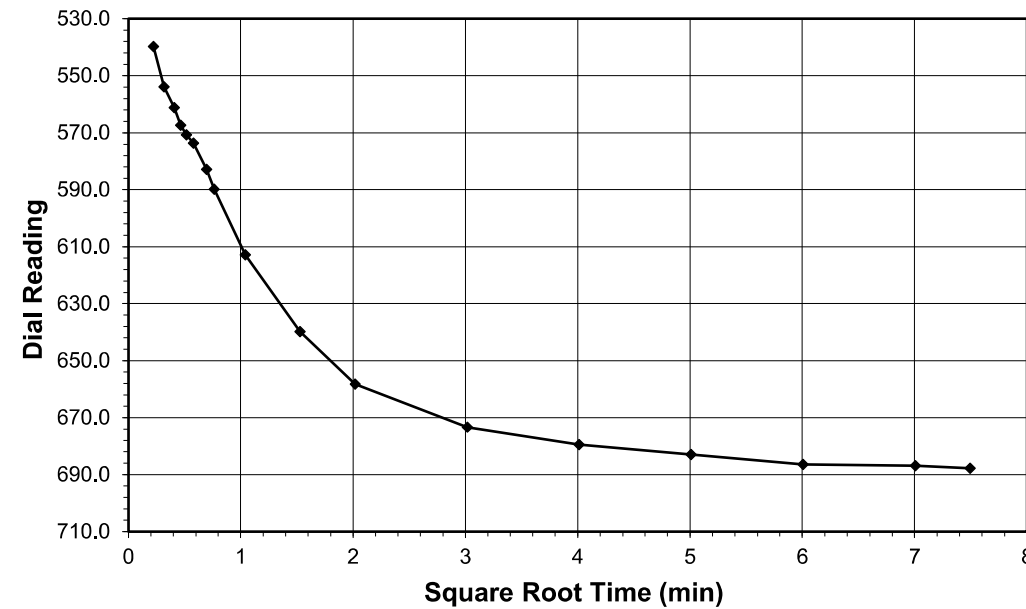
Start Date 2/5/20  
 Start Time 8:32:33

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>332.9</b>
0.05	366.1
0.10	376.6
0.15	382.3
0.20	384.6
0.25	388.0
0.30	391.4
0.45	399.5
0.55	406.2
1.07	425.3
2.32	442.0
4.08	464.1
9.08	478.6
16.10	484.1
25.10	487.7
36.12	491.8
49.12	493.9
64.13	495.0
77.58	496.2



Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

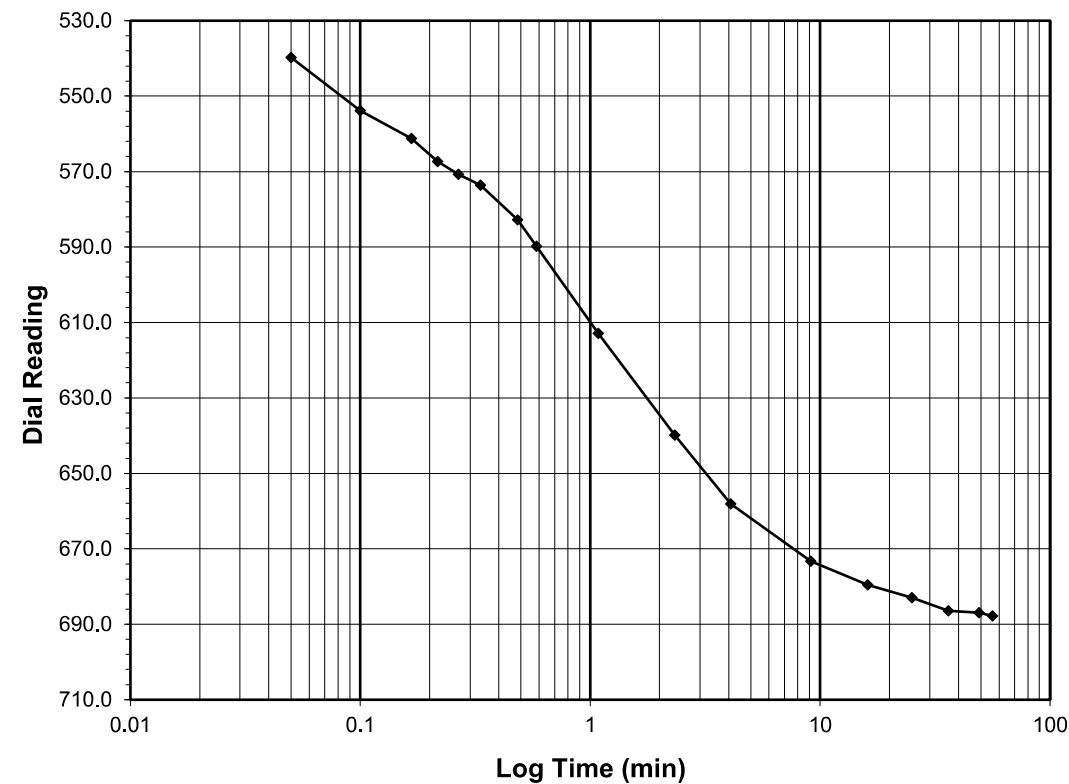
**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf) 2.0-4.0**  
**Final Reading (div) 687.8**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/5/20  
 Start Time 9:50:08

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>496.2</b>
0.05	539.8
0.10	553.9
0.17	561.2
0.22	567.3
0.27	570.7
0.33	573.6
0.48	582.9
0.58	589.9
1.08	612.8
2.33	639.9
4.08	658.2
9.10	673.3
16.10	679.5
25.10	683.0
36.10	686.4
49.12	686.9
56.15	687.8



Tested By 129-07-0411 Date 2/5/20 Checked By GEM Date 2/11/20

Tested By 129-07-0411 Date 2/5/20 Checked By GEM Date 2/11/20

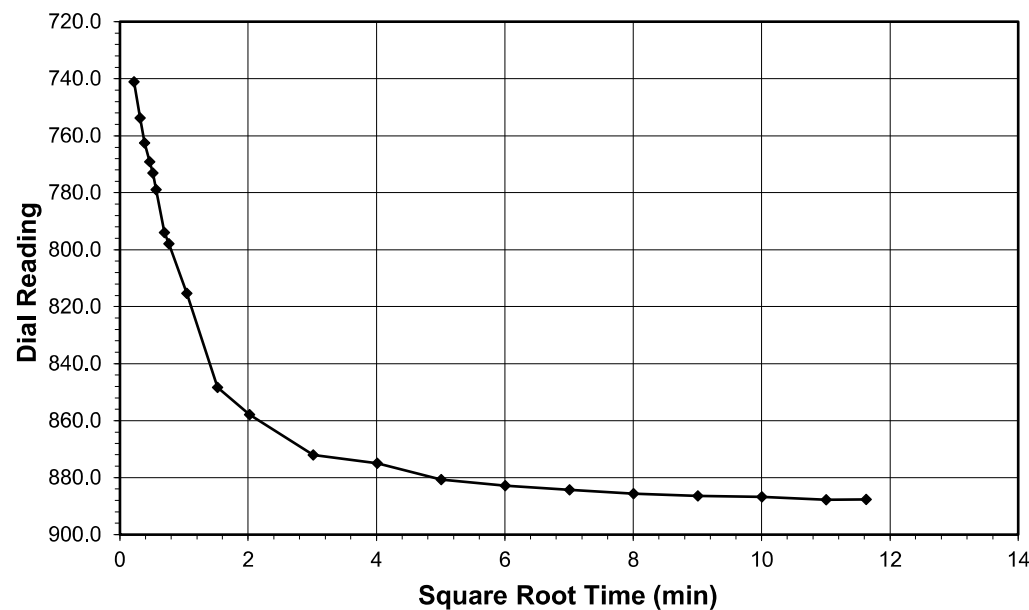




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

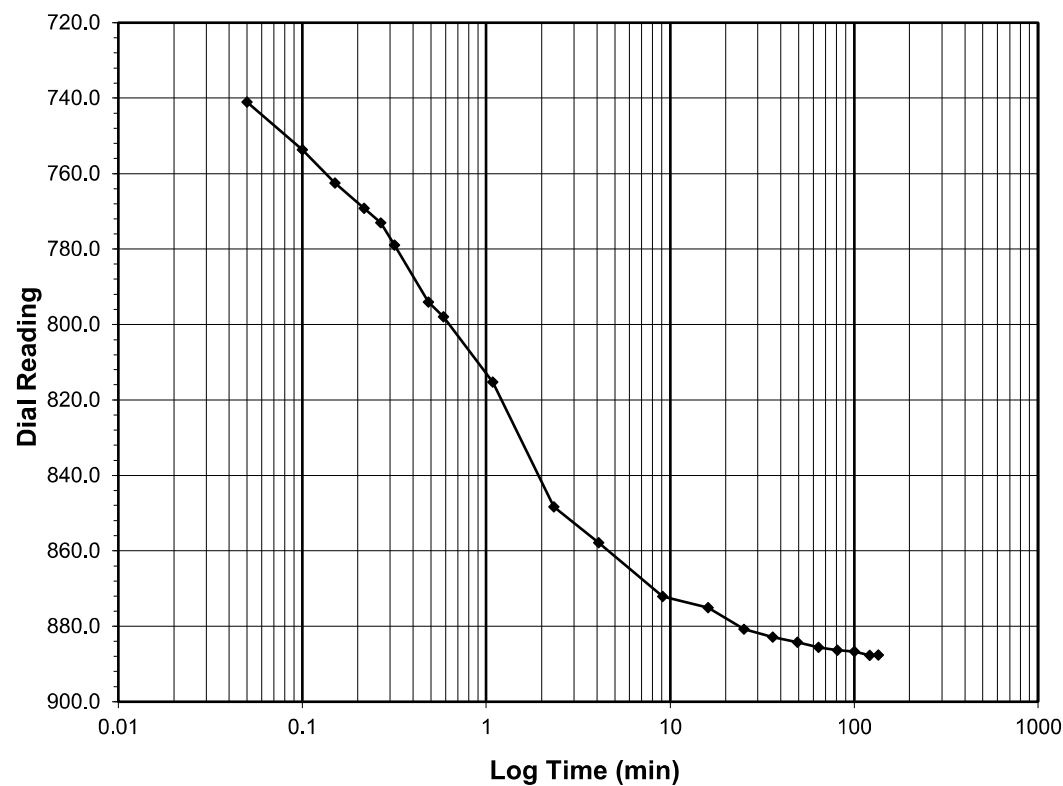
Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



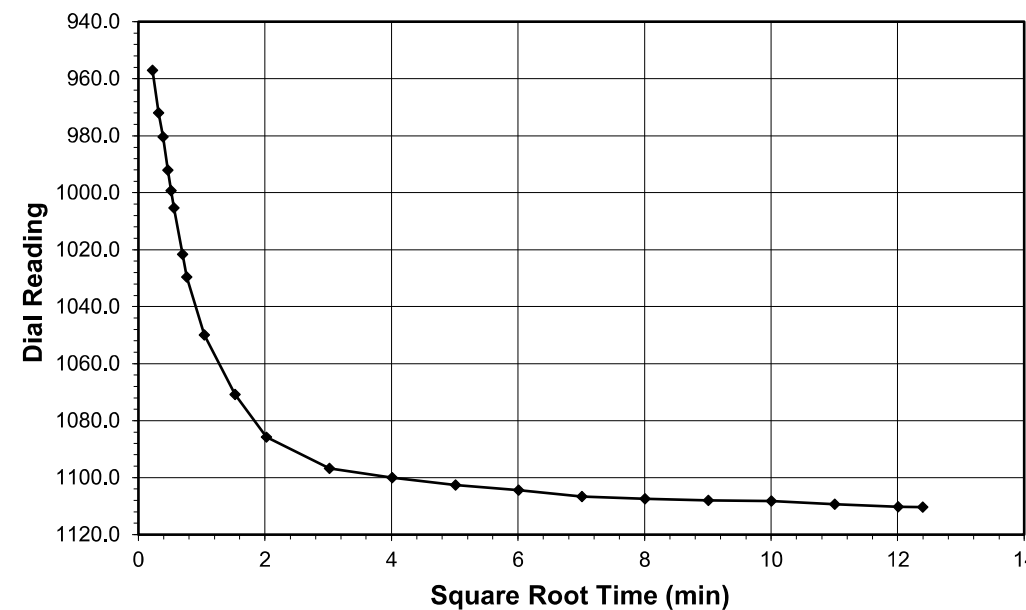
Test Load (tsf) 4.0-8.0  
 Final Reading (div) 887.7  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/5/20  
 Start Time 10:46:17

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>687.8</b>
0.05	741.1
0.10	753.7
0.15	762.5
0.22	769.1
0.27	773.1
0.32	779.0
0.48	794.0
0.58	797.9
1.08	815.3
2.33	848.4
4.08	857.8
9.08	872.1
16.08	875.0
25.08	880.8
36.08	882.9
49.08	884.3
64.10	885.6
81.10	886.4
100.10	886.7
121.10	887.7
135.17	887.7



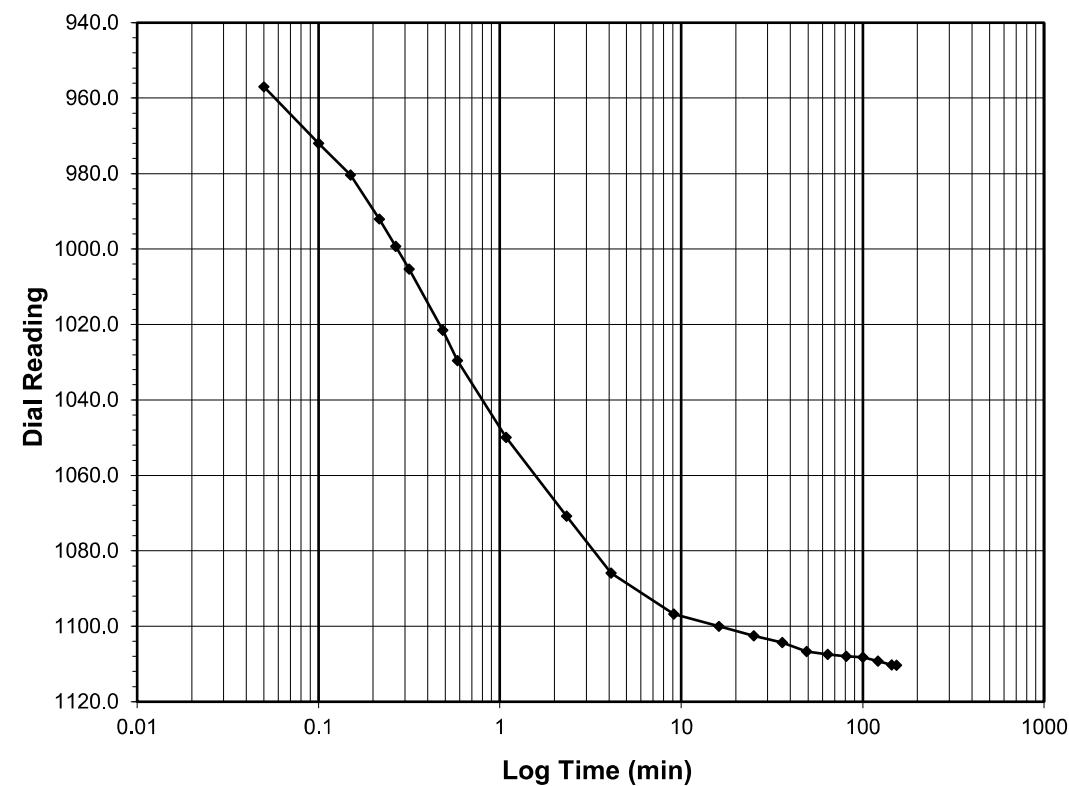
Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 8.0-16.0  
 Final Reading (div) 1110.4  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/5/20  
 Start Time 13:01:27

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>887.7</b>
0.05	957.0
0.10	972.0
0.15	980.3
0.22	992.1
0.27	999.3
0.32	1005.3
0.48	1021.5
0.58	1029.6
1.08	1050.0
2.33	1070.8
4.10	1085.9
9.10	1096.8
16.10	1100.1
25.10	1102.6
36.10	1104.4
49.10	1106.7
64.12	1107.5
81.12	1108.0
100.12	1108.2
121.13	1109.3
144.13	1110.3
153.62	1110.4



Tested By 129-07-0411 Date 2/5/20 Checked By GEM Date 2/11/20

Tested By 129-07-0411 Date 2/5/20 Checked By GEM Date 2/11/20

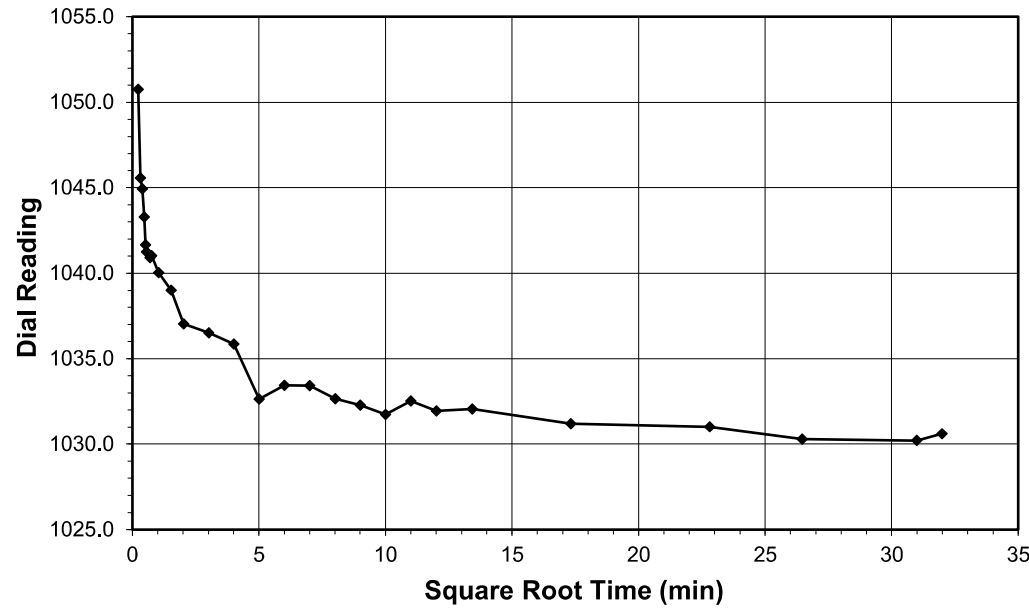




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

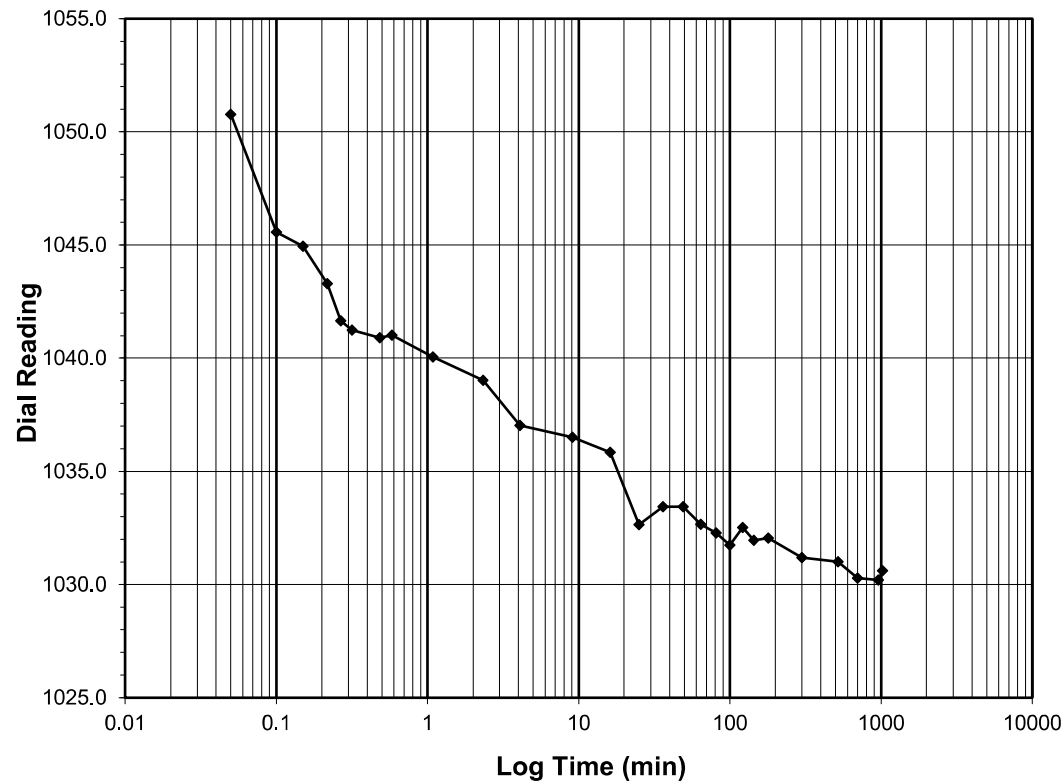
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **16.0-4.0**  
 Final Reading (div) **1030.6**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/5/20  
 Start Time 15:35:04

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>1110.4</b>
0.05	1050.8
0.10	1045.6
0.15	1044.9
0.22	1043.3
0.27	1041.7
0.32	1041.3
0.48	1040.9
0.58	1041.0
1.08	1040.0
2.33	1039.0
4.08	1037.0
9.10	1036.5
16.10	1035.8
25.10	1032.6
36.10	1033.4
49.10	1033.4
64.12	1032.7
81.12	1032.3
100.12	1031.7
121.12	1032.5
144.12	1032.0
180.12	1032.1
300.12	1031.2
520.13	1031.0
700.13	1030.3
960.13	1030.2
1023.08	1030.6



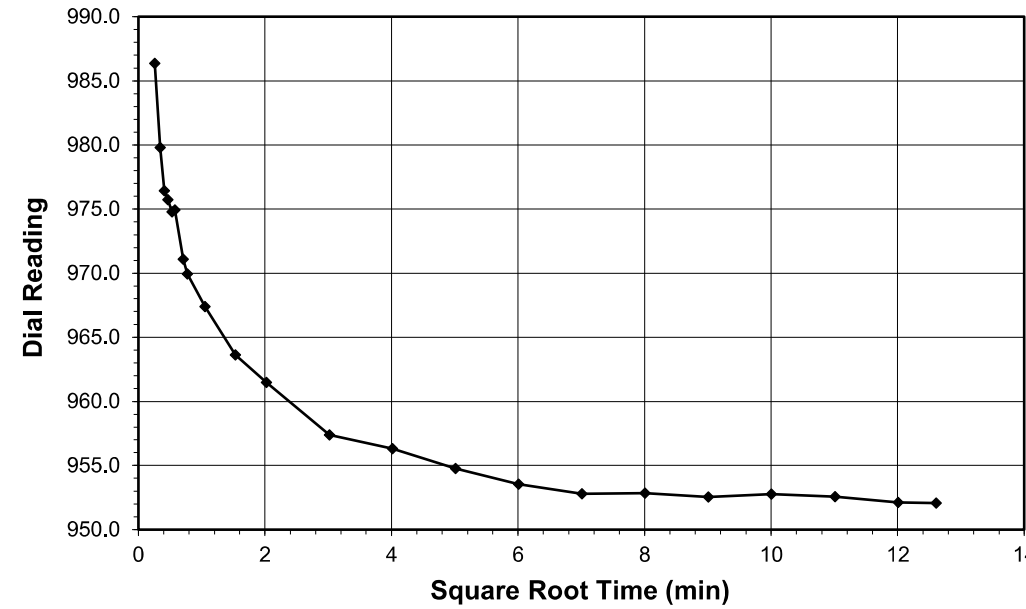
Tested By 129-07-0411 Date 2/5/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

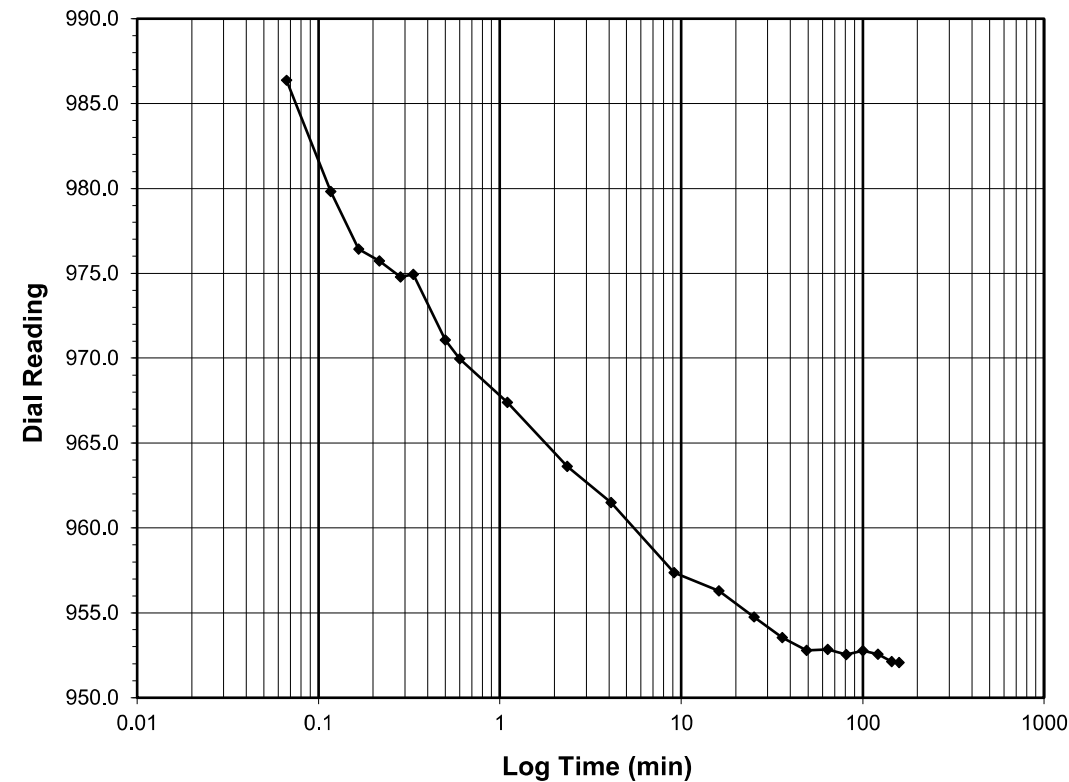
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **4.0-1.0**  
 Final Reading (div) **952.1**  
 Consolidometer No. **R-470**  
 1 Division (in) 0.0001

Start Date 2/6/20  
 Start Time 8:38:10

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>1030.6</b>
0.07	986.4
0.12	979.8
0.17	976.4
0.22	975.7
0.28	974.8
0.33	974.9
0.50	971.1
0.60	969.9
1.10	967.4
2.35	963.6
4.10	961.5
9.12	957.4
16.12	956.3
25.12	954.8
36.13	953.5
49.13	952.8
64.13	952.8
81.13	952.5
100.13	952.8
121.15	952.6
144.15	952.1
158.92	952.1



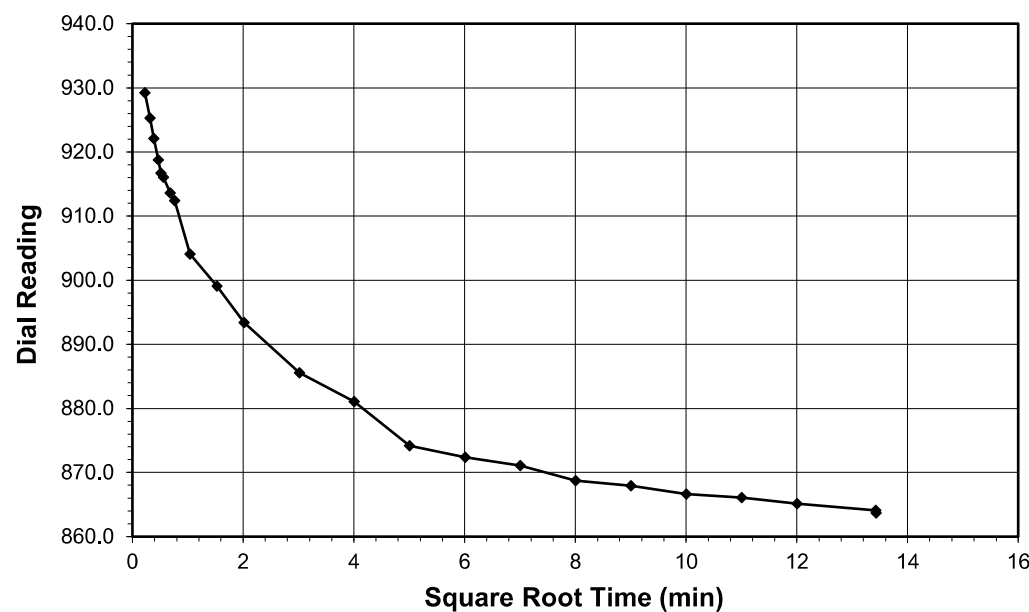
Tested By 129-07-0411 Date 2/6/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

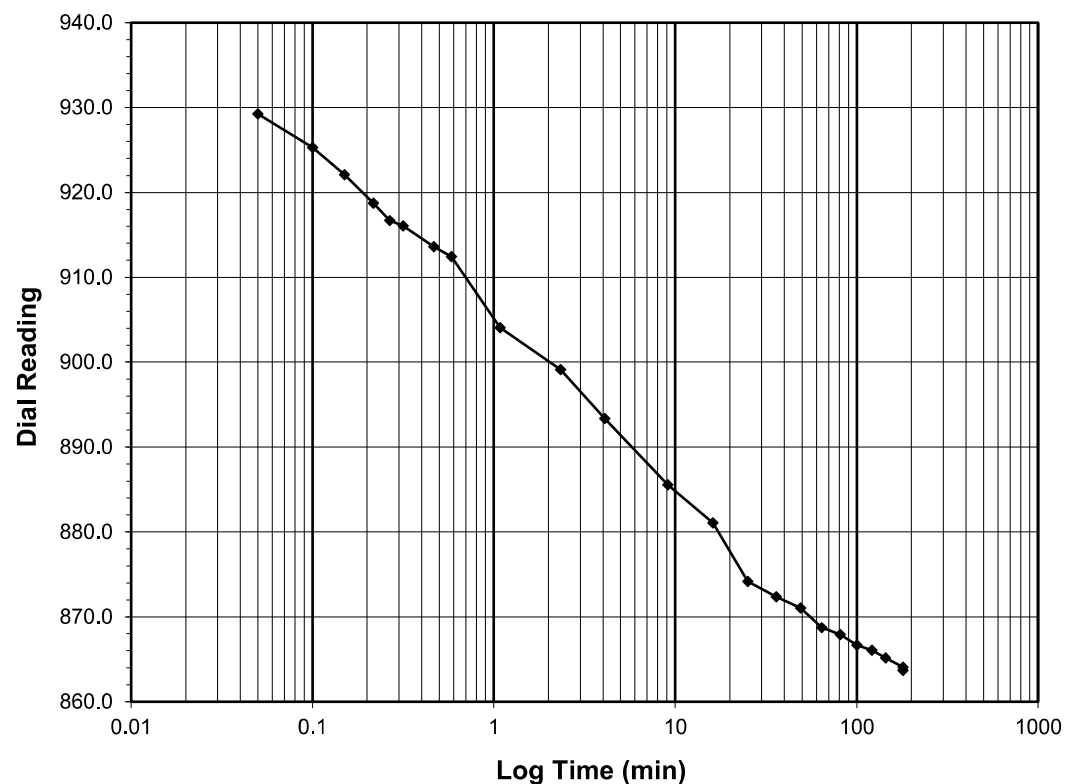
Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



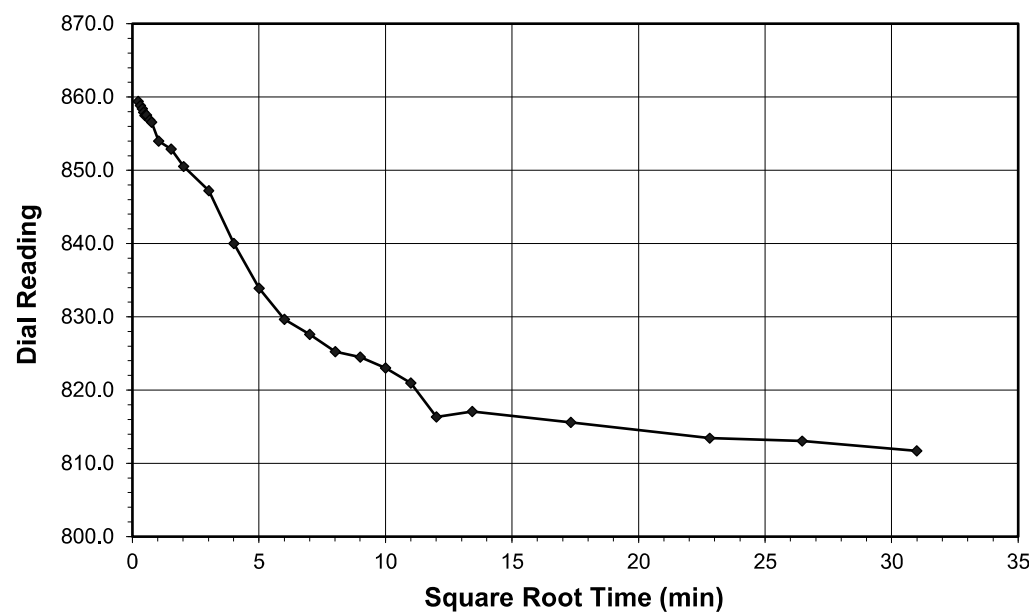
Test Load (tsf) 1.0-0.25  
 Final Reading (div) 863.7  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/6/20  
 Start Time 11:17:04

Elapsed Time (min)	Dial Reading (div)
Initial	952.1
0.05	929.2
0.10	925.3
0.15	922.1
0.22	918.8
0.27	916.7
0.32	916.0
0.47	913.6
0.58	912.4
1.08	904.1
2.33	899.1
4.08	893.4
9.08	885.6
16.08	881.1
25.08	874.2
36.08	872.4
49.08	871.1
64.08	868.7
81.10	867.9
100.10	866.6
121.10	866.1
144.10	865.1
180.12	864.1
180.37	863.7



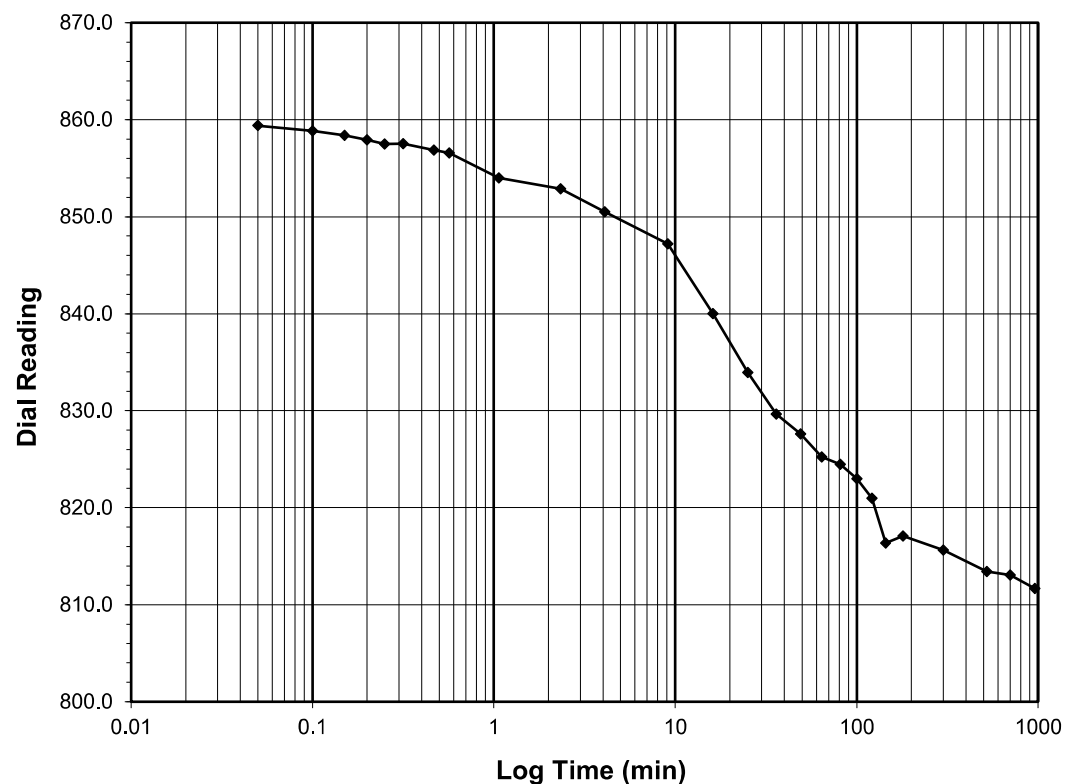
Client Kleinfelder Boring No. Y1RPC\_2800  
 Client Project R-5819/R-5820 Depth (ft) 10.0-12.0  
 Project No. R-2020-024-001 Sample No. ST-5  
 Lab ID R-2020-024-001-003 Visual Description Gray Orange Sandy Clay

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.25-0.125  
 Final Reading (div) 811.7  
 Consolidometer No. R-470  
 1 Division (in) 0.0001  
 Start Date 2/6/20  
 Start Time 14:17:27

Elapsed Time (min)	Dial Reading (div)
Initial	863.7
0.05	859.4
0.10	858.8
0.15	858.4
0.20	857.9
0.25	857.5
0.32	857.5
0.47	856.9
0.57	856.6
1.07	854.0
2.33	852.9
4.08	850.5
9.08	847.2
16.08	840.0
25.08	833.9
36.10	829.7
49.10	827.6
64.10	825.3
81.10	824.5
100.12	823.0
121.12	820.9
144.12	816.4
180.12	817.1
300.13	815.6
520.13	813.4
700.13	813.0
960.13	811.7



Tested By 129-07-0411 Date 2/6/20 Checked By GEM Date 2/11/20

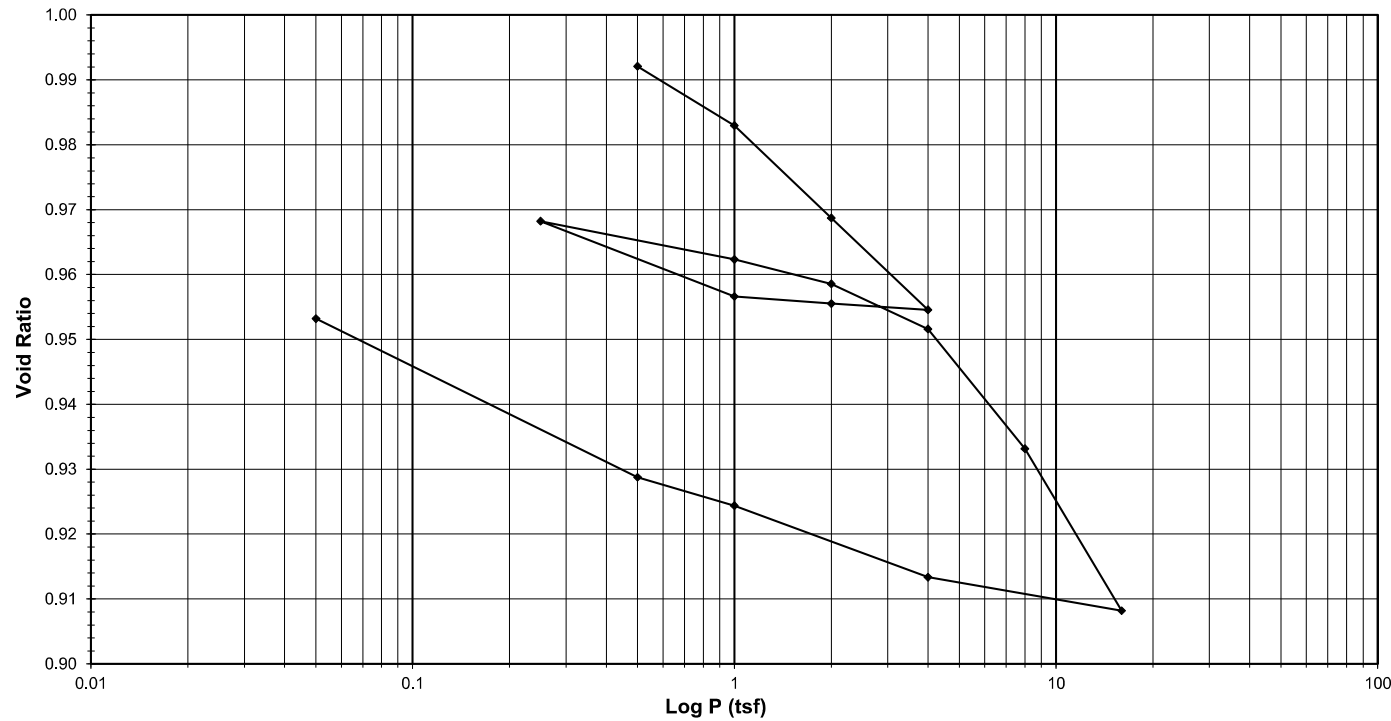
Tested By 129-07-0411 Date 2/6/20 Checked By GEM Date 2/11/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 3/3/20 Approved By MPS Date 3/18/20

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R572  
 1 Division = 0.0001 (in.)

**Sample Properties**

	Initial	Final
<i>Water Content</i>		
Tare Number	TB-01	852
Wt. Tare & WS (g)	311.65	276.53
Wt. Tare & DS (g)	266.16	239.64
Wt. Water (g)	45.49	36.89
Wt. Tare (g)	135.84	136.11
Wt. DS (g)	130.32	103.53
Water Content (%)	34.91	35.63
<i>Sample Parameters</i>		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.0000	0.9743
Sample Volume (cc)	80.44	78.37
Wt. Wet Sample + Ring (g)	249.41	250.19
Wt. of Ring (g)	104.34	104.34
Wt. of Wet Sample (g)	145.07	145.85
Wet Density (pcf)	112.54	116.13
Wet Density (g/cc)	1.80	1.86
Water Content (%)	34.91	35.63
Wt. of Dry Sample (g)	107.53	107.53
Dry Density (pcf)	83.42	85.62
Dry Density (g/cc)	1.34	1.37
Void Ratio	1.0048	0.9532
Saturation (%)	93.11	100.18
Specific Gravity	2.68	Assumed

**Test Data Summary**

Applied Pressure (tsf)	Final Dial Reading (div)	Machine Deflection (div)	Corrected Reading (div)	Height of Sample (mm)	Volume (cc)	Dry Density (g/cc)	Void Ratio
Seating	0	0	0	25.400	80.440	1.33682	1.00475
0.5	106.0	42.9	63.1	25.240	79.932	1.34532	0.99210
1	180.0	71.5	108.5	25.124	79.567	1.35149	0.98300
2	267.4	87.7	179.7	24.944	78.994	1.36129	0.96873
4	372.2	121.9	250.3	24.764	78.427	1.37114	0.95458
2	353.8	108.3	245.5	24.777	78.465	1.37046	0.95555
1	329.6	89.6	240.0	24.790	78.509	1.36969	0.95664
0.25	250.0	67.7	182.3	24.937	78.973	1.36165	0.96821
1	290.5	78.8	211.7	24.862	78.737	1.36574	0.96231
2	323.4	93.0	230.4	24.815	78.587	1.36834	0.95857
4	387.6	122.5	265.1	24.727	78.307	1.37323	0.95161
8	513.8	156.8	357.0	24.493	77.568	1.38632	0.93318
16	700.3	218.7	481.6	24.177	76.566	1.40446	0.90820
4	609.6	153.8	455.8	24.242	76.773	1.40067	0.91337
1	510.6	109.7	400.9	24.382	77.215	1.39266	0.92438
0.5	466.2	87.2	379.0	24.437	77.391	1.38948	0.92878
0.05	304.8	47.7	257.1	24.747	78.371	1.37211	0.95320

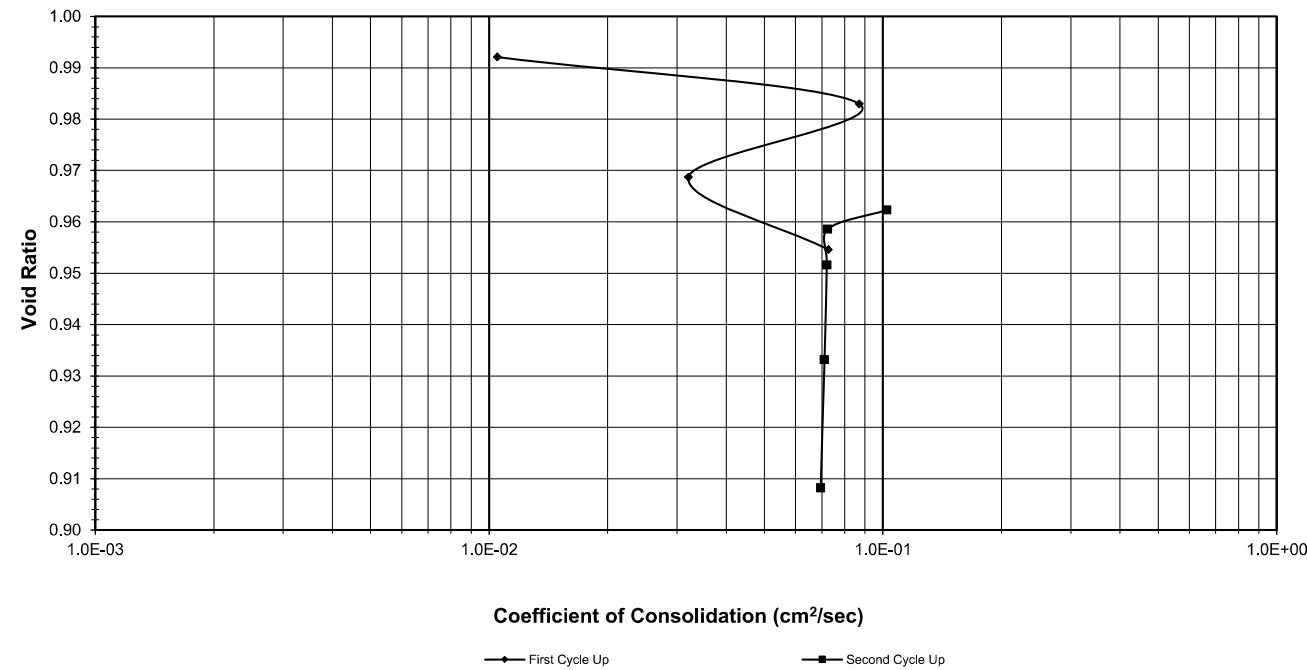
Tested By 129-07-0411 Date 3/3/20 Input Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Tested By 129-07-0411 Date 3/3/20 Input Checked By GEM Date 3/18/20

DCN: CT-24E Date: 5/3/12 Revision: 6 Z:\2020 PROJECTS\Kleinfelder\2020-024 Kleinfelder - R5819&R5820\2020-024-003\2020-024-003-054 DOT GEOJAC-16TSF1 Cv.xlsm\FINAL PLOT  
 2200 Westinghouse Blvd., Suite 103 • Raleigh, NC 27604 • Phone (919) 876-0405 • Fax (919) 876-0460 • www.geotechnics.net

**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Reference R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED

Consolidometer No. R572  
 1 Division = 0.0001 (in.)

Sample Properties	Initial	Final
Water Content		
Tare Number	TB-01	852
Wt. Tare & WS (g)	311.65	276.53
Wt. Tare & DS (g)	266.16	239.64
Wt. Water (g)	45.49	36.89
Wt. Tare (g)	135.84	136.11
Wt. DS (g)	130.32	103.53
Water Content (%)	34.91	35.63
Sample Parameters		
Sample Diameter (in)	2.5	2.5
Sample Height (in)	1.000	0.974
Sample Volume (cc)	80.44	78.37
Wt. Wet Sample + Ring (g)	249.41	250.19
Wt. of Ring (g)	104.34	104.34
Wt. of Wet Sample (g)	145.07	145.85
Wet Density (pcf)	112.54	116.13
Wet Density (g/cc)	1.80	1.86
Water Content (%)	34.91	35.63
Wt. of Dry Sample (g)	107.53	107.53
Dry Density (pcf)	83.42	85.62
Dry Density (g/cc)	1.34	1.37
Void Ratio	1.0048	0.9532
Saturation (%)	93.11	100.18
Specific Gravity	2.68	Assumed

Load Increment (tsf)	Dial Reading @ t <sub>50</sub> (div)	Machine Deflection (div)	C <sub>v</sub> Test Data Summary		Time t <sub>50</sub> (min.)	C <sub>v</sub> (cm <sup>2</sup> /sec)
			Corrected Dial Reading @ t <sub>50</sub> (div)	Sample Height @ t <sub>50</sub> (cm)		
0.0 - 0.5	88.7	42.9	45.8	2.528	0.50	0.01049
0.5 - 1.0	140.2	71.5	68.7	2.523	0.06	0.08705
1.0 - 2.0	241.4	87.7	153.7	2.501	0.16	0.03209
2.0 - 4.0	323.1	121.9	201.2	2.489	0.07	0.07264
4.0 - 2.0	NA	108.3	NA	NA	NA	NA
2.0 - 1.0	NA	89.6	NA	NA	NA	NA
1.0 - 0.25	NA	67.7	NA	NA	NA	NA
0.25 - 1.0	251.2	78.8	172.4	2.496	0.05	0.10229
1.0 - 2.0	310.0	93.0	217.0	2.485	0.07	0.07240
2.0 - 4.0	362.9	122.5	240.4	2.479	0.07	0.07206
4.0 - 8.0	466.7	156.8	309.9	2.461	0.07	0.07104
8.0 - 16.0	630.8	218.7	412.1	2.435	0.07	0.06955
16.0 - 4.0	NA	153.8	NA	NA	NA	NA
4.0 - 1.0	NA	109.7	NA	NA	NA	NA
1.0 - 0.5	NA	87.2	NA	NA	NA	NA
1.0 - 0.05	NA	47.7	NA	NA	NA	NA

Tested By 129-07-0411 Date 3/3/20 Input Checked By GEM Date 3/18/20

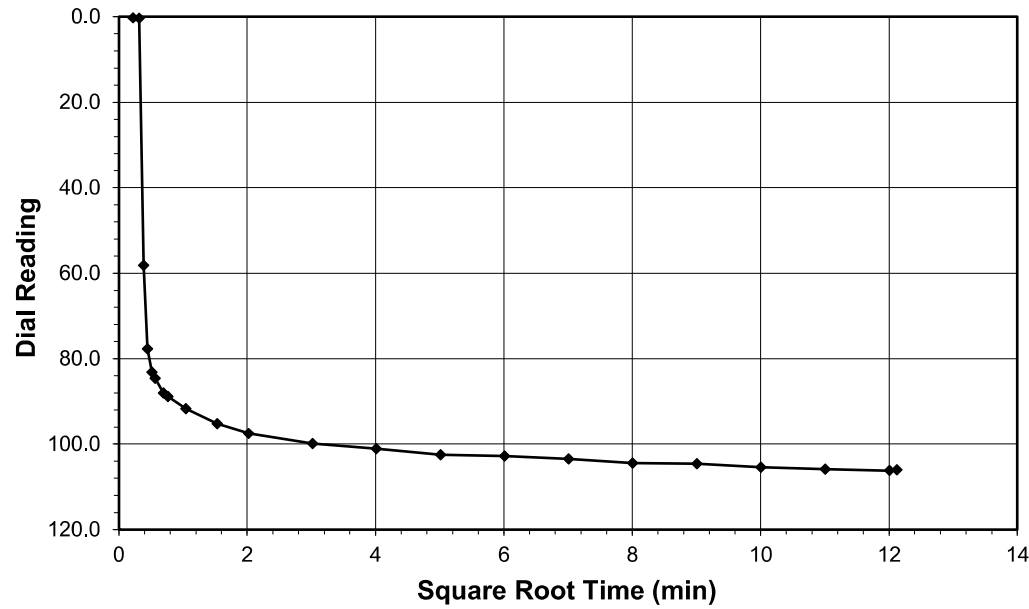
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**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

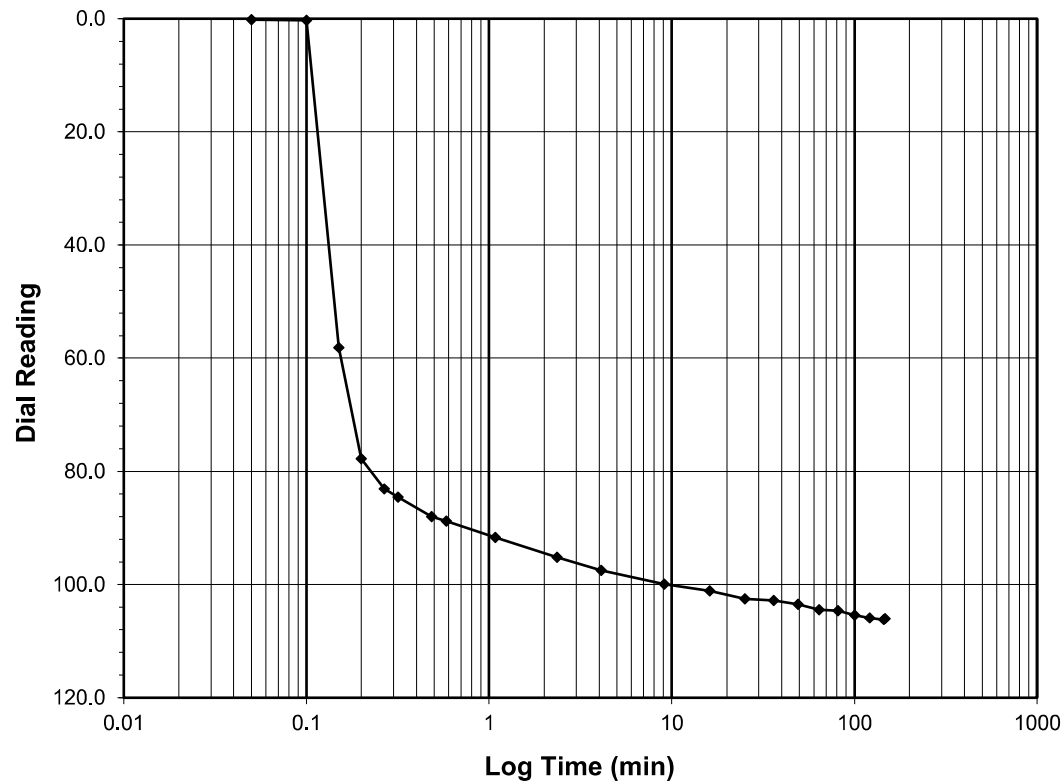
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.05-0.5**  
 Final Reading (div) **106.0**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001

Start Date 3/2/20  
 Start Time 14:03:23

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>0.0</b>
0.05	0.2
0.10	0.3
0.15	58.1
0.20	77.7
0.27	83.1
0.32	84.6
0.48	88.0
0.58	88.8
1.08	91.7
2.35	95.2
4.10	97.5
9.10	99.9
16.10	101.1
25.10	102.5
36.12	102.8
49.12	103.5
64.13	104.4
81.13	104.6
100.13	105.4
121.13	105.9
144.13	106.2
147.02	106.0



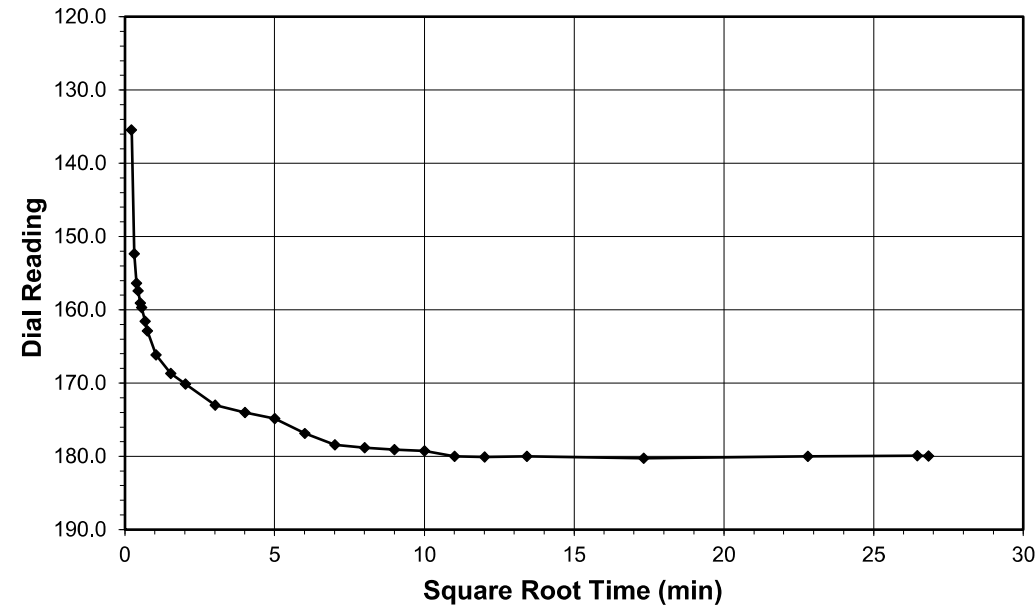
Tested By 129-07-0411 Date 3/2/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

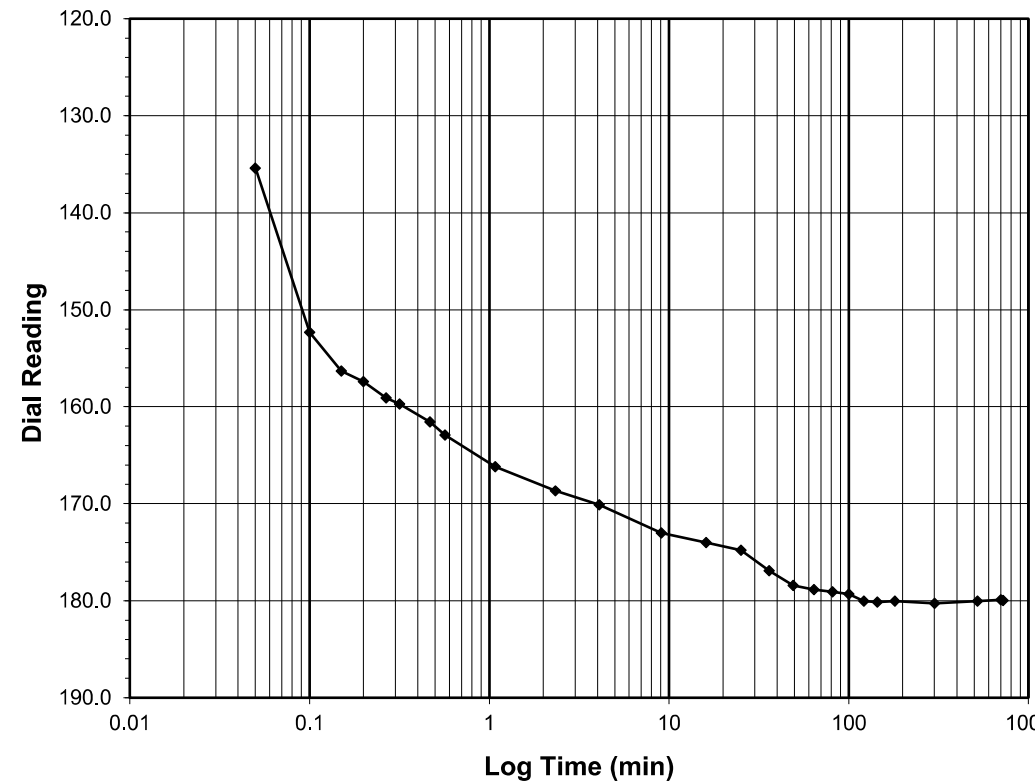
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.5-1.0**  
 Final Reading (div) **180.0**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001

Start Date 3/2/20  
 Start Time 16:30:25

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>106.0</b>
0.05	135.4
0.10	152.3
0.15	156.3
0.20	157.4
0.27	159.1
0.32	159.7
0.47	161.6
0.57	162.9
1.08	166.2
2.33	168.7
4.08	170.1
9.08	173.0
16.10	174.0
25.10	174.8
36.10	176.9
49.12	178.4
64.12	178.8
81.13	179.1
100.13	179.3
121.13	180.0
144.13	180.1
180.13	180.0
300.15	180.3
520.15	180.0
700.15	179.9
720.08	180.0



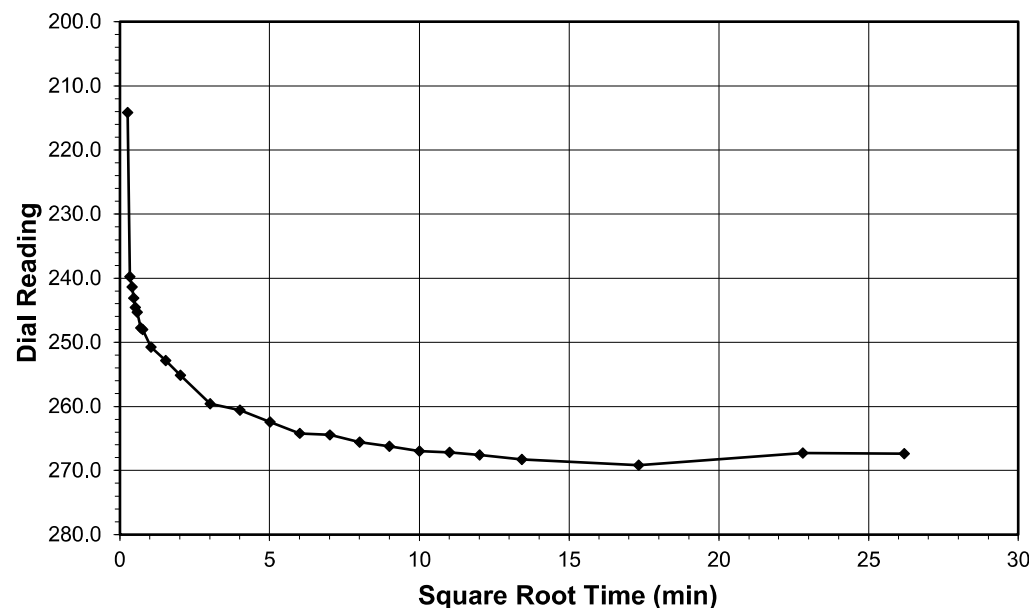
Tested By 129-07-0411 Date 3/2/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

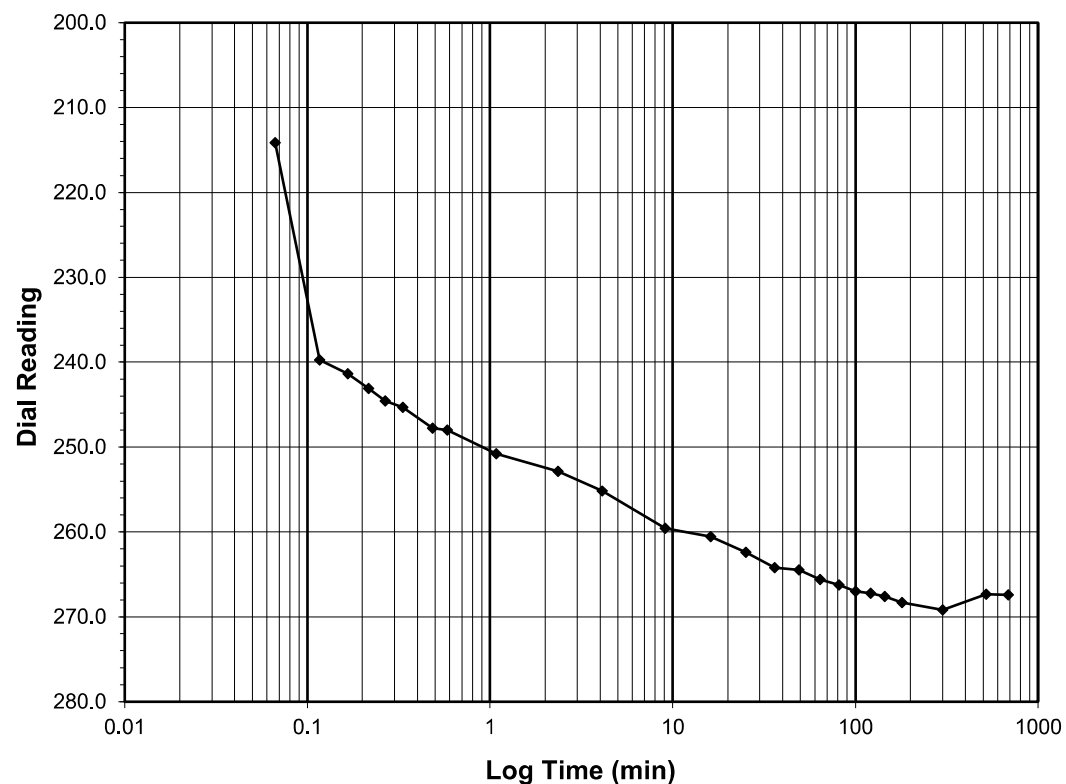
Client: Kleinfelder      Boring No.: Y2\_3590  
 Client Project: R-5819/R-5820      Depth (ft): 5.0-7.0  
 Project No.: R-2020-024-003      Sample No.: ST-6  
 Lab ID: R-2020-024-003-054      Visual Description: Gray Green Clay with Sand

**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf)** 1.0-2.0  
**Final Reading (div)** 267.4  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001  
 Start Date 3/3/20  
 Start Time 4:30:31

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>180.0</b>
0.07	214.1
0.12	239.8
0.17	241.4
0.22	243.1
0.27	244.6
0.33	245.3
0.48	247.8
0.58	248.0
1.08	250.8
2.35	252.8
4.10	255.2
9.10	259.6
16.12	260.6
25.12	262.4
36.12	264.2
49.12	264.5
64.12	265.6
81.12	266.2
100.12	267.0
121.13	267.2
144.13	267.6
180.15	268.3
300.15	269.2
520.15	267.3
685.93	267.4



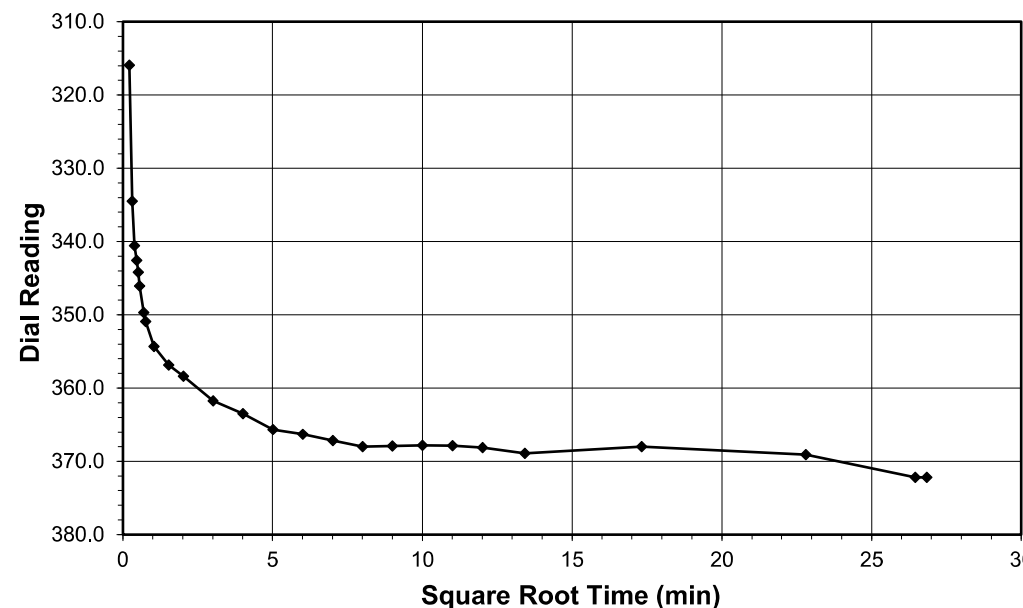
Tested By 129-07-0411 Date 3/3/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

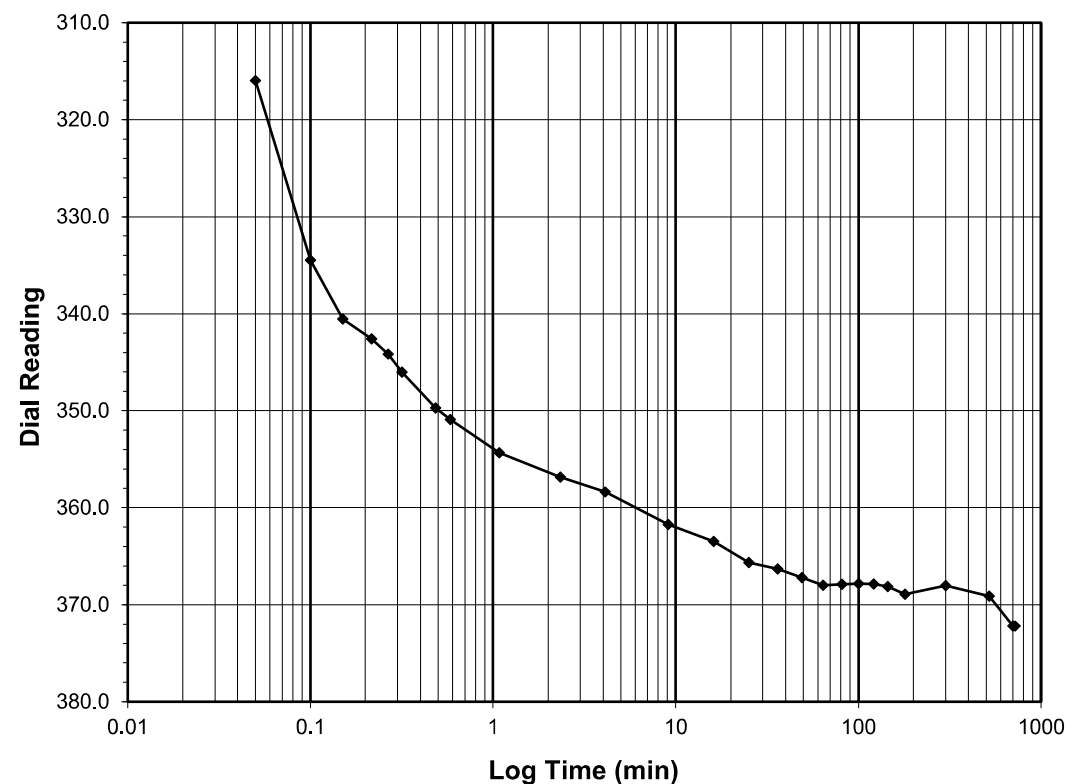
Client: Kleinfelder      Boring No.: Y2\_3590  
 Client Project: R-5819/R-5820      Depth (ft): 5.0-7.0  
 Project No.: R-2020-024-003      Sample No.: ST-6  
 Lab ID: R-2020-024-003-054      Visual Description: Gray Green Clay with Sand

**Sample Conditions:** UNDISTURBED, INUNDATED AND DOUBLE DRAINED



**Test Load (tsf)** 2.0-4.0  
**Final Reading (div)** 372.2  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001  
 Start Date 3/3/20  
 Start Time 15:56:26

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>267.4</b>
0.05	315.9
0.10	334.5
0.15	340.6
0.22	342.6
0.27	344.2
0.32	346.0
0.48	349.7
0.58	350.9
1.08	354.3
2.33	356.8
4.10	358.4
9.10	361.7
16.10	363.5
25.12	365.7
36.12	366.3
49.12	367.2
64.12	368.0
81.12	367.9
100.12	367.8
121.13	367.9
144.13	368.1
180.13	368.9
300.13	368.0
520.15	369.1
700.15	372.2
720.50	372.2



Tested By 129-07-0411 Date 3/3/20 Checked By GEM Date 3/18/20

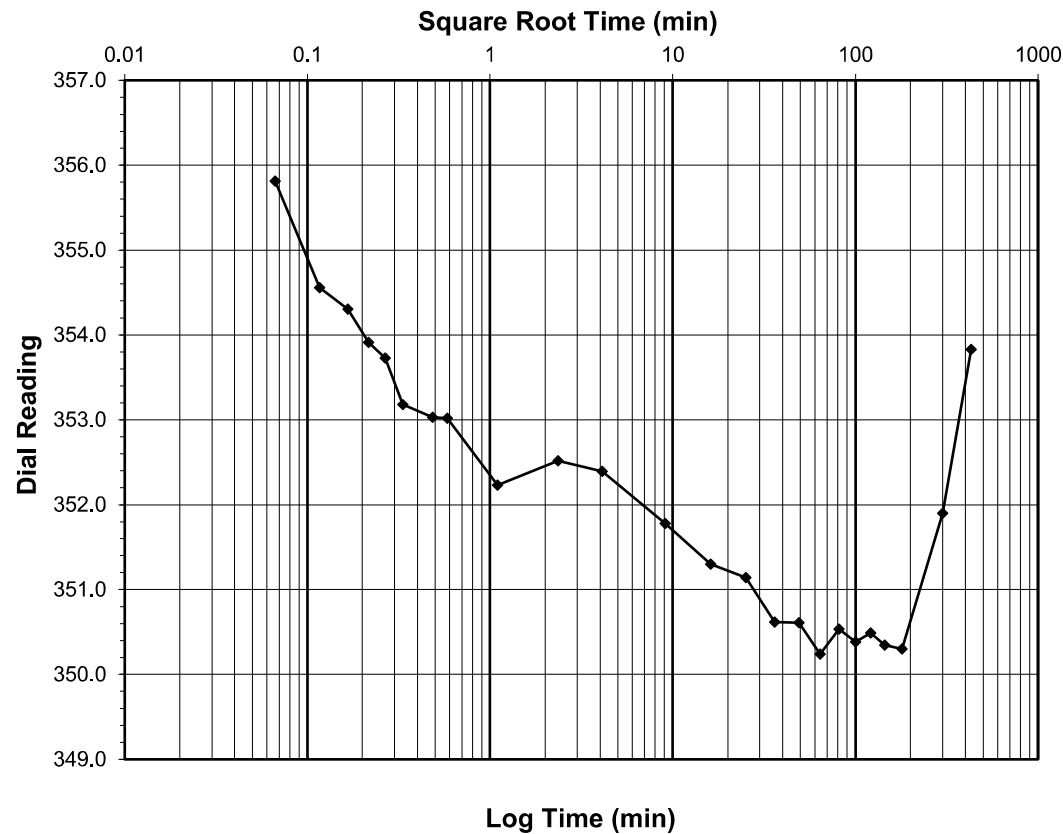
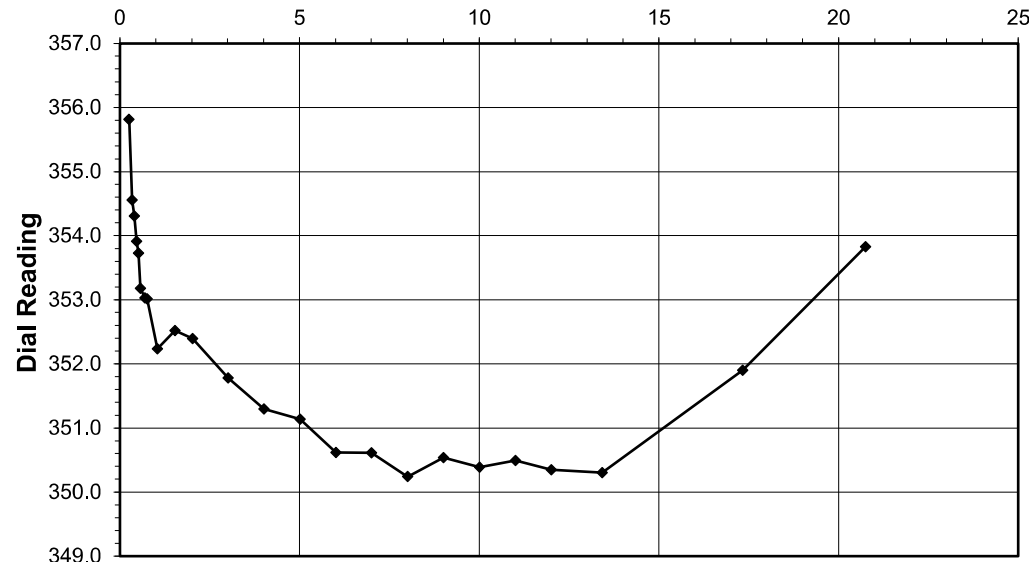




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y2\_3590  
 Client Project: R-5819/R-5820      Depth (ft): 5.0-7.0  
 Project No.: R-2020-024-003      Sample No.: ST-6  
 Lab ID: R-2020-024-003-054      Visual Description: Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 4.0-2.0  
 Final Reading (div) 353.8  
 Consolidometer No. R572  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 3:56:57

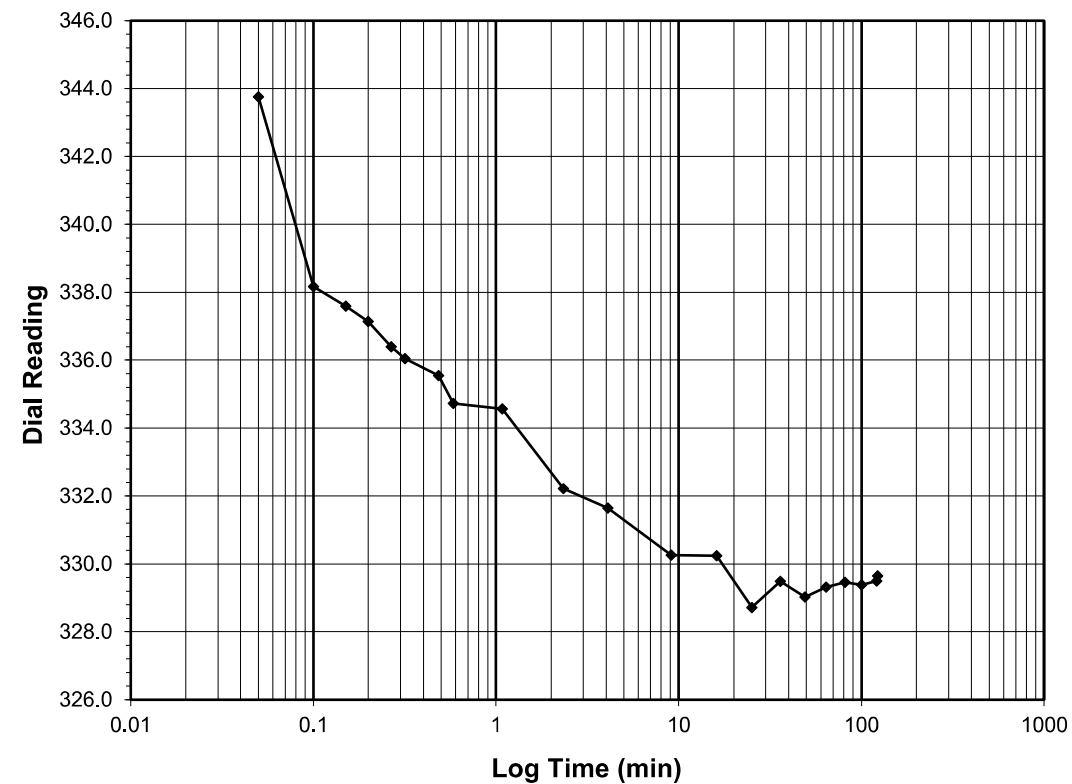
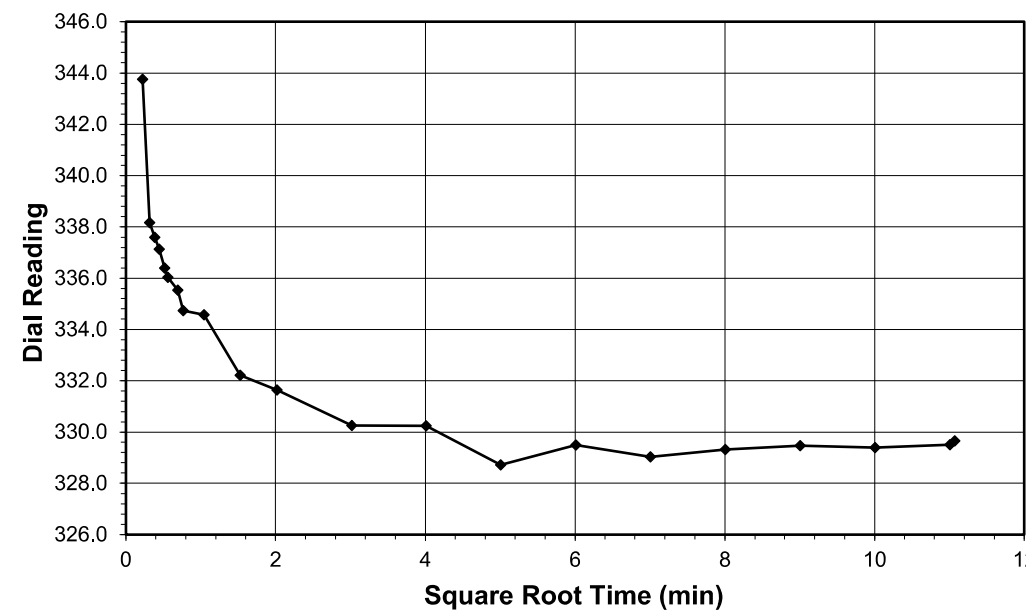
Elapsed Time (min)	Dial Reading (div)
Initial	372.2
0.07	355.8
0.12	354.6
0.17	354.3
0.22	353.9
0.27	353.7
0.33	353.2
0.48	353.0
0.58	353.0
1.10	352.2
2.35	352.5
4.10	352.4
9.10	351.8
16.10	351.3
25.12	351.1
36.12	350.6
49.12	350.6
64.13	350.2
81.13	350.5
100.13	350.4
121.15	350.5
144.15	350.3
180.15	350.3
300.15	351.9
430.33	353.8



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client: Kleinfelder      Boring No.: Y2\_3590  
 Client Project: R-5819/R-5820      Depth (ft): 5.0-7.0  
 Project No.: R-2020-024-003      Sample No.: ST-6  
 Lab ID: R-2020-024-003-054      Visual Description: Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-1.0  
 Final Reading (div) 329.6  
 Consolidometer No. R572  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 11:07:16

Elapsed Time (min)	Dial Reading (div)
Initial	353.8
0.05	343.8
0.10	338.2
0.15	337.6
0.20	337.1
0.27	336.4
0.32	336.0
0.48	335.5
0.58	334.7
1.08	334.6
2.33	332.2
4.08	331.6
9.10	330.3
16.10	330.2
25.10	328.7
36.10	329.5
49.10	329.0
64.10	329.3
81.12	329.5
100.12	329.4
121.12	329.5
122.53	329.6

Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/18/20

Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/18/20

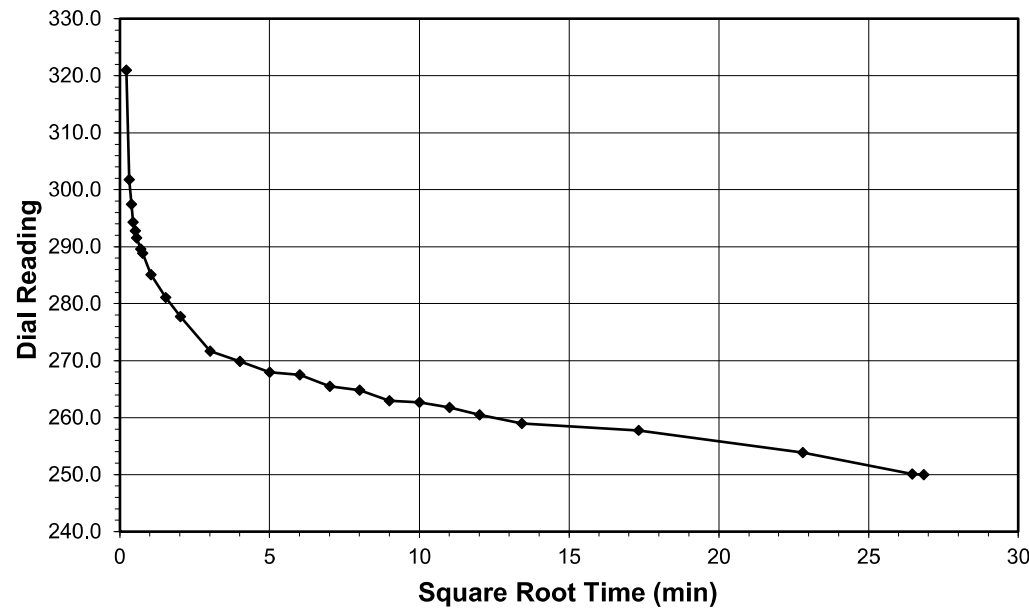




**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

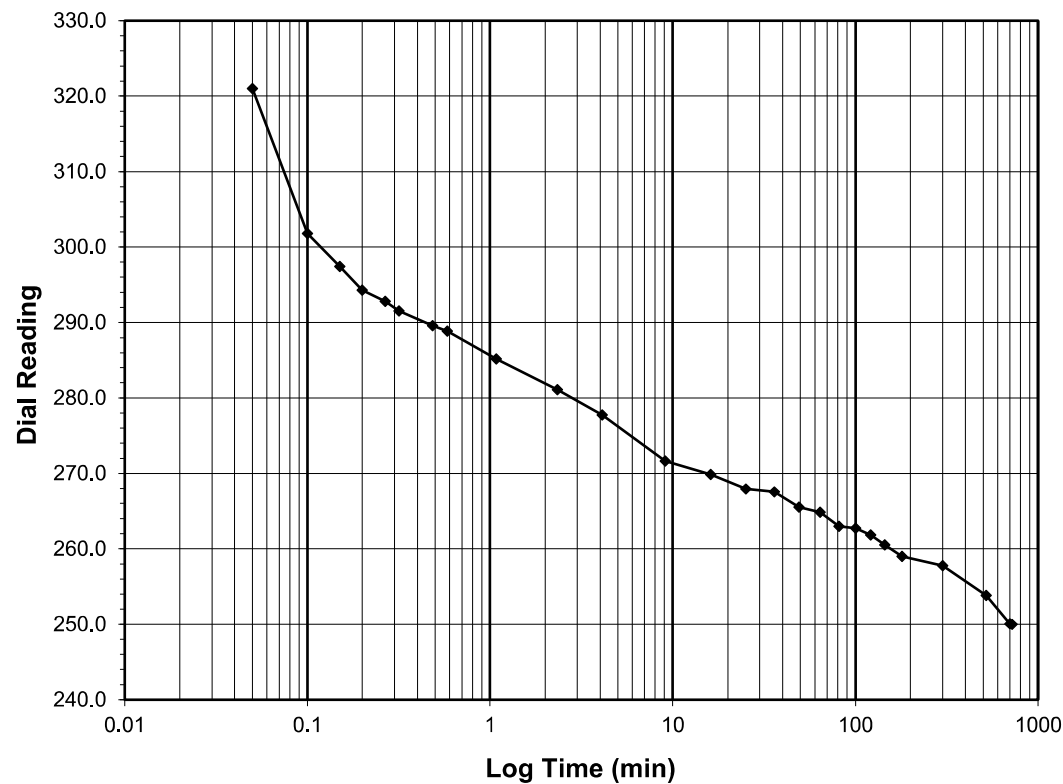
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **1.0-0.25**  
 Final Reading (div) **250.0**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001

Start Date 3/4/20  
 Start Time 13:09:48

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>329.6</b>
0.05	321.0
0.10	301.8
0.15	297.4
0.20	294.3
0.27	292.8
0.32	291.5
0.48	289.6
0.58	288.9
1.08	285.1
2.33	281.1
4.10	277.7
9.10	271.7
16.10	269.9
25.10	267.9
36.10	267.5
49.10	265.5
64.12	264.8
81.12	263.0
100.12	262.7
121.13	261.8
144.13	260.5
180.13	259.0
300.13	257.8
520.15	253.8
700.15	250.1
720.42	250.0



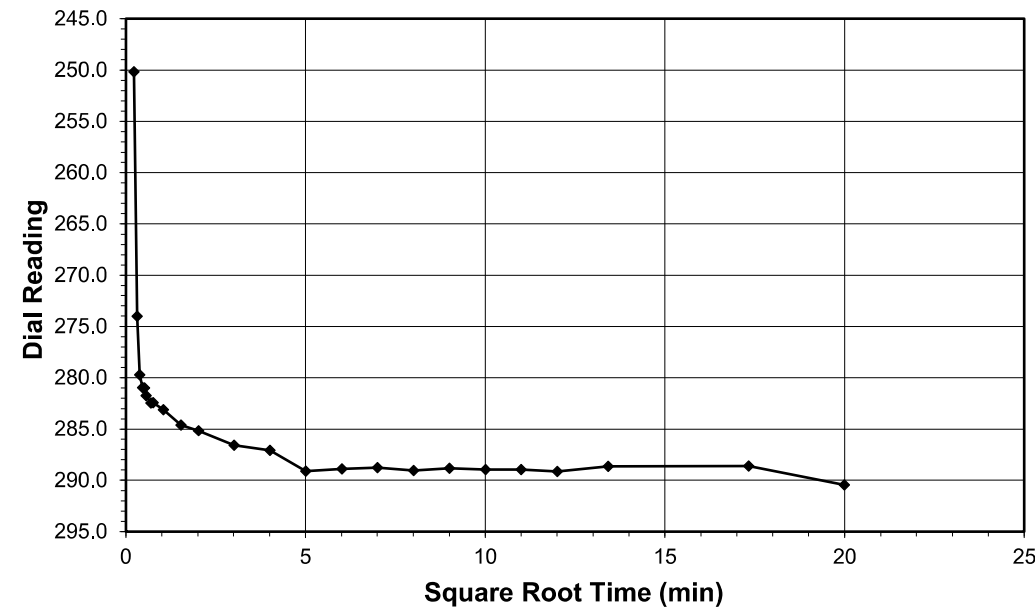
Tested By 129-07-0411 Date 3/4/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

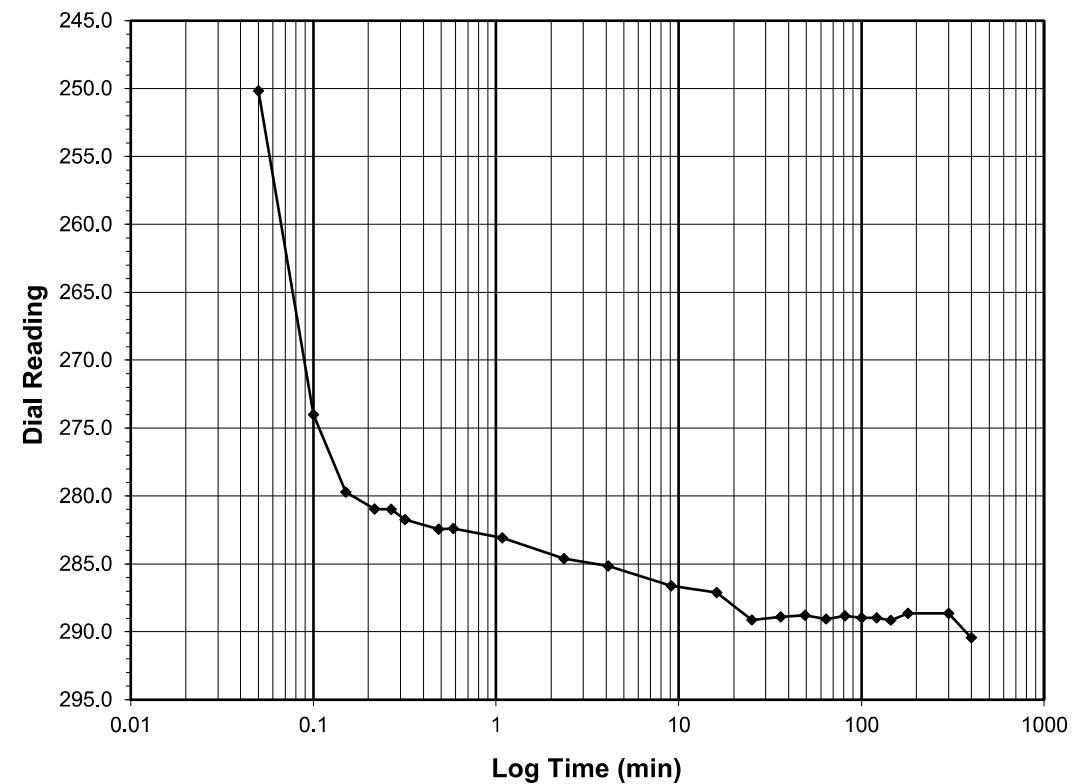
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **0.25-1.0**  
 Final Reading (div) **290.5**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 1:10:13

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>250.0</b>
0.05	250.2
0.10	274.0
0.15	279.7
0.22	281.0
0.27	281.0
0.32	281.7
0.48	282.5
0.58	282.4
1.08	283.1
2.35	284.6
4.10	285.2
9.10	286.6
16.10	287.1
25.10	289.1
36.12	288.9
49.12	288.8
64.12	289.0
81.12	288.8
100.12	289.0
121.12	289.0
144.13	289.1
180.13	288.6
300.13	288.6
399.63	290.5



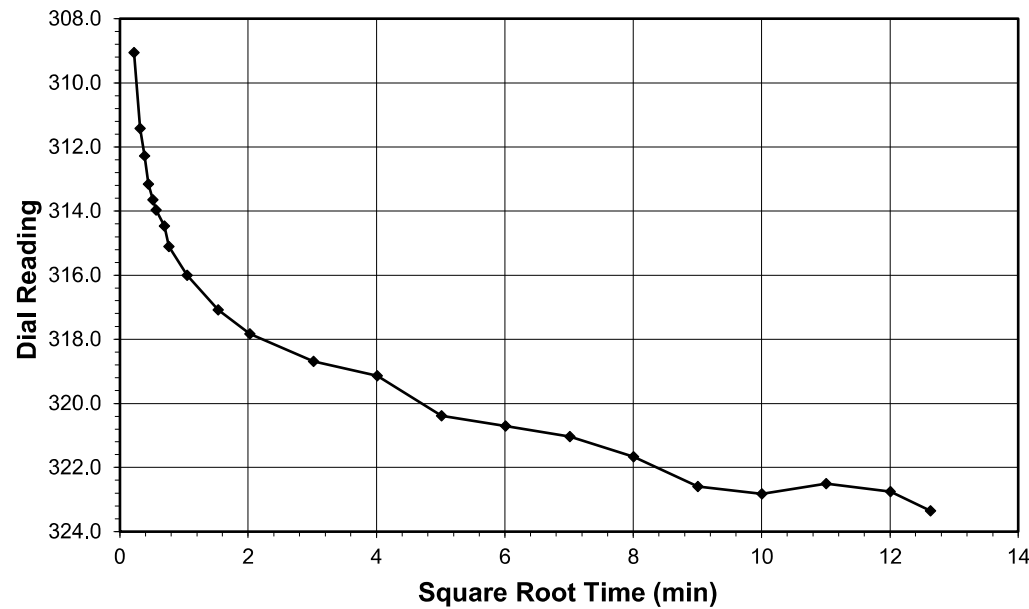
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

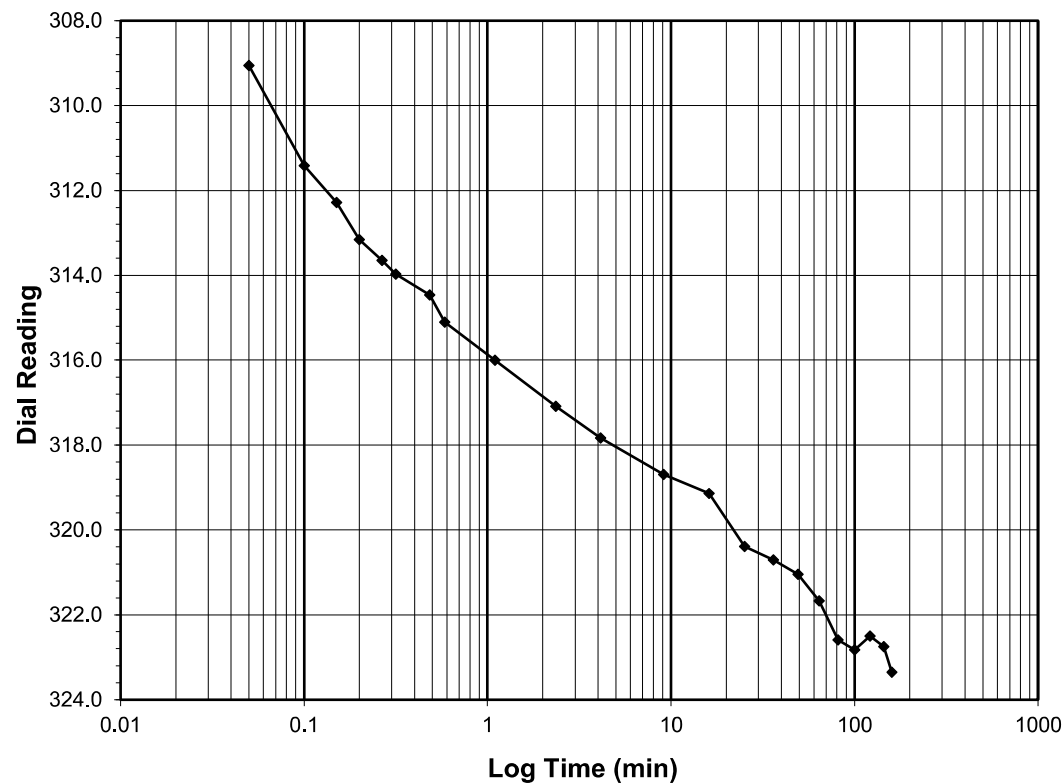
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-2.0  
 Final Reading (div) 323.4  
 Consolidometer No. R572  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 7:49:51

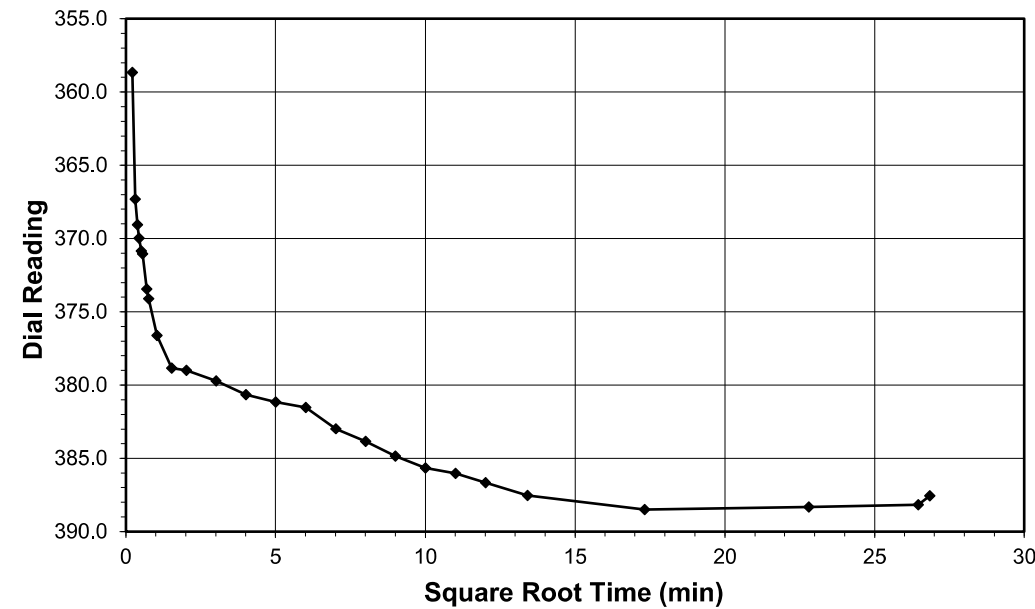
Elapsed Time (min)	Dial Reading (div)
Initial	290.5
0.05	309.1
0.10	311.4
0.15	312.3
0.20	313.2
0.27	313.7
0.32	314.0
0.48	314.5
0.58	315.1
1.10	316.0
2.35	317.1
4.12	317.8
9.12	318.7
16.12	319.1
25.12	320.4
36.13	320.7
49.13	321.0
64.13	321.7
81.13	322.6
100.13	322.8
121.13	322.5
144.13	322.8
159.60	323.4



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

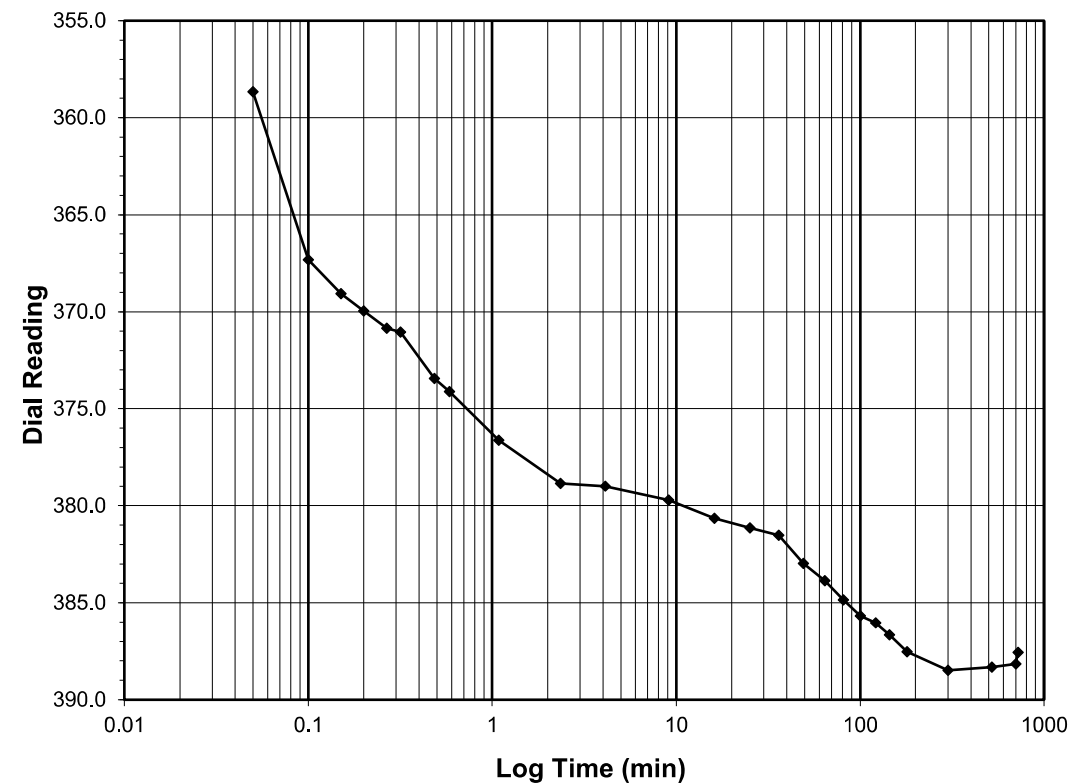
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 2.0-4.0  
 Final Reading (div) 387.6  
 Consolidometer No. R572  
 1 Division (in) 0.0001

Start Date 3/5/20  
 Start Time 10:29:27

Elapsed Time (min)	Dial Reading (div)
Initial	323.4
0.05	358.7
0.10	367.3
0.15	369.1
0.20	370.0
0.27	370.9
0.32	371.0
0.48	373.4
0.58	374.1
1.08	376.6
2.35	378.8
4.10	379.0
9.10	379.7
16.10	380.7
25.10	381.2
36.10	381.5
49.12	383.0
64.12	383.9
81.12	384.9
100.12	385.7
121.12	386.0
144.12	386.7
180.12	387.5
300.13	388.5
520.13	388.3
700.13	388.2
720.43	387.6



Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/18/20

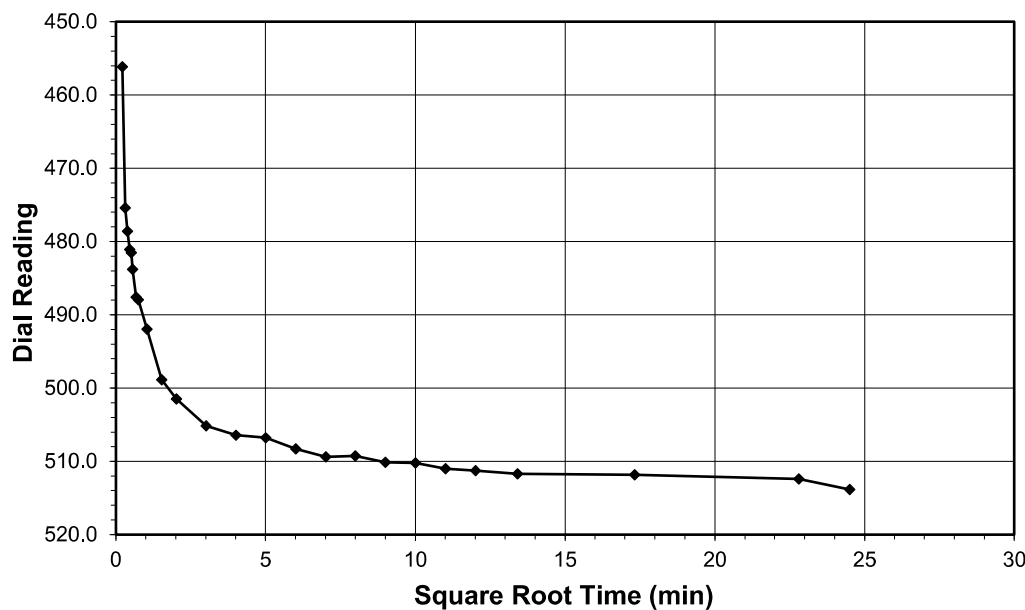
Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

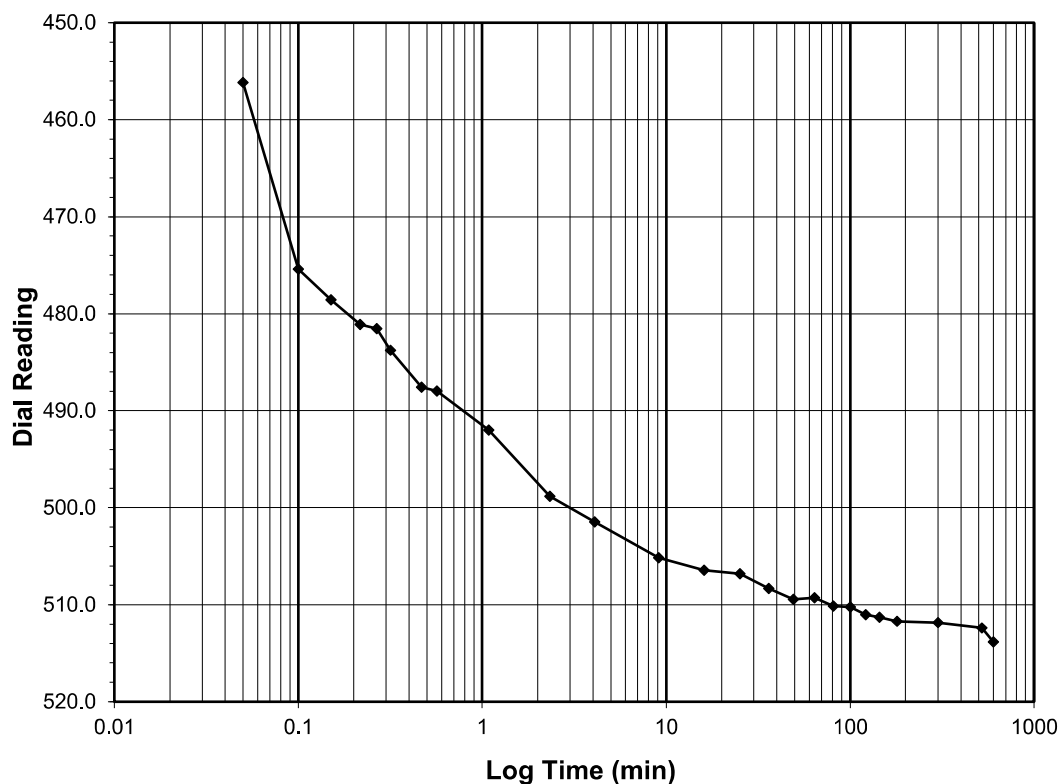
Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



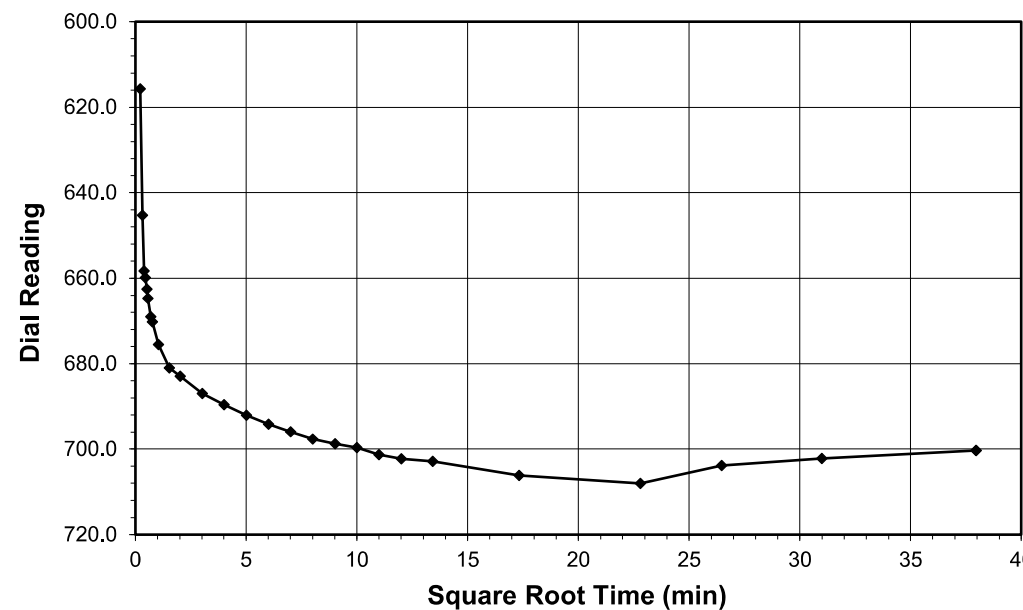
Test Load (tsf) **4.0-8.0**  
 Final Reading (div) **513.8**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001  
 Start Date 3/5/20  
 Start Time 22:29:53

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>387.6</b>
0.05	456.2
0.10	475.4
0.15	478.6
0.22	481.1
0.27	481.5
0.32	483.8
0.47	487.6
0.57	488.0
1.08	492.0
2.33	498.8
4.08	501.5
9.08	505.2
16.08	506.4
25.08	506.8
36.08	508.3
49.08	509.4
64.08	509.3
81.08	510.1
100.10	510.2
121.10	511.0
144.10	511.3
180.10	511.7
300.10	511.8
520.10	512.4
600.20	513.8



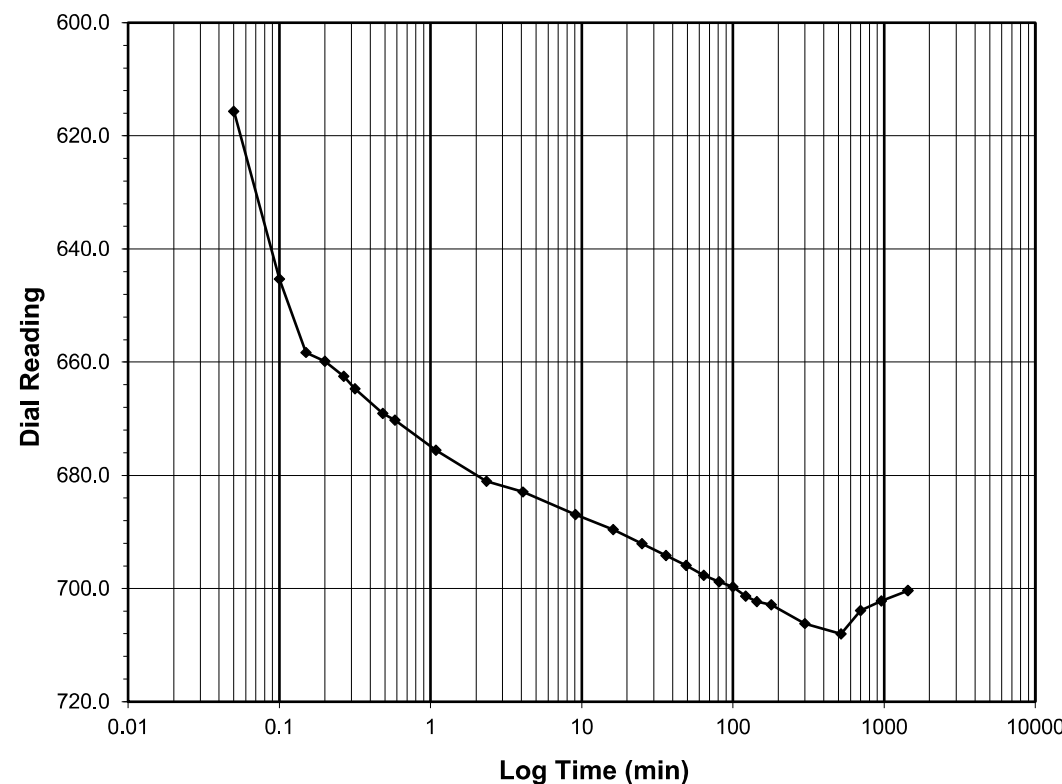
Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **8.0-16.0**  
 Final Reading (div) **700.3**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001  
 Start Date 3/6/20  
 Start Time 8:30:05

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>513.8</b>
0.05	615.7
0.10	645.3
0.15	658.3
0.20	659.9
0.27	662.5
0.32	664.7
0.48	669.1
0.58	670.2
1.08	675.5
2.35	681.0
4.10	682.9
9.10	686.9
16.12	689.6
25.12	692.1
36.12	694.1
49.12	695.9
64.12	697.7
81.12	698.8
100.12	699.7
121.12	701.3
144.13	702.3
180.13	702.9
300.13	706.2
520.13	708.0
700.13	703.9
960.13	702.2
1440.15	700.4
1440.45	700.3



Tested By 129-07-0411 Date 3/5/20 Checked By GEM Date 3/18/20

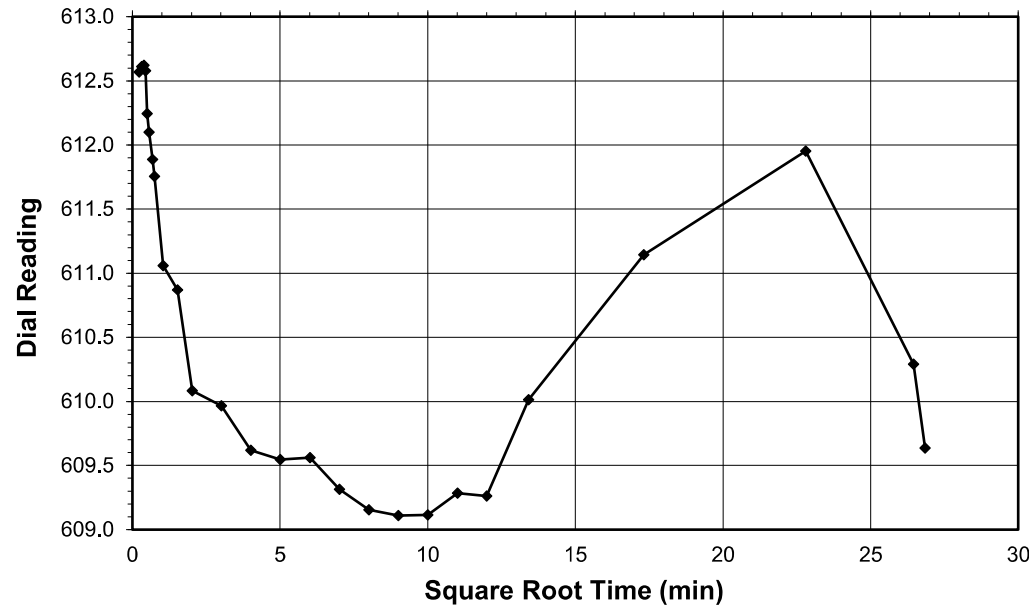
Tested By 129-07-0411 Date 3/6/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

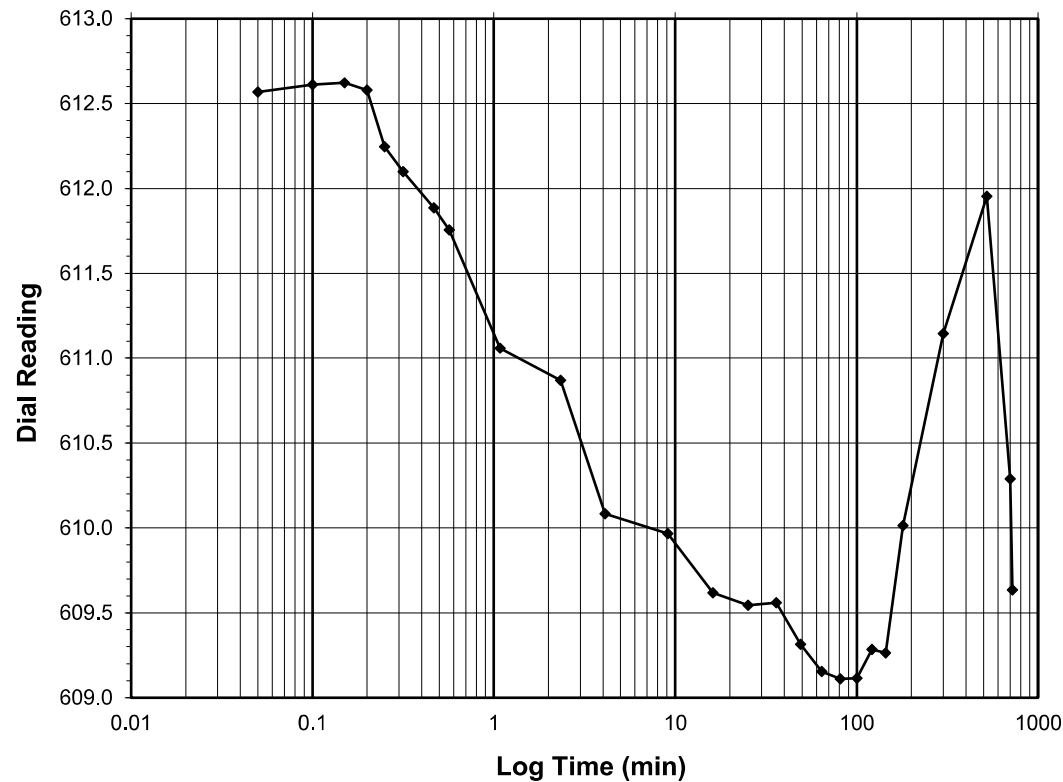
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **16.0-4.0**  
 Final Reading (div) **609.6**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001

Start Date 3/7/20  
 Start Time 8:30:33

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>700.3</b>
0.05	612.6
0.10	612.6
0.15	612.6
0.20	612.6
0.25	612.2
0.32	612.1
0.47	611.9
0.57	611.8
1.08	611.1
2.33	610.9
4.10	610.1
9.10	610.0
16.10	609.6
25.12	609.5
36.12	609.6
49.12	609.3
64.12	609.2
81.12	609.1
100.12	609.1
121.13	609.3
144.13	609.3
180.13	610.0
300.13	611.1
520.13	612.0
700.13	610.3
720.42	609.6



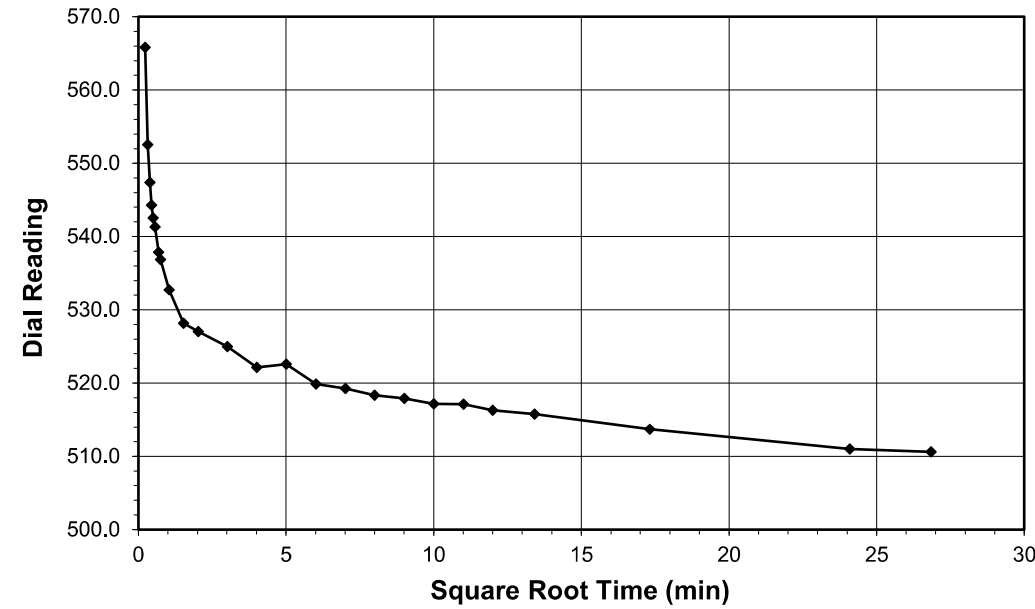
Tested By 129-07-0411 Date 3/7/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

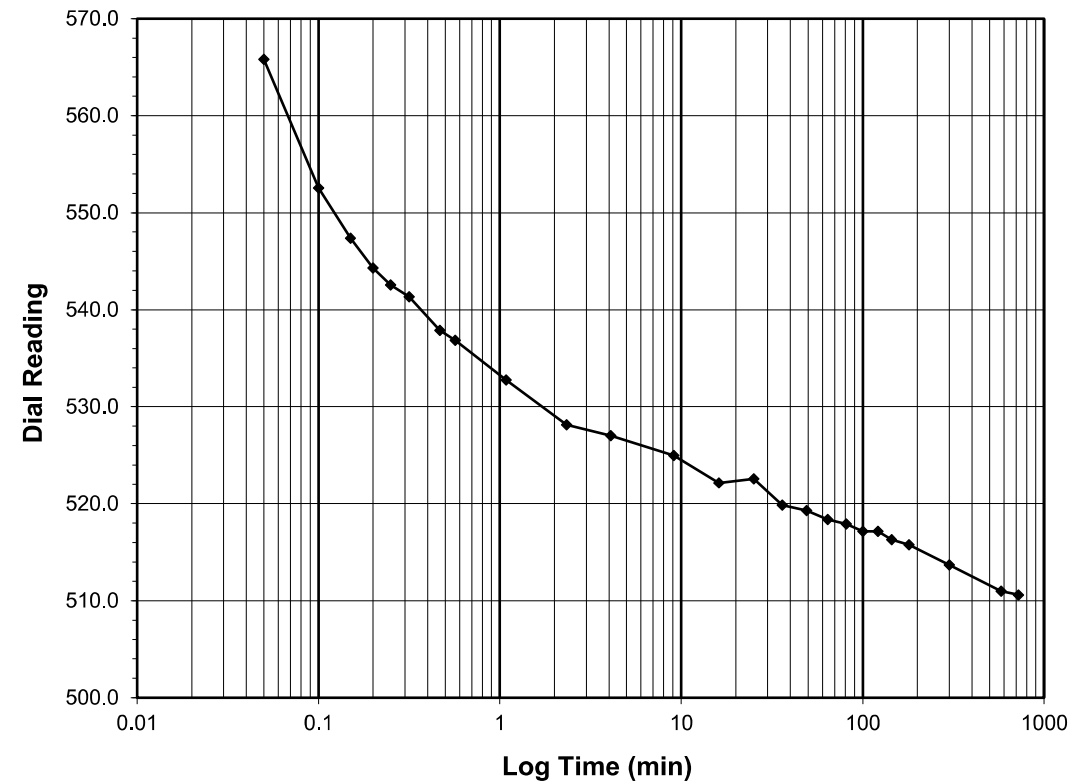
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) **4.0-1.0**  
 Final Reading (div) **510.6**  
 Consolidometer No. **R572**  
 1 Division (in) 0.0001

Start Date 3/7/20  
 Start Time 20:30:59

Elapsed Time (min)	Dial Reading (div)
<b>Initial</b>	<b>609.6</b>
0.05	565.8
0.10	552.5
0.15	547.4
0.20	544.3
0.25	542.5
0.32	541.3
0.47	537.9
0.57	536.9
1.08	532.7
2.33	528.1
4.08	527.0
9.08	525.0
16.08	522.1
25.10	522.6
36.10	519.9
49.10	519.3
64.10	518.4
81.12	517.9
100.12	517.2
121.12	517.1
144.12	516.3
180.12	515.8
300.12	513.7
580.12	511.0
720.35	510.6



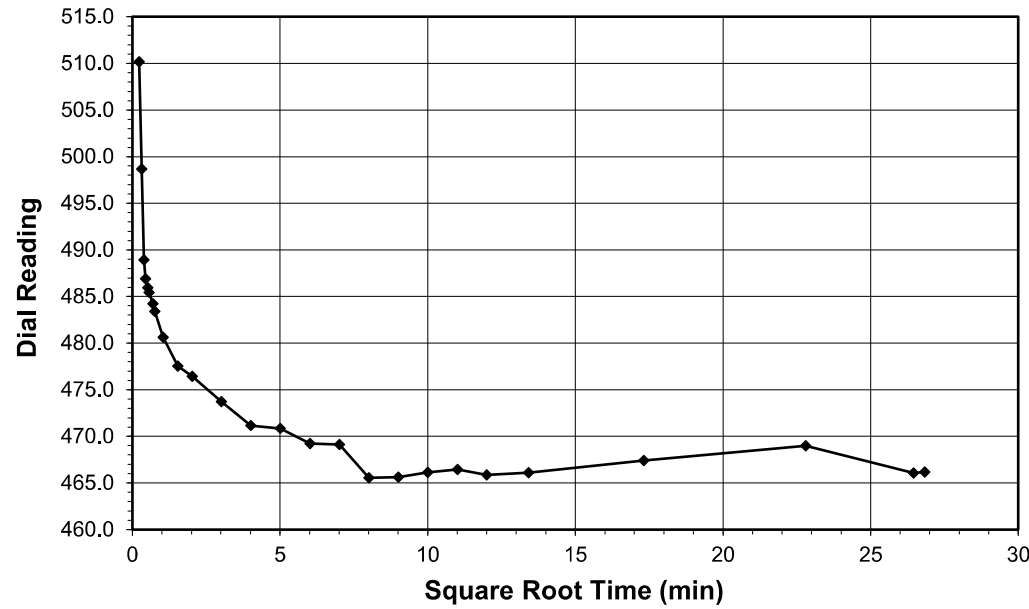
Tested By 129-07-0411 Date 3/7/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

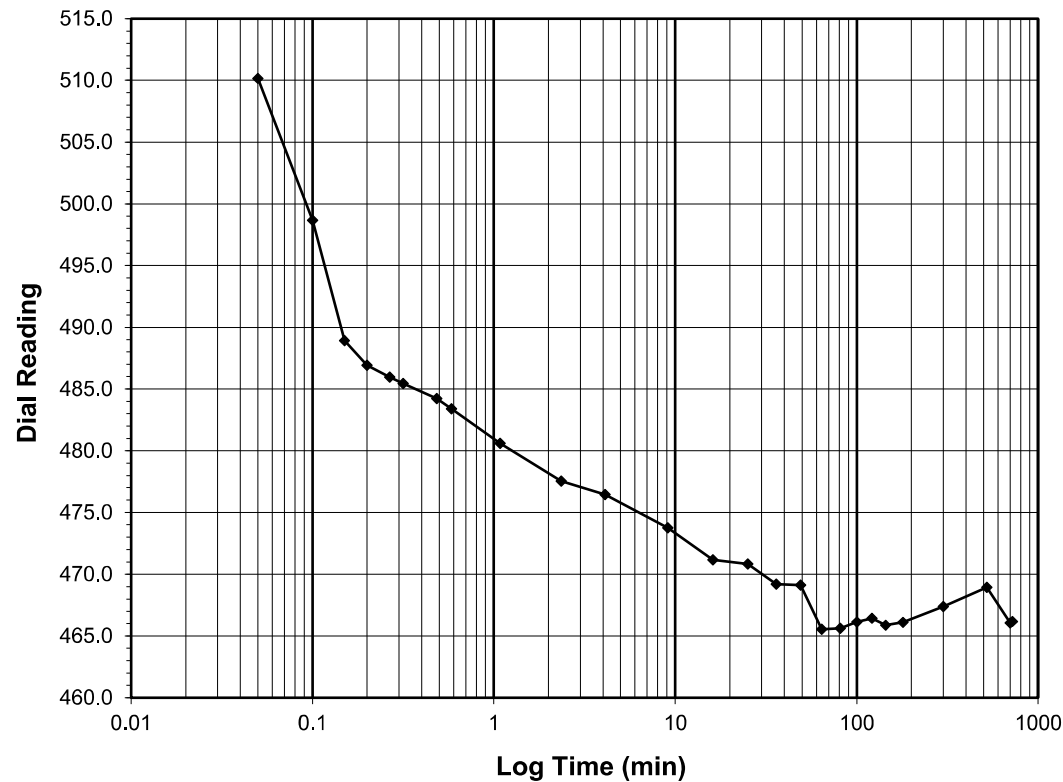
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 1.0-0.5  
 Final Reading (div) 466.2  
 Consolidometer No. R572  
 1 Division (in) 0.0001

Start Date 3/8/20  
 Start Time 8:31:20

Elapsed Time (min)	Dial Reading (div)
Initial	510.6
0.05	510.2
0.10	498.7
0.15	488.9
0.20	486.9
0.27	486.0
0.32	485.4
0.48	484.2
0.58	483.4
1.08	480.6
2.35	477.5
4.10	476.4
9.10	473.7
16.10	471.2
25.10	470.8
36.10	469.2
49.12	469.1
64.12	465.5
81.12	465.6
100.12	466.1
121.12	466.4
144.13	465.9
180.13	466.1
300.13	467.4
520.13	469.0
700.13	466.1
720.25	466.2



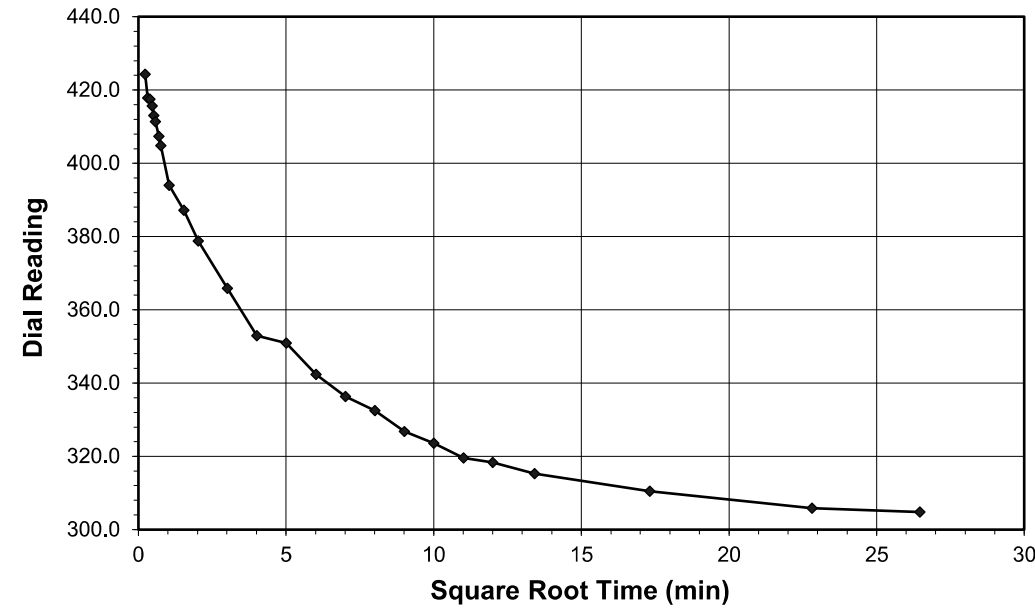
Tested By 129-07-0411 Date 3/8/20 Checked By GEM Date 3/18/20



**ONE DIMENSIONAL CONSOLIDATION**  
AASHTO T-216

Client Kleinfelder Boring No. Y2\_3590  
 Client Project R-5819/R-5820 Depth (ft) 5.0-7.0  
 Project No. R-2020-024-003 Sample No. ST-6  
 Lab ID R-2020-024-003-054 Visual Description Gray Green Clay with Sand

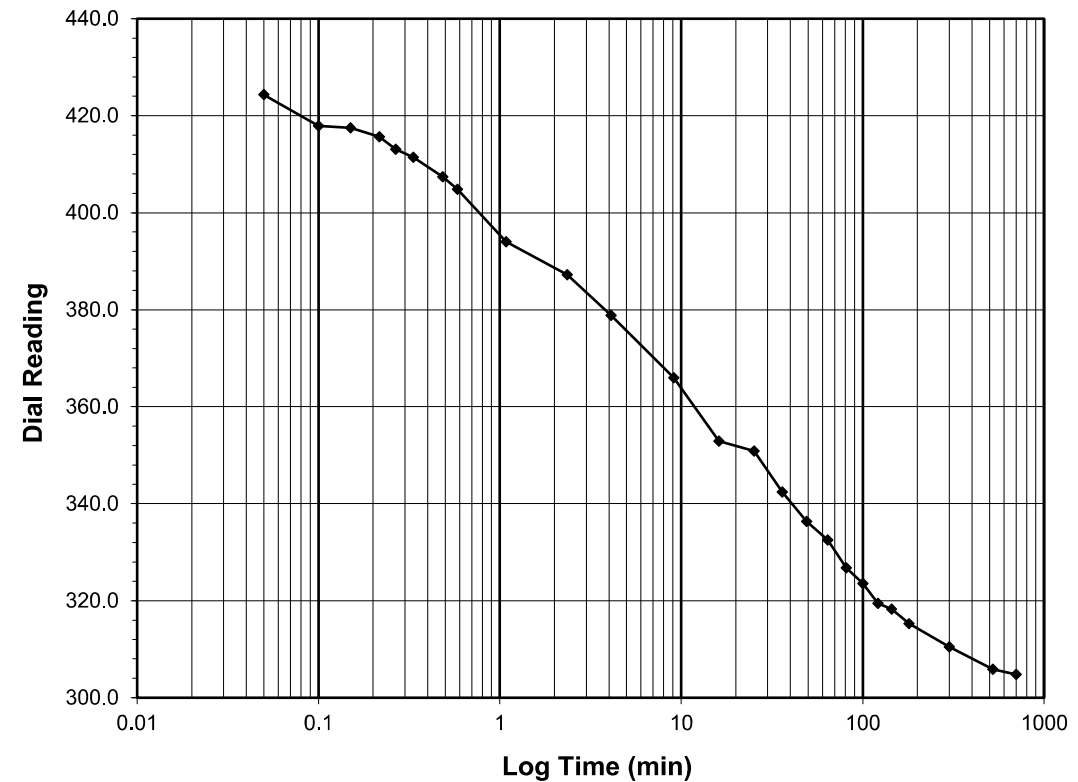
Sample Conditions: UNDISTURBED, INUNDATED AND DOUBLE DRAINED



Test Load (tsf) 0.5-0.05  
 Final Reading (div) 304.8  
 Consolidometer No. R572  
 1 Division (in) 0.0001

Start Date 3/8/20  
 Start Time 20:31:35

Elapsed Time (min)	Dial Reading (div)
Initial	466.2
0.05	424.3
0.10	417.9
0.15	417.5
0.22	415.7
0.27	413.1
0.33	411.4
0.48	407.4
0.58	404.9
1.08	394.0
2.35	387.2
4.10	378.8
9.10	365.9
16.12	352.9
25.12	350.9
36.12	342.4
49.12	336.4
64.12	332.5
81.12	326.8
100.13	323.6
121.13	319.5
144.13	318.3
180.15	315.2
300.15	310.5
520.15	305.9
700.17	304.8



Tested By 129-07-0411 Date 3/8/20 Checked By GEM Date 3/18/20