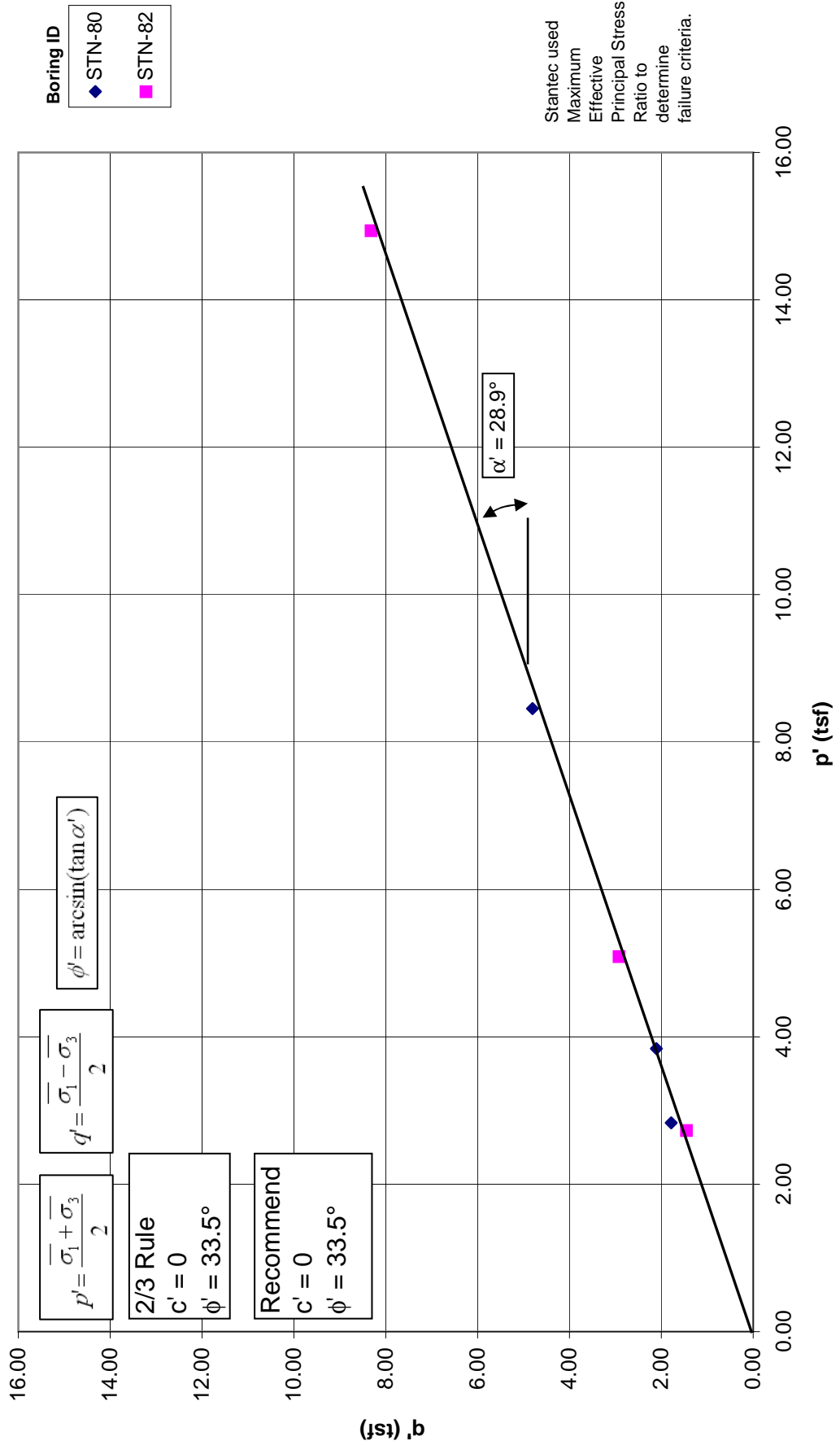
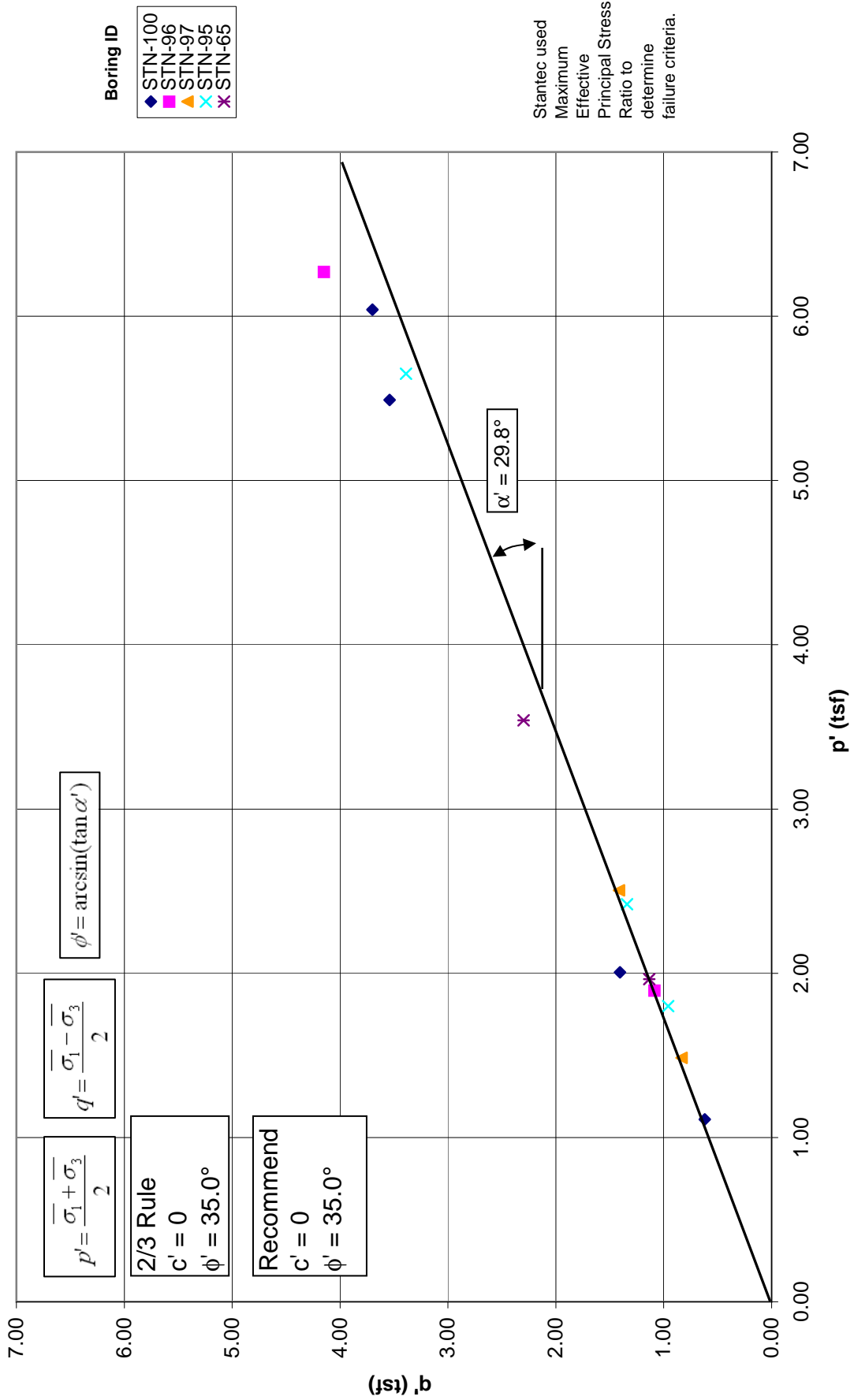


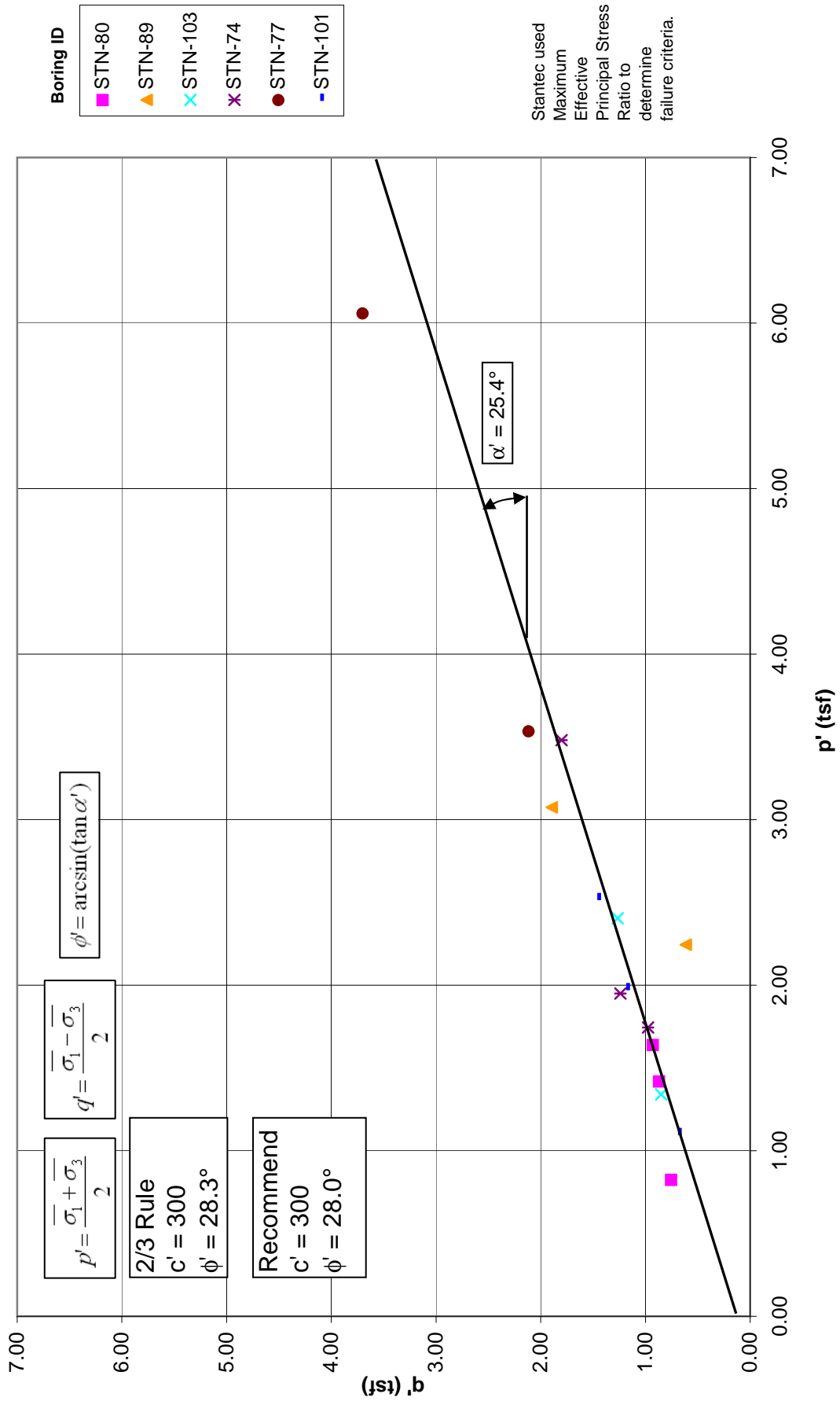
Bottom Ash (Silt with Sand) Effective Stress from CU Triaxial Tests



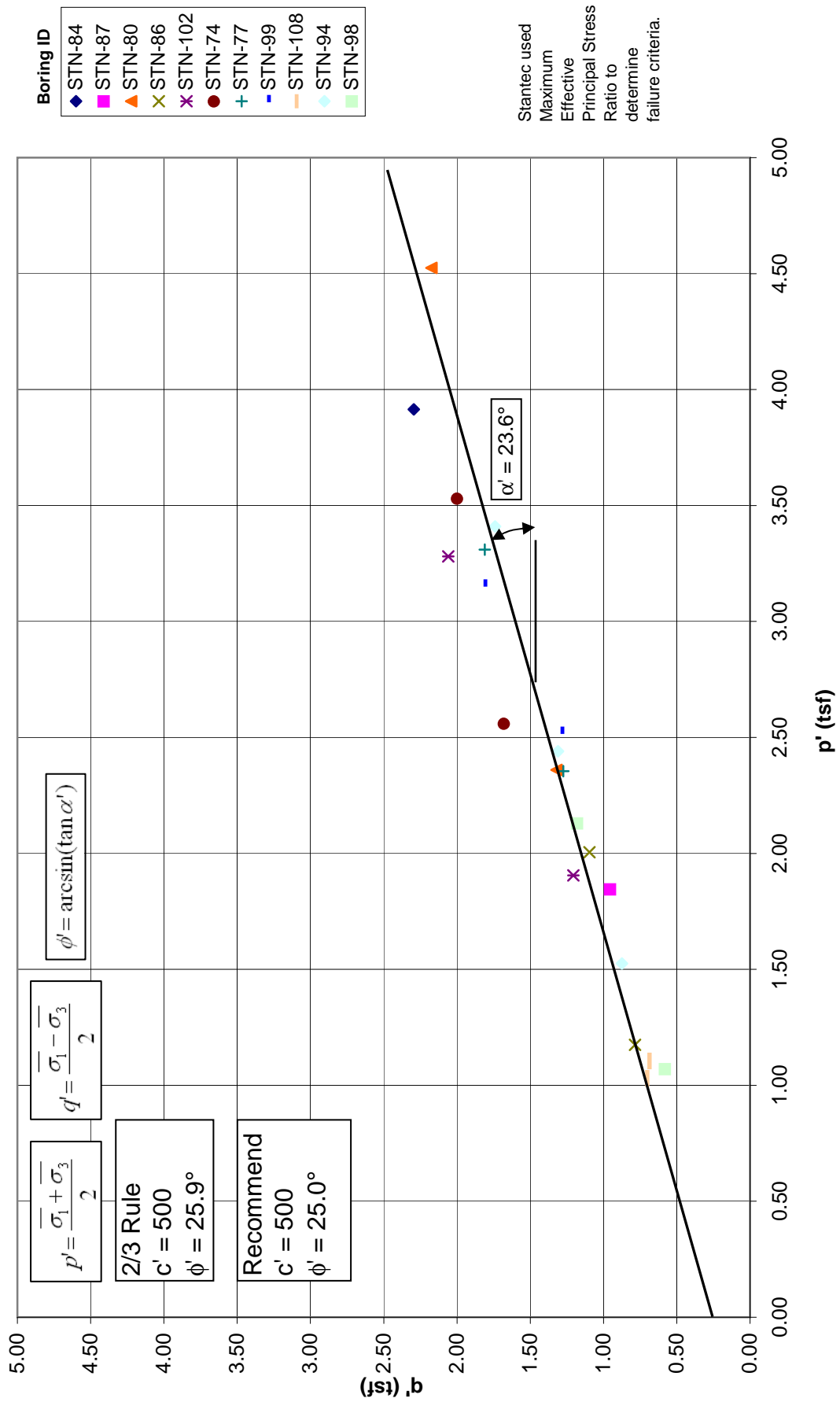
Fly Ash
Effective Stress from CU Triaxial Tests



Fill Clay Effective Stress from CU Triaxial Tests



Residual Clay Effective Stress from CU Triaxial Tests



Unconsolidated Undrained Test Results

Boring	Sample	Soil Type	Depth (feet)	Total Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	Shear Stress (psi)	Corrected Deviator Stress (psi)	Axial Strain, %
STN-100	ST-4	4	50.1-50.6	115.3	86.0	10.2	20.1	15.00
STN-102	ST-1	3	19.5-20.0	125.6	100.3	26.7	53.1	11.71
STN-105	ST-2	4	39.5-40.0	122.9	97.3	8.5	16.72	15.01
STN-107	ST-2	4	40.1-40.6	126.5	103.5	13.8	27.49	14.83
STN-108	ST-1	3	11.1-11.6	123.4	97.6	18.2	36.1	15.01
STN-65	ST-3	5	32.4-32.9	123.4	102.0	69.2	137.8	11.52
STN-67	ST-1	1	9.0-9.5	90.4	70.8	14.7	29.2	12.41
STN-74	ST-1	3	9.0-9.5	120.6	92.3	22.6	44.9	11.91
STN-75	ST-2	4	35.0-35.5	130.0	111.0	14.0	27.8	14.91
STN-79	ST-1	3	15.6-16.1	133.3	115.2	41.0	81.6	15.10
STN-80	ST-5	2	36.3-36.8	94.4	59.8	24.0	47.7	12.80
STN-82	ST-1	3	7.5-8.0	122.7	100.5	14.4	28.6	13.52
STN-82	ST-2	2	20.0-20.5	109.6	80.2	9.9	19.7	9.42
STN-93	ST-1	1	30.6-31.1	138	121.8	90.5	180.69	5.13
STN-94	ST-1	3	15.6-16.1	122.1	86.5	13.4	26.69	15.09
STN-95	ST-1	5	26.0-26.5	113.2	85.9	6.6	13.1	15.1
STN-96	ST-2	2	36.2-36.7	118.2	93.7	8.6	17.01	15.02
STN-96	ST-4	4	53.9-54.4	121.3	95.2	13.4	26.58	14.61
V-1	ST-1	2	10.6-11.1	94.4	57	11.7	23.3	15.09
V-1	ST-2	3	20.6-21.1	98.6	66.2	4.9	9.69	15.04
V-1	ST-3	3	30.0-30.5	97.6	63.7	4	7.76	3.92
V-2	ST-1	3	5.6-6.1	94.7	62.3	19.3	38.48	6.91
V-2	ST-2	3	15.0-15.5	80.6	45.4	20.2	40.32	10.99
V-2	ST-3	2	25.0-25.5	100.4	73.4	26.1	51.8	14.22
V-3	ST-1	1	15.6-16.1	93.5	57.2	13.1	25.93	15.07
V-3	ST-2	5	25.0-25.5	88	54.5	33.5	66.76	13.2
V-4	ST-1	5	20.0-20.5	101.1	74	4.5	8.98	15.09
V-4	ST-2	4	50.6-51.1	128.1	106.4	6.5	12.88	15.02
V-5	ST-1	5	20.0-20.5	98.9	67.5	2.8	5.63	15.07
V-7	ST-1	4	20.0-20.5	120.7	93.7	7.5	14.79	15.02
V-8	ST-1	5	45.0-45.5	89.4	54.5	1.2	2.29	14.78
V-8	ST-2	5	50.6-51.1	119	92.3	23.3	46.24	15.08

Consolidated Undrained Test Results

Boring	Sample	Soil Type	Depth (feet)	Total Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	c' (psf)	ϕ' (deg.)
STN-84 STN-87	ST-2 ST-1	4	40.5-41.0 37.0-37.5	136.2 125.8	115.3 101.2	600	31.0
STN-108	ST-1 ST-2	4	10.5-11.0 15.5-16.0	124.1 122.1	99.3 97.9	400	26.6
STN-80	ST-1	3	10.5-11.0	122.1	92.6	480	27.1
	ST-2		11.1-11.6	123.4	97.2		
	ST-4	2	30.5-31.0	104.3	75.3	500	33.2
	ST-5		31.2-31.7	95.4	62.2		
	ST-6	4	47.5-48.0 48.1-48.6	129.1 131.8	106.5 111.1	800	23.4
STN-82	ST-3	2	40.0-40.5 40.6-41.1 41.3-41.8	107.2 106.9 116	86 78.3 89.2	200	33.5
STN-65	ST-4	5	45.4-45.9 46.1-46.6	92.8 117.6	57.5 52.5	0	35.8
STN-86	ST-1	4	15.0-15.5 15.6-16.1	126.6 126.9	102.9 102.7	720	22.4
STN-89	ST-2 ST-3	3	16.3-16.8 20.5-21.0	118.3 123.9	95.1 97.6	300	35.5
STN-100	ST-1	5	30.5-31.0 30.6-31.1	128.9 125.5	107.9 102.5	500	35.9
	ST-2 ST-3	5	34.1-34.6 44.6-45.1	83.7 79.4	37.5 39	0	44.6
STN-102	ST-2 ST-3	4	29.0-29.5 40.0-40.5	126.4 124.7	102.1 99.9	160	37.1
STN-103	ST-1 ST-2	3	19.5-20.0 29.0-29.5	129.3 125.5	107.3 101.8	660	23.9
STN-106	ST-1	5	24.0-24.5 24.6-25.1	104.4 114.0	75.1 88.6	240	34.9
STN-74	ST-1	3	9.6-10.1	126.4	101.9	340	28.3
	ST-2		24.5-25.0	125.9	101.5		
	ST-3	4	40.0-40.5 40.6-41.1	128.1 128	105.8 118.9	400	31
STN-77	ST-1	3	21.6-22.1 22.2-22.7	113.3 115	90.5 92.3	0	37.7
	ST-2	4	38.0-38.5 38.6-39.1	129.6 108.8	129.4 107.2	40	32.5
STN-98	ST-1	4	18.0-18.5 18.6-19.1	117.6 123.9	88 98.6	0	33.7
STN-101	ST-1 ST-2 ST-3	3	19.5-20.0 29.0-29.5 40.0-40.5	117.6 128.4 123.5	89.4 104.9 97.9	160	33

Consolidated Undrained Test Results

Boring	Sample	Soil Type	Depth (feet)	Total Wet Unit Weight (pcf)	Dry Unit Weight (pcf)	c' (psf)	ϕ' (deg.)
STN-94	ST-2	4	24.5-25.0	123.5	98.5	360	27.5
			25.1-25.6	124.6	99.5		
	ST-3		49.7-50.2	122.8	98.2		
STN-95	ST-2	5	30.5-31.0	115.6	82.8	0	36.7
			31.2-31.7	107.8	86		
	ST-3		35.6-36.1	102.7	69.1		
STN-96	ST-1	5	25.6-26.1	123.5	99.6	200	38.7
			26.8-27.3	112.5	82.5		
STN-97	ST-2	5	29.0-29.5	119.2	91.6	100	32.6
			29.6-31.1	126.8	102.3		
STN-99	ST-3	4	40.1-40.6	117.2	101.4	720	27.7
			40.7-41.2	127.1	103.3		

Permeability Test Results

Boring	Sample	Soil Type	Depth (feet)	Sample Center Elevation (MSL)	Effective Confining Pressure (psf)	Initial Conditions			Final Conditions			Coefficient of Permeability Kv (cm/sec)		
						Dry Density (pcf)	Moisture Content (%)	Void Ratio, e	Degree of Saturation (%)	Dry Density (pcf)	Moisture Content (%)		Void Ratio, e	Degree of Saturation (%)
STN-89	ST-4	4	40.0-42.0	595.3	1440	116.2	16.7	0.462	98.4	121.2	14.9	0.401	101.1	1.78E-07
STN-67	ST-3	2	40.5-42.5	595.3	1440	105.8	18.6	0.564	87.4	111.5	18.2	0.484	99.6	1.83E-05
STN-90	ST-2	5	40.5-42.5	605.5	1440	76.6	47.9	1.314	103.6	79.6	43.2	1.228	99.8	1.79E-06
STN-80	ST-3	3	10.0-10.5	603.0	1440	98.0	26.0	0.727	96.9	100.3	25.6	0.886	101.3	1.29E-08
STN-100	ST-3	2	28.0-28.5	608.95	720	68.8	43	0.968	96.4	71.4	41.7	0.898	100.7	4.84E-05
STN-101	ST-4	4	49.5-50.0	594.35	1440	86.4	33.9	0.937	97	88.2	33.2	0.896	99.3	1.06E-05
STN-106	ST-3	3	40.6-41.1	597.95	1440	95.8	27.5	0.792	95.5	98.3	27.7	0.747	102.1	1.80E-08
STN-72	ST-1	5	50.5-51.0	595.15	1440	73.3	41.8	0.943	101	77.3	37.1	0.841	100.5	7.05E-06
STN-78	ST-1	2	18.0-18.5	618.35	1440	105	17.1	0.587	77.7	110.1	18.7	0.514	97.2	1.70E-06
STN-78	ST-1	3	10.5-11.0	626.05	1440	102.1	22.1	0.669	90.2	102.6	24.5	0.661	101.1	2.79E-08
STN-78	ST-3	4	36.5-37.0	600.05	1440	104	22.1	0.614	96.9	105.2	22.8	0.597	102.9	1.94E-08
STN-96	ST-2	2	35.6-36.1	611.75	1008	97.1	27.5	0.75	99.8	101.3	24.4	0.676	98	1.78E-05

Unit Weight Summary

Location	Boring	Sample	Soil Type	Depth (feet)	Sample Center Elevation (MSL)	Natural Moisture Content (%) @ 40° C	Total Unit Weight (pcf)	Dry Density (pcf)	Void Ratio, e	Porosity, n	
Main Ash Pond	STN-71	ST-1	3	30.0-30.5	606.4	16.5	134.7	115.6	0.47	0.68	
		ST-2	4	39.5-40.0	596.9	17.5	130.6	111.1	0.53	0.65	
	STN-72	ST-1	2	18.0-18.5	618.4	16.4	122.9	105.5	0.43	0.70	
	STN-74	ST-1	3	9.0-9.5	626.5	28.4	120.6	93.9	0.81	0.55	
			3	9.6-10.1	626.9	25	126.5	101.2	0.68	0.60	
		ST-2	3	24.5-25.0	611.0	18.1	126	106.7	0.59	0.63	
			3	25.1-25.6	610.4	17	133	113.6	0.49	0.67	
		ST-3	4	40.0-40.5	595.5	16.9	128.2	109.6	0.55	0.64	
			4	40.6-41.1	594.9	20.5	127.8	106.1	0.61	0.62	
	STN-75	ST-1	1	25.5-26.0	611.0	13.5	135.9	119.7	0.32	0.76	
		ST-2	4	35.0-35.5	601.5	18.3	129.7	109.6	0.55	0.64	
	STN-77	ST-1	2	21.0-21.5	614.9	24.6					
			2	21.6-22.1	614.3	21.3	113.1	93.2	0.82	0.55	
			2	22.2-22.7	613.7	23.6	114.9	93	0.62	0.62	
		ST-2	4	38.0-38.5	597.9	22.8	129.5	105.5	0.61	0.62	
			4	38.6-39.1	597.3	18.8	129.4	108.9	0.56	0.64	
			4	38.6-39.1	597.3	18.8	129.4	108.9	0.56	0.64	
	STN-78	ST-1	3	10.5-11.0	626.1	23.6	124.8	101	0.68	0.60	
		ST-3	4	36.5-37.0	600.1	23.8	126.1	101.8	0.67	0.60	
	STN-79	ST-1	3	15.0-15.5	607.6	18.1	132.3	112.1	0.51	0.66	
3			15.6-16.1	607.0	15.7	133.3	115.2	0.47	0.68		
Bottom Ash Stack	STN-80	ST-1	3	10.5-11.0	626.5	29	122.1	94.7	0.79	0.56	
			3	11.1-11.6	625.9	25.8	123.3	98	0.73	0.58	
		ST-2	3	20.0-20.5	617.0	21.4	123	101.4	0.67	0.60	
			2	28.0-28.5	609.0	39.4	101.2	72.6	1.07	0.48	
		ST-3	2	28.6-29.1	608.4	46					1.00
			2	30.5-31.0	606.5	36.4	104.4	76.6	0.96	0.51	
		ST-4	2	31.2-31.7	605.8	40	95.6	68.3	1.20	0.45	
			2	35.0-35.5	602.0	31.4	108.2	82.4	0.83	0.55	
			2	35.6-36.1	601.4	35					1.00
			2	36.3-36.8	600.7	45.6	94.4	64.8	1.32	0.43	
	ST-6	4	47.5-48.0	589.5	22	129	105.7	0.61	0.62		
		4	48.1-48.6	588.9	17.9	131.9	111.9	0.52	0.66		
	STN-82	ST-1	3	7.5-8.0	629.2	22.4	122.6	100.2	0.69	0.59	
		ST-2	2	20.0-20.5	616.7	22.2	109.6	89.7	0.68	0.60	
		ST-3	2	40.0-40.5	596.7	23.6	114.5	92.6	0.62	0.62	
			2	40.6-41.1	596.1	26.7	106.8	84.3	0.78	0.56	
	2	41.3-41.8	595.4	26.9	115.9	91.3	0.65	0.61			
	STN-83	ST-1	1	10.0-10.8	614.5	18.2					
	STN-84	ST-1	1	10.0-12.0	628.3	19					
		ST-2	1	20.0-22.0	618.3	15.9					
		ST-3	4	40.0-40.5	599.1	23.4					
	4		40.5-41.0	598.6	24.7	126	101	0.69	0.59		
	STN-86	ST-1	4	15.0-15.5	599.4	22.6	126.7	103.3	0.65	0.61	
			4	15.6-16.1	598.8	24.6	126.9	101.8	0.67	0.60	
	STN-87	ST-1	4	24.0-24.5	590.4	45.6	111.8	76.8	1.22	0.45	
			4	37.0-37.5	600.2	18	134.8	114.2	0.49	0.67	

Unit Weight Summary

Location	Boring	Sample	Soil Type	Depth (feet)	Sample Center Elevation (MSL)	Natural Moisture Content (%) @ 40° C	Total Unit Weight (pcf)	Dry Density (pcf)	Void Ratio, e	Porosity, n	
Old Scrubber Sludge Pond	STN-93	ST-1	1	30.0-30.5	611.6	14.7					
			1	30.6-31.1	611.0	10.3	137.9	125	0.26	0.79	
		ST-3	4	49.0-49.5	592.6	23.8	124.6	100.7	0.69	0.59	
	STN-94	ST-1	3	15.0-15.5	623.8	23	127.7	103.8	0.52	0.66	
			3	15.6-16.1	623.2	22.8	122.2	99.5	0.59	0.63	
			4	24.5-25.0	614.3	24.7	123.5	99.1	0.72	0.58	
		ST-2	4	25.1-25.6	613.7	25.9	124.6	99	0.72	0.58	
			4	49.1-49.6	589.7	26.6	123.4	97.5	0.75	0.57	
			4	49.7-50.2	589.1	24.1	122.7	98.9	0.72	0.58	
	STN-103	ST-1	3	19.5-20.0	619.2	18.4	129.3	109.2	0.55	0.64	
			3	29.0-29.5	609.7	21.3	125.6	103.6	0.64	0.61	
		ST-3	4	40.0-40.5	598.7	24.9					1.00
			4	40.6-41.1	598.1	21	129.7	107.2	0.59	0.63	
	STN-104	ST-3	4	44.5-44.9	601.2	29.3					
	STN-105	ST-1	4	30.1-30.6	607.3	21.2	131.4	108.4	0.57	0.64	
		ST-2	4	39.5-40.0	597.9	27	122.9	96.7	0.76	0.57	
	STN-106	ST-1	2	24.0-24.5	621.7	36.9	104.2	76.1	0.98	0.51	
			2	24.6-25.1	621.1	39.6	113.9	81.6	0.84	0.54	
		ST-3	4	50.5-51.0	595.2	25.8	117.6	93.5	0.61	0.62	
	STN-107	ST-1	3	30.1-30.6	606.4	31.3	123.2	93.8	0.81	0.55	
3			30.7-31.2	605.8	17.1	126.6	108.2	0.57	0.64		
ST-2		4	35.5-40.0	601.0	24.4	125.5	100.9	0.69	0.59		
		4	40.1-40.6	596.4	20.6	126.4	104.9	0.62	0.62		
		4	49.0-49.2	587.6	25.5						
Old Scrubber Sludge Pond Dredge Cell	STN-65	ST-1	1	10.0-10.4	634.8	17.2					
			1	32.4-32.9	612.4	21.2	123.5	101.9	0.55	0.65	
		ST-4	1	45.4-45.9	599.4	72.4	93.2	54	1.92	0.34	
			1	46.1-46.6	598.7	68.6	117.6	69.8	1.26	0.44	
	STN-67	ST-1	1	9.0-9.5	637.8	35.7	90.6	66.8	1.36	0.42	
		ST-3	5	40.8-41.3	606.0	56.9	103.2	65.7	1.40	0.42	
	STN-95	ST-1	5	26.0-26.5	619.2	27.7	112.9	88.4	0.79	0.56	
			5	26.6-27.1	618.6	19.4	115.5	96.7	0.63	0.61	
		ST-2	2	30.5-31.1	614.6	27.6	115.8	90.7	0.66	0.60	
			2	31.2-31.7	614.0	29.3	108.2	83.6	0.80	0.56	
ST-3		2	35.6-36.1	609.6	46.8	103	70.1	1.15	0.47		
ST-6		5	50.5-51.0	594.7	30.8	116.7	89.3	0.77	0.57		
	5	51.1-51.6	594.1	35	118	87.4	0.81	0.55			

Unit Weight Summary

Location	Boring	Sample	Soil Type	Depth (feet)	Sample Center Elevation (MSL)	Natural Moisture Content (%) @ 40° C	Total Unit Weight (pcf)	Dry Density (pcf)	Void Ratio, e	Porosity, n
Old Scrubber Sludge Pond Dredge Cell	STN-96	ST-1	5	25.6-26.1	621.8	23.6	123.6	100	0.58	0.63
			5	26.2-26.7	621.2	29.4				
			5	26.8-27.3	620.6	28.2	112.4	87.7	0.80	0.56
		ST-2	2	35.0-35.5	612.4	21.5				
			2	35.6-36.1	611.8	24.1	121.6	98	0.53	0.65
			2	36.2-36.7	611.2	21.7	118.1	97.1	0.55	0.65
	ST-4	4	53.9-54.4	593.5	31.5	121.4	92.3	0.85	0.54	
	STN-97	ST-1	3	19.5-20.0	618.9	18.2				
		ST-2	5	29.0-29.5	609.4	26.2	119.1	94.4	0.67	0.60
			5	29.6-30.1	608.8	24.5	126.8	101.8	0.55	0.64
	ST-3	4	40.0-40.5	598.4	29.7	122.7	94.6	0.80	0.56	
	STN-98	ST-1	4	18.0-18.5	584.3	37	117.5	85.8	0.98	0.51
			4	18.6-19.1	583.7	23.6	124	100.3	0.69	0.59
	STN-99	ST-1	3	19.5-20.0	618.7	22	126	103.3	0.64	0.61
		ST-2	3	29.0-29.5	609.2	24.2	125.7	101.2	0.68	0.60
			4	40.1-40.6	598.1	35.1	117.4	86.9	0.96	0.51
		ST-3	4	40.7-41.2	597.5	23.2	127.1	103.1	0.65	0.61
	4		41.2-41.7	597.0	24.2	126.9	102.1	0.67	0.60	
	STN-100	ST-1	5	30.0-30.5	613.9	22.4	128.8	105.2	0.50	0.67
			5	30.6-31.1	613.3	20.6	125.4	104	0.52	0.66
		ST-2	5	33.5-34.0	610.4	104.8				
			5	34.1-34.6	609.8	109.7	83.8	39.9	2.96	0.25
		ST-3	5	44.0-44.5	599.9	77.2				
			5	44.6-45.1	599.3	97.2	78.9	40	2.95	0.25
		ST-4	4	49.5-50.0	594.4	32.7	118.2	89.1	0.91	0.52
			4	50.1-50.6	593.8	31.2	115.2	87.8	0.94	0.52
	STN-101	ST-1	3	19.5-20.0	619.1	30	117.6	90.4	0.88	0.53
		ST-2	3	29.0-29.5	609.6	26.5	128.5	101.6	0.67	0.60
		ST-3	3	40.0-40.5	598.6	30.9	123.4	94.3	0.80	0.56
			3	40.6-41.1	598.0	27.2	121	95.1	0.78	0.56
	STN-102	ST-1	3	19.5-20.0	619.0	25.7	125.4	99.7	0.70	0.59
		ST-2	4	29.0-29.5	609.5	24.9	126.3	101.1	0.68	0.59
ST-3		4	40.0-40.5	598.5	25.5	124.7	99.4	0.71	0.58	
STN-108	ST-1	4	10.5-11.0	590.8	21.2	124	102.4	0.66	0.60	
		4	11.1-11.6	590.2	26.7	123.3	97.3	0.74	0.57	
	ST-2	4	15.5-16.0	585.8	18.9	122.2	102.8	0.65	0.61	
Lower Stilling Pond	STN-90	ST-2	3	10.0-10.5	603.0	22.7	123.8	100.9	0.68	0.59
		ST-3	4	20.0-20.4	593.0	17.9				
		ST-1	1	5.3-5.6	607.8	45.5				
Upper Stilling Pond	STN-89	ST-2	3	16.3-16.8	619.8	22.9	118.2	96.2	0.76	0.57
		ST-3	3	20.5-21.0	615.6	27.3	123.7	97.2	0.75	0.57
		ST-4	2	40.3-40.8	595.8	21.7	127.6	104.8	0.43	0.70
			2	40.9-41.4	596.2	17.8	141.4	120	0.25	0.80

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N₍₆₀₎
Main Ash Pond A	72	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	22
		Residual Lean to Fat Clay	26
		Silty Sand (Fly Ash)	NA
	73	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	19
		Silty Sand (Fly Ash)	NA
	74	Silty Sand with Gravel (Bottom Ash)	5
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	11
		Residual Lean to Fat Clay	19
		Silty Sand (Fly Ash)	NA
	75	Silty Sand with Gravel (Bottom Ash)	42
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	18
		Residual Lean to Fat Clay	16
		Silty Sand (Fly Ash)	NA
	76	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	11
		Residual Lean to Fat Clay	22
		Silty Sand (Fly Ash)	NA
	77	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	26
		Fill Lean Clay with Sand	20
		Residual Lean to Fat Clay	11
		Silty Sand (Fly Ash)	NA
	78	Silty Sand with Gravel (Bottom Ash)	19
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	20
		Residual Lean to Fat Clay	24
		Silty Sand (Fly Ash)	24
79	Silty Sand with Gravel (Bottom Ash)	NA	
	Silt with Sand (Bottom Ash)	NA	
	Fill Lean Clay with Sand	19	
	Residual Lean to Fat Clay	19	
	Silty Sand (Fly Ash)	NA	

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N ₍₆₀₎
Old Scrubber Sludge Pond	69	Silty Sand with Gravel (Bottom Ash)	12
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	13
		Residual Lean to Fat Clay	22
		Silty Sand (Fly Ash)	3
	70	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	9
		Residual Lean to Fat Clay	18
		Silty Sand (Fly Ash)	NA
	71	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	18
		Residual Lean to Fat Clay	17
		Silty Sand (Fly Ash)	NA
	93	Silty Sand with Gravel (Bottom Ash)	25
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	18
		Silty Sand (Fly Ash)	NA
	94	Silty Sand with Gravel (Bottom Ash)	17
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	19
		Residual Lean to Fat Clay	16
		Silty Sand (Fly Ash)	NA
	103	Silty Sand with Gravel (Bottom Ash)	21
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	17
		Residual Lean to Fat Clay	20
		Silty Sand (Fly Ash)	NA
	104	Silty Sand with Gravel (Bottom Ash)	6
		Silt with Sand (Bottom Ash)	2
		Fill Lean Clay with Sand	0
Residual Lean to Fat Clay		0	
Silty Sand (Fly Ash)		NA	
105	Silty Sand with Gravel (Bottom Ash)	18	
	Silt with Sand (Bottom Ash)	29	
	Fill Lean Clay with Sand	24	
	Residual Lean to Fat Clay	10	
	Silty Sand (Fly Ash)	NA	
106	Silty Sand with Gravel (Bottom Ash)	19	
	Silt with Sand (Bottom Ash)	1	
	Fill Lean Clay with Sand	NA	

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N₍₆₀₎
Old Scrubber Sludge Pond	106	Residual Lean to Fat Clay	10
		Silty Sand (Fly Ash)	NA
	107	Silty Sand with Gravel (Bottom Ash)	9
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	12
		Residual Lean to Fat Clay	10
	Silty Sand (Fly Ash)	NA	
Bottom Ash Stack	62	Silty Sand with Gravel (Bottom Ash)	33
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	28
		Residual Lean to Fat Clay	NA
		Silty Sand (Fly Ash)	NA
	80	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	2
		Fill Lean Clay with Sand	13
		Residual Lean to Fat Clay	13
		Silty Sand (Fly Ash)	NA
	81	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	8
		Residual Lean to Fat Clay	15
		Silty Sand (Fly Ash)	3
	82	Silty Sand with Gravel (Bottom Ash)	6
		Silt with Sand (Bottom Ash)	10
		Fill Lean Clay with Sand	23
		Residual Lean to Fat Clay	18
		Silty Sand (Fly Ash)	NA
	83	Silty Sand with Gravel (Bottom Ash)	2
		Silt with Sand (Bottom Ash)	2
		Fill Lean Clay with Sand	10
		Residual Lean to Fat Clay	18
		Silty Sand (Fly Ash)	NA
	84	Silty Sand with Gravel (Bottom Ash)	49
		Silt with Sand (Bottom Ash)	12
		Fill Lean Clay with Sand	25
Residual Lean to Fat Clay		19	
	Silty Sand (Fly Ash)	NA	
85	Silty Sand with Gravel (Bottom Ash)	NA	
	Silt with Sand (Bottom Ash)	NA	
	Fill Lean Clay with Sand	12	
	Residual Lean to Fat Clay	14	
	Silty Sand (Fly Ash)	NA	

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N₍₆₀₎
Bottom Ash Stack	87	Silty Sand with Gravel (Bottom Ash)	27
		Silt with Sand (Bottom Ash)	50+
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	13
		Silty Sand (Fly Ash)	NA
	88	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	8
		Fill Lean Clay with Sand	18
		Residual Lean to Fat Clay	50+
		Silty Sand (Fly Ash)	NA
	91	Silty Sand with Gravel (Bottom Ash)	17
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	NA
		Silty Sand (Fly Ash)	NA
92	Silty Sand with Gravel (Bottom Ash)	18	
	Silt with Sand (Bottom Ash)	NA	
	Fill Lean Clay with Sand	NA	
	Residual Lean to Fat Clay	NA	
	Silty Sand (Fly Ash)	NA	
Upper Stilling Pond	89	Silty Sand with Gravel (Bottom Ash)	50+
		Silt with Sand (Bottom Ash)	26
		Fill Lean Clay with Sand	16
		Residual Lean to Fat Clay	13
		Silty Sand (Fly Ash)	NA
Lower Stilling Pond	90	Silty Sand with Gravel (Bottom Ash)	30
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	14
		Residual Lean to Fat Clay	5
		Silty Sand (Fly Ash)	NA

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N₍₆₀₎
Old Scrubber Sludge Pond Dredge Cell	63	Silty Sand with Gravel (Bottom Ash)	12
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	29
		Silty Sand (Fly Ash)	8
	64	Silty Sand with Gravel (Bottom Ash)	50+
		Silt with Sand (Bottom Ash)	15
		Fill Lean Clay with Sand	13
		Residual Lean to Fat Clay	23
		Silty Sand (Fly Ash)	NA
	65	Silty Sand with Gravel (Bottom Ash)	47
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	31
		Silty Sand (Fly Ash)	9
	66	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	18
		Residual Lean to Fat Clay	19
		Silty Sand (Fly Ash)	NA
	67	Silty Sand with Gravel (Bottom Ash)	26
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	20
		Silty Sand (Fly Ash)	1
	68	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	12
		Residual Lean to Fat Clay	19
		Silty Sand (Fly Ash)	NA
	95	Silty Sand with Gravel (Bottom Ash)	18
		Silt with Sand (Bottom Ash)	18
		Fill Lean Clay with Sand	NA
Residual Lean to Fat Clay		25	
Silty Sand (Fly Ash)		12	
96	Silty Sand with Gravel (Bottom Ash)	24	
	Silt with Sand (Bottom Ash)	29	
	Fill Lean Clay with Sand	15	
	Residual Lean to Fat Clay	21	
	Silty Sand (Fly Ash)	4	
97	Silty Sand with Gravel (Bottom Ash)	NA	
	Silt with Sand (Bottom Ash)	NA	
	Fill Lean Clay with Sand	11	

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N₍₆₀₎
Old Scrubber Sludge Pond Dredge Cell	97	Residual Lean to Fat Clay	14
		Silty Sand (Fly Ash)	23
	98	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	12
		Residual Lean to Fat Clay	NA
		Silty Sand (Fly Ash)	NA
	99	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	11
		Residual Lean to Fat Clay	22
	100	Silty Sand (Fly Ash)	20
		Silty Sand with Gravel (Bottom Ash)	50+
		Silt with Sand (Bottom Ash)	24
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	11
	101	Silty Sand (Fly Ash)	3
		Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	14
		Residual Lean to Fat Clay	NA
	102	Silty Sand (Fly Ash)	NA
		Silty Sand with Gravel (Bottom Ash)	23
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	13
		Residual Lean to Fat Clay	15
	108	Silty Sand (Fly Ash)	NA
		Silty Sand with Gravel (Bottom Ash)	6
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	16
		Residual Lean to Fat Clay	NA
109	Silty Sand (Fly Ash)	NA	
	Silty Sand with Gravel (Bottom Ash)	NA	
	Silt with Sand (Bottom Ash)	NA	
	Fill Lean Clay with Sand	NA	
	Residual Lean to Fat Clay	NA	
110	Silty Sand (Fly Ash)	NA	
	Silty Sand with Gravel (Bottom Ash)	NA	
	Silt with Sand (Bottom Ash)	NA	
	Fill Lean Clay with Sand	NA	
	Residual Lean to Fat Clay	NA	
111	Silty Sand with Gravel (Bottom Ash)	NA	

Summary of Standard Penetration Tests

Boring Location	Boring Number	Soil Horizon	*Average Blow Count Value N₍₆₀₎
Old Scrubber Sludge Pond Dredge Cell	111	Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	NA
		Silty Sand (Fly Ash)	NA
	112	Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	NA
Limestone Runoff Pond	113	Silty Sand (Fly Ash)	NA
		Silty Sand with Gravel (Bottom Ash)	NA
		Silt with Sand (Bottom Ash)	NA
		Fill Lean Clay with Sand	NA
		Residual Lean to Fat Clay	NA
		Silty Sand (Fly Ash)	NA

Soil Classification Summary - Plastic Soils

Boring	Visual Description	Unified Soil Classification System	Depth (feet)	Source	Specific Gravity	LL	PL	PI	Gravel and Sand (%)	Silt and Clay (%)
STN-63	Lean Clay	CL	52.5-59	SPT	2.74	44	21	23	9.5	90.5
STN-64	Fat Clay	CH	7.5-12.0	SPT	2.77	65	24	41	10.1	89.9
STN-66	Lean Clay	CL	15.0-19.5	SPT	2.71	45	23	22	6	94.0
STN-68	Sandy lean clay	CL/CH	10.5-15.0	SPT	2.93	49	26	23	39.4	60.6
STN-70	Clayey Sand	SC	12.0-16.5	SPT	2.7	35	16	19	53	47.0
STN-71	Sandy fat clay	CH	32.0-35.0	SPT	2.71	69	24	45	31.7	68.3
STN-73	Clayey sand with gravel	SC	4.5-9.0	SPT	2.74	41	14	27	67.5	32.5
STN-74	Fat Clay	CH	4.5-9.0	SPT	2.79	59	25	34	14.7	85.3
STN-75	Fat clay with sand	CH	7.5-12.0	SPT	2.78	55	21	34	23.7	76.3
STN-75	Clayey sand	SC	19.0-22.0	Bag	2.68	28	19	9	63.8	36.2
STN-76	Lean clay with sand	CL	15.0-17.0	Bag	2.69	42	16	26	23	77.0
STN-76	Lean clay with sand	CL	42.0-48.0	SPT	2.72	48	15	33	19.4	80.6
STN-80	Fat Clay	CH	6.0-10.5	SPT	2.7	65	27	38	4	96.0
STN-81	Sandy lean clay	CL	32.0-36.5	SPT	2.71	38	13	25	35	65.0
STN-83	Clayey Sand	SC	8.0-12.0	SPT	2.72	45	17	28	50.7	49.3
STN-83	Clayey Sand	SC	2.0-9.0	Bag	2.7	43	18	25	55.3	44.7
STN-84	Fat clay with sand	CH	35.0-39.0	SPT	2.78	60	21	39	27.3	72.7
STN-85	Fat Clay	CH	12.5-22.0	SPT	2.8	73	22	51	8.3	91.7
STN-94	Silty, Clayey Sand	SC/SM	52.5-55.5	SPT	2.7	21	15	6	66.1	33.9
STN-94	Lean clay with sand	CL	28.0-32.5	SPT	2.68	47	16	31	21	79.0
STN-96	Sandy lean clay	CL	43.0-46.0	SPT	2.61	29	21	8	46.2	53.8
STN-97	Fat clay with sand	CH	32.5-37.0	Bag	2.73	52	23	29	22.4	77.6
STN-98	Lean clay	CL/CH	12.0-16.5	SPT	2.7	49	23	26	6.3	93.7
STN-99	Lean clay	CL	38.5-43.5	SPT	2.73	43	22	21	13.1	86.9
STN-101	Sandy lean clay	CL	55.5-60.0	SPT	2.66	31	18	13	33.4	66.6
STN-105	Fat clay with sand	CH	13.0-16.0	Bag	2.7	55	19	36	18.2	81.8
STN-107	Lean clay with sand	CL	13.5-18.0	SPT	2.73	37	17	20	18.4	81.6
STN-107	Lean clay with sand	CL	35.0-39.5	SPT	2.7	36	16	20	20.6	79.4
STN-108	Silty sand	SM	19.7-23.5	SPT	2.65	25	24	1	54.6	45.4
STN-109	Clayey gravel with sand	GC	23-26.3	SPT	2.7	28	17	11	68.5	31.5
STN-110	Fat Clay	CH/CL	13.0-15.0	Bag	2.77	50	23	27	5.5	94.5
STN-110	Lean clay with sand	CL	20.0-24.5	SPT	2.76	39	20	19	18.6	81.4
STN-111	Sandy lean clay	CL	21.5-24.5	SPT	2.62	29	17	12	34.6	65.4
STN-112	Sandy lean clay	CL	21.5-26.0	SPT	2.65	32	19	13	31.2	68.8
STN-113	Lean Clay with Sand	CL	19.5-24	SPT	2.73	36	20	16	21.6	78.4
STN-113	Sandy Silty Clay	CL/ML	31.5-34.5	SPT	2.69	26	19	7	35.4	64.6