

Identification			Mechanical analysis																				Atterberg's tests			Swell capacity 2/ (cc)	Soil classification Unified AASHTO		Specific gravity	Location						
			Sieve analysis (cumulative percent retained)										Hydrometer analysis (percent passing in millimeters)																							
Field No.	Depth of sample (ft)	Soil horizon	3 in.	1 in.	3/4 in.	1/2 in.	3/8 in.	No. 4	No. 10	No. 18	No. 35	No. 40	No. 60	No. 120	No. 200	0.05	0.037	0.019	0.0009	0.005	0.0036	0.001	Trask's coefficient of sorting ¹ / ₂	Liquid limit	Plastic limit	Plastic index	pH	Section	Township South	Range West						
Artificial fill (af)																																				
830+003/	0.2-1.5	-----	---	0	1	---	4	6	13	---	---	28	---	---	67	---	---	---	---	---	---	---	---	4.9	20.1	NP	-----	---	-----	SM	A-2-4	2.65	NEL/4NEL/4	36	2	70
870+003/	0.2-2.0	-----	0	1	1	---	2	5	10	---	---	21	---	---	65	---	---	---	---	---	---	---	---	5.2	21.1	NP	-----	---	-----	SM	A-2-4	2.65	SEL/4SEL/4	36	2	70
Post-Piney Creek alluvium (Qpp)																																				
R-40 ⁴ /	-----	-----	12	31	45	53	58	69	73	80	88	89	94	98	99	---	---	---	---	---	---	---	4.6	-----	-----	-----	---	-----	-----	-----	NW1/4SEL/4	31	2	70		
R-41 ⁴ /	-----	-----	7	47	57	61	64	70	76	83	90	92	96	99	99	---	---	---	---	---	---	---	4.9	-----	-----	-----	---	-----	-----	-----	NEL/4SEL/4	7	3	70		
R-42	-----	-----	4	16	31	42	47	42	71	79	85	87	93	98	99	---	---	---	---	---	---	---	3.9	-----	-----	-----	---	-----	-----	-----	NW1/4SEL/4	20	3	70		
R-43	-----	-----	0	41	55	61	64	69	71	73	81	84	93	98	99	---	---	---	---	---	---	---	7.3	-----	-----	-----	---	-----	-----	-----	NEL/4NEL/4	32	3	70		
R-44 ⁴ /	-----	-----	9	23	38	46	50	63	70	75	83	86	93	98	99	---	---	---	---	---	---	---	4.9	-----	-----	-----	---	-----	-----	-----	NW1/4SEL/4	17	4	70		
Piney Creek Alluvium (Qp)																																				
842+003/	0.2-7.0	-----	---	---	0	---	1	2	5	---	---	15	---	---	41	---	---	---	---	---	---	---	14.8	33	18.0	15	---	-----	CL	A-6(7)	2.69	NEL/4NEL/4	36	2	70	
Loess (Qes)																																				
G-173	-----	-----	---	---	---	---	0	1	4	7	10	---	15	24	33	38	47	61	75	86	89	95	3.4	42	22	20	7.58	-----	CL	A-7-6(11)	-----	NW1/4NW1/4	33	2	69	
Colluvium (Qco)																																				
821+003/	0.2-5	-----	0	1	3	---	5	6	8	---	---	12	---	---	24	---	---	---	---	---	---	---	3.16	51	25	26	---	-----	CH	A-7-6(16)	2.70	SEL/4SEL/4	25	2	70	
830+003/	1.5-3.0	-----	---	---	---	---	---	0	2	---	---	4	---	---	17	---	---	---	---	---	---	---	3.16	56	26	30	---	-----	CH	A-7-6(19)	2.66	NEL/4NEL/4	36	2	70	
860+003/	0.2-2.5	-----	4	5	9	---	12	13	16	---	---	28	---	---	68	---	---	---	---	---	---	---	3.49	22	17	6	---	-----	SM-SC	A-2-4	2.65	NEL/4SEL/4	36	2	70	
890+003/	0.2-3.0	-----	---	---	0	---	1	1	4	---	---	15	---	---	45	---	---	---	---	---	---	---	4.29	35	20	15	---	-----	CL	A-6(6)	2.67	NEL/4NEL/4	1	3	70	
960+003/	0.2-3.0	-----	---	---	0	---	2	3	6	---	---	14	---	---	24	---	---	---	---	---	---	---	3.16	69	40	29	---	-----	MH	A-7-5(20)	2.70	NW1/4NEL/4	7	3	69	
1020+003/	1.2-3.0	-----	---	---	0	---	1	2	6	---	---	19	---	---	63	---	---	---	---	---	---	---	2.90	29	NP	-----	---	-----	SM	A-4(10)	2.69	SEL/4SEL/4	5	3	69	
G-161	-----	C	---	---	---	---	---	0	1	1	3	---	8	21	31	37	41	47	53	57	63	73	10.24	38	23	15	8.12	3.0	CL	A-6(10)	-----	SEL/4NEL/4SW1/4	7	3	69	
Residuum (Qre)																																				
705+003/	0.2-3.0	-----	5	24	28	---	39	45	52	---	---	61	---	---	71	---	---	---	---	---	---	---	21.1	42	23	19	---	-----	GC	A-2-7(1)	2.65	NEL/4SW1/4	23	2	70	
775+003/	0.2-3.0	-----	0	5	8	---	12	14	19	---	---	27	---	---	44	---	---	---	---	---	---	---	5.96	41	23	18	---	-----	CL	A-7-6(8)	2.67	SW1/4NEL/4	25	2	70	
850+003/	0.2-3.0	-----	0	1	3	---	6	9	15	---	---	27	---	---	57	---	---	---	---	---	---	---	4.65	28	16	12	---	-----	SC	A-6(2)	2.67	SEL/4NEL/4	36	2	70	
870+003/	2.0-3.5	-----	---	---	---	---	0	2	---	---	8	---	---	58	---	---	---	---	---	---	---	---	2.72	NV	NP	-----	---	-----	SM	A-4(1)	2.67	SEL/4SEL/4	36	2	70	
G-114	-----	C	0	10	11	11	13	17	24	32	39	---	48	60	66	70	73	77	81	83	86	89	79.6	29	19	10	7.53	3.0	SC	A-2-4	-----	NW1/4NEL/4	6	3	69	
G-157-U3	-----	C	---	---	---	---	0	1	5	10	16	---	25	33	41	47	53	59	65	69	72	79	32.2	42	25	17	7.55	3.0	CL	A-7-6(5)	-----	NW1/4SW1/4	9	3	69	
Broadway Alluvium (Qb)																																				
G-109-2	-----	A	---	---	0	3	6	11	17	22	29	---	36	49	57	61	64	71	74	78	80	86	9.6	30	19	11	6.76	3.0	SC	A-2-6(4)	-----	NEL/4SEL/4	13	3	70	
G-109-3	-----	B	---	---	0	2	2	3	7	10	17	---	23	32	38	43	45	51	55	58	60	67	14.8	47	25	22	6.02	4.0	CL	A-7-6(4)	-----	NEL/4SEL/4	13	3	70	
G-109-5	-----	Cca	---	---	7	9	11	15	21	26	31	---	39	51	58	63	67	72	76	78	79	84	10.5	39	27	12	7.08	3.5	SC	A-2-6(4)	-----	NEL/4SEL/4	13	3	70	
G-109-7	-----	C	---	---	---	0	1	5	11	16	22	---	31	45	53	57	61	66	70	73	75	82	10.2	34	18	16	7.73	3.3	SC	A-2-6(4)	-----	NEL/4SEL/4	13	3	70	
G-115-1	-----	A	---	---	---	---	0	5	15	23	39	---	52	61	66	71	73	78	81	83	86	89	5.7	-----	-----	-----	---	3.0	-----	-----	SW1/4SW1/4	24	3	70		
G-115-2	-----	B	---	---	---	---	0	4	15	20	24	---	29	33	36	39	42	48	55	59	63	74	20.0	-----	-----	-----	---	3.5	-----	-----	SW1/4SW1/4	24	3	70		
G-115-3	-----	B	---	---	0	6	6	12	19	25	29	---	35	44	49	54	58	63	68	72	75	82	14.5	-----	-----	-----	---	3.5	-----	-----	SW1/4SW1/4	24	3	70		
Old alluvial fan deposits (Qof)																																				
G-95	-----	-----	30	44	48	51	53	61	67	71	84	86	91	96	98	---	---	---	---	---	---	---	10.86	-----	-----	-----	---	-----	-----	-----	NW1/4SEL/4	28	3	70		
G-99	-----	-----	6	10	13	18	21	31	40	52	66	70	81	88	90	---	---	---	---	---	---	---	4.37	-----	-----	-----	---	-----	-----	-----	NW1/4NW1/4	34	3	70		
Luviers Alluvium (Qlo)																																				
940+003/	2.0-3.0	-----	---	---	0	---	2	3	7	---	---	17	---	---	53	---	---	---	---	---	---	---	5.00	39	23	16	---	-----	SC	A-6(1)	2.70	SEL/4SW1/4	6	3	69	
910+003/	0.2-3.0	-----	0	1	2	---	4	5	9	---	---	20	---	---	50	---	---	---	---	---	---	---	3.94	38	21	17	---	-----	CL	A-6(5)	2.65	NW1/4SW1/4	6	3	69	
G-169 3/	1-9	-----	32	54	59	63	66	70	76	---	---	88	---	---	96	---	---	---	---	---	---	---	6.4	-----	-----	-----	---	-----	GW	A-1-a	-----	NEL/4SEL/4	1	3	70	
G-111A	-----	B	0	15	22	32	42	54	65	71	76	---	81	85	86	87	87	88	89	89	90	92	4.24	41	29	12	6.47	3.0	GM	A-7-5(14)	-----	NW1/4NEL/4	11	3	70	
G-111B	-----	B	---	0	9	18	24	34	49	63	79	---	88	90	91	91	92	92	92	93	93	94	3.78	28	23	5	6.75	2.5	SW-SM	A-2-6	-----	NW1/4NEL/4	11	3	70	
G-111C	-----	C	40	48	58	65	70	75	80	84	88	---	93	96	97	98	98	98	99	99	99	99	1.81	NV	NP	-----	7.47	2.0	GP	A-1-a	-----	NW1/4NEL/4	11	3	70	
G-162-U1	-----	B ₂	---	---	---	0	3	4	8	16	26	---	37	49	55	61	64	70	74	78	79	86	8.69	-----	-----	-----	---	3.0	-----	-----	NEL/4SW1/4	19	3	69		
G-162-U2	-----	B ₁	---	---	---	---	0	1	6	15	---	25	35	40	45	47	54	59	64	66	75	49.0	-----	-----	-----	---	3.7	-----	-----	NEL/4SW1/4	19	3	69			
G-162-U3	-----	B	---	---	---	---	0	2	7	15	29	---	45	57	62	67	69	72	74	80	80	86	8.46	-----	-----	-----	---	2.7	-----</							