

7. Listing of Soil Properties by Soil Group for the SIR

Table 30.1 Soil Group 1 Duplex soils

Soil Group 1D

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	70	12.3	8.5	3.1	44.1	7.4	10.0	12.2	70	29.7	8.9	11.5	52.3	24.3	29.4	35.5
Silt%	70	37.8	7.9	19.5	54.0	32.3	38.5	43.6	70	41.5	10.1	18.0	57.2	36.6	44.4	48.8
Sand%	70	49.9	10.9	21.3	76.6	43.5	48.6	56.9	70	28.8	11.7	9.4	62.7	20.8	26.3	36.1
Bulk density (g/cm ³)	70	1.47	0.17	0.96	1.80	1.39	1.47	1.60	70	1.68	0.08	1.46	1.93	1.63	1.68	1.73
Organic matter (%)	57	6.6	2.8	1.6	12.0	4.0	7.2	8.5	57	2.5	0.6	0.9	3.8	2.1	2.5	2.8
Depth of horizon (mm)	30	196	42	140	320	170	185	230	20	188	58	110	320	150	175	220
Soil Chemical Properties																
EC (dS/cm)	57	0.15	0.08	0.06	0.45	0.11	0.13	0.16	57	0.09	0.04	0.04	0.30	0.07	0.08	0.10
pH (H ₂ O)	57	6.1	0.9	5.2	8.5	5.6	5.7	6.1	57	7.0	0.7	5.9	8.8	6.6	6.9	7.2
pH (CaCl ₂)	57	5.4	0.7	4.6	7.3	5.0	5.1	5.5	57	6.1	0.6	5.1	7.7	5.7	6.0	6.4
Ca (meq/100g)	57	6.3	1.8	2.0	11.0	4.9	6.7	7.6	57	5.8	2.0	2.0	10.0	4.5	6.2	7.2
Mg (meq/100g)	57	3.7	1.0	0.4	5.6	3.3	3.9	4.4	57	3.8	1.4	0.5	6.5	3.0	4.0	4.6
Na (meq/100g)	57	0.7	0.5	0.1	3.4	0.4	0.5	0.7	57	0.7	0.4	0.1	2.3	0.5	0.7	0.9
K (meq/100g)	57	0.7	0.4	0.1	2.1	0.3	0.6	0.9	57	0.5	0.3	0.1	1.5	0.3	0.4	0.6
ESP (%)	57	6.2	5.5	1.3	31.3	3.6	4.5	5.7	57	7.3	6.0	1.6	32.8	4.4	5.5	7.3
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	65	48.5	30.1	10.3	143.3	27.5	38.4	63.0	28	11.69	17.18	0.65	91.19	2.72	7.25	13.87
Final infiltration rate (mm/hr)									56	5.85	9.12	0.005	36.2	0.20	1.3	7.59
Available water capacity (%)	14	17.4	6.5	8.7	31.1	12.6	15.8	19.6	14	12.8	2.5	4.1	30.8	10.1	13.0	15.0
Soil water retention characteristic																
Volumetric water content (%) at																
Matric suction (kPa)																
0	14	40.2	7.0	18.9	34.8	36.2	39.5	43.1	14	37.4	4.6	30.6	45.4	32.3	38.3	41.5
10	14	33.1	6.8	37.0	26.1	28.9	32.7	35.7	14	32.4	5.8	23.8	39.7	26.1	34.5	37.4
60	14	27.9	6.6	44.4	22.5	23.6	25.7	29.4	14	28.0	5.7	20.1	36.0	23.3	27.4	33.9
1500	14	15.7	5.0	19.3	7.6	13.5	16.3	17.0	14	19.6	6.8	7.8	29.6	12.8	21.7	24.3

Table 30.2 Soil Group 1 Sandy soils

Soil Group 1S

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	8	1.5	0.6	0.3	2.2	1.2	1.6	2.0	8	4.2	2.6	1.2	7.3	1.5	4.5	6.4
Silt%	8	14.5	7.5	5.8	23.7	6.4	16.3	20.5	8	14.3	8.0	2.8	23.0	6.1	18.1	20.1
Sand%	8	84.0	8.0	74.4	93.9	77.5	81.9	92.3	8	81.6	10.2	71.4	96.0	74.4	75.7	92.5
Bulk density (g/cm ³)	8	1.65	0.09	1.52	1.79	1.58	1.67	1.70	8	1.74	0.12	1.54	1.88	1.66	1.74	1.85
Organic matter (%)	8	1.8	0.4	1.3	2.5	1.4	1.7	2.0	8	1.1	0.4	0.6	1.7	0.8	1.0	1.4
Depth of horizon (mm)	0								0							
Soil Chemical Properties																
EC (dS/cm)	8	0.08	0.04	0.04	0.14	0.04	0.07	0.12	8	0.07	0.03	0.04	0.10	0.04	0.07	0.10
pH (H ₂ O)	8	7.4	1.3	5.8	9.0	6.4	7.2	8.6	8	7.1	1.8	5.2	8.8	5.4	7.2	8.8
pH (CaCl ₂)	8	6.6	1.0	5.0	7.9	5.9	6.5	7.6	8	6.2	1.6	4.5	7.8	4.7	6.3	7.7
Ca (meq/100g)	8	2.9	1.4	1.0	4.7	1.9	3.0	4.1	8	1.9	1.1	0.7	3.8	0.9	2.0	2.5
Mg (meq/100g)	8	1.5	1.2	0.2	2.9	0.3	1.4	2.6	8	1.1	0.9	0.1	2.2	0.2	1.0	1.9
Na (meq/100g)	8	0.4	0.4	0.0	0.8	0.1	0.4	0.7	8	0.3	0.2	0.0	0.6	0.1	0.3	0.5
K (meq/100g)	8	0.5	0.2	0.2	0.7	0.3	0.5	0.7	8	0.5	0.3	0.1	0.8	0.2	0.5	0.7
ESP (%)	8	5.8	3.4	1.8	10.3	2.2	6.7	8.4	8	6.8	2.9	2.3	10.4	4.7	7.0	9.2
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	8	140.5	152.7	17.8	366.9	24.8	48.3	296.4	8	36.48	31.46	6.13	83.16	12.83	21.62	66.84
Final infiltration rate (mm/hr)									8	129	169	8.52	420	13.9	28.6	258
Available water capacity (%)	4	16.4	2.5	12.8	18.5	14.9	17.1	17.9	4	14.2	1.9	9.0	16.5	12.1	15.7	16.3
Soil water retention characteristic																
Volumetric water content (%) at																
 Matric suction (kPa)																
0	4	39.0	6.6	19.4	35.1	35.4	38.5	42.7	4	36.2	4.8	30.7	42.0	32.7	36.0	39.7
10	4	23.6	5.4	26.2	16.8	19.8	24.4	27.3	4	20.7	6.3	12.2	26.3	16.1	22.1	25.3
60	4	17.5	4.9	37.5	10.7	12.4	17.5	22.5	4	15.4	6.8	7.7	23.3	10.0	15.3	20.8
1500	4	7.2	3.4	13.6	4.0	4.2	6.5	10.2	4	6.5	3.1	3.2	10.1	4.0	6.3	9.0

Table 30.3 Soil Group 2

Soil Group 2

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	112	13.7	6.0	4.4	38.6	9.6	11.9	16.5	112	38.7	12.4	3.3	61.5	32.1	41.5	48.0
Silt%	112	35.0	7.4	19.5	63.4	30.7	34.2	37.5	112	31.7	8.1	10.1	48.6	26.2	32.4	36.9
Sand%	112	51.3	10.2	23.2	74.7	46.1	53.3	57.6	112	29.6	12.3	7.1	81.3	21.8	26.7	36.5
Bulk density (g/cm ³)	112	1.53	0.15	1.01	1.77	1.46	1.55	1.62	112	1.64	0.09	1.44	1.95	1.58	1.63	1.68
Organic matter (%)	84	5.1	1.3	1.9	8.4	4.4	5.1	6.1	84	2.6	0.7	1.1	4.2	2.1	2.6	3.1
Depth of horizon (mm)	72	185	36	130	290	160	185	210	40	192	55	100	310	155	180	230
Soil Chemical Properties																
EC (dS/cm)	84	0.14	0.13	0.04	0.98	0.09	0.12	0.16	84	0.14	0.13	0.04	0.84	0.08	0.10	0.15
pH (H ₂ O)	84	6.2	0.7	5.0	8.4	5.9	6.0	6.3	84	7.0	0.7	6.0	8.8	6.5	6.9	7.5
pH (CaCl ₂)	84	5.5	0.7	4.5	7.9	5.2	5.3	5.7	84	6.2	0.7	4.9	8.2	5.7	5.9	6.6
Ca (meq/100g)	84	5.8	1.6	3.2	12.0	4.7	5.7	6.2	84	5.8	2.3	2.0	17.0	4.4	5.6	6.8
Mg (meq/100g)	84	3.4	1.3	0.9	9.1	2.8	3.4	3.9	84	4.3	1.7	1.1	8.7	3.0	4.2	5.4
Na (meq/100g)	84	0.9	0.6	0.1	4.4	0.5	0.8	1.0	84	1.3	0.9	0.2	5.6	0.8	1.1	1.5
K (meq/100g)	84	0.5	0.5	0.1	2.2	0.2	0.3	0.4	84	0.6	0.5	0.1	2.8	0.3	0.4	0.7
ESP (%)	84	7.9	3.6	2.0	22.3	6.0	8.1	9.3	84	10.6	5.2	1.5	28.8	7.9	10.1	11.8
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	112	27.3	18.9	3.9	109.1	14.3	23.3	34.4	63	3.61	3.89	0.10	18.28	0.79	2.08	5.34
Final infiltration rate (mm/hr)									78	0.88	2.06	0.005	10.9	0.07	0.14	0.74
Available water capacity (%)	36	14.6	4.3	5.3	22.8	11.9	13.9	18.4	36	12.5	1.7	7.0	20.1	10.5	12.3	14.5
Soil water retention characteristic																
Volumetric water content (%) at																
 Matric suction (kPa)																
0	36	43.3	8.1	45.6	33.5	38.9	41.8	46.5	36	45.1	4.9	35.0	55.3	41.8	45.5	48.7
10	36	38.4	7.3	37.5	29.3	34.6	37.1	41.6	36	41.8	5.4	28.6	50.7	39.7	42.2	45.4
60	36	34.1	7.2	34.6	25.7	30.6	33.4	36.0	36	38.4	5.5	25.3	47.3	35.7	38.9	41.6
1500	36	23.7	6.2	33.6	13.6	19.4	23.3	27.4	36	29.3	5.2	17.9	37.8	26.0	29.5	33.5

Table 30.4 Soil Group 3

Soil Group 3

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	86	19.8	8.9	7.2	46.2	14.0	17.5	23.2	85	42.3	14.2	14.5	70.4	31.4	44.7	53.0
Silt%	86	35.6	8.3	17.2	65.0	30.2	34.9	39.9	85	30.5	10.3	12.0	73.3	23.6	29.9	35.1
Sand%	86	44.6	11.7	16.7	65.1	37.2	46.0	53.8	85	27.3	11.2	4.2	63.5	18.4	26.0	33.9
Bulk density (g/cm ³)	86	1.55	0.17	1.00	1.81	1.47	1.59	1.68	85	1.62	0.12	1.29	1.94	1.56	1.62	1.71
Organic matter (%)	57	4.3	1.5	2.1	8.2	3.1	4.0	5.1	57	2.0	0.5	1.1	3.8	1.7	1.9	2.4
Depth of horizon (mm)	86	170	36	100	290	150	170	190	39	161	44	60	250	130	160	198
Soil Chemical Properties																
EC (dS/cm)	57	0.18	0.16	0.04	0.72	0.08	0.13	0.22	57	0.16	0.18	0.04	1.10	0.07	0.10	0.21
pH (H ₂ O)	57	6.3	0.8	4.7	8.6	5.8	6.4	6.8	57	7.2	0.7	5.8	9.1	6.7	7.1	7.5
pH (CaCl ₂)	57	5.8	0.8	4.4	8.6	5.1	5.8	6.2	57	6.4	0.8	5.0	8.5	5.9	6.2	6.8
Ca (meq/100g)	57	6.0	2.7	3.1	18.0	4.0	5.4	7.3	57	5.8	2.7	1.9	18.0	4.2	5.4	6.8
Mg (meq/100g)	57	3.8	2.1	0.9	8.7	2.1	3.1	5.3	57	5.6	2.5	1.5	10.0	3.5	5.0	7.6
Na (meq/100g)	57	0.8	0.8	0.1	4.6	0.3	0.6	1.1	57	1.3	1.0	0.2	4.8	0.6	1.1	1.8
K (meq/100g)	57	0.6	0.4	0.1	1.6	0.3	0.4	0.9	57	0.7	0.4	0.1	1.4	0.4	0.7	1.0
ESP (%)	57	6.9	4.7	1.5	25.5	3.6	5.6	8.6	57	9.9	5.8	2.4	28.2	4.8	8.5	13.2
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	82	44.2	31.3	4.2	143.3	20.8	37.2	60.3	80	5.68	6.48	0.14	43.27	1.97	3.68	7.37
Final infiltration rate (mm/hr)									55	1.97	3.99	0.005	25.9	0.29	0.66	1.43
Available water capacity (%)	37	13.3	4.1	3.7	22.1	11.2	13.2	15.1	42	12.0	1.8	4.3	18.2	9.7	12.0	13.8
Soil water retention characteristic																
Volumetric water content (%) at																
Matric suction (kPa)																
0	37	43.9	7.8	35.8	34.4	38.3	43.7	47.2	42	43.8	6.8	32.3	60.5	40.0	43.1	48.6
10	37	37.2	7.1	38.0	26.4	32.3	36.0	42.7	42	38.8	6.8	25.8	51.2	34.8	39.2	45.3
60	37	33.2	6.8	35.3	22.9	28.9	32.3	38.8	42	35.1	7.0	22.2	47.4	30.0	34.6	40.6
1500	37	23.9	5.8	28.0	14.1	19.7	24.2	27.8	42	26.9	6.3	13.8	39.0	22.4	27.8	30.8

Table 30.5 Soil Group 4

Soil Group 4

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	34	20.6	11.3	4.2	47.9	12.4	20.9	25.8	34	37.3	13.7	6.5	60.1	28.0	37.7	48.6
Silt%	34	39.0	5.9	28.5	54.5	35.7	39.5	42.2	34	36.2	6.8	24.2	54.5	32.3	35.5	39.2
Sand%	34	40.4	10.8	8.3	57.7	33.7	42.8	47.6	34	26.6	10.6	8.5	57.7	19.8	24.4	32.5
Bulk density (g/cm ³)	34	1.53	0.12	1.33	1.78	1.42	1.53	1.64	34	1.61	0.12	1.41	1.91	1.52	1.60	1.66
Organic matter (%)	26	4.3	0.9	2.5	6.7	3.4	4.3	4.8	26	2.0	0.9	1.0	5.0	1.5	1.9	2.1
Depth of horizon (mm)	34	186	65	120	340	150	160	210	16	191	51	120	320	155	190	220
Soil Chemical Properties																
EC (dS/cm)	26	0.16	0.16	0.04	0.73	0.07	0.11	0.21	26	0.16	0.15	0.04	0.52	0.06	0.08	0.26
pH (H ₂ O)	26	6.2	0.7	5.4	8.4	5.8	6.1	6.4	26	7.1	0.5	6.2	8.0	6.7	7.0	7.5
pH (CaCl ₂)	26	5.7	0.9	4.9	8.3	5.2	5.4	5.9	26	6.3	0.6	5.5	7.7	5.9	6.3	6.6
Ca (meq/100g)	26	5.9	2.1	3.1	13.0	4.6	5.6	6.5	26	6.4	2.9	2.6	17.0	4.2	6.3	7.4
Mg (meq/100g)	26	3.1	1.5	0.6	6.5	2.0	3.0	4.2	26	5.0	2.7	1.4	13.0	3.5	4.6	5.9
Na (meq/100g)	26	0.7	1.0	0.1	4.2	0.2	0.3	0.8	26	1.2	1.1	0.2	4.0	0.5	0.8	1.4
K (meq/100g)	26	0.7	0.4	0.2	1.4	0.4	0.6	0.9	26	0.6	0.3	0.2	1.4	0.4	0.5	0.8
ESP (%)	26	6.1	5.6	0.5	23.0	2.0	4.1	7.8	26	8.3	5.8	2.0	26.0	4.9	6.6	10.9
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	33	26.1	16.5	5.0	74.8	14.6	23.2	33.1	29	3.17	5.03	0.44	27.42	1.13	1.44	2.97
Final infiltration rate (mm/hr)									25	0.53	0.61	0.005	1.98	0.1	0.29	0.81
Available water capacity (%)	16	12.1	4.3	4.2	22.1	9.5	11.3	14.1	16	13.7	2.0	5.9	19.2	11.5	13.6	17.1
Soil water retention characteristic																
Volumetric water content (%) at																
Matric suction (kPa)																
0	16	42.6	7.2	32.5	35.2	38.0	40.8	47.9	16	47.5	6.0	38.9	58.6	42.5	47.4	51.0
10	16	38.5	6.8	29.6	29.0	35.0	37.5	43.5	16	43.3	5.7	33.0	52.1	38.1	44.1	47.8
60	16	34.7	6.6	30.7	24.7	31.7	34.1	38.8	16	39.7	6.3	25.7	48.8	35.0	41.1	44.1
1500	16	26.5	6.0	31.1	17.9	21.6	27.6	29.7	16	29.6	6.8	13.8	38.5	26.5	30.2	34.8

Table 30.6 Soil Group 5

Soil Group 5

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	16	32.5	13.3	16.2	62.7	22.6	29.9	37.5	16	55.1	12.4	26.8	71.3	44.5	59.1	63.6
Silt%	16	30.6	4.9	22.9	40.3	26.8	30.2	33.0	16	25.0	8.0	13.9	41.9	17.6	24.2	31.0
Sand%	16	36.9	12.3	10.9	56.6	26.8	39.6	46.6	16	19.8	7.4	8.5	31.2	13.7	19.8	26.8
Bulk density (g/cm ³)	16	1.43	0.10	1.29	1.65	1.37	1.41	1.50	16	1.51	0.09	1.41	1.69	1.44	1.47	1.59
Organic matter (%)	12	5.1	1.6	2.5	8.0	4.1	5.3	6.1	12	1.9	0.4	1.3	2.5	1.7	1.8	2.2
Depth of horizon (mm)	16	176	29	130	230	155	170	200	8	165	34	110	210	145	160	195
Soil Chemical Properties																
EC (dS/cm)	12	0.29	0.16	0.10	0.64	0.19	0.22	0.42	12	0.28	0.17	0.09	0.64	0.14	0.24	0.35
pH (H ₂ O)	12	6.8	0.4	6.0	7.8	6.6	6.9	7.1	12	7.5	0.4	6.3	7.9	7.5	7.7	7.7
pH (CaCl ₂)	12	6.3	0.5	5.1	7.1	6.1	6.4	6.6	12	6.8	0.5	5.3	7.3	6.9	6.9	7.0
Ca (meq/100g)	12	9.7	2.5	5.9	15.0	7.8	9.5	11.5	12	8.8	2.6	3.4	14.0	7.5	9.1	9.7
Mg (meq/100g)	12	7.0	1.3	5.0	10.0	6.4	6.9	7.6	12	8.9	3.0	3.7	13.0	6.4	9.8	11.5
Na (meq/100g)	12	1.3	0.6	0.5	2.4	0.8	1.4	1.8	12	2.4	1.4	0.7	4.3	1.1	2.3	3.7
K (meq/100g)	12	1.0	0.3	0.4	1.4	0.9	1.0	1.3	12	1.4	0.7	0.2	2.6	0.9	1.4	1.9
ESP (%)	12	7.1	3.4	2.9	13.6	4.3	7.3	9.2	12	10.7	5.0	3.9	17.2	5.9	11.4	15.7
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	14	36.3	20.3	14.4	82.5	23.6	30.3	40.4	12	1.97	1.50	0.42	5.65	0.82	1.73	2.50
Final infiltration rate (mm/hr)									12	0.36	0.42	0.02	1.2	0.05	0.14	0.49
Available water capacity (%)	8	10.2	4.1	6.0	18.9	7.3	9.4	11.6	8	12.3	1.2	10.1	13.8	11.0	12.6	13.7
Soil water retention characteristic																
Volumetric water content (%) at																
Matric suction (kPa)																
0	8	48.4	7.3	18.4	43.8	44.7	47.0	53.1	8	51.2	8.0	36.7	61.5	48.5	49.5	57.5
10	8	44.6	7.0	7.1	41.5	42.4	43.8	47.0	8	46.0	6.2	32.5	52.3	45.0	46.5	50.0
60	8	42.3	6.9	7.9	39.5	40.0	41.5	44.6	8	44.0	6.4	29.8	50.4	43.1	44.9	47.9
1500	8	34.4	6.2	13.9	28.4	31.1	35.7	37.6	8	33.7	5.3	22.4	38.8	31.6	35.2	37.3

Table 30.7 Soil Group 6

Soil Group 6

Soil Properties	Horizon A								Horizon B1							
	Sampling Points	Mean	Std	Min	Max	Percentile			Sampling Points	Mean	Std	Min	Max	Percentile		
						25	50	75						25	50	75
Soil Physical Properties																
Particle size distribution																
Clay%	22	29.1	13.7	16.1	70.8	20.9	24.8	33.3	22	46.9	12.3	21.3	63.7	35.5	49.1	57.0
Silt%	22	34.6	6.9	21.5	50.9	31.8	33.2	39.1	22	29.3	8.3	15.2	45.1	22.9	30.1	34.4
Sand%	22	36.3	12.6	7.6	56.5	29.9	39.7	45.3	22	23.8	8.8	7.3	45.2	18.2	22.6	29.7
Bulk density (g/cm ³)	22	1.56	0.12	1.23	1.72	1.53	1.55	1.64	22	1.60	0.12	1.41	1.86	1.52	1.59	1.65
Organic matter (%)	17	3.7	1.4	1.4	6.5	2.8	3.8	4.3	17	1.7	0.7	0.7	3.3	1.3	1.6	2.2
Depth of horizon (mm)	22	190	34	100	240	180	200	210	10	198	41	120	270	180	200	220
Soil Chemical Properties																
EC (dS/cm)	17	0.09	0.04	0.04	0.21	0.08	0.08	0.11	17	0.09	0.05	0.04	0.21	0.06	0.07	0.10
pH (H ₂ O)	17	6.1	0.7	5.4	7.6	5.6	5.8	6.4	17	7.0	0.6	6.1	8.0	6.4	7.1	7.2
pH (CaCl ₂)	17	5.4	0.6	4.8	6.7	4.9	5.1	5.7	17	6.1	0.6	5.1	7.3	5.6	6.1	6.3
Ca (meq/100g)	17	5.9	2.9	3.8	16.0	4.3	5.2	6.2	17	6.3	3.1	2.8	15.0	3.2	6.5	7.5
Mg (meq/100g)	17	3.4	2.2	1.0	8.6	1.8	3.2	4.0	17	6.0	3.2	1.3	11.0	3.2	5.0	9.8
Na (meq/100g)	17	0.5	0.3	0.1	1.5	0.4	0.5	0.6	17	1.0	0.7	0.2	2.6	0.5	1.0	1.2
K (meq/100g)	17	0.6	0.7	0.2	2.9	0.2	0.4	0.7	17	0.7	0.5	0.2	2.2	0.4	0.5	1.0
ESP (%)	17	5.1	1.8	1.8	7.6	3.8	5.8	6.5	17	7.0	2.3	2.1	11.1	5.9	7.1	8.2
Soil Hydraulic Properties																
Sat. hydraulic conductivity (mm/hr)	22	21.5	15.5	4.0	55.9	10.8	14.4	30.5	17	1.34	1.14	0.03	3.82	0.44	1.09	2.39
Final infiltration rate (mm/hr)									16	0.19	0.24	0.003	0.73	0.02	0.06	0.38
Available water capacity (%)	16	10.3	3.7	5.5	16.3	7.2	9.3	13.9	16	12.6	1.7	6.5	16.7	10.5	12.6	15.6
Soil water retention characteristic																
Volumetric water content (%) at																
 Matric suction (kPa)																
0	16	45.5	8.2	70.4	35.2	38.9	44.8	48.3	16	49.5	8.9	38.1	65.7	42.4	45.7	58.6
10	16	40.1	7.2	28.5	31.8	35.1	41.2	42.5	16	44.3	6.9	34.2	53.8	39.5	42.1	51.6
60	16	36.9	7.0	28.8	29.6	32.1	36.9	39.9	16	41.0	7.0	28.2	50.6	36.7	39.5	47.8
1500	16	29.8	6.6	26.0	23.9	26.0	28.4	33.3	16	31.7	6.2	17.6	41.6	29.4	30.4	37.7