Engineering Interpretations

Chemical Properties

This table shows estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Properties

DEPTH to the upper and lower boundaries of each layer is indicated.

SOIL REACTION is a measure of acidity or alkalinity and is expressed as a range in pH values. The range in pH of each major horizon is based on many field tests. For many soils, values have been verified by laboratory.

SALINITY is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at typical sites of nonirrigated soils.

This subsection includes:

- **(a) Chemical Properties**

Physical and Chemical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not available or were not estimated)

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodibility group	Wind erodibility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
15000:															
BASEHOR---------	0-6	5-12	1.30-1.45	14.00-42.00	0.16-0.19	5.0-10	---	4.5-6.5	0.1-2.9	1.0-2.0	.17	.24	1	3	86
	6-15	4-12	1.30-1.45	14.00-42.00	0.10-0.15	3.0-10	---	4.5-6.5	0.1-2.9	0.3-1.0	.24	.37			
	15-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
15001:															
BASEHOR---------	0-2	5-15	1.30-1.45	14.00-42.00	0.13-0.18	15-25	---	5.1-6.5	0.1-2.9	1.0-14	.10	.10	1	8	0
	2-10	5-15	1.30-1.45	14.00-42.00	0.12-0.17	5.0-15	---	4.0-5.5	0.1-2.9	1.0-2.0	.10	.17			
	10-16	5-22	1.30-1.45	14.00-42.00	0.08-0.12	5.0-15	---	4.5-5.5	0.1-2.9	0.5-1.5	.10	.17			
	16-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
15002:															
MCGIRK----------	0-4	15-27	1.30-1.45	4.00-14.00	0.22-0.24	8.0-16	8.0-16	5.1-7.3	0.1-2.9	1.0-2.0	.49	.49	3	6	48
	4-9	25-35	1.30-1.40	1.40-4.00	0.18-0.20	10-20	10-20	4.5-6.0	3.0-5.9	0.5-1.0	.37	.37			
	9-30	40-60	1.25-1.35	0.42-1.40	0.10-0.18	20-35	18-26	4.5-6.0	6.0-8.9	0.5-1.0	.24	.24			
	30-91	30-60	1.25-1.35	0.42-1.40	0.10-0.18	20-30	18-26	4.5-7.3	6.0-8.9	0.1-0.5	.24	.28			
40000:															
BARDEN----------	0-8	15-27	1.40-1.50	4.00-14.00	0.21-0.24	8.0-18	---	5.1-7.3	0.1-2.9	1.0-3.0	.43	.43	3	6	48
	8-16	35-50	1.25-1.40	0.42-1.40	0.11-0.19	19-30	---	4.5-7.3	6.0-8.9	0.5-2.0	.24	.24			
	16-76	27-40	1.30-1.45	1.40-4.00	0.10-0.14	14-20	---	4.5-7.4	3.0-5.9	0.1-0.5	.37	.37			
40001:															
BOLIVAR---------	0-9	6-22	1.20-1.40	4.00-14.00	0.19-0.21	4.0-10	4.0-10	5.1-6.6	0.1-2.9	0.5-2.0	.28	.28	3	5	56
	9-25	15-30	1.30-1.50	4.00-14.00	0.12-0.16	6.0-15	4.0-15	4.5-6.6	3.0-5.9	0.1-0.5	.28	.32			
	25-38	20-30	1.35-1.55	4.00-14.00	0.09-0.12	6.0-15	4.0-15	4.5-6.0	0.1-2.9	0.1-0.5	.18	.24			
	38-42	---	---	0.42-1.40	---	---	---	---	---	---	---	---			
	42-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
40002:															
LIBERAL---------	0-9	15-27	1.35-1.50	4.00-14.00	0.20-0.24	12-18	7.0-16	4.5-6.0	0.1-2.9	1.0-4.0	.37	.37	4	6	48
	9-23	27-50	1.35-1.45	1.40-4.00	0.11-0.20	14-26	7.0-16	4.5-6.5	3.0-5.9	0.5-1.0	.37	.37			
	23-40	27-50	1.25-1.40	0.42-1.40	0.11-0.20	14-30	10-25	4.5-6.5	6.0-8.9	0.2-0.5	.28	.28			
	40-50	27-50	1.25-1.40	0.42-1.40	0.08-0.12	12-26	10-25	5.1-7.3	6.0-8.9	0.2-0.5	.49	.49			
	50-55	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
	55-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
46000:															
HUMANSVILLE-----	0-7	18-27	1.30-1.55	4.00-14.00	0.18-0.22	20-30	---	5.5-7.3	0.1-2.9	2.0-8.0	.37	.37	5	6	48
	7-24	18-35	1.40-1.60	1.40-4.00	0.17-0.22	20-30	---	6.1-7.3	0.1-2.9	1.0-5.0	.55	.55			
	24-60	27-50	1.40-1.60	0.42-4.00	0.12-0.18	20-30	---	6.1-7.3	3.0-5.9	0.5-2.0	.43	.43			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
66000:															
MONITEAU--------	0-6	15-27	1.20-1.40	4.00-14.00	0.21-0.23	10-14	7.0-12	5.1-6.5	0.1-2.9	1.0-2.0	.55	.55	5	6	48
	6-18	12-25	1.20-1.40	4.00-14.00	0.18-0.22	6.0-12	4.0-10	5.1-6.5	0.1-2.9	0.5-1.0	.55	.55			
	18-60	22-35	1.30-1.50	1.40-4.00	0.17-0.20	12-20	10-18	4.5-6.0	3.0-5.9	0.1-0.8	.47	.47			
66001:															
DAMERON---------	0-9	20-27	1.25-1.40	4.00-14.00	0.22-0.24	12-22	---	5.1-7.3	0.1-2.9	2.0-4.0	.32	.32	4	6	48
	9-15	20-32	1.25-1.40	4.00-14.00	0.18-0.24	12-22	---	5.1-7.3	3.0-5.9	2.0-4.0	.28	.28			
	15-24	27-32	1.20-1.55	4.00-14.00	0.04-0.10	15-22	---	5.6-7.3	0.1-2.9	0.5-2.0	.10	.28			
	24-72	20-32	1.25-1.40	4.00-14.00	0.18-0.24	12-22	---	5.1-7.3	3.0-5.9	0.5-2.0	.20	.32			
	72-80	20-32	1.25-1.40	4.00-14.00	0.06-0.10	12-25	---	5.1-7.3	0.1-2.9	0.5-2.0	.05	.24			
70000:															
BONA----------	0-6	12-27	1.30-1.50	4.00-14.00	0.12-0.22	10-18	8.0-18	5.1-6.5	0.1-2.9	1.0-4.0	.20	.37	3	8	0
	6-18	18-27	1.35-1.45	4.00-14.00	0.06-0.18	10-18	8.0-18	5.1-6.5	0.1-2.9	1.0-4.0	.10	.37			
	18-24	20-40	1.35-1.45	4.00-14.00	0.03-0.12	8.0-16	6.0-16	5.1-6.5	3.0-5.9	0.5-2.0	.10	.43			
	24-30	50-70	1.35-1.50	1.40-4.00	0.06-0.12	10-20	8.0-18	4.5-6.5	3.0-5.9	0.5-1.0	.05	.20			
	30-72	50-80	1.35-1.55	1.40-4.00	0.10-0.18	15-30	12-25	4.5-6.5	3.0-5.9	0.5-1.0	.05	.10			
	72-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
70001:															
BONA----------	0-7	12-27	1.30-1.50	4.00-14.00	0.12-0.22	10-25	8.0-18	5.1-6.5	0.1-2.9	1.0-7.0	.17	.32	3	8	0
	7-12	18-27	1.35-1.45	4.00-14.00	0.06-0.18	10-21	8.0-18	5.1-6.5	0.1-2.9	1.0-5.0	.15	.32			
	12-19	20-40	1.35-1.45	4.00-14.00	0.03-0.12	8.0-24	6.0-16	5.1-6.5	3.0-5.9	0.5-3.0	.15	.32			
	19-45	50-70	1.35-1.50	1.40-4.00	0.06-0.12	10-37	8.0-18	4.5-6.5	3.0-5.9	0.5-2.0	.05	.15			
	45-62	50-81	1.35-1.55	1.40-4.00	0.10-0.18	15-44	12-25	4.5-7.1	3.0-5.9	0.5-1.0	.05	.10			
	62-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
70002:															
ALSUP----------	0-4	3-24	1.20-1.40	4.00-14.00	0.12-0.18	6.0-35	2.0-40	4.5-7.3	0.1-2.9	1.0-12	.37	.55	4	8	0
	4-13	5-24	1.20-1.40	4.00-14.00	0.12-0.17	3.0-12	2.0-12	4.5-7.3	0.1-2.9	0.5-2.0	.37	.55			
	13-23	35-70	1.20-1.50	1.40-4.00	0.12-0.21	15-30	18-30	4.5-6.0	3.0-5.9	0.5-1.0	.37	.37			
	23-39	35-55	1.30-1.50	1.40-4.00	0.12-0.21	9.0-25	18-31	5.0-6.0	6.0-8.9	0.1-0.5	.24	.24			
	39-44	35-50	1.40-1.70	1.40-4.00	0.06-0.17	9.0-20	9.0-20	5.1-8.0	6.0-8.9	---	.24	.43			
	44-60	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
70003:															
ALSUP----------	0-7	5-24	1.20-1.40	4.00-14.00	0.12-0.16	6.0-16	2.0-8.0	4.5-7.3	0.1-2.9	1.0-4.0	.24	.55	4	8	0
	7-12	5-24	1.20-1.40	4.00-14.00	0.12-0.16	3.0-12	2.0-8.0	5.1-7.3	0.1-2.9	0.5-2.0	.20	.64			
	12-40	35-70	1.20-1.50	1.40-4.00	0.12-0.17	20-30	18-30	4.5-6.0	3.0-5.9	0.5-1.0	.20	.24			
	40-56	27-50	1.40-1.70	1.40-4.00	0.06-0.12	9.0-20	9.0-20	6.6-8.0	6.0-8.9	0.1-0.5	.15	.43			
	56-66	---	---	0.01-0.42	---	---	---	---	---	---	---	---			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
70004:															
ALSUP----------	0-4	5-24	1.20-1.40	4.00-14.00	0.12-0.19	6.0-18	2.0-23	4.5-7.3	0.1-2.9	1.0-6.7	.28	.37	4	8	0
	4-9	5-24	1.20-1.40	4.00-14.00	0.12-0.19	3.0-12	2.0-8.0	5.1-7.3	0.1-2.9	0.5-2.0	.49	.64			
	9-27	35-70	1.20-1.50	1.40-4.00	0.12-0.19	13-30	16-30	4.5-6.0	6.0-8.9	0.5-1.0	.28	.37			
	27-41	27-50	1.40-1.70	1.40-4.00	0.06-0.13	8.6-20	9.0-20	5.0-8.0	3.0-5.9	0.1-0.5	.20	.49			
	41-46	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
70005:															
BLUEYE----------	0-9	15-27	1.20-1.30	4.00-14.00	0.10-0.16	12-25	---	6.1-7.8	0.1-2.9	2.0-4.0	.15	.20	2	8	0
	9-15	15-35	1.25-1.40	4.00-14.00	0.08-0.14	12-25	---	6.1-8.4	0.1-2.9	1.0-3.0	.10	.17			
	15-21	40-65	1.20-1.45	0.42-1.40	0.04-0.09	25-40	---	6.6-8.4	6.0-8.9	1.0-3.0	.10	.20			
	21-35	55-80	1.20-1.40	0.42-1.40	0.03-0.08	25-40	---	7.3-8.4	6.0-8.9	0.5-2.0	.17	.17			
	35-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
MOKO----------	0-7	18-35	1.25-1.50	4.00-14.00	0.08-0.13	15-30	---	6.6-7.8	0.1-2.9	4.0-10	.10	.28	1	8	0
	7-12	18-35	1.25-1.60	4.00-14.00	0.03-0.14	15-30	---	6.6-7.8	0.1-2.9	3.0-8.0	.10	.37			
	12-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
70006:															
CRELDON---------	0-10	10-25	1.20-1.40	4.00-14.00	0.22-0.24	12-18	10-18	4.5-7.3	0.1-2.9	1.0-3.0	.27	.37	4	5	56
	10-14	27-40	1.30-1.50	1.40-4.00	0.17-0.20	15-24	12-24	4.5-6.5	3.0-5.9	1.0-2.0	.37	.37			
	14-26	35-50	1.30-1.50	1.40-4.00	0.12-0.17	15-24	12-24	4.5-6.5	3.0-5.9	0.5-1.0	.32	.32			
	26-41	25-35	1.60-1.90	0.01-0.42	0.07-0.12	9.0-15	6.0-14	3.6-5.5	0.1-2.9	0.1-0.5	.24	.43			
	41-51	15-35	1.60-1.85	0.01-0.42	0.05-0.12	6.0-10	5.0-10	3.6-6.0	0.1-2.9	0.1-0.5	.10	.43			
	51-60	40-70	1.30-1.55	4.00-14.00	0.04-0.10	25-40	20-40	4.5-6.5	6.0-8.9	0.1-0.5	.10	.15			
70007:															
CLIQUOT---------	0-4	8-18	1.30-1.50	4.00-14.00	0.14-0.19	8.0-16	5.0-15	4.5-6.0	0.1-2.9	4.0-8.0	.15	.32	4	8	0
	4-10	15-27	1.40-1.55	4.00-14.00	0.14-0.19	5.0-10	2.0-10	4.5-6.0	0.1-2.9	0.5-1.0	.15	.49			
	10-41	50-70	1.30-1.55	0.42-1.40	0.07-0.16	15-25	10-20	4.5-5.5	6.0-8.9	0.5-1.0	.17	.20			
	41-48	45-60	1.30-1.55	0.42-1.40	0.07-0.12	15-25	10-20	4.5-5.5	6.0-8.9	0.2-0.5	.15	.28			
	48-55	40-60	1.30-1.55	0.42-1.40	0.07-0.12	15-25	5.0-20	4.5-5.5	3.0-5.9	0.2-0.5	.10	.32			
	55-80	---	---	0.01-0.42	---	---	---	---	---	---	---	---			
70008:															
GOSS----------	0-6	12-27	1.10-1.30	14.00-42.00	0.06-0.10	10-31	10-31	4.5-6.5	0.1-2.9	1.0-4.0	.28	.49	2	8	0
	6-10	10-24	1.10-1.30	14.00-42.00	0.06-0.10	6.0-12	3.7-12	4.5-6.5	0.1-2.9	0.1-2.0	.17	.49			
	10-14	35-50	1.30-1.50	4.00-14.00	0.04-0.09	9.0-25	7.0-25	4.5-7.3	3.0-5.9	0.1-1.0	.10	.43			
	14-80	50-85	1.40-1.60	4.00-14.00	0.06-0.10	25-58	21-58	4.5-7.3	3.0-5.9	0.1-1.0	.05	.05			
70009:															
GOSS----------	0-4	12-27	1.10-1.30	14.00-42.00	0.06-0.10	10-31	10-31	4.5-6.5	0.1-2.9	1.0-4.0	.20	.37	2	8	0
	4-10	10-24	1.10-1.30	14.00-42.00	0.06-0.10	6.0-12	3.7-12	4.5-6.5	0.1-2.9	0.1-2.0	.10	.55			
	10-16	35-50	1.30-1.50	4.00-14.00	0.04-0.09	9.0-25	7.0-25	4.5-7.3	3.0-5.9	0.1-1.0	.10	.49			
	16-60	50-85	1.40-1.60	4.00-14.00	0.06-0.10	25-58	21-58	4.5-7.3	3.0-5.9	0.1-1.0	.02	.10			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
70010:															
GOSS----------	0-3	12-27	1.10-1.30	14.00-42.00	0.06-0.10	10-31	10-31	4.5-6.5	0.1-2.9	1.0-4.0	.10	.32	2	8	0
	3-15	10-24	1.10-1.30	14.00-42.00	0.06-0.10	6.0-12	3.7-12	4.5-6.5	0.1-2.9	0.1-2.0	.10	.43			
	15-21	35-50	1.30-1.50	4.00-14.00	0.04-0.09	9.0-25	7.0-25	4.5-7.3	3.0-5.9	0.1-1.0	.10	.43			
	21-60	50-85	1.40-1.60	4.00-14.00	0.06-0.10	25-58	21-58	4.5-7.3	3.0-5.9	0.1-1.0	.05	.15			
70011:															
GOSS----------	0-9	12-27	1.10-1.30	14.00-42.00	0.06-0.10	10-31	10-31	4.5-6.5	0.1-2.9	1.0-4.0	.17	.43	2	8	0
	9-21	10-24	1.10-1.30	14.00-42.00	0.06-0.10	6.0-12	3.7-12	4.5-6.5	0.1-2.9	0.1-2.0	.10	.49			
	21-27	35-50	1.30-1.50	4.00-14.00	0.04-0.09	16-24	7.0-25	4.5-7.3	3.0-5.9	0.1-1.0	.05	.24			
	27-60	50-80	1.40-1.60	4.00-14.00	0.06-0.10	25-58	21-58	4.5-7.3	3.0-5.9	0.1-1.0	.05	.10			
MOKO----------	0-7	18-35	1.25-1.50	4.00-14.00	0.08-0.13	15-30	---	6.6-7.8	0.1-2.9	4.0-10	.10	.28	1	8	0
	7-12	18-35	1.25-1.60	4.00-14.00	0.03-0.14	15-30	---	6.6-7.8	0.1-2.9	3.0-8.0	.10	.37			
	12-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
70012:															
HOBERG----------	0-7	15-25	1.30-1.60	4.00-14.00	0.13-0.18	12-18	5.0-18	5.1-7.3	0.1-2.9	1.0-3.0	.43	.43	4	6	48
	7-22	20-30	1.50-1.70	4.00-14.00	0.08-0.14	12-18	5.0-10	5.1-6.5	0.1-2.9	0.5-2.0	.37	.43			
	22-47	20-30	1.60-1.90	0.42-1.40	0.01-0.05	12-18	5.0-13	3.6-6.0	0.1-2.9	0.2-1.0	.28	.47			
	47-72	40-75	1.10-1.40	1.40-4.00	0.04-0.10	30-40	20-36	3.6-6.0	3.0-5.9	0.1-0.5	.05	.11			
70013:															
MOKO----------	0-7	18-35	1.25-1.50	4.00-14.00	0.08-0.13	15-30	---	6.6-7.8	0.1-2.9	4.0-10	.10	.28	1	8	0
	7-12	18-35	1.25-1.60	4.00-14.00	0.03-0.14	15-30	---	6.6-7.8	0.1-2.9	3.0-8.0	.10	.37			
	12-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
70014:															
MOKO----------	0-7	18-35	1.25-1.50	4.00-14.00	0.08-0.13	15-30	---	6.6-7.8	0.1-2.9	4.0-10	.10	.28	1	8	0
	7-12	18-35	1.25-1.60	4.00-14.00	0.03-0.14	15-30	---	6.6-7.8	0.1-2.9	3.0-8.0	.10	.37			
	12-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
ROCK OUTCROP.															
70015:															
PEMBROKE--------	0-9	12-27	1.10-1.30	4.00-14.00	0.18-0.23	10-18	10-18	4.5-7.3	0.1-2.9	2.0-5.0	.43	.43	4	6	48
	9-24	27-35	1.20-1.40	4.00-14.00	0.14-0.19	8.0-16	8.0-16	4.5-7.3	0.1-2.9	0.5-2.0	.43	.43			
	24-48	27-45	1.20-1.40	4.00-14.00	0.14-0.19	8.0-16	8.0-16	4.5-7.3	0.1-2.9	0.5-1.2	.28	.28			
	48-60	35-60	1.30-1.50	4.00-14.00	0.08-0.13	12-22	12-22	4.5-6.5	3.0-5.9	0.5-1.0	.02	.15			
70016:															
GOODSON---------	0-8	18-27	1.20-1.50	4.00-14.00	0.17-0.20	15-25	15-25	5.6-7.3	0.1-2.9	2.0-5.0	.37	.43	3	5	56
	8-13	18-40	1.20-1.40	4.00-14.00	0.12-0.20	15-41	15-25	5.1-7.3	0.1-2.9	2.0-4.0	.10	.37			
	13-31	45-65	1.30-1.55	1.40-4.00	0.10-0.15	15-45	15-30	5.1-8.4	6.0-8.9	0.1-2.0	.20	.24			
	31-43	27-45	1.40-1.71	4.00-14.00	0.12-0.20	15-45	12-20	6.1-7.9	3.0-8.9	0.1-0.5	.28	.28			
	43-45	---	---	0.01-0.42	---	---	---	---	---	---	---	---			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
70017:															
GOODSON---------	0-9	18-27	1.20-1.50	4.00-14.00	0.17-0.20	15-25	15-25	5.6-7.3	0.1-2.9	2.0-5.0	.24	.37	3	8	0
	9-15	18-40	1.20-1.40	4.00-14.00	0.12-0.20	15-41	15-25	5.1-7.3	0.1-2.9	2.0-4.0	.24	.28			
	15-32	45-65	1.30-1.55	1.40-4.00	0.10-0.15	15-45	15-30	5.1-8.4	6.0-8.9	0.1-2.0	.20	.24			
	32-44	27-45	1.40-1.71	4.00-14.00	0.12-0.20	15-45	12-20	6.1-7.9	3.0-8.9	0.1-0.5	.37	.43			
	44-51	---	---	---	---	---	---	---	---	---	---	---			
70018:															
GOODSON---------	0-7	18-27	1.20-1.50	4.00-14.00	0.17-0.20	15-25	15-25	5.6-7.3	0.1-2.9	2.0-5.0	.24	.32	3	8	0
	7-12	18-40	1.20-1.40	4.00-14.00	0.12-0.20	15-41	15-25	5.1-7.3	0.1-2.9	2.0-4.0	.24	.32			
	12-31	45-65	1.30-1.55	1.40-4.00	0.10-0.15	15-45	15-30	5.1-8.4	6.0-8.9	0.1-2.0	.28	.28			
	31-43	27-45	1.40-1.71	4.00-14.00	0.12-0.20	15-45	12-20	6.1-7.9	3.0-8.9	0.1-0.5	.28	.37			
	43-52	---	---	---	---	---	---	---	---	---	---	---			
70039:															
SACVILLE--------	0-7	27-40	1.30-1.50	1.40-4.00	0.21-0.24	18-40	---	5.6-7.3	3.0-5.9	3.0-8.0	.32	.32	4	7	38
	7-46	35-60	1.40-1.60	0.42-1.40	0.11-0.13	18-40	---	5.6-7.8	6.0-8.9	0.5-2.0	.22	.24			
	46-80	35-60	1.40-1.60	0.42-1.40	0.08-0.12	18-35	---	5.6-7.8	6.0-8.9	0.1-2.0	.10	.24			
73000:															
POMME----------	0-7	15-25	1.35-1.45	4.00-14.00	0.16-0.21	5.0-12	---	5.6-7.3	0.1-2.9	1.0-2.0	.32	.37	5	5	56
	7-19	22-35	1.30-1.45	4.00-14.00	0.14-0.21	8.0-16	---	5.6-7.3	0.1-2.9	0.2-1.0	.32	.37			
	19-57	28-40	1.30-1.45	4.00-14.00	0.08-0.14	8.0-16	---	5.1-7.3	0.1-2.9	0.1-1.0	.28	.32			
	57-86	45-75	1.25-1.40	4.00-14.00	0.04-0.14	10-30	---	4.5-7.3	3.0-5.9	0.1-1.0	.05	.10			
73001:															
GLENSTED--------	0-8	15-27	1.30-1.50	4.00-14.00	0.22-0.24	11-17	---	5.1-7.3	3.0-5.9	2.0-3.0	.49	.49	3	6	48
	8-17	12-24	1.30-1.50	4.00-14.00	0.20-0.24	6.0-14	---	5.1-7.3	3.0-5.9	0.5-1.5	.64	.64			
	17-60	40-55	1.30-1.45	0.42-1.40	0.10-0.20	25-36	---	5.1-6.5	6.0-8.9	0.5-1.0	.20	.24			
73002:															
OCIE----------	0-3	10-20	1.10-1.40	4.00-14.00	0.12-0.17	10-25	14-20	4.5-6.5	0.1-2.9	2.0-12	.20	.37	3	8	0
	3-15	15-20	1.10-1.35	4.00-14.00	0.12-0.15	4.0-8.0	4.0-8.0	4.5-6.0	0.1-2.9	0.5-2.0	.10	.49			
	15-19	15-35	1.10-1.35	4.00-14.00	0.12-0.15	6.0-12	4.0-8.0	4.5-6.0	0.1-2.9	0.1-1.0	.10	.43			
	19-42	50-86	1.10-1.30	0.42-1.40	0.07-0.10	15-40	15-35	5.1-7.3	6.0-8.9	0.1-1.0	.10	.15			
	42-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
GATEWOOD--------	0-2	15-25	1.10-1.40	4.00-14.00	0.12-0.17	10-18	---	5.1-7.3	0.1-2.9	2.0-8.0	.24	.37	2	8	0
	2-13	15-25	1.10-1.40	4.00-14.00	0.12-0.17	5.0-15	---	5.1-7.3	0.1-2.9	0.5-2.0	.10	.43			
	13-27	55-85	1.10-1.30	0.42-1.40	0.09-0.12	20-35	---	4.5-7.3	6.0-8.9	0.5-1.0	.10	.17			
	27-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
73003:															
OCIE----------	0-2	10-20	1.10-1.40	4.00-14.00	0.12-0.17	10-25	14-20	4.5-6.5	0.1-2.9	2.0-12	.10	.37	3	8	0
	2-14	15-20	1.10-1.35	4.00-14.00	0.12-0.15	4.0-8.0	4.0-8.0	4.5-6.0	0.1-2.9	0.5-2.0	.10	.55			
	14-19	15-35	1.10-1.35	4.00-14.00	0.12-0.15	6.0-12	4.0-8.0	4.5-6.0	0.1-2.9	0.1-1.0	.10	.37			
	19-44	50-86	1.10-1.30	0.42-1.40	0.07-0.10	15-40	15-35	5.1-7.3	6.0-8.9	0.1-1.0	.10	.15			
	44-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
GATEWOOD--------	0-4	15-25	1.10-1.40	4.00-14.00	0.12-0.17	10-18	---	5.1-7.3	0.1-2.9	2.0-8.0	.20	.43	2	8	0
	4-7	15-25	1.10-1.40	4.00-14.00	0.12-0.17	5.0-15	---	5.1-7.3	0.1-2.9	0.5-2.0	.15	.37			
	7-28	55-85	1.10-1.30	0.42-1.40	0.09-0.12	20-35	---	4.5-7.3	6.0-8.9	0.5-1.0	.15	.20			
	28-80	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
73004:															
OCIE----------	0-3	10-20	1.10-1.40	4.00-14.00	0.12-0.17	10-25	14-20	4.5-6.5	0.1-2.9	2.0-12	.17	.37	3	8	0
	3-10	15-20	1.10-1.35	4.00-14.00	0.12-0.15	4.0-8.0	4.0-8.0	4.5-6.0	0.1-2.9	0.5-2.0	.20	.55			
	10-20	15-35	1.10-1.35	4.00-14.00	0.12-0.15	6.0-12	4.0-8.0	4.5-6.0	0.1-2.9	0.1-1.0	.15	.55			
	20-45	50-86	1.10-1.30	0.42-1.40	0.07-0.10	15-40	15-35	5.1-7.3	6.0-8.9	0.1-1.0	.10	.20			
	45-53	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
	53-60	---	---	0.00-0.01	---	---	---	---	---	---	---	---			
73005:															
OCIE----------	0-4	10-20	1.10-1.40	4.00-14.00	0.12-0.17	10-25	14-20	4.5-6.5	0.1-2.9	2.0-12	.15	.37	3	8	0
	4-10	15-20	1.10-1.35	4.00-14.00	0.12-0.15	4.0-8.0	4.0-8.0	4.5-6.0	0.1-2.9	0.5-2.0	.17	.49			
	10-19	15-35	1.10-1.35	4.00-14.00	0.12-0.15	6.0-12	4.0-8.0	4.5-6.0	0.1-2.9	0.1-1.0	.20	.49			
	19-52	50-86	1.10-1.30	0.42-1.40	0.07-0.10	15-40	15-35	5.1-7.3	6.0-8.9	0.1-1.0	.10	.20			
	52-60	---	---	0.06-0.42	---	---	---	---	---	---	---	---			
73006:															
PERIDGE---------	0-8	10-20	1.35-1.45	4.00-14.00	0.16-0.20	5.0-15	5.0-15	4.5-6.0	0.1-2.9	1.0-3.0	.43	.43	5	5	56
	8-19	18-35	1.30-1.45	4.00-14.00	0.16-0.20	10-20	10-20	4.5-6.0	0.1-2.9	0.5-1.0	.49	.49			
	19-60	30-50	1.30-1.45	4.00-14.00	0.10-0.20	10-20	10-20	4.5-6.0	3.0-5.9	0.1-0.5	.28	.32			
73007:															
PLATO----------	0-6	10-20	1.20-1.50	4.00-14.00	0.20-0.22	10-20	5.0-15	4.5-7.3	0.1-2.9	1.0-4.0	.55	.55	4	5	56
	6-29	27-45	1.30-1.50	1.40-4.00	0.10-0.18	10-20	5.0-15	3.5-5.5	6.0-8.9	0.2-1.0	.43	.43			
	29-37	20-40	1.60-1.90	0.01-0.42	0.01-0.05	20-30	15-25	3.5-5.5	3.0-5.9	0.1-0.5	.10	.55			
	37-46	20-40	1.60-1.90	0.01-0.42	0.01-0.05	5.0-15	6.0-20	4.5-5.5	3.0-5.9	0.1-0.5	.32	.49			
	46-80	20-45	1.40-1.60	4.00-14.00	0.02-0.06	5.0-15	4.0-23	4.5-6.0	6.0-8.9	0.1-0.5	.10	.28			
73008:															
VIRATON---------	0-6	8-25	1.30-1.50	4.00-14.00	0.18-0.22	6.0-14	3.0-10	4.5-7.3	0.1-2.9	0.5-2.0	.43	.43	4	6	48
	6-24	18-35	1.30-1.50	4.00-14.00	0.08-0.16	8.0-15	6.0-18	4.5-6.0	0.1-2.9	0.5-1.0	.37	.43			
	24-40	18-30	1.60-1.90	0.01-0.42	0.01-0.05	8.0-15	6.0-16	4.5-5.5	0.1-2.9	0.1-0.5	.24	.43			
	40-60	27-60	1.10-1.40	1.40-4.00	0.06-0.10	15-30	10-20	4.5-7.3	3.0-5.9	0.1-0.5	.10	.37			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
73009:															
VIRATON---------	0-3	8-25	1.30-1.50	4.00-14.00	0.18-0.22	6.0-14	3.0-11	4.5-7.3	0.1-2.9	0.5-3.5	.32	.32	4	6	48
	3-9	8-25	1.30-1.50	4.00-14.00	0.18-0.22	6.0-14	3.0-10	4.5-7.3	0.1-2.9	0.5-2.0	.43	.43			
	9-24	18-35	1.30-1.50	4.00-14.00	0.17-0.21	8.0-16	6.0-18	4.5-6.0	0.1-2.9	0.5-1.0	.32	.37			
	24-35	18-30	1.60-1.90	0.01-0.42	0.01-0.05	8.0-15	6.0-16	4.5-5.5	0.1-2.9	0.1-0.5	.17	.43			
	35-60	27-60	1.10-1.40	1.40-4.00	0.06-0.10	15-30	10-20	4.5-7.3	3.0-5.9	0.1-0.5	.10	.32			
73010:															
WILDERNESS------	0-6	7-27	1.20-1.45	14.00-42.00	0.07-0.12	10-15	6.0-10	4.5-6.5	0.1-2.9	1.0-4.0	.32	.49	3	8	0
	6-11	7-18	1.20-1.45	14.00-42.00	0.07-0.12	6.0-12	5.0-10	4.5-6.5	0.1-2.9	0.5-2.0	.37	.55			
	11-25	22-35	1.30-1.50	4.00-14.00	0.03-0.10	10-15	8.0-15	4.5-6.0	0.1-2.9	0.5-1.0	.10	.43			
	25-32	20-35	1.70-2.00	0.42-1.40	0.01-0.05	10-15	8.0-15	3.5-5.5	0.1-2.9	0.1-0.5	.10	.43			
	32-60	50-70	1.40-1.60	4.00-14.00	0.07-0.12	25-35	25-35	4.5-6.0	3.0-5.9	0.1-0.5	.05	.10			
74625:															
HARTVILLE-------	0-7	12-27	1.10-1.30	4.00-14.00	0.22-0.24	10-16	10-16	4.5-7.3	0.1-2.9	1.0-3.0	.49	.49	5	6	48
	7-12	24-40	1.20-1.40	0.42-1.40	0.18-0.21	12-20	12-20	5.1-7.3	3.0-5.9	0.5-1.0	.49	.49			
	12-60	35-60	1.20-1.50	0.42-1.40	0.10-0.12	18-30	18-30	5.1-7.3	6.0-8.9	0.1-0.5	.32	.32			
75375:															
HORSECREEK------	0-9	10-25	1.20-1.40	4.00-14.00	0.18-0.23	8.0-16	8.0-16	5.6-7.3	0.1-2.9	2.0-4.0	.43	.43	5	5	56
	9-19	10-25	1.20-1.40	4.00-14.00	0.18-0.23	8.0-16	8.0-16	5.6-7.3	0.1-2.9	1.0-2.0	.55	.55			
	19-60	18-34	1.20-1.50	4.00-14.00	0.16-0.23	8.0-16	8.0-16	5.6-7.3	0.1-2.9	0.5-2.0	.49	.49			
75376:															
CEDARGAP--------	0-11	12-25	1.20-1.45	4.00-14.00	0.11-0.18	12-30	12-30	5.6-7.8	0.1-2.9	2.0-8.0	.17	.28	5	8	0
	11-20	12-35	1.30-1.50	4.00-14.00	0.10-0.15	12-30	12-30	5.6-7.8	0.1-2.9	2.0-6.0	.05	.20			
	20-60	18-35	1.40-1.55	4.00-14.00	0.04-0.12	12-25	12-25	5.6-7.8	0.1-2.9	0.5-3.0	.05	.20			
75377:															
RACKET----------	0-10	15-27	1.25-1.45	4.00-14.00	0.18-0.24	8.0-18	8.0-18	6.1-7.3	0.1-2.9	1.0-4.0	.28	.32	5	6	48
	10-38	15-30	1.25-1.45	4.00-14.00	0.16-0.20	10-20	10-20	6.1-7.3	3.0-5.9	1.0-3.0	.28	.37			
	38-60	5-18	1.35-1.55	42.00-141.0	0.02-0.08	6.0-16	6.0-16	6.1-7.3	0.1-2.9	0.5-2.0	.10	.20			
75378:															
STURKIE---------	0-9	15-25	1.30-1.40	4.00-14.00	0.20-0.24	12-25	12-25	5.6-7.3	0.1-2.9	2.0-4.0	.37	.37	5	5	56
	9-19	18-30	1.30-1.40	4.00-14.00	0.20-0.22	12-25	12-25	5.6-7.3	0.1-2.9	1.0-3.0	.32	.32			
	19-60	18-30	1.35-1.45	4.00-14.00	0.18-0.20	12-25	12-25	5.6-7.3	0.1-2.9	0.5-2.0	.37	.37			

Physical and Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Ksat	Available water capacity	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Shrink-swell potential	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
	In	Pct	g/cc	um/sec	In/in	meq/100g	meq/100g	pH	Pct	Pct					
99000. PITS, QUARRIES															
99001. WATER															
99003. MISCELLANEOUS WATER															