(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
11B:								
Colo	0-8	21-30	---	5.6-7.3	0	0	0.0-2.0	0
	8-14	20-29	---	5.6-7.3	0	0	0.0-2.0	0
	14-34	23-29	---	5.6-7.3	0	0	0.0-2.0	0
	34-40	23-29	---	5.6-7.3	0	0	0.0-2.0	0
	40-46	25-29	---	5.6-7.3	0	0	0.0-2.0	0
	46-52	24-28	---	5.6-7.3	0	0	0.0-2.0	0
	52-79	20-28	---	5.6-7.3	0	0	0.0-2.0	0
Ely	0-8	18-30	---	5.6-7.3	0	0	0.0-2.0	0
	8-24	17-29	---	5.6-7.3	0	0	0.0-2.0	0
	24-32	20-29	---	5.6-7.3	0	0	0.0-2.0	0
	32-47	22-29	---	5.6-7.3	0	0	0.0-2.0	0
	47-58	19-28	---	5.6-7.3	0	0	0.0-2.0	0
	58-79	15-28	---	5.6-7.3	0	0	0.0-2.0	0
20C2:								
Killduff, eroded	0-6	23-27	---	6.1-7.3	0	0	0.0-2.0	0
	6-8	23-28	---	5.6-7.3	0	0	0.0-2.0	0
	8-28	20-28	---	5.6-7.3	0	0	0.0-2.0	0
	28-39	16-24	---	6.1-7.3	0	0	0.0-2.0	0
	39-79	14-23	---	6.1-7.3	0	0	0.0-2.0	0
20C3:								
Killduff, severely eroded	0-4	22-27	---	6.1-7.3	0	0	0.0-2.0	0
	4-20	19-27	---	5.6-7.3	0	0	0.0-2.0	0
	20-29	16-24	---	6.1-7.3	0	0	0.0-2.0	0
	29-79	14-23	---	6.1-7.3	0	0	0.0-2.0	0
20D2:								
Killduff, eroded	0-6	23-27	---	6.1-7.3	0	0	0.0-2.0	0
	6-8	23-28	---	5.6-7.3	0	0	0.0-2.0	0
	8-28	20-28	---	5.6-7.3	0	0	0.0-2.0	0
	28-39	16-24	---	6.1-7.3	0	0	0.0-2.0	0
	39-79	14-23	---	6.1-7.3	0	0	0.0-2.0	0
20D3:								
Killduff, severely eroded	0-4	22-27	---	6.1-7.3	0	0	0.0-2.0	0
	4-20	19-27	---	5.6-7.3	0	0	0.0-2.0	0
	20-29	16-24	---	6.1-7.3	0	0	0.0-2.0	0
	29-79	14-23	---	6.1-7.3	0	0	0.0-2.0	0
24D3:								
Shelby, severely eroded	0-6	20-25	---	5.1-7.3	0	---	---	---
	6-47	20-25	---	5.1-7.3	0	---	---	---
	47-60	20-25	---	6.6-8.4	0-30	---	---	---
24E2:								
Shelby, moderately eroded	0-8	20-25	---	5.1-7.3	0	---	---	---
	8-11	20-25	---	5.1-7.3	0	---	---	---
	11-42	20-25	---	5.1-7.3	0	---	---	---
	42-72	20-25	---	6.6-8.4	0-30	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	

24E3:								
Shelby, severely eroded	0-6	20-25	---	5.1-7.3	0	---	---	---
	6-47	20-25	---	5.1-7.3	0	---	---	---
	47-60	20-25	---	6.6-8.4	0-30	---	---	---
41:								
Sparta	0-11	1.5-10	---	5.1-7.3	0	0	0.0-2.0	0
	11-15	1.4-9.2	---	5.1-7.3	0	0	0.0-2.0	0
	15-72	0.8-5.8	---	5.1-7.8	0	0	0.0-2.0	0
	72-79	0.1-5.8	---	5.1-7.8	0	0	0.0-2.0	0
41B:								
Sparta	0-11	1.5-10	---	5.1-7.3	0	0	0.0-2.0	0
	11-15	1.4-9.2	---	5.1-7.3	0	0	0.0-2.0	0
	15-72	0.8-5.8	---	5.1-7.8	0	0	0.0-2.0	0
	72-79	0.1-5.8	---	5.1-7.8	0	0	0.0-2.0	0
41C:								
Sparta	0-11	1.5-10	---	5.1-7.3	0	0	0.0-2.0	0
	11-15	1.4-9.2	---	5.1-7.3	0	0	0.0-2.0	0
	15-72	0.8-5.8	---	5.1-7.8	0	0	0.0-2.0	0
	72-79	0.1-5.8	---	5.1-7.8	0	0	0.0-2.0	0
41D:								
Sparta	0-11	1.5-10	---	5.1-7.3	0	0	0.0-2.0	0
	11-15	1.4-9.2	---	5.1-7.3	0	0	0.0-2.0	0
	15-72	0.8-5.8	---	5.1-7.8	0	0	0.0-2.0	0
	72-79	0.1-5.8	---	5.1-7.8	0	0	0.0-2.0	0
54:								
Zook	0-7	26-36	---	5.6-7.8	0-5	0	---	---
	7-20	26-36	---	5.6-7.8	0-5	0	---	---
	20-38	26-35	---	5.6-7.8	0-5	0	---	---
	38-61	28-35	---	5.6-7.3	0	0	---	---
	61-80	15-33	---	5.6-7.3	0	0	---	---
63C:								
Chelsea	0-8	1.0-8.0	---	5.1-7.3	0	0	0.0-2.0	0
	8-36	0.8-6.1	---	5.1-6.5	0	0	0.0-2.0	0
	36-70	0.8-7.4	---	5.1-6.5	0	0	0.0-2.0	0
63E:								
Chelsea	0-8	1.0-8.0	---	5.1-7.3	0	0	0.0-2.0	0
	8-36	0.8-6.1	---	5.1-6.5	0	0	0.0-2.0	0
	36-70	0.8-7.4	---	5.1-6.5	0	0	0.0-2.0	0
65E2:								
Lindley, moderately eroded	0-6	20-25	---	4.5-7.3	0	---	---	---
	6-48	15-20	---	4.5-6.5	0	---	---	---
	48-60	10-16	---	6.1-7.8	0	---	---	---
65F:								
Lindley	0-6	15-20	---	4.5-7.3	0	---	---	---
	6-48	15-20	---	4.5-6.5	0	---	---	---
	48-60	10-16	---	6.1-7.8	0	---	---	---
65G:								
Lindley	0-6	15-20	---	4.5-7.3	0	---	---	---
	6-48	15-20	---	4.5-6.5	0	---	---	---
	48-60	10-16	---	6.1-7.8	0	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
83B:								
Kenyon	0-9	12-23	---	5.1-7.3	0	0	0.0-2.0	0
	9-14	12-23	---	5.1-7.3	0	0	0.0-2.0	0
	14-19	17-23	---	5.1-7.3	0	0	0.0-2.0	0
	19-41	14-25	---	5.1-7.3	0-9	0	0.0-2.0	0

	41-55	14-25	---	5.1-7.3	0-9	0	0.0-2.0	0
	55-71	13-18	---	6.1-8.4	0-10	0	0.0-2.0	0
	71-79	13-18	---	6.1-8.4	0-10	0	0.0-2.0	0
83C2:								
Kenyon, eroded	0-7	12-23	---	5.1-7.3	0	0	0.0-2.0	0
	7-12	16-23	---	5.1-7.3	0	0	0.0-2.0	0
	12-41	14-23	---	5.1-7.3	0-9	0	0.0-2.0	0
	41-55	14-23	---	5.1-7.3	0-9	0	0.0-2.0	0
	55-71	13-19	---	6.1-8.4	0-10	0	0.0-2.0	0
	71-79	13-19	---	6.1-8.4	0-10	0	0.0-2.0	0
83D2:								
Kenyon, mod eroded	0-7	12-23	---	5.1-7.3	0	0	0.0-2.0	0
	7-12	16-23	---	5.1-7.3	0	0	0.0-2.0	0
	12-41	14-23	---	5.1-7.3	0-9	0	0.0-2.0	0
	41-55	14-23	---	5.1-7.3	0-9	0	0.0-2.0	0
	55-71	13-19	---	6.1-8.4	0-10	0	0.0-2.0	0
	71-79	13-19	---	6.1-8.4	0-10	0	0.0-2.0	0
83D3:								
Kenyon, severely eroded	0-6	15-22	---	5.1-7.3	0	0	---	---
	6-19	13-22	---	5.1-7.3	0	0	---	---
	19-41	14-23	---	5.1-7.3	0	0	---	---
	41-55	14-23	---	5.1-7.3	0	0	---	---
	55-71	13-21	---	6.1-8.4	0-13	0	---	---
	71-79	13-21	---	6.1-8.4	0-13	0	---	---
84:								
Clyde	0-17	18-34	---	6.6-7.3	0	0	0.0-2.0	0
	17-23	17-29	---	5.6-7.3	0	0	0.0-2.0	0
	23-28	15-28	---	6.1-7.3	0	0	0.0-2.0	0
	28-41	15-28	---	6.1-7.3	0	0	0.0-2.0	0
	41-44	8.6-24	---	6.1-7.3	0	0	0.0-2.0	0
	44-62	7.6-20	---	6.1-8.4	0-10	0	0.0-2.0	0
	62-79	7.6-18	---	6.1-8.4	0-15	0	0.0-2.0	0
118:								
Garwin	0-8	23-30	---	5.6-7.3	0	0	0.0-2.0	0
	8-12	23-29	---	5.6-7.3	0	0	0.0-2.0	0
	12-18	22-29	---	5.6-7.3	0	0	0.0-2.0	0
	18-22	22-29	---	6.1-7.3	0	0	0.0-2.0	0
	22-27	22-28	---	6.1-7.3	0	0	0.0-2.0	0
	27-36	22-28	---	6.1-7.3	0	0	0.0-2.0	0
	36-42	21-28	---	6.1-7.3	0	0	0.0-2.0	0
	42-48	19-25	---	6.1-7.8	0-15	0	0.0-2.0	0
	48-79	17-25	---	6.1-7.8	0-15	0	0.0-2.0	0
119:								
Muscatine	0-7	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	7-16	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	16-20	22-29	---	5.1-7.3	0	0	0.0-2.0	0
	20-42	21-28	---	5.1-7.3	0	0	0.0-2.0	0
	42-79	16-27	---	5.6-7.8	0-15	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
119B:								
Muscatine	0-7	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	7-16	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	16-20	22-29	---	5.1-7.3	0	0	0.0-2.0	0
	20-42	21-28	---	5.1-7.3	0	0	0.0-2.0	0
	42-79	16-27	---	5.6-7.8	0-15	0	0.0-2.0	0
120B:								
Tama	0-6	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	6-10	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	10-14	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	14-18	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	18-32	19-28	---	5.1-6.5	0	0	0.0-2.0	0

	32-45	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	45-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120B2:								
Tama, eroded	0-6	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	12-20	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	20-33	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	33-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120C:								
Tama	0-6	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	6-10	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	10-14	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	14-18	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	18-32	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	32-45	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	45-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120C2:								
Tama, eroded	0-6	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	12-20	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	20-33	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	33-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120C3:								
Tama, severely eroded	0-4	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	4-18	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	18-24	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	24-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120D2:								
Tama, eroded	0-6	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	12-20	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	20-33	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	33-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120D3:								
Tama, severely eroded	0-4	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	4-18	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	18-24	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	24-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
120E2:								
Tama, eroded	0-6	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	12-20	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	20-33	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	33-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
120E3:								
Tama, severely eroded	0-4	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	4-18	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	18-24	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	24-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
133:								
Colo, occasionally flooded	0-8	21-30	---	5.6-7.3	0	0	0.0-2.0	0
	8-14	20-29	---	5.6-7.3	0	0	0.0-2.0	0
	14-34	23-29	---	5.6-7.3	0	0	0.0-2.0	0
	34-40	23-29	---	5.6-7.3	0	0	0.0-2.0	0
	40-46	25-29	---	5.6-7.3	0	0	0.0-2.0	0
	46-52	24-28	---	5.6-7.3	0	0	0.0-2.0	0
	52-79	20-28	---	5.6-7.3	0	0	0.0-2.0	0
139:								

Perks, occasionally flooded	0-4	5.0-10	---	5.6-6.5	0	---	---	---
	4-60	5.0-10	---	5.6-7.3	0	---	---	---
160:								
Walford	0-9	20-25	---	5.6-7.3	0	---	---	---
	9-13	20-25	---	5.1-7.3	0	---	---	---
	13-60	20-25	---	5.1-6.0	0	---	---	---
174:								
Bolan	0-8	11-23	---	5.6-7.3	0	0	---	---
	8-14	11-23	---	5.6-7.3	0	0	---	---
	14-19	11-21	---	5.6-7.3	0	0	---	---
	19-30	6.4-17	---	5.6-7.3	0	0	---	---
	30-45	5.5-13	---	5.6-7.3	0	0	---	---
	45-80	1.8-8.6	---	5.6-7.3	0	0	---	---
175:								
Dickinson	0-8	11-16	---	5.6-7.3	0	---	---	---
	8-18	8.6-16	---	5.1-6.5	0	---	---	---
	18-30	7.6-15	---	5.1-6.5	0	---	---	---
	30-36	4.1-8.6	---	5.1-6.5	0	---	---	---
	36-60	4.1-8.6	---	5.6-6.5	0	---	---	---
175B:								
Dickinson	0-8	11-16	---	5.6-7.3	0	---	---	---
	8-18	8.6-16	---	5.1-6.5	0	---	---	---
	18-30	7.6-15	---	5.1-6.5	0	---	---	---
	30-36	4.1-8.6	---	5.1-6.5	0	---	---	---
	36-60	4.1-8.6	---	5.6-6.5	0	---	---	---
175C:								
Dickinson	0-8	11-16	---	5.6-7.3	0	---	---	---
	8-18	8.6-16	---	5.1-6.5	0	---	---	---
	18-30	7.6-15	---	5.1-6.5	0	---	---	---
	30-36	4.1-8.6	---	5.1-6.5	0	---	---	---
	36-60	4.1-8.6	---	5.6-6.5	0	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
179D2:								
Gara, moderately eroded	0-7	25-30	---	5.6-7.3	0	---	---	---
	7-43	25-30	---	4.5-6.5	0	---	---	---
	43-60	25-30	---	5.6-8.4	0-25	---	---	---
179E2:								
Gara, moderately eroded	0-7	25-30	---	5.6-7.3	0	---	---	---
	7-43	25-30	---	4.5-6.5	0	---	---	---
	43-60	25-30	---	5.6-8.4	0-25	---	---	---
179E3:								
Gara, severely eroded	0-8	25-30	---	5.6-7.3	0	---	---	---
	8-43	25-30	---	4.5-6.5	0	---	---	---
	43-60	25-30	---	5.6-8.4	0-25	---	---	---
179F2:								
Gara, moderately eroded	0-7	25-30	---	5.6-7.3	0	---	---	---
	7-43	25-30	---	4.5-6.5	0	---	---	---
	43-60	25-30	---	5.6-8.4	0-25	---	---	---
179F3:								
Gara, severely eroded	0-8	25-30	---	5.6-7.3	0	---	---	---
	8-43	25-30	---	4.5-6.5	0	---	---	---
	43-60	25-30	---	5.6-8.4	0-25	---	---	---
184:								
Klinger	0-8	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	8-14	20-29	---	5.1-7.3	0	0	0.0-2.0	0

	14-19	20-29	---	5.1-7.3	0	0	0.0-2.0	0
	19-29	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	29-45	13-23	---	5.1-7.8	0	0	0.0-2.0	0
	45-59	13-23	---	5.1-7.8	0-5	0	0.0-2.0	0
	59-72	13-21	---	5.1-7.8	0-15	0	0.0-2.0	0
	72-79	13-21	---	5.1-7.8	0-15	0	0.0-2.0	0
220:								
Nodaway, occasionally flooded	0-7	16-29	---	6.1-7.3	0	0	0.0-2.0	0
	7-31	15-28	---	6.1-7.3	0	0	0.0-2.0	0
	31-42	13-28	---	6.1-7.3	0	0	0.0-2.0	0
	42-79	13-27	---	6.1-7.3	0	0	0.0-2.0	0
254:								
Zook, sandy substratum, occasionally flooded	0-27	41-45	---	5.6-7.3	0	---	---	---
	27-53	41-45	---	5.6-7.8	0-15	---	---	---
	53-60	3.0-10	---	5.6-7.8	0-15	---	---	---
273C:								
Olmitz	0-30	20-25	---	5.6-7.3	0	---	---	---
	30-60	20-25	---	5.6-7.3	0	---	---	---
284:								
Flagler	0-16	15-20	---	5.6-7.3	0	---	---	---
	16-22	10-15	---	5.1-6.5	0	---	---	---
	22-60	5.0-10	---	5.1-7.3	0	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
291:								
Atterberry	0-8	20-25	---	5.6-7.3	0	---	---	---
	8-60	15-22	---	5.1-7.3	0	---	---	---
293C:								
Chelsea	0-8	1.0-8.0	---	5.1-7.3	0	0	0.0-2.0	0
	8-36	0.8-6.1	---	5.1-6.5	0	0	0.0-2.0	0
	36-70	0.8-7.4	---	5.1-6.5	0	0	0.0-2.0	0
Fayette	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
Lamont	0-8	4.6-17	---	5.1-7.3	0	0	0.0-2.0	0
	8-23	4.1-16	---	5.1-7.3	0	0	0.0-2.0	0
	23-39	4.1-19	---	5.1-6.5	0	0	0.0-2.0	0
	39-53	---	2.6-12	5.1-6.5	0	0	0.0-2.0	0
	53-79	1.8-8.6	---	5.1-7.3	0	0	0.0-2.0	0
293E:								
Chelsea	0-8	1.0-8.0	---	5.1-7.3	0	0	0.0-2.0	0
	8-36	0.8-6.1	---	5.1-6.5	0	0	0.0-2.0	0
	36-70	0.8-7.4	---	5.1-6.5	0	0	0.0-2.0	0
Fayette	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
Lamont	0-8	4.6-17	---	5.1-7.3	0	0	0.0-2.0	0
	8-23	4.1-16	---	5.1-7.3	0	0	0.0-2.0	0
	23-39	4.1-19	---	5.1-6.5	0	0	0.0-2.0	0

	39-53	---	2.6-12	5.1-6.5	0	0	0.0-2.0	0
	53-79	1.8-8.6	---	5.1-7.3	0	0	0.0-2.0	0
293F:								
Chelsea	0-1	1.0-8.0	---	5.1-7.3	0	0	0.0-2.0	0
	1-4	0.9-7.6	---	5.1-7.3	0	0	0.0-2.0	0
	4-36	0.8-6.1	---	5.1-6.5	0	0	0.0-2.0	0
	36-70	0.8-7.4	---	5.1-6.5	0	0	0.0-2.0	0
Fayette	0-3	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	3-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
Lamont	0-8	4.6-17	---	5.1-7.3	0	0	0.0-2.0	0
	8-23	4.1-16	---	5.1-7.3	0	0	0.0-2.0	0
	23-39	4.1-19	---	5.1-6.5	0	0	0.0-2.0	0
	39-53	---	2.6-12	5.1-6.5	0	0	0.0-2.0	0
	53-79	1.8-8.6	---	5.1-7.3	0	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
352B:								
Whittier	0-8	20-25	---	5.6-7.3	0	---	---	---
	8-32	20-25	---	5.1-7.3	0	---	---	---
	32-36	15-20	---	5.1-6.0	0	---	---	---
	36-60	5.0-10	---	5.1-6.5	0	---	---	---
352C2:								
Whittier, moderately eroded	0-8	20-25	---	5.6-7.3	0	0	---	---
	8-30	20-25	---	5.1-7.3	0	0	---	---
	30-34	15-20	---	5.1-6.0	0	0	---	---
	34-43	5.0-10	---	5.1-6.5	0	0	---	---
	43-60	5.0-10	---	5.1-6.5	0	0	---	---
354:								
Aquolls	0-80	---	---	---	---	0	---	---
377B:								
Dinsdale	0-7	17-27	---	5.1-7.3	0	0	0.0-2.0	0
	7-12	17-27	---	5.1-7.3	0	0	0.0-2.0	0
	12-19	18-26	---	5.1-7.3	0	0	0.0-2.0	0
	19-28	18-28	---	5.1-7.3	0	0	0.0-2.0	0
	28-34	18-28	---	5.1-7.3	0	0	0.0-2.0	0
	34-46	14-23	---	5.6-7.3	0-9	0	0.0-2.0	0
	46-58	13-23	---	6.1-8.4	0-25	0	0.0-2.0	0
	58-79	13-23	---	6.1-8.4	0-25	0	0.0-2.0	0
377C:								
Dinsdale	0-7	17-27	---	5.1-7.3	0	0	0.0-2.0	0
	7-12	17-27	---	5.1-7.3	0	0	0.0-2.0	0
	12-19	18-26	---	5.1-7.3	0	0	0.0-2.0	0
	19-28	18-28	---	5.1-7.3	0	0	0.0-2.0	0
	28-34	18-28	---	5.1-7.3	0	0	0.0-2.0	0
	34-46	14-23	---	5.6-7.3	0-9	0	0.0-2.0	0
	46-58	13-20	---	6.1-8.4	0-25	0	0.0-2.0	0
	58-79	13-20	---	6.1-8.4	0-25	0	0.0-2.0	0
377C2:								
Dinsdale, eroded	0-6	17-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-14	18-28	---	5.1-7.3	0	0	0.0-2.0	0
	14-30	18-28	---	5.1-7.3	0	0	0.0-2.0	0
	30-42	14-23	---	5.6-7.3	0-9	0	0.0-2.0	0
	42-53	13-23	---	6.1-8.4	0-25	0	0.0-2.0	0
	53-79	13-23	---	6.1-8.4	0-25	0	0.0-2.0	0
382:								

Maxfield----------	0-12	18-26	---	5.1-7.3	0	0	0.0-2.0	0
----------	12-19	17-26	---	5.1-7.3	0	0	0.0-2.0	0
----------	19-29	20-28	---	5.6-7.3	0	0	0.0-2.0	0
----------	29-47	13-21	---	6.1-8.4	0-5	0	0.0-2.0	0
----------	47-55	13-21	---	6.1-8.4	0-10	0	0.0-2.0	0
----------	55-70	13-21	---	6.1-8.4	0-15	0	0.0-2.0	0
----------	70-79	13-21	---	6.1-8.4	0-15	0	0.0-2.0	0
420B:								
Tama----------	0-6	19-25	---	5.1-7.3	0	0	0.0-2.0	0
----------	6-10	19-25	---	5.1-7.3	0	0	0.0-2.0	0
----------	10-14	19-25	---	5.1-7.3	0	0	0.0-2.0	0
----------	14-18	20-26	---	5.1-6.5	0	0	0.0-2.0	0
----------	18-32	19-28	---	5.1-6.5	0	0	0.0-2.0	0
----------	32-45	19-28	---	5.1-6.5	0	0	0.0-2.0	0
----------	45-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
426B:								
Aredale----------	0-14	20-25	---	5.6-7.3	0	---	---	---
----------	14-36	20-25	---	5.1-6.0	0	---	---	---
----------	36-48	20-25	---	5.1-6.0	0	---	---	---
----------	48-60	20-25	---	5.6-7.3	0	---	---	---
426C:								
Aredale----------	0-14	20-25	---	5.6-7.3	0	---	---	---
----------	14-36	20-25	---	5.1-6.0	0	---	---	---
----------	36-48	20-25	---	5.1-6.0	0	---	---	---
----------	48-60	20-25	---	5.6-7.3	0	---	---	---
426C2:								
Aredale, moderately eroded----------	0-14	20-25	---	5.6-7.3	0	---	---	---
----------	14-36	20-25	---	5.1-6.0	0	---	---	---
----------	36-48	10-15	---	5.1-6.0	0	---	---	---
----------	48-60	20-25	---	5.6-7.3	0	---	---	---
426D2:								
Aredale, moderately eroded----------	0-14	20-25	---	5.6-7.3	0	---	---	---
----------	14-36	20-25	---	5.1-6.0	0	---	---	---
----------	36-48	10-15	---	5.1-6.0	0	---	---	---
----------	48-60	20-25	---	5.6-7.3	0	---	---	---
428B:								
Ely----------	0-8	18-30	---	5.6-7.3	0	0	0.0-2.0	0
----------	8-24	17-29	---	5.6-7.3	0	0	0.0-2.0	0
----------	24-32	20-29	---	5.6-7.3	0	0	0.0-2.0	0
----------	32-47	22-29	---	5.6-7.3	0	0	0.0-2.0	0
----------	47-58	19-28	---	5.6-7.3	0	0	0.0-2.0	0
----------	58-79	15-28	---	5.6-7.3	0	0	0.0-2.0	0
430:								
Ackmore, occasionally flooded	0-7	25-30	---	5.6-7.3	0	---	---	---
----------	7-27	25-30	---	5.6-7.3	0	---	---	---
----------	27-60	25-30	---	5.6-7.8	5-10	---	---	---
430B:								
Ackmore, Frequently flooded----------	0-7	25-30	---	5.6-7.3	0	---	---	---
----------	7-27	25-30	---	5.6-7.3	0	---	---	---
----------	27-60	25-30	---	5.6-7.8	5-10	---	---	---
442C2:								
Tama, moderately eroded----------	0-7	25-30	---	5.1-7.3	0	---	---	---
----------	7-19	25-30	---	5.1-7.3	0	---	---	---
----------	19-40	25-30	---	5.1-6.0	0	---	---	---
----------	40-45	15-20	---	5.1-6.5	0	---	---	---

	45-60	5.0-10	---	5.1-7.3	0	---	---	---
Dickinson, moderately eroded	0-8	15-20	---	5.6-7.3	0	---	---	---
	8-26	15-20	---	5.6-7.3	0	---	---	---
	26-60	5.0-10	---	5.1-6.5	0	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
442D2:								
Tama, moderately eroded	0-7	25-30	---	5.1-7.3	0	---	---	---
	7-19	25-30	---	5.1-7.3	0	---	---	---
	19-40	25-30	---	5.1-6.0	0	---	---	---
	40-45	15-20	---	5.1-6.5	0	---	---	---
	45-60	5.0-10	---	5.1-7.3	0	---	---	---
Dickinson, moderately eroded	0-8	15-20	---	5.6-7.3	0	---	---	---
	8-26	15-20	---	5.6-7.3	0	---	---	---
	26-60	5.0-10	---	5.1-6.5	0	---	---	---
442E2:								
Tama, moderately eroded	0-7	25-30	---	5.1-7.3	0	---	---	---
	7-19	25-30	---	5.1-7.3	0	---	---	---
	19-40	25-30	---	5.1-6.0	0	---	---	---
	40-45	15-20	---	5.1-6.5	0	---	---	---
	45-60	5.0-10	---	5.1-7.3	0	---	---	---
Dickinson, moderately eroded	0-8	15-20	---	5.6-7.3	0	---	---	---
	8-26	15-20	---	5.6-7.3	0	---	---	---
	26-60	5.0-10	---	5.1-6.5	0	---	---	---
450B:								
Pillot	0-24	25-30	---	5.6-7.3	0	---	---	---
	24-34	20-27	---	5.6-7.3	0	---	---	---
	34-60	1.6-7.2	---	5.6-7.3	0	---	---	---
450C2:								
Pillot, moderately eroded	0-24	25-30	---	5.6-7.3	0	---	---	---
	24-34	20-27	---	5.6-7.3	0	---	---	---
	34-60	1.6-7.2	---	5.6-7.3	0	---	---	---
484:								
Lawson, occasionally flooded	0-24	25-30	---	6.1-7.3	0	---	---	---
	24-35	11-29	---	6.1-7.8	0	---	---	---
	35-60	9.0-17	---	6.1-7.8	0	---	---	---
499G:								
Nordness	0-6	15-20	---	5.6-7.3	0	---	---	---
	6-14	15-20	---	5.6-7.3	0	---	---	---
	14-60	---	---	---	0	---	---	---
539:								
Perks, occasionally flooded	0-4	10-15	---	5.6-6.5	0	---	---	---
	4-60	5.0-10	---	5.6-7.3	0	---	---	---
673D3:								
Timula, severely eroded	0-34	15-20	---	6.1-7.3	0-5	---	---	---
	34-60	6.0-12	---	7.4-8.4	5-35	---	---	---
673E3:								
Timula, severely eroded	0-34	15-20	---	6.1-7.3	0-5	---	---	---
	34-60	6.0-12	---	7.4-8.4	5-35	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
673F3:								
Timula, severely eroded	0-34	15-20	---	6.1-7.3	0-5	---	---	---
	34-60	6.0-12	---	7.4-8.4	5-35	---	---	---
763E3:								
Exette, severely eroded	0-8	20-25	---	6.6-7.3	0	---	---	---
	8-46	20-25	---	5.6-7.3	0	---	---	---
	46-60	20-25	---	6.6-7.8	0-25	---	---	---
763F3:								
Exette, severely eroded	0-8	20-25	---	6.6-7.3	0	---	---	---
	8-46	20-25	---	5.6-7.3	0	---	---	---
	46-60	20-25	---	6.6-7.8	0-25	---	---	---
767E3:								
Mula, severely eroded	0-5	20-25	---	6.6-8.4	0-25	---	---	---
	5-23	20-25	---	6.6-8.4	0-25	---	---	---
	23-60	20-25	---	6.6-8.4	0-25	---	---	---
767F3:								
Mula, severely eroded	0-34	20-25	---	6.6-8.4	0-25	---	---	---
	34-60	20-25	---	6.6-8.4	0-25	---	---	---
814:								
Rockton	0-21	20-25	---	5.1-7.3	0	---	---	---
	21-34	18-25	---	5.1-6.5	0	---	---	---
	34-60	---	---	---	0	---	---	---
820:								
Dockery, occasionally flooded	0-8	12-26	---	5.6-7.3	0	0	0.0-2.0	0
	8-79	10-27	---	5.6-7.3	0	0	0.0-2.0	0
820B:								
Dockery, Frequently flooded	0-7	20-25	---	5.6-7.3	0	---	---	---
	7-60	6.0-12	---	5.6-7.3	0	---	---	---
826:								
Rowley, rarely flooded	0-8	25-30	---	6.1-7.3	0	0	---	---
	8-16	25-30	---	6.1-7.3	0	0	---	---
	16-21	20-25	---	5.1-7.3	0	0	---	---
	21-32	25-30	---	5.1-6.5	0	0	---	---
	32-45	20-25	---	5.1-7.3	0	0	---	---
	45-55	5.0-10	---	5.6-7.3	0	0	---	---
	55-60	5.0-10	---	5.6-6.5	0	0	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
916B:								
Downs, sandy substratum	0-8	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	8-12	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	12-17	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	17-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0

	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-60	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	60-79	4.1-8.6	---	5.1-6.5	0	0	0.0-2.0	0
916C2:								
Downs, sandy substratum, eroded--	0-6	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	12-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-60	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	60-79	4.1-8.6	---	5.1-6.5	0	0	0.0-2.0	0
916D2:								
Downs, sandy substratum, eroded--	0-6	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	12-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-60	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	60-79	4.1-8.6	---	5.1-6.5	0	0	0.0-2.0	0
920B:								
Tama, sandy substratum----------	0-6	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	6-10	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	10-14	19-25	---	5.1-7.3	0	0	0.0-2.0	0
	14-18	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	18-32	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	32-45	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	45-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
	60-79	4.1-8.6	---	5.1-6.5	0	0	0.0-2.0	0
920C2:								
Tama, sandy substratum, eroded--	0-6	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	12-20	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	20-33	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	33-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
	60-79	4.1-8.6	---	5.1-6.5	0	0	0.0-2.0	0
920D2:								
Tama, sandy substratum, eroded--	0-6	20-27	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	20-26	---	5.1-6.5	0	0	0.0-2.0	0
	12-20	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	20-33	19-28	---	5.1-6.5	0	0	0.0-2.0	0
	33-60	14-23	---	5.1-7.3	0	0	0.0-2.0	0
	60-79	4.1-8.6	---	5.1-6.5	0	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
926:								
Canoe, rarely flooded	0-8	20-25	---	5.6-7.3	0	---	---	---
	8-23	20-25	---	5.1-6.0	0	---	---	---
	23-60	20-25	---	5.1-6.5	0	---	---	---
950:								
Niota----------	0-8	20-25	---	5.1-7.3	0	---	---	---
	8-16	15-20	---	5.1-7.3	0	---	---	---
	16-60	---	21-35	3.6-6.0	0	---	---	---
950B:								
Niota----------	0-8	20-25	---	5.1-7.3	0	---	---	---
	8-16	15-20	---	5.1-7.3	0	---	---	---

	16-60	---	21-35	3.6-6.0	0	---	---	---
960:								
Shaffton, occasionally flooded	0-19	25-30	---	5.1-7.3	0	0	0	0
	19-30	---	20-25	4.5-6.0	0	0	0	0
	30-50	---	10-15	4.5-6.0	0	0	0	0
	50-60	5.0-10	---	6.1-7.3	0	0	0	0
961:								
Ambraw, occasionally flooded	0-21	25-30	---	5.6-7.3	0	---	---	---
	21-27	19-29	---	5.1-7.3	0	---	---	---
	27-48	15-23	---	5.1-7.3	0	---	---	---
	48-60	11-19	---	6.1-8.4	0	---	---	---
977:								
Richwood, rarely flooded	0-8	20-25	---	5.6-7.3	0	0	---	---
	8-18	20-25	---	5.6-7.3	0	0	---	---
	18-46	4.0-25	---	5.6-7.3	0	0	---	---
	46-60	2.0-15	---	5.6-7.3	0	0	---	---
1118:								
Garwin, terrace	0-8	23-30	---	5.6-7.3	0	0	0.0-2.0	0
	8-12	23-29	---	5.6-7.3	0	0	0.0-2.0	0
	12-18	22-29	---	5.6-7.3	0	0	0.0-2.0	0
	18-22	22-29	---	6.1-7.3	0	0	0.0-2.0	0
	22-27	22-28	---	6.1-7.3	0	0	0.0-2.0	0
	27-36	22-28	---	6.1-7.3	0	0	0.0-2.0	0
	36-42	21-28	---	6.1-7.3	0	0	0.0-2.0	0
	42-48	19-25	---	6.1-7.8	0-15	0	0.0-2.0	0
	48-79	17-25	---	6.1-7.8	0-15	0	0.0-2.0	0
1119:								
Muscatine, terrace	0-7	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	7-16	21-30	---	5.1-7.3	0	0	0.0-2.0	0
	16-20	22-29	---	5.1-7.3	0	0	0.0-2.0	0
	20-42	21-28	---	5.1-7.3	0	0	0.0-2.0	0
	42-79	16-27	---	5.6-7.8	0-15	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
1152:								
Marshan, rarely flooded	0-8	16-30	---	5.6-7.3	0	0	0.0-2.0	0
	8-14	16-29	---	5.6-7.3	0	0	0.0-2.0	0
	14-18	15-29	---	5.6-7.3	0	0	0.0-2.0	0
	18-23	15-28	---	5.6-7.3	0	0	0.0-2.0	0
	23-30	15-24	---	5.6-7.3	0	0	0.0-2.0	0
	30-40	0.1-8.6	---	6.1-7.3	0	0	0.0-2.0	0
	40-79	0.1-8.6	---	6.1-7.3	0	0	0.0-2.0	0
1226:								
Lawler, rarely flooded	0-9	16-26	---	5.6-7.3	0	0	0.0-2.0	0
	9-16	16-25	---	5.6-7.3	0	0	0.0-2.0	0
	16-19	15-25	---	5.6-7.3	0	0	0.0-2.0	0
	19-38	16-25	---	5.1-6.5	0	0	0.0-2.0	0
	38-79	0.1-8.6	---	5.1-7.3	0	0	0.0-2.0	0
1313G:								
Munterville	0-4	8.0-19	---	5.6-7.3	0	0	0	---
	4-8	13-21	---	5.6-6.5	0	0	0	---
	8-17	11-27	---	5.1-6.5	0	0	0	---
	17-47	---	1.2-14	3.5-6.5	0	0	0	---
	47-75	---	1.1-14	3.5-6.5	0	0	0	---
	75-79	---	---	---	0	0	---	---
1539:								
Ambraw, Frequently								

flooded----------	0-21	15-27	---	5.6-7.3	0	---	---	---
----------	21-27	19-29	---	5.1-7.3	0	---	---	---
----------	27-48	15-23	---	5.1-7.3	0	---	---	---
----------	48-60	11-19	---	6.1-8.4	0	---	---	---
Perks, Frequently flooded----------	0-4	10-15	---	5.6-7.3	0	---	---	---
----------	4-60	5.0-10	---	5.6-7.3	0	---	---	---
Lawson, Frequently flooded----------	0-8	25-30	---	6.1-7.3	0	---	---	---
----------	8-30	11-29	---	6.1-7.8	0	---	---	---
----------	30-80	9.0-17	---	6.1-7.8	0	---	---	---
1730B:								
Nodaway, frequently flooded, channeled--	0-7	20-25	---	6.1-7.3	0	---	---	---
----------	7-31	20-25	---	6.1-7.3	0	---	---	---
----------	31-42	20-25	---	6.1-7.3	0	---	---	---
----------	42-80	20-25	---	6.1-7.3	0	---	---	---
Perks, frequently flooded, channeled--	0-4	10-15	---	5.6-7.3	0	---	---	---
----------	4-60	5.0-10	---	5.6-7.3	0	---	---	---
4000:								
Urban land----------	---	---	---	---	---	---	---	---
4133:								
Colo, occasionally flooded----------	0-21	36-41	---	5.6-7.3	0	---	---	---
----------	21-60	36-41	---	5.6-7.3	0	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Urban land, occasionally flooded	---	---	---	---	---	---	---	---
4162C:								
Downs----------	0-8	16-22	---	5.1-7.3	0	0	0.0-2.0	0
----------	8-12	16-22	---	5.1-7.3	0	0	0.0-2.0	0
----------	12-17	15-21	---	5.1-7.3	0	0	0.0-2.0	0
----------	17-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
----------	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
----------	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
----------	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
----------	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
Urban land----------	---	---	---	---	---	---	---	---
4162D:								
Downs----------	0-8	16-22	---	5.1-7.3	0	0	0.0-2.0	0
----------	8-12	16-22	---	5.1-7.3	0	0	0.0-2.0	0
----------	12-17	15-21	---	5.1-7.3	0	0	0.0-2.0	0
----------	17-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
----------	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
----------	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
----------	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
----------	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
Urban land----------	---	---	---	---	---	---	---	---
4163E:								
Fayette----------	0-6	15-20	---	5.1-7.3	0	---	---	---
----------	6-60	15-20	---	4.5-6.5	0	---	---	---
Urban land----------	---	---	---	---	---	---	---	---
4220:								
Nodaway, occasionally flooded	0-7	20-25	---	6.1-7.3	0	---	---	---

	7-31	20-25	---	6.1-7.3	0	---	---	---
	31-42	20-25	---	6.1-7.3	0	---	---	---
	42-80	20-25	---	6.1-7.3	0	---	---	---
Urban land, occasionally flooded	---	---	---	---	---	---	---	---
4291:								
Atterberry	0-8	16-24	---	5.6-7.3	0	---	---	---
	8-60	15-22	---	5.1-7.3	0	---	---	---
Urban land	---	---	---	---	---	---	---	---
4977B:								
Richwood	0-8	20-25	---	5.6-7.3	0	0	---	---
	8-18	20-25	---	5.6-7.3	0	0	---	---
	18-46	4.0-25	---	5.6-7.3	0	0	---	---
	46-60	2.0-15	---	5.6-7.3	0	0	---	---
Urban land	---	---	---	---	---	---	---	---
5010:								
Pits, sand and gravel	---	---	---	---	---	---	---	---

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
5030:								
Pits, limestone quarry	---	---	---	---	---	---	---	---
5040:								
Udorthents, loamy	---	---	---	---	---	---	---	---
5080:								
Udorthents	---	---	---	---	---	---	---	---
INT:								
Intermittent water	---	---	---	---	---	---	---	---
M162B:								
Downs	0-8	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	8-12	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	12-17	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	17-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M162C2:								
Downs, eroded	0-6	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	12-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M162C3:								
Downs, severely eroded	0-4	16-25	---	5.1-7.3	0	0	0.0-2.0	0
	4-10	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	10-33	19-27	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M162D2:								
Downs, eroded	0-6	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	12-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0

	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M162D3:								
Downs, severely eroded	0-4	16-25	---	5.1-7.3	0	0	0.0-2.0	0
	4-10	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	10-33	19-27	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
M162E2:								
Downs, eroded	0-6	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	12-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M162E3:								
Downs, severely eroded	0-4	16-25	---	5.1-7.3	0	0	0.0-2.0	0
	4-10	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	10-33	19-27	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M162F2:								
Downs, eroded	0-6	16-22	---	5.1-7.3	0	0	0.0-2.0	0
	6-12	15-21	---	5.1-7.3	0	0	0.0-2.0	0
	12-24	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	24-33	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	33-39	19-25	---	4.5-6.5	0	0	0.0-2.0	0
	39-48	14-21	---	5.1-6.5	0	0	0.0-2.0	0
	48-79	14-21	---	5.1-6.5	0	0	0.0-2.0	0
M163B2:								
Fayette, eroded	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	11-23	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	23-31	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	31-44	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	44-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163C:								
Fayette	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163C2:								
Fayette, eroded	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	11-23	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	23-31	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	31-44	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	44-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163C3:								
Fayette, severely eroded	0-8	13-25	---	4.5-7.3	0	0	0.0-2.0	0

	8-20	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	20-28	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	28-41	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	41-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorp-tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
M163D:								
Fayette	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163D2:								
Fayette, eroded	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	11-23	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	23-31	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	31-44	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	44-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163D3:								
Fayette, severely eroded	0-8	13-25	---	4.5-7.3	0	0	0.0-2.0	0
	8-20	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	20-28	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	28-41	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	41-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163E:								
Fayette	0-3	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	3-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163E2:								
Fayette, eroded	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	8-11	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	11-23	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	23-31	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	31-44	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	44-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163E3:								
Fayette, severely eroded	0-8	13-25	---	4.5-7.3	0	0	0.0-2.0	0
	8-20	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	20-28	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	28-41	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	41-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163F:								
Fayette	0-3	13-23	---	4.5-7.3	0	0	0.0-2.0	0
	3-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0

Chemical Soil Properties

Map symbol and soil name	Depth	Cation exchange	Effective cation	Soil reaction	Calcium carbon-	Gypsum	Salinity	Sodium adsorp-

		capacity	exchange capacity		ate			tion ratio
	Inches	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
M163F2:								
Fayette, eroded------	0-8	13-23	---	4.5-7.3	0	0	0.0-2.0	0
----------	8-11	16-28	---	4.5-7.3	0	0	0.0-2.0	0
----------	11-23	17-28	---	4.5-6.5	0	0	0.0-2.0	0
----------	23-31	---	11-18	4.5-6.5	0	0	0.0-2.0	0
----------	31-44	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
----------	44-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163F3:								
Fayette, severely eroded----------	0-8	13-25	---	4.5-7.3	0	0	0.0-2.0	0
----------	8-20	17-28	---	4.5-6.5	0	0	0.0-2.0	0
----------	20-28	---	11-18	4.5-6.5	0	0	0.0-2.0	0
----------	28-41	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
----------	41-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
M163G:								
Fayette----------	0-3	13-23	---	4.5-7.3	0	0	0.0-2.0	0
----------	3-11	13-21	---	4.5-6.5	0	0	0.0-2.0	0
----------	11-14	16-28	---	4.5-7.3	0	0	0.0-2.0	0
----------	14-26	17-28	---	4.5-6.5	0	0	0.0-2.0	0
----------	26-34	---	11-18	4.5-6.5	0	0	0.0-2.0	0
----------	34-47	---	9.3-17	4.5-7.8	0-8	0	0.0-2.0	0
----------	47-79	13-23	---	4.5-7.8	0-8	0	0.0-2.0	0
SL:								
Sewage lagoon--------	---	---	---	---	---	---	---	---
W:								
Water----------	---	---	---	---	---	---	---	---