

(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
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
AsC:								
Ashe-----	0-6	---	---	4.5-6.0	0	0	0	0
	6-23	---	---	4.5-6.0	0	0	0	0
	23-60	---	---	4.5-6.0	0	0	0	0
	60-64	---	---	---	---	---	---	---
AsD:								
Ashe-----	0-6	---	---	4.5-6.0	0	0	0	0
	6-23	---	---	4.5-6.0	0	0	0	0
	23-60	---	---	4.5-6.0	0	0	0	0
	60-64	---	---	---	---	---	---	---
BdB:								
Beltsville-----	0-16	---	---	3.6-5.5	---	---	0	---
	16-21	---	---	3.6-5.5	---	---	0	---
	21-45	---	---	3.6-5.5	---	---	0	---
	45-60	---	---	3.6-5.5	---	---	0	---
BeB:								
Beltsville-----	0-16	---	---	3.6-5.5	---	---	0	---
	16-21	---	---	3.6-5.5	---	---	0	---
	21-45	---	---	3.6-5.5	---	---	0	---
	45-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
Bg:								
Bibb-----	0-14	---	4.0-7.0	3.6-5.5	0	0	0	0
	14-60	---	4.0-10	3.6-5.5	0	0	0	0
BnB:								
Bourne-----	0-11	---	---	4.5-6.5	---	---	0	---
	11-18	---	---	3.6-5.5	---	---	0	---
	18-28	---	---	3.6-5.5	---	---	0	---
	28-60	---	---	---	---	---	---	---
BnC:								
Bourne-----	0-11	---	---	4.5-6.5	---	---	0	---
	11-18	---	---	3.6-5.5	---	---	0	---
	18-28	---	---	3.6-5.5	---	---	0	---
	28-60	---	---	---	---	---	---	---
BpB:								
Bourne-----	0-11	---	---	4.5-6.5	---	---	0	---
	11-18	---	---	3.6-5.5	---	---	0	---
	18-28	---	---	3.6-5.5	---	---	0	---
	28-60	---	---	---	---	---	---	---
Urban Land-----	0-6	---	---	---	---	---	0	---
BrC:								
Brandywine-----	0-22	---	---	3.6-5.5	---	---	0	---
	22-60	---	---	3.6-5.5	---	---	0	---
BrD:								
Brandywine-----	0-22	---	---	3.6-5.5	---	---	0	---
	22-60	---	---	3.6-5.5	---	---	0	---

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
BtB:								
Brandywine-----	0-22	---	---	3.6-5.5	---	---	0	---
	22-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
BtC:								
Brandywine-----	0-22	---	---	3.6-5.5	---	---	0	---
	22-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
BtD:								
Brandywine-----	0-22	---	---	3.6-5.5	---	---	0	---
	22-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
CcB:								
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
CcC:								
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
CcD:								
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
CdB:								
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
CdC:								
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
CdD:								
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
CeB:								
Christiana-----	0-10	---	---	3.6-5.0	---	---	0	---
	10-75	---	---	3.6-5.0	---	---	0	---
CeC:								
Christiana-----	0-10	---	---	3.6-5.0	---	---	0	---
	10-75	---	---	3.6-5.0	---	---	0	---

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
CxC:								
Croom-----	0-21	---	---	4.5-6.0	---	---	---	---
	21-42	---	---	4.5-6.0	---	---	---	---
	42-72	---	---	4.5-6.0	---	---	---	---
	72-76	---	---	4.5-6.0	---	---	---	---
Urban Land-----	0-6	---	---	---	---	---	0	---
CxD:								
Croom-----	0-21	---	---	4.5-6.0	---	---	---	---
	21-42	---	---	4.5-6.0	---	---	---	---
	42-72	---	---	4.5-6.0	---	---	---	---
	72-76	---	---	4.5-6.0	---	---	---	---
Urban Land-----	0-6	---	---	---	---	---	0	---
Dn:								
Dunning-----	0-16	---	---	5.6-7.8	---	---	0	---
	16-60	---	---	5.6-7.8	---	---	0	---
Fa:								
Fallsington-----	0-13	---	2.0-5.0	3.6-5.5	0	0	0	0
	13-33	---	1.0-3.0	3.6-5.5	0	0	0	0
	33-60	---	1.0-3.0	3.6-5.5	0	0	0	0
FB:								
Fluvaquents-----	0-6	10-30	---	3.6-7.3	---	---	0	---
	6-42	5.0-20	---	3.6-7.3	---	---	0	---
	42-60	5.0-20	---	4.5-6.5	---	---	0	---
	60-80	---	---	4.5-6.5	---	---	---	---
FD:								
Fluvaquents-----	0-6	---	---	3.6-7.3	---	---	0	---
	6-42	---	---	3.6-7.3	---	---	0	---
	42-60	---	---	4.5-6.5	---	---	0	---
FF:								
Fluvaquents-----	0-6	10-30	---	3.6-7.3	---	---	0	---
	6-42	5.0-20	---	3.6-7.3	---	---	0	---
	42-60	5.0-20	---	4.5-6.5	---	---	0	---
	60-80	---	---	4.5-6.5	---	---	---	---
Udifluvents-----	0-6	10-30	---	3.6-7.3	---	---	0	---
	6-42	5.0-20	---	3.6-7.3	---	---	0	---
	42-60	5.0-20	---	4.5-6.5	---	---	0	---
	60-80	---	---	4.5-6.5	---	---	---	---
FH:								
Fluvaquents-----	0-6	---	---	3.6-7.3	---	---	0	---
	6-42	---	---	3.6-7.3	---	---	0	---
	42-60	---	---	4.5-6.5	---	---	0	---
Udifluvents-----	0-6	10-30	---	3.6-7.3	---	---	0	---
	6-42	5.0-20	---	3.6-7.3	---	---	0	---
	42-60	5.0-20	---	4.5-6.5	---	---	0	---
	60-80	---	---	4.5-6.5	---	---	---	---
Urban Land-----	0-6	---	---	---	---	---	0	---
GeB:								
Galestown-----	0-60	---	2.0-5.0	3.6-5.5	0	0	0	0
	60-64	---	1.0-3.0	3.6-5.5	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Urban Land-----	0-6	---	---	---	---	---	0	---
GfB:								
Galestown-----	0-60	---	2.0-5.0	3.6-5.5	0	0	0	0
	60-64	---	1.0-3.0	3.6-5.5	0	0	0	0
Rumford-----	0-19	---	---	3.6-5.5	0	0	0	0
	19-39	---	---	3.6-6.0	0	0	0	0
	39-60	---	---	3.6-6.5	0	0	0	0
GfC:								
Galestown-----	0-60	---	2.0-5.0	3.6-5.5	0	0	0	0
	60-64	---	1.0-3.0	3.6-5.5	0	0	0	0
Rumford-----	0-19	---	---	3.6-5.5	0	0	0	0
	19-39	---	---	3.6-6.0	0	0	0	0
	39-60	---	---	3.6-6.5	0	0	0	0
GgB:								
Glenelg-----	0-9	---	---	4.5-5.5	---	---	0	---
	9-28	---	---	4.5-6.5	---	---	0	---
	28-60	---	---	4.5-6.5	---	---	0	---
GgC:								
Glenelg-----	0-9	---	---	4.5-5.5	---	---	0	---
	9-28	---	---	4.5-6.5	---	---	0	---
	28-60	---	---	4.5-6.5	---	---	0	---
GgD:								
Glenelg-----	0-9	---	---	4.5-5.5	---	---	0	---
	9-28	---	---	4.5-6.5	---	---	0	---
	28-60	---	---	4.5-6.5	---	---	0	---
GhB:								
Glenelg-----	0-9	---	---	4.5-5.5	---	---	0	---
	9-28	---	---	4.5-6.5	---	---	0	---
	28-60	---	---	4.5-6.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
GhC:								
Glenelg-----	0-9	---	---	4.5-5.5	---	---	0	---
	9-28	---	---	4.5-6.5	---	---	0	---
	28-60	---	---	4.5-6.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
GhD:								
Glenelg-----	0-9	---	---	4.5-5.5	---	---	0	---
	9-28	---	---	4.5-6.5	---	---	0	---
	28-60	---	---	4.5-6.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
GlB:								
Glenelg Variant-----	0-9	10-20	---	4.5-7.3	0	0	0	0
	9-18	---	10-20	4.5-6.0	0	0	0	0
	18-40	---	10-20	4.5-6.0	0	0	0	0
	40-62	---	10-20	4.5-5.5	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
GmB:								
Glenelg Variant-----	0-9	10-20	---	4.5-7.3	0	0	0	0
	9-18	---	10-20	4.5-6.0	0	0	0	0
	18-40	---	10-20	4.5-6.0	0	0	0	0
	40-62	---	10-20	4.5-5.5	0	0	0	0
Urban Land-----	0-6	---	---	---	---	---	0	---
Ik:								
Iuka-----	0-21	---	---	5.1-6.0	---	---	0	---
	21-60	---	---	4.5-5.5	---	---	0	---
Ip:								
Iuka-----	0-21	---	---	5.1-6.0	---	---	0	---
	21-60	---	---	4.5-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
JtB:								
Joppa-----	0-7	---	---	3.6-5.5	---	---	0	---
	7-27	---	---	3.6-5.5	---	---	0	---
	27-60	---	---	3.6-5.5	---	---	0	---
JtC:								
Joppa-----	0-7	---	---	3.6-5.5	---	---	0	---
	7-27	---	---	3.6-5.5	---	---	0	---
	27-60	---	---	3.6-5.5	---	---	0	---
JtD:								
Joppa-----	0-7	---	---	3.6-5.5	---	---	0	---
	7-27	---	---	3.6-5.5	---	---	0	---
	27-60	---	---	3.6-5.5	---	---	0	---
JuB:								
Joppa-----	0-7	---	---	3.6-5.5	---	---	0	---
	7-27	---	---	3.6-5.5	---	---	0	---
	27-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
JuC:								
Joppa-----	0-7	---	---	3.6-5.5	---	---	0	---
	7-27	---	---	3.6-5.5	---	---	0	---
	27-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
JuD:								
Joppa-----	0-7	---	---	3.6-5.5	---	---	0	---
	7-27	---	---	3.6-5.5	---	---	0	---
	27-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
KeB:								
Keyport-----	0-12	---	4.0-12	3.6-5.5	0	0	0	0
	12-60	---	12-20	4.5-5.5	0	0	0	0
KeC:								
Keyport-----	0-12	---	4.0-12	3.6-5.5	0	0	0	0
	12-60	---	12-20	4.5-5.5	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
KmB:								
Keyport-----	0-12	---	4.0-12	3.6-5.5	0	0	0	0
	12-60	---	12-20	4.5-5.5	0	0	0	0
Urban Land-----	0-6	---	---	---	---	---	0	---
KmC:								
Keyport-----	0-12	---	4.0-12	3.6-5.5	0	0	0	0
	12-60	---	12-20	4.5-5.5	0	0	0	0
Urban Land-----	0-6	---	---	---	---	---	0	---
Ld:								
Lindside-----	0-6	---	---	5.1-7.8	0	0	0	0
	6-48	---	---	5.1-7.8	0	0	0	0
	48-60	---	---	5.6-7.8	0	0	0	0
Lp:								
Lindside-----	0-29	---	---	5.1-7.8	---	---	0	---
	29-44	---	---	5.1-7.8	---	---	0	---
	44-48	---	---	---	---	---	---	---
MbC:								
Manor-----	0-8	---	---	3.6-6.0	---	---	0	---
	8-23	---	---	3.6-6.0	---	---	0	---
	23-60	---	---	3.6-6.0	---	---	0	---
MbD:								
Manor-----	0-8	---	---	3.6-6.0	---	---	0	---
	8-23	---	---	3.6-6.0	---	---	0	---
	23-60	---	---	3.6-6.0	---	---	0	---
McC:								
Manor-----	0-8	---	---	3.6-6.0	---	---	0	---
	8-23	---	---	3.6-6.0	---	---	0	---
	23-60	---	---	3.6-6.0	---	---	0	---
MdB:								
Manor-----	0-8	---	---	3.6-6.0	---	---	0	---
	8-23	---	---	3.6-6.0	---	---	0	---
	23-60	---	---	3.6-6.0	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
MdC:								
Manor-----	0-8	---	---	3.6-6.0	---	---	0	---
	8-23	---	---	3.6-6.0	---	---	0	---
	23-60	---	---	3.6-6.0	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
MdD:								
Manor-----	0-8	---	---	3.6-6.0	---	---	0	---
	8-23	---	---	3.6-6.0	---	---	0	---
	23-60	---	---	3.6-6.0	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
MgB:								
Matapeake-----	0-10	---	---	4.5-5.5	---	---	0	---
	10-38	---	---	3.6-5.5	---	---	0	---
	38-60	---	---	3.6-5.5	---	---	0	---

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
MgC:								
Matapeake-----	0-10	---	---	4.5-5.5	---	---	0	---
	10-38	---	---	3.6-5.5	---	---	0	---
	38-60	---	---	3.6-5.5	---	---	0	---
MhB:								
Matapeake-----	0-10	---	---	4.5-5.5	---	---	0	---
	10-38	---	---	3.6-5.5	---	---	0	---
	38-60	---	---	3.6-5.5	---	---	0	---
Urban Land-----	0-6	---	---	---	---	---	0	---
Mp:								
Melvin-----	0-9	5.0-10	---	5.6-7.8	0	0	0	0
	9-30	5.0-15	---	5.6-7.8	0	0	0	0
	30-62	5.0-15	---	5.6-7.8	0	0	0	0
MvB:								
Muirkirk Variant----	0-11	---	---	4.5-6.0	---	---	---	---
	11-31	---	---	4.5-5.5	---	---	---	---
	31-60	---	---	4.5-5.5	---	---	---	---
MvC:								
Muirkirk Variant----	0-11	---	---	4.5-6.0	---	---	---	---
	11-31	---	---	4.5-5.5	---	---	---	---
	31-60	---	---	4.5-5.5	---	---	---	---
MvD:								
Muirkirk Variant----	0-11	---	---	4.5-6.0	---	---	---	---
	11-31	---	---	4.5-5.5	---	---	---	---
	31-60	---	---	4.5-5.5	---	---	---	---
NeC:								
Neshaminy-----	0-18	---	20-30	4.5-6.0	0	0	0	0
	18-40	20-30	---	5.1-6.5	0	0	0	0
	40-60	---	---	---	---	---	---	---
NeD:								
Neshaminy-----	0-18	---	20-30	4.5-6.0	0	0	0	0
	18-40	20-30	---	5.1-6.5	0	0	0	0
	40-60	---	---	---	---	---	---	---
NuC:								
Neshaminy-----	0-18	---	20-30	4.5-6.0	0	0	0	0
	18-40	20-30	---	5.1-6.5	0	0	0	0
	40-60	---	---	---	---	---	---	---
Urban Land-----	0-6	---	---	---	---	---	0	---
NuD:								
Neshaminy-----	0-18	---	20-30	4.5-6.0	0	0	0	0
	18-40	20-30	---	5.1-6.5	0	0	0	0
	40-60	---	---	---	---	---	---	---
Urban Land-----	0-6	---	---	---	---	---	0	---
SaB:								
Sassafras-----	0-20	---	2.0-10	3.6-5.5	0	0	0	0
	20-31	---	1.0-5.0	3.6-5.5	0	0	0	0
	31-60	---	1.0-5.0	3.6-5.5	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
UcB:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Beltsville-----	0-16	---	---	3.6-5.5	---	---	0	---
	16-21	---	---	3.6-5.5	---	---	0	---
	21-45	---	---	3.6-5.5	---	---	0	---
	45-60	---	---	3.6-5.5	---	---	0	---
UdB:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Brandywine-----	0-22	---	---	3.6-5.5	---	---	0	---
	22-60	---	---	3.6-5.5	---	---	0	---
UeB:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
UeC:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Chillum-----	0-12	---	---	4.5-5.5	---	---	0	---
	12-28	---	---	4.5-5.5	---	---	0	---
	28-60	---	---	4.5-5.5	---	---	0	---
UfB:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Christiana-----	0-10	---	---	3.6-5.0	---	---	0	---
	10-75	---	---	3.6-5.0	---	---	0	---
Christiana-----	0-10	---	---	3.6-5.0	---	---	0	---
	10-75	---	---	3.6-5.0	---	---	0	---
UfC:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Christiana-----	0-10	---	---	3.6-5.0	---	---	0	---
	10-75	---	---	3.6-5.0	---	---	0	---
Christiana-----	0-10	---	---	3.6-5.0	---	---	0	---
	10-75	---	---	3.6-5.0	---	---	0	---
UkC:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Croom-----	0-21	---	---	4.5-6.0	---	---	---	---
	21-42	---	---	4.5-6.0	---	---	---	---
	42-72	---	---	4.5-6.0	---	---	---	---
	72-76	---	---	4.5-6.0	---	---	---	---
UmB:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Galestown-----	0-60	---	2.0-5.0	3.6-5.5	0	0	0	0
	60-64	---	1.0-3.0	3.6-5.5	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
WoB:								
Woodstown-----	0-12	---	2.0-10	3.6-5.5	0	0	0	0
	12-40	---	1.0-5.0	3.6-5.5	0	0	0	0
	40-60	---	1.0-5.0	3.6-5.5	0	0	0	0
WpB:								
Urban Land-----	0-6	---	---	---	---	---	0	---
Woodstown-----	0-12	---	2.0-10	3.6-5.5	0	0	0	0
	12-40	---	1.0-5.0	3.6-5.5	0	0	0	0
	40-60	---	1.0-5.0	3.6-5.5	0	0	0	0

