

Map Unit Description (MN)

Pipestone County, Minnesota

[Data apply to the entire extent of the map unit within the survey area. Map unit and soil properties for a specific parcel of land may vary somewhat and should be determined by onsite investigation]

1003B--Udorthents (cut and fill land), 0 to 6 percent slopes

Udorthents, (cut and fill land)

Extent: 100 percent of the unit

Landform(s): moraines

Slope gradient: 0 to 6 percent

Parent material: variable loamy material

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Pipestone County, Minnesota

GP--Pits, gravel-Udipsamments complex

Pits, gravel

Extent: 50 to 100 percent of the unit

Landform(s): moraines, outwash plains, stream terraces

Slope gradient: 0 to 50 percent

Parent material: sandy and gravelly outwash

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Udipsamments

Extent: 15 to 30 percent of the unit

Landform(s): moraines, outwash plains, stream terraces

Slope gradient: 0 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class: excessively drained

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Pipestone County, Minnesota

J1A--Parnell silty clay loam, depressional, 0 to 1 percent slopes

Parnell, depressional

Extent: 85 to 95 percent of the unit

Landform(s): depressions on lake plains, depressions on moraines, depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer): .32

Land capability, nonirrigated: 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2	-- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg	-- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg	-- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J2A--La Prairie loam, 0 to 2 percent slopes, occasionally flooded

La Prairie, occasionally flooded

Extent: 80 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.81 to 1.99 in	6.6 to 8.4
A -- 9 to 38 in	loam	moderate	5.83 to 6.41 in	6.6 to 8.4
Bw -- 38 to 50 in	loam	moderate	2.01 to 2.24 in	6.6 to 8.4
C -- 50 to 60 in	loam	moderate	1.67 to 1.87 in	7.4 to 8.4

J7A--Sverdrup sandy loam, 0 to 2 percent slopes

Sverdrup

Extent: 70 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 26 in	sandy loam	moderately rapid	1.70 to 1.98 in	6.1 to 7.3
2C -- 26 to 80 in	sand	rapid	2.70 to 3.78 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J7B--Sverdrup sandy loam, 2 to 6 percent slopes

Sverdrup

Extent: 80 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	sandy loam	moderately rapid	1.54 to 1.77 in	6.1 to 7.3
Bw -- 12 to 26 in	sandy loam	moderately rapid	1.70 to 1.98 in	6.1 to 7.3
2C -- 26 to 80 in	sand	rapid	2.70 to 3.78 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J12A--Marysland loam, 0 to 2 percent slopes

Marysland

Extent: 75 to 95 percent of the unit

Landform(s): rims on depressions on outwash plains, flats on outwash plains, drainageways on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer): .28

Land capability, nonirrigated: 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

Representative soil profile:

		<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap --	0 to 9 in	loam	moderate	1.54 to 1.99 in	7.4 to 8.4
Ak --	9 to 12 in	loam	moderate	0.47 to 0.61 in	7.4 to 8.4
Bkg --	12 to 27 in	loam	moderate	2.30 to 2.92 in	7.4 to 8.4
2Cg --	27 to 80 in	gravelly sand	rapid	1.06 to 3.69 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J22A--Renshaw loam, 0 to 3 percent slopes

Renshaw

Extent: 75 to 95 percent of the unit
Landform(s): flats on outwash plains
Slope gradient: 0 to 3 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .20
Land capability, nonirrigated 3s
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw -- 7 to 15 in	loam	moderately rapid	1.34 to 1.50 in	6.6 to 7.3
2Bk -- 15 to 20 in	gravelly loamy sand	very rapid	0.26 to 0.36 in	7.4 to 8.4
2C -- 20 to 60 in	gravelly loamy sand	very rapid	1.59 to 2.39 in	7.4 to 8.4

J23A--Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded

Lamoure, occasionally flooded

Extent: 75 to 95 percent of the unit
Landform(s): flats on flood plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: occasional
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 4L
Wind erodibility index (WEI): 86
Kw factor (surface layer) .24
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: B/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J25A--Rauville silty clay loam, 0 to 1 percent slopes, frequently flooded

Rauville, frequently flooded

Extent: 80 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 1 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 6w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg -- 27 to 45 in	silty clay loam	moderate	2.83 to 3.37 in	7.4 to 8.4
2Cg -- 45 to 60 in	stratified gravelly sand to clay loam	moderately rapid	1.20 to 2.24 in	7.4 to 8.4

J26B--Darnen loam, 2 to 6 percent slopes

Darnen

Extent: 85 to 95 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 24 in	loam	moderate	4.80 to 5.28 in	6.6 to 7.3
AB,Bw1 -- 24 to 34 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw2 -- 34 to 80 in	loam	moderate	7.83 to 8.75 in	6.6 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J31B--Arvilla-Sandberg complex, 2 to 6 percent slopes

Arvilla

Extent: 35 to 55 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

Sandberg

Extent: 30 to 50 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 5
Wind erodibility index (WEI): 56
Kw factor (surface layer) .15
Land capability, nonirrigated 4s
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	gravelly sandy loam	very rapid	0.39 to 1.02 in	6.1 to 7.8
Bk -- 8 to 32 in	very gravelly sand	very rapid	0.48 to 1.44 in	7.4 to 8.4
C -- 32 to 80 in	gravelly sand	very rapid	0.96 to 2.88 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J42C--Sandberg-Arvilla complex, 6 to 12 percent slopes

Sandberg

Extent: 50 to 70 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .17

Land capability, nonirrigated 6s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	gravelly sandy loam	very rapid	0.49 to 1.28 in	6.1 to 7.8
Bk -- 10 to 22 in	gravelly sand	very rapid	0.24 to 0.73 in	7.4 to 8.4
C -- 22 to 80 in	gravelly sand	very rapid	1.16 to 3.47 in	7.4 to 8.4

Arvilla

Extent: 25 to 35 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 6 to 12 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J45F--Sandberg sandy loam, 12 to 40 percent slopes

Sandberg

Extent: 70 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 12 to 40 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.32 to 0.97 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.04 to 3.12 in	7.4 to 8.4

J47A--Swenoda sandy loam, 1 to 3 percent slopes

Swenoda, moderately wet

Extent: 75 to 95 percent of the unit

Landform(s): swales on outwash plains, flats on outwash plains

Slope gradient: 1 to 3 percent

Parent material: outwash over lacustrine deposits

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	sandy loam	moderately rapid	2.20 to 2.54 in	6.1 to 7.3
Bw -- 17 to 29 in	sandy loam	moderately rapid	1.46 to 1.71 in	6.6 to 7.3
2C -- 29 to 80 in	silt loam	moderate	10.16 to 11.17 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J48A--Bigstone and Parnell soils, ponded, 0 to 1 percent slopes

Bigstone, ponded

<i>Extent:</i> 0 to 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions on moraines, depressions on lake plains, depressions on till plains	<i>Wind erodibility group (WEG):</i> 8
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 0
<i>Parent material:</i> lacustrine deposits	<i>Kw factor (surface layer)</i> .24
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 8w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> B/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1 -- 0 to 18 in	silty clay loam	moderate	3.26 to 3.98 in	7.4 to 8.4
A2 -- 18 to 48 in	silty clay loam	moderate	5.39 to 6.58 in	7.4 to 8.4
2Cg -- 48 to 80 in	loam	moderate	4.78 to 6.06 in	7.4 to 8.4

Parnell, ponded

<i>Extent:</i> 0 to 85 percent of the unit	<i>Soil loss tolerance (T factor):</i> 5
<i>Landform(s):</i> depressions on moraines, depressions on lake plains, depressions on till plains	<i>Wind erodibility group (WEG):</i> 8
<i>Slope gradient:</i> 0 to 1 percent	<i>Wind erodibility index (WEI):</i> 0
<i>Parent material:</i> till	<i>Kw factor (surface layer)</i> .32
<i>Restrictive feature(s):</i> greater than 60 inches	<i>Land capability, nonirrigated</i> 8w
<i>Flooding:</i> none	<i>Hydric soil:</i> yes
<i>Ponding:</i> frequent	<i>Hydrologic group:</i> C/D
<i>Drainage class:</i> very poorly drained	<i>Potential for frost action:</i> high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J69A--Athelwold silty clay loam, 0 to 2 percent slopes

Athelwold

Extent: 80 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderate	3.05 to 3.72 in	6.1 to 7.3
Bw1,Bw2 -- 17 to 30 in	silty clay loam	moderate	2.08 to 2.47 in	6.6 to 7.3
Bk -- 30 to 36 in	silty clay loam	moderate	0.94 to 1.12 in	7.4 to 8.4
2C -- 36 to 60 in	gravelly sand	rapid	0.72 to 1.44 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J70A--Brandt silty clay loam, 0 to 2 percent slopes

Brandt

Extent: 80 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silty clay loam	moderate	1.28 to 1.56 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 7 to 34 in	silty clay loam	moderate	4.28 to 5.09 in	6.1 to 7.3
Bk1 -- 34 to 44 in	silt loam	moderate	2.05 to 2.25 in	7.4 to 8.4
2Bk2,2C1 -- 44 to 57 in	gravelly loam	moderately rapid	1.04 to 1.30 in	7.4 to 8.4
2C2 -- 57 to 60 in	gravelly sand	very rapid	0.08 to 0.17 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J71A--Brookings silty clay loam, 1 to 3 percent slopes

Brookings

Extent: 75 to 85 percent of the unit

Landform(s): drainageways on till plains, flats on till plains

Slope gradient: 1 to 3 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 9 to 30 in	silty clay loam	moderate	3.34 to 3.96 in	6.6 to 7.3
2BC,2C -- 30 to 60 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J72B--Renshaw-Sandberg complex, 2 to 6 percent slopes

Renshaw

Extent: 65 to 85 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw -- 7 to 15 in	loam	moderately rapid	1.34 to 1.50 in	6.6 to 7.3
2Bk -- 15 to 20 in	gravelly loamy sand	very rapid	0.26 to 0.36 in	7.4 to 8.4
2C -- 20 to 60 in	gravelly loamy sand	very rapid	1.59 to 2.39 in	7.4 to 8.4

Sandberg

Extent: 10 to 20 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: excessively drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.48 to 0.81 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.56 to 2.60 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J73D2--Buse clay loam, 12 to 18 percent slopes, moderately eroded

Buse, moderately eroded

Extent: 65 to 80 percent of the unit

Landform(s): hills on till plains

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	7.4 to 8.4
ABk,Bk -- 7 to 22 in	clay loam	moderately slow	2.09 to 2.69 in	7.4 to 8.4
C -- 22 to 60 in	clay loam	moderately slow	5.29 to 6.80 in	7.4 to 8.4

J73E--Buse clay loam, 18 to 25 percent slopes

Buse

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 18 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	7.4 to 8.4
ABk,Bk -- 7 to 22 in	clay loam	moderately slow	2.09 to 2.69 in	7.4 to 8.4
C -- 22 to 60 in	clay loam	moderately slow	5.29 to 6.80 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J73F--Buse clay loam, 25 to 40 percent slopes

Buse

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 25 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	7.4 to 8.4
ABk,Bk -- 7 to 22 in	clay loam	moderately slow	2.09 to 2.69 in	7.4 to 8.4
C -- 22 to 60 in	clay loam	moderately slow	5.29 to 6.80 in	7.4 to 8.4

J74A--Estelline silty clay loam, 0 to 2 percent slopes

Estelline

Extent: 75 to 85 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 10 to 30 in	silty clay loam	moderate	3.21 to 3.81 in	6.1 to 7.3
2C -- 30 to 60 in	gravelly sand	very rapid	0.90 to 1.80 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J74B--Estelline silty clay loam, 2 to 6 percent slopes

Estelline

Extent: 80 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 10 to 30 in	silty clay loam	moderate	3.21 to 3.81 in	6.1 to 7.3
2C -- 30 to 60 in	gravelly sand	very rapid	0.90 to 1.80 in	7.4 to 8.4

J75A--Fordville loam, 0 to 2 percent slopes

Fordville

Extent: 80 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.30 in	6.1 to 7.3
Bw -- 6 to 24 in	loam	moderate	3.08 to 3.44 in	6.1 to 7.3
2C -- 24 to 80 in	gravelly loamy sand	very rapid	2.24 to 3.35 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J75B--Fordville loam, 2 to 6 percent slopes

Fordville

Extent: 80 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	1.18 to 1.30 in	6.1 to 7.3
Bw -- 6 to 24 in	loam	moderate	3.08 to 3.44 in	6.1 to 7.3
2C -- 24 to 80 in	gravelly loamy sand	very rapid	2.24 to 3.35 in	7.4 to 8.4

J76A--Parnell silty clay loam, depressional, verdi, 0 to 1 percent slopes

Parnell, depressional, verdi

Extent: 85 to 95 percent of the unit

Landform(s): depressions on till plains

Slope gradient: 0 to 1 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	silty clay loam	moderately slow	2.91 to 3.55 in	6.1 to 7.3
Btg -- 16 to 28 in	silty clay	slow	1.54 to 1.89 in	6.1 to 7.3
2Cg -- 28 to 60 in	clay loam	moderately slow	4.46 to 5.74 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J77A--Lamoure silty clay loam, 0 to 2 percent slopes, frequently flooded

Lamoure, frequently flooded

Extent: 75 to 95 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J78A--Lismore silty clay loam, 1 to 3 percent slopes

Lismore

Extent: 65 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 3 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
A -- 8 to 17 in	silty clay loam	moderate	1.63 to 1.99 in	6.1 to 7.3
2Bw1,2Bw2 -- 17 to 32 in	clay loam	moderately slow	2.24 to 2.84 in	6.1 to 7.3
2Bk -- 32 to 48 in	clay loam	moderately slow	2.26 to 2.91 in	7.4 to 8.4
2C -- 48 to 60 in	clay loam	moderately slow	1.65 to 2.13 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J79B--Vienna-Brookings complex, 1 to 4 percent slopes

Vienna, occasional saturation

Extent: 45 to 65 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 4 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw -- 10 to 15 in	silty clay loam	moderate	0.82 to 0.97 in	6.1 to 7.3
2Bw -- 15 to 23 in	clay loam	moderately slow	1.10 to 1.42 in	6.1 to 7.3
2Bk,2C -- 23 to 60 in	clay loam	moderately slow	5.18 to 6.66 in	7.4 to 8.4

Brookings

Extent: 25 to 45 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 4 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 9 to 30 in	silty clay loam	moderate	3.34 to 3.96 in	6.6 to 7.3
2BC,2C -- 30 to 60 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J80A--Lamoure-La Prairie complex, channeled, 0 to 2 percent slopes, frequently flooded

Lamoure, channeled, frequently flooded

Extent: 40 to 60 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .24

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 27 in	silty clay loam	moderate	4.89 to 5.98 in	7.4 to 8.4
Cg1 -- 27 to 34 in	silty clay loam	moderate	1.07 to 1.27 in	7.4 to 8.4
Cg2 -- 34 to 60 in	silt loam	moderate	5.20 to 5.72 in	7.4 to 8.4

La Prairie, channeled, frequently flooded

Extent: 30 to 50 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.81 to 1.99 in	6.6 to 8.4
A -- 9 to 38 in	loam	moderate	5.83 to 6.41 in	6.6 to 8.4
Bw -- 38 to 50 in	loam	moderate	2.01 to 2.24 in	6.6 to 8.4
C -- 50 to 60 in	loam	moderate	1.67 to 1.87 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J81C2--Renshaw-Barnes complex, 6 to 12 percent slopes, moderately eroded

Renshaw, moderately eroded

Extent: 60 to 80 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 6 to 12 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .20
Land capability, nonirrigated 4e
Hydric soil: no
Hydrologic group: B
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw -- 7 to 15 in	loam	moderately rapid	1.34 to 1.50 in	6.6 to 7.3
2Bk -- 15 to 20 in	gravelly loamy sand	very rapid	0.26 to 0.36 in	7.4 to 8.4
2C -- 20 to 60 in	gravelly loamy sand	very rapid	1.59 to 2.39 in	7.4 to 8.4

Barnes, moderately eroded

Extent: 10 to 30 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 6 to 12 percent
Parent material: till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .28
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: C
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	clay loam	moderately slow	1.87 to 2.09 in	6.1 to 7.3
Bw -- 11 to 17 in	clay loam	moderately slow	0.89 to 1.12 in	6.1 to 7.3
Bk -- 17 to 31 in	clay loam	moderately slow	1.93 to 2.48 in	7.4 to 8.4
BC -- 31 to 60 in	clay loam	moderately slow	4.08 to 5.24 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J82C--Rock outcrop-Ihlen complex, 6 to 12 percent slopes

Rock outcrop

Extent: 35 to 55 percent of the unit

Landform(s): till plains

Slope gradient: 6 to 12 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Ihlen

Extent: 30 to 50 percent of the unit

Landform(s): hills on till plains

Slope gradient: 6 to 12 percent

Parent material: loess over bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	silty clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
Bw1,Bw2 -- 8 to 23 in	silty clay loam	moderate	2.39 to 2.84 in	6.1 to 7.3
BC,C -- 23 to 31 in	silt loam	moderate	1.65 to 1.82 in	6.6 to 8.4
2R -- 31 to 80 in	unweathered bedrock	very slow		

Map Unit Description (MN)

Pipestone County, Minnesota

J83F--Sandberg-Buse-Everts complex, 12 to 40 percent slopes

Sandberg

Extent: 45 to 65 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 12 to 40 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 12 in	sandy loam	very rapid	1.54 to 1.77 in	6.1 to 7.8
Bk -- 12 to 28 in	gravelly sand	very rapid	0.48 to 0.81 in	7.4 to 8.4
C -- 28 to 80 in	gravelly sand	very rapid	1.56 to 2.60 in	7.4 to 8.4

Buse

Extent: 15 to 35 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 12 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	7.4 to 8.4
ABk,Bk -- 7 to 22 in	clay loam	moderately slow	2.09 to 2.69 in	7.4 to 8.4
C -- 22 to 60 in	clay loam	moderately slow	5.29 to 6.80 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J83F--Sandberg-Buse-Everts complex, 12 to 40 percent slopes

Events

Extent: 10 to 20 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 12 to 40 percent

Parent material: colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,AB -- 0 to 38 in	loam	moderate	7.64 to 8.40 in	6.6 to 7.3
Bw -- 38 to 54 in	loam	moderate	2.68 to 2.99 in	6.1 to 7.3
2C -- 54 to 80 in	very gravelly coarse sand	very rapid	0.52 to 1.04 in	7.4 to 8.4

J84A--Strayhoss loam, 0 to 2 percent slopes

Strayhoss

Extent: 80 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw1,Bw2,Bw3 --	silt loam	moderate	4.57 to 5.02 in	6.1 to 7.3
Bk -- 30 to 36 in	loam	moderate	1.00 to 1.12 in	7.4 to 8.4
2C1,2C2 -- 36 to 60 in	loamy sand	rapid	1.92 to 2.40 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J84B--Strayhoss loam, 2 to 6 percent slopes

Strayhoss

Extent: 80 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 7 to 30 in	silt loam	moderate	4.57 to 5.02 in	6.1 to 7.3
Bk -- 30 to 36 in	loam	moderate	1.00 to 1.12 in	7.4 to 8.4
2C1,2C2 -- 36 to 60 in	loamy sand	rapid	1.92 to 2.40 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J85A--Trosky silty clay loam, 0 to 2 percent slopes

Trosky

Extent: 85 to 95 percent of the unit

Landform(s): drainageways on outwash plains, flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,AB -- 0 to 20 in	silty clay loam	moderate	3.61 to 4.42 in	7.4 to 8.4
Bkg1,Bkg2 -- 20 to 38 in	silty clay loam	moderate	2.90 to 3.44 in	7.4 to 8.4
2Cg -- 38 to 60 in	gravelly coarse sand	rapid	0.87 to 1.30 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J86B--Vienna silty clay loam, 3 to 6 percent slopes

Vienna, occasional saturation

Extent: 80 to 90 percent of the unit

Landform(s): hills on till plains

Slope gradient: 3 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw -- 10 to 15 in	silty clay loam	moderate	0.82 to 0.97 in	6.1 to 7.3
2Bw -- 15 to 23 in	clay loam	moderately slow	1.10 to 1.42 in	6.1 to 7.3
2Bk,2C -- 23 to 60 in	clay loam	moderately slow	5.18 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J87A--Waubay silty clay loam, loess deposit, 1 to 3 percent slopes

Waubay, loess deposit

Extent: 75 to 95 percent of the unit

Landform(s): flats on till plains

Slope gradient: 1 to 3 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay loam	moderate	2.55 to 3.12 in	6.1 to 7.3
Bw1 -- 14 to 26 in	silty clay loam	moderate	1.89 to 2.24 in	6.1 to 7.3
Bw2,Bw3 -- 26 to 44 in	silty clay loam	moderate	2.90 to 3.44 in	6.1 to 7.3
Bk1 -- 44 to 59 in	silt loam	moderate	2.99 to 3.29 in	7.4 to 8.4
2Bk2 -- 59 to 76 in	clay loam	moderately slow	2.37 to 3.05 in	7.4 to 8.4
2C -- 76 to 80 in	clay loam	moderately slow	0.55 to 0.71 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J88B--Kranzburg silty clay loam, 3 to 6 percent slopes

Kranzburg, occasional saturation

Extent: 80 to 90 percent of the unit

Landform(s): hills on till plains

Slope gradient: 3 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	6.1 to 7.3
Bw1,Bw2 -- 9 to 25 in	silty clay loam	moderate	2.58 to 3.07 in	6.6 to 7.3
2Bk -- 25 to 57 in	clay loam	moderately slow	4.46 to 5.74 in	7.4 to 8.4
2C -- 57 to 60 in	clay loam	moderately slow	0.39 to 0.50 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J89B--Lanona-Swenoda complex, 2 to 6 percent slopes

Lanona, occasional saturation

Extent: 40 to 60 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .17
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	fine sandy loam	moderately rapid	1.26 to 1.42 in	6.1 to 7.3
Bw1,Bw2 -- 8 to 28 in	fine sandy loam	moderately rapid	3.01 to 3.41 in	6.6 to 7.3
2Bk -- 28 to 42 in	loam	moderate	2.41 to 2.69 in	7.4 to 8.4
2C -- 42 to 60 in	loam	moderate	3.01 to 3.37 in	7.4 to 8.4

Swenoda

Extent: 30 to 50 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash over till
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: moderately well drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .15
Land capability, nonirrigated 2e
Hydric soil: no
Hydrologic group: B
Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	sandy loam	moderately rapid	2.20 to 2.54 in	6.1 to 7.3
Bw -- 17 to 29 in	sandy loam	moderately rapid	1.46 to 1.71 in	6.6 to 7.3
2C -- 29 to 80 in	silt loam	moderate	10.16 to 11.17 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J90B--Kranzburg-Brookings complex, 1 to 4 percent slopes

Kranzburg, occasional saturation

Extent: 45 to 65 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 4 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	6.1 to 7.3
Bw1,Bw2 -- 9 to 25 in	silty clay loam	moderate	2.58 to 3.07 in	6.6 to 7.3
2Bk -- 25 to 57 in	clay loam	moderately slow	4.46 to 5.74 in	7.4 to 8.4
2C -- 57 to 60 in	clay loam	moderately slow	0.39 to 0.50 in	7.4 to 8.4

Brookings

Extent: 25 to 45 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 4 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderate	1.63 to 1.99 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 9 to 30 in	silty clay loam	moderate	3.34 to 3.96 in	6.6 to 7.3
2BC,2C -- 30 to 60 in	clay loam	moderately slow	4.19 to 5.39 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J91B--Darnen loam, stratified substratum, 2 to 6 percent slopes

Darnen, stratified substratum

Extent: 85 to 95 percent of the unit

Landform(s): hills on moraines

Slope gradient: 2 to 6 percent

Parent material: colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2 -- 0 to 30 in	loam	moderate	5.98 to 6.58 in	6.6 to 7.3
Bk1,Bk2 -- 30 to 62 in	loam	moderate	5.42 to 6.06 in	7.4 to 8.4
C1 -- 62 to 74 in	loamy sand	moderately rapid	0.98 to 1.59 in	7.4 to 8.4
C2 -- 74 to 80 in	clay loam	moderately slow	0.77 to 1.12 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J92C2--Buse-Vienna complex, 6 to 12 percent slopes, moderately eroded

Buse, moderately eroded

Extent: 45 to 55 percent of the unit

Landform(s): hills on till plains

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	clay loam	moderately slow	1.20 to 1.35 in	7.4 to 8.4
ABk,Bk -- 7 to 22 in	clay loam	moderately slow	2.09 to 2.69 in	7.4 to 8.4
C -- 22 to 60 in	clay loam	moderately slow	5.29 to 6.80 in	7.4 to 8.4

Vienna, moderately eroded

Extent: 15 to 25 percent of the unit

Landform(s): hills on till plains

Slope gradient: 6 to 12 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	1.77 to 2.17 in	6.1 to 7.3
Bw -- 10 to 15 in	silty clay loam	moderate	0.82 to 0.97 in	6.1 to 7.3
2Bw -- 15 to 23 in	clay loam	moderately slow	1.10 to 1.42 in	6.1 to 7.3
2Bk,2C -- 23 to 60 in	clay loam	moderately slow	5.18 to 6.66 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J93A--Hidewood-Badger complex, 0 to 2 percent slopes

Hidewood

Extent: 40 to 60 percent of the unit

Landform(s): flats on till plains, drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	moderate	1.42 to 1.73 in	7.4 to 8.4
A -- 8 to 27 in	silty clay loam	moderate	3.47 to 4.24 in	7.4 to 8.4
Cg -- 27 to 42 in	silty clay loam	moderate	2.39 to 2.84 in	7.4 to 8.4
2Cg -- 42 to 80 in	clay loam	moderately slow	5.29 to 6.80 in	7.4 to 8.4

Badger

Extent: 20 to 40 percent of the unit

Landform(s): drainageways on till plains

Slope gradient: 0 to 2 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	silty clay loam	moderately slow	1.63 to 1.99 in	6.1 to 7.3
Bt1,Bt2 -- 9 to 35 in	silty clay	slow	3.38 to 4.16 in	6.1 to 7.3
BCg,Cg -- 35 to 55 in	silty clay loam	moderately slow	3.21 to 3.81 in	6.6 to 8.4
2Cg -- 55 to 60 in	clay loam	moderately slow	0.66 to 0.76 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J94A--Parnell-McIntosh complex, 0 to 3 percent slopes

Parnell

Extent: 60 to 80 percent of the unit

Landform(s): drainageways on till plains, flats on till plains

Slope gradient: 0 to 2 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

McIntosh

Extent: 15 to 25 percent of the unit

Landform(s): knolls on till plains

Slope gradient: 1 to 3 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.73 to 1.89 in	7.4 to 8.4
Ak -- 8 to 13 in	silt loam	moderate	1.13 to 1.23 in	7.4 to 8.4
Bk -- 13 to 29 in	silt loam	moderate	3.23 to 3.55 in	7.4 to 8.4
2Bk -- 29 to 34 in	clay loam	moderately slow	0.66 to 0.85 in	7.4 to 8.4
2C -- 34 to 80 in	clay loam	moderately slow	6.45 to 8.29 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J95E--Buse, stony-Wilno complex, 18 to 25 percent slopes

Buse, stony

Extent: 65 to 85 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 37 in	loam	moderate	4.37 to 5.54 in	7.4 to 8.4
C -- 37 to 80 in	loam	moderately slow	6.44 to 8.15 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 18 to 25 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 6e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

Map Unit Description (MN)

Pipestone County, Minnesota

J95F--Buse, stony-Wilno complex, 25 to 40 percent slopes

Buse, stony

Extent: 65 to 85 percent of the unit

Landform(s): hills on moraines

Slope gradient: 25 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 37 in	loam	moderate	4.37 to 5.54 in	7.4 to 8.4
C -- 37 to 80 in	loam	moderately slow	6.44 to 8.15 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 25 to 40 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

Map Unit Description (MN)

Pipestone County, Minnesota

J96B--Barnes-Buse complex, 3 to 6 percent slopes

Barnes, occasional saturation

Extent: 55 to 75 percent of the unit

Landform(s): hills on moraines, hills on till plains

Slope gradient: 3 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 11 in	loam	moderate	2.20 to 2.43 in	6.1 to 7.3
Bw -- 11 to 26 in	loam	moderate	2.54 to 2.84 in	6.1 to 7.3
Bk -- 26 to 44 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 44 to 80 in	loam	moderately slow	5.37 to 6.81 in	7.4 to 8.4

Buse

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines, hills on till plains

Slope gradient: 3 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J96C2--Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded

Barnes, moderately eroded

Extent: 40 to 60 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	loam	moderate	1.42 to 1.56 in	6.1 to 7.3
Bw1,Bw2 -- 7 to 19 in	loam	moderate	2.01 to 2.24 in	6.1 to 7.3
Bk -- 19 to 37 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 37 to 60 in	loam	moderately slow	3.43 to 4.34 in	7.4 to 8.4

Buse, moderately eroded

Extent: 20 to 40 percent of the unit

Landform(s): hills on moraines

Slope gradient: 6 to 12 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J99A--Lakepark clay loam, 0 to 3 percent slopes, overwash

Lakepark, overwash

Extent: 75 to 95 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	clay loam	moderate	1.34 to 1.50 in	6.1 to 7.3
A -- 8 to 40 in	clay loam	moderate	5.49 to 6.13 in	6.1 to 7.3
Bg -- 40 to 60 in	clay loam	moderate	2.95 to 3.74 in	6.6 to 7.3
Cg -- 60 to 80 in	loam	moderately slow	3.01 to 3.81 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J100D2--Buse, eroded-Wilno complex, 12 to 18 percent slopes

Buse, moderately eroded

Extent: 60 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Wilno

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines

Slope gradient: 12 to 18 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 4e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 42 in	loam	moderate	8.43 to 9.27 in	6.1 to 7.3
AB -- 42 to 52 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw1,Bw2 -- 52 to 80 in	loam	moderate	4.75 to 5.31 in	6.1 to 7.3

Map Unit Description (MN)

Pipestone County, Minnesota

J101B--Hokans-Svea complex, 1 to 4 percent slopes

Hokans

Extent: 60 to 80 percent of the unit

Landform(s): hills on moraines

Slope gradient: 1 to 4 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 15 in	loam	moderate	2.99 to 3.29 in	6.1 to 7.3
Bw -- 15 to 22 in	loam	moderate	1.20 to 1.35 in	6.1 to 7.3
Bk -- 22 to 40 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 40 to 80 in	loam	moderately slow	5.96 to 7.56 in	7.4 to 8.4

Svea

Extent: 15 to 25 percent of the unit

Landform(s): swales on moraines, flats on moraines

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.3
Bk -- 21 to 36 in	clay loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderately slow	3.60 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J104A--Svea loam, 1 to 3 percent slopes

Svea

Extent: 65 to 85 percent of the unit

Landform(s): swales on moraines, flats on moraines

Slope gradient: 1 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.3
Bk -- 21 to 36 in	clay loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderately slow	3.60 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J105A--Arvilla sandy loam, 0 to 2 percent slopes

Arvilla

Extent: 75 to 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 3

Wind erodibility index (WEI): 86

Kw factor (surface layer) .15

Land capability, nonirrigated 3s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.18 to 1.36 in	6.1 to 7.3
Bw -- 9 to 14 in	sandy loam	moderately rapid	0.61 to 0.72 in	6.6 to 7.3
2Bk -- 14 to 48 in	gravelly sand	very rapid	0.68 to 1.69 in	7.4 to 8.4
2C -- 48 to 80 in	gravelly sand	very rapid	0.64 to 1.59 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J106B--Barnes-Buse-Svea complex, 1 to 6 percent slopes

Barnes, occasional saturation

Extent: 50 to 70 percent of the unit

Landform(s): hills on moraines, hills on till plains

Slope gradient: 3 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 11 in	loam	moderate	2.20 to 2.43 in	6.1 to 7.3
Bw -- 11 to 26 in	loam	moderate	2.54 to 2.84 in	6.1 to 7.3
Bk -- 26 to 44 in	loam	moderate	2.72 to 3.44 in	7.4 to 8.4
C -- 44 to 80 in	loam	moderately slow	5.37 to 6.81 in	7.4 to 8.4

Buse

Extent: 10 to 20 percent of the unit

Landform(s): hills on moraines, hills on till plains

Slope gradient: 3 to 6 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	7.4 to 8.4
Bk1,Bk2 -- 8 to 40 in	loam	moderate	4.84 to 6.13 in	7.4 to 8.4
C -- 40 to 60 in	loam	moderately slow	2.95 to 3.74 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J106B--Barnes-Buse-Svea complex, 1 to 6 percent slopes

Svea

<p><i>Extent:</i> 10 to 20 percent of the unit</p> <p><i>Landform(s):</i> swales on moraines, flats on moraines, swales on till plains, flats on till plains</p> <p><i>Slope gradient:</i> 1 to 3 percent</p> <p><i>Parent material:</i> till</p> <p><i>Restrictive feature(s):</i> greater than 60 inches</p> <p><i>Flooding:</i> none</p> <p><i>Ponding:</i> none</p> <p><i>Drainage class:</i> moderately well drained</p>	<p><i>Soil loss tolerance (T factor):</i> 5</p> <p><i>Wind erodibility group (WEG):</i> 6</p> <p><i>Wind erodibility index (WEI):</i> 48</p> <p><i>Kw factor (surface layer)</i> .24</p> <p><i>Land capability, nonirrigated</i> 1</p> <p><i>Hydric soil:</i> no</p> <p><i>Hydrologic group:</i> C</p> <p><i>Potential for frost action:</i> moderate</p>
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<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	loam	moderate	1.97 to 2.17 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.87 to 2.09 in	6.6 to 7.3
Bk -- 21 to 36 in	clay loam	moderate	2.24 to 2.84 in	7.4 to 8.4
C -- 36 to 60 in	loam	moderately slow	3.60 to 4.56 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J107A--Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes

Lakepark

Extent: 30 to 40 percent of the unit

Landform(s): drainageways on moraines

Slope gradient: 0 to 3 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.57 to 1.73 in	6.1 to 7.3
A -- 8 to 27 in	loam	moderate	3.86 to 4.24 in	6.1 to 7.3
Bg -- 27 to 41 in	loam	moderate	2.34 to 2.62 in	6.6 to 7.3
Cg -- 41 to 80 in	loam	moderately slow	5.85 to 7.41 in	7.4 to 8.4

Roliss

Extent: 20 to 30 percent of the unit

Landform(s): drainageways on moraines, flats on moraines, rims on moraines

Slope gradient: 0 to 2 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.36 to 1.72 in	7.4 to 8.4
A -- 9 to 14 in	clay loam	moderate	0.87 to 0.97 in	7.4 to 8.4
Bg -- 14 to 20 in	clay loam	moderate	1.00 to 1.12 in	7.4 to 8.4
Cg -- 20 to 80 in	loam	moderately slow	8.98 to 11.37 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

J107A--Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes

Parnell, depressional

Extent: 10 to 20 percent of the unit

Landform(s): depressions on moraines

Slope gradient: 0 to 1 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: frequent

Drainage class: very poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 22 in	silty clay loam	moderately slow	3.97 to 4.85 in	6.1 to 7.3
Btg -- 22 to 55 in	silty clay	slow	4.30 to 5.29 in	6.1 to 7.3
BCg -- 55 to 80 in	silty clay loam	slow	3.97 to 4.71 in	6.6 to 8.4

M-W--Water, miscellaneous

Water, miscellaneous

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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Map Unit Description (MN)

Pipestone County, Minnesota

P4A--Calco silty clay loam, 0 to 2 percent slopes, frequently flooded

Calco, frequently flooded

Extent: 75 to 85 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 36 in	silty clay loam	moderate	7.52 to 8.24 in	7.4 to 8.4
Cg -- 36 to 60 in	silty clay loam	moderate	5.04 to 5.52 in	7.4 to 8.4

P5A--Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded

Calco, occasionally flooded

Extent: 75 to 85 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2,A3 -- 0 to 36 in	silty clay loam	moderate	7.52 to 8.24 in	7.4 to 8.4
Bg -- 36 to 44 in	silty clay loam	moderate	1.74 to 1.90 in	7.4 to 8.4
Cg -- 44 to 60 in	silty clay loam	moderate	3.31 to 3.62 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P8A--Cylinder loam, 0 to 2 percent slopes, occasionally flooded

Cylinder, occasionally flooded

Extent: 75 to 85 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: alluvium over outwash

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .20

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2 -- 0 to 18 in	loam	moderate	3.62 to 3.98 in	6.1 to 7.3
Bg1,Bg2 -- 18 to 28 in	loam	moderate	1.67 to 1.87 in	6.1 to 7.3
2BC -- 28 to 39 in	gravelly sand	very rapid	0.22 to 0.44 in	7.4 to 8.4
2C1,2C2 -- 39 to 60 in	gravelly sand	very rapid	0.42 to 0.83 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P11A--Dempster silt loam, 0 to 2 percent slopes

Dempster

Extent: 85 to 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	silt loam	moderate	1.87 to 2.17 in	6.1 to 7.3
Bw1,Bw2 -- 10 to 29 in	silty clay loam	moderate	3.28 to 3.86 in	6.1 to 7.3
Bk -- 29 to 36 in	loam	moderate	0.87 to 1.14 in	7.4 to 8.4
2C -- 36 to 60 in	gravelly sand	rapid	0.72 to 1.44 in	7.4 to 8.4

P11B--Dempster silt loam, 2 to 6 percent slopes

Dempster

Extent: 85 to 95 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .37

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 12 in	silt loam	moderate	2.24 to 2.60 in	6.1 to 7.3
Bw1,Bw2 -- 12 to 27 in	silty clay loam	moderate	2.61 to 3.07 in	6.1 to 7.3
2C -- 27 to 60 in	gravelly sand	rapid	0.98 to 1.96 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P12B--Everly silty clay loam, 2 to 6 percent slopes

Everly

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 6 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	1.67 to 1.87 in	6.1 to 7.3
Bw -- 10 to 18 in	silty clay loam	moderate	1.24 to 1.41 in	6.1 to 7.3
2Bk,2BC -- 18 to 80 in	clay loam	moderately slow	8.65 to 11.13 in	7.4 to 8.4

P12C2--Everly silty clay loam, 6 to 12 percent slopes, moderately eroded

Everly, moderately eroded

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 6 to 12 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silty clay loam	moderate	1.20 to 1.35 in	6.1 to 7.3
Bw -- 7 to 16 in	silty clay loam	moderate	1.36 to 1.54 in	6.1 to 7.3
2Bk,2BC -- 16 to 80 in	clay loam	moderately slow	8.93 to 11.48 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P14A--Flandreau silt loam, 0 to 2 percent slopes

Flandreau

Extent: 85 to 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.57 to 1.73 in	6.1 to 7.3
AB,Bw1 -- 8 to 30 in	silt loam	moderate	3.53 to 4.85 in	6.1 to 7.3
2BC -- 30 to 47 in	sandy loam	moderately rapid	1.35 to 2.20 in	6.1 to 7.3
2C -- 47 to 60 in	loamy sand	rapid	0.78 to 1.30 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P14B--Flandreau silt loam, 2 to 6 percent slopes

Flandreau

Extent: 75 to 85 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silt loam	moderate	1.57 to 1.73 in	6.1 to 7.3
AB,Bw1,Bw2 -- 8 to 30 in	silt loam	moderate	3.53 to 4.85 in	6.1 to 7.3
2BC -- 30 to 36 in	loamy sand	rapid	0.35 to 0.59 in	6.1 to 7.3
2C -- 36 to 60 in	loamy sand	rapid	1.44 to 2.40 in	7.4 to 8.4

P16A--Graceville silt loam, 0 to 2 percent slopes

Graceville

Extent: 85 to 95 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 4

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 20 in	silty clay loam	moderate	3.41 to 3.81 in	5.6 to 7.3
Bw1,Bw2,Bw3 -- 20 to 53 in	silty clay loam	moderate	5.62 to 7.28 in	5.6 to 7.3
2C -- 53 to 60 in	gravelly sand	rapid	0.20 to 0.40 in	6.1 to 7.8

Map Unit Description (MN)

Pipestone County, Minnesota

P17A--Ihlen silty clay loam, 0 to 2 percent slopes

Ihlen

Extent: 85 to 95 percent of the unit

Landform(s): flats on till plains

Slope gradient: 0 to 2 percent

Parent material: loess over bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 12 in	silty clay loam	moderate	2.13 to 2.60 in	6.1 to 7.3
Bw1,Bw2 -- 12 to 38 in	silty clay loam	moderate	4.22 to 5.01 in	6.1 to 7.3
2R -- 38 to 80 in	unweathered bedrock	very slow		

P17B--Ihlen silty clay loam, 2 to 6 percent slopes

Ihlen

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 6 percent

Parent material: loess over bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 8 in	silty clay loam	moderate	1.42 to 1.73 in	6.1 to 7.3
Bw1,Bw2 -- 8 to 23 in	silty clay loam	moderate	2.39 to 2.84 in	6.1 to 7.3
BC,C -- 23 to 31 in	silt loam	moderate	1.65 to 1.82 in	6.6 to 8.4
2R -- 31 to 80 in	unweathered bedrock	very slow		

Map Unit Description (MN)

Pipestone County, Minnesota

P18B--Ihlen-Rock outcrop complex, 0 to 6 percent slopes

Ihlen

Extent: 50 to 60 percent of the unit

Landform(s): hills on till plains

Slope gradient: 0 to 4 percent

Parent material: loess over bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 11 in	silty clay loam	moderate	1.98 to 2.43 in	6.1 to 7.3
Bw1,Bw2 -- 11 to 32 in	silty clay loam	moderate	3.34 to 3.96 in	6.1 to 7.3
2R -- 32 to 80 in	unweathered bedrock	very slow		

Rock outcrop

Extent: 20 to 30 percent of the unit

Landform(s): till plains

Slope gradient: 0 to 4 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Pipestone County, Minnesota

P18C--Ihlen-Rock outcrop complex, 4 to 35 percent slopes

Ihlen

Extent: 40 to 50 percent of the unit

Landform(s): hills on till plains

Slope gradient: 4 to 35 percent

Parent material: loess over bedrock

Restrictive feature(s): lithic bedrock at 20 to 40 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 2

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 14 in	silty clay loam	moderate	2.55 to 3.12 in	6.1 to 7.3
Bw1,Bw2 -- 14 to 27 in	silty clay loam	moderate	2.08 to 2.47 in	6.1 to 7.3
2R -- 27 to 80 in	unweathered bedrock	very slow		

Rock outcrop

Extent: 35 to 45 percent of the unit

Landform(s): till plains

Slope gradient: 4 to 35 percent

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>

Map Unit Description (MN)

Pipestone County, Minnesota

P20B--Judson silt loam, 3 to 8 percent slopes

Judson

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 3 to 8 percent

Parent material: colluvium

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 36 in	silt loam	moderate	6.81 to 7.88 in	6.1 to 7.3
Bw1,Bw2 -- 36 to 56 in	silty clay loam	moderate	3.81 to 4.42 in	6.1 to 7.3
C -- 56 to 60 in	silty clay loam	moderate	0.67 to 0.79 in	6.6 to 7.8

P24B--Moody silty clay loam, 2 to 5 percent slopes

Moody

Extent: 80 to 90 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 5 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	1.87 to 2.17 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 10 to 35 in	silty clay loam	moderate	4.28 to 5.04 in	6.1 to 7.3
Bk -- 35 to 48 in	silt loam	moderate	2.21 to 2.60 in	7.4 to 8.4
C -- 48 to 60 in	silt loam	moderate	2.01 to 2.36 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P27A--Primghar silty clay loam, 1 to 3 percent slopes

Primghar

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 3 percent

Parent material: loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2 -- 0 to 21 in	silty clay loam	moderate	3.96 to 4.59 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 21 to 42 in	silty clay loam	moderate	3.61 to 4.25 in	6.1 to 7.3
C -- 42 to 60 in	silty clay loam	moderate	3.01 to 3.54 in	7.4 to 8.4

P28A--Ransom silty clay loam, 1 to 3 percent slopes

Ransom

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 1 to 3 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: somewhat poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,AB -- 0 to 16 in	silty clay loam	moderate	2.91 to 3.55 in	6.6 to 7.3
Bw1,Bw2,Bw3 -- 16 to 33 in	silty clay loam	moderate	2.71 to 3.22 in	6.6 to 7.3
2BCK,2BC -- 33 to 80 in	clay loam	moderately slow	6.56 to 8.43 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P29A--Rushmore silty clay loam, 0 to 2 percent slopes

Rushmore

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 0 to 2 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: C/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,AB -- 0 to 18 in	silty clay loam	moderate	3.26 to 3.98 in	6.6 to 7.3
Bg1,Bg2 -- 18 to 24 in	silty clay loam	moderate	0.94 to 1.12 in	6.6 to 7.3
BCg -- 24 to 32 in	silty clay loam	moderate	1.26 to 1.50 in	7.4 to 7.8
2BCkg,2BCg -- 32 to 80 in	clay loam	moderately slow	6.72 to 8.65 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P30B--Sac silty clay loam, 2 to 5 percent slopes

Sac

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 5 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 11 in	silty clay loam	moderate	2.31 to 2.54 in	6.1 to 7.3
BA,Bw1 -- 11 to 28 in	silty clay loam	moderate	3.05 to 3.39 in	6.1 to 7.3
2Bw2 -- 28 to 33 in	clay loam	moderately slow	0.72 to 0.92 in	6.1 to 7.3
2BCK,2BC -- 33 to 60 in	clay loam	moderately slow	3.75 to 4.82 in	7.4 to 8.4

P32A--Spillco silt loam, 0 to 2 percent slopes, frequently flooded

Spillco, frequently flooded

Extent: 80 to 90 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: frequent

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 5w

Hydric soil: yes

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1,A2 -- 0 to 35 in	silt loam	moderate	6.66 to 7.36 in	6.6 to 7.3
C1,C2 -- 35 to 60 in	loam	moderate	4.71 to 5.21 in	6.6 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P33A--Spillco silt loam, 0 to 2 percent slopes, occasionally flooded

Spillco, occasionally flooded

Extent: 80 to 90 percent of the unit

Landform(s): flats on flood plains

Slope gradient: 0 to 2 percent

Parent material: alluvium

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A1 -- 0 to 10 in	silt loam	moderate	1.87 to 2.07 in	6.6 to 7.3
A2,A3,A4 -- 10 to 35 in	silt loam	moderate	4.79 to 5.29 in	6.6 to 8.4
C -- 35 to 60 in	loam	moderate	4.71 to 5.21 in	6.6 to 8.4

P34B--Splitrock silty clay loam, 2 to 5 percent slopes

Splitrock

Extent: 75 to 90 percent of the unit

Landform(s): hills on till plains

Slope gradient: 2 to 5 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 10 in	silty clay loam	moderate	2.07 to 2.26 in	6.1 to 7.3
Bw1,Bw2 -- 10 to 30 in	silty clay loam	moderate	3.61 to 4.02 in	6.1 to 7.3
2Bk,2BC -- 30 to 80 in	clay loam	moderately slow	7.00 to 8.00 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P34C2--Splitrock silty clay loam, 5 to 9 percent slopes, moderately eroded

Splitrock, moderately eroded

Extent: 75 to 85 percent of the unit

Landform(s): hills on till plains

Slope gradient: 5 to 9 percent

Parent material: loess over till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	moderate	1.65 to 1.81 in	6.1 to 7.3
Bw -- 8 to 26 in	silty clay loam	moderate	3.26 to 3.62 in	6.1 to 7.3
2Bk,2Bck -- 26 to 60 in	clay loam	moderately slow	4.74 to 5.42 in	7.4 to 8.4

P36A--Talcot silty clay loam, 0 to 2 percent slopes, occasionally flooded

Talcot, occasionally flooded

Extent: 80 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: alluvium over outwash

Restrictive feature(s): greater than 60 inches

Flooding: occasional

Ponding: none

Drainage class: poorly drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .28

Land capability, nonirrigated 2w

Hydric soil: yes

Hydrologic group: B/D

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A1,A2 -- 0 to 22 in	silty clay loam	moderate	3.97 to 4.85 in	7.4 to 8.4
Bg -- 22 to 33 in	silty clay loam	moderate	1.87 to 2.20 in	7.4 to 8.4
2Cg -- 33 to 60 in	coarse sand	rapid	0.54 to 1.07 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P37B--Talmo gravelly sandy loam, 2 to 6 percent slopes

Talmo

Extent: 85 to 95 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .10

Land capability, nonirrigated 4s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	gravelly sandy loam	moderately rapid	0.71 to 0.85 in	6.1 to 8.4
AC -- 7 to 10 in	gravelly loamy sand	rapid	0.06 to 0.11 in	7.4 to 8.4
C1,C2 -- 10 to 60 in	very gravelly coarse sand	rapid	1.00 to 2.00 in	7.4 to 8.4

P37D--Talmo gravelly sandy loam, 6 to 35 percent slopes

Talmo

Extent: 85 to 95 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 6 to 35 percent

Parent material: outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: excessively drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 5

Wind erodibility index (WEI): 56

Kw factor (surface layer) .10

Land capability, nonirrigated 7s

Hydric soil: no

Hydrologic group: A

Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 9 in	gravelly sandy loam	moderately rapid	0.91 to 1.09 in	6.1 to 8.4
AC -- 9 to 12 in	gravelly loamy sand	rapid	0.06 to 0.11 in	7.4 to 8.4
C1,C2 -- 12 to 60 in	very gravelly sand	rapid	0.96 to 1.92 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P38B--Thurman sandy loam, 2 to 6 percent slopes

Thurman

Extent: 85 to 95 percent of the unit
Landform(s): hills on outwash plains
Slope gradient: 2 to 6 percent
Parent material: outwash
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: somewhat excessively drained

Soil loss tolerance (T factor): 3
Wind erodibility group (WEG): 3
Wind erodibility index (WEI): 86
Kw factor (surface layer) .20
Land capability, nonirrigated 3e
Hydric soil: no
Hydrologic group: A
Potential for frost action: low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 10 in	sandy loam	moderately rapid	1.28 to 1.48 in	6.1 to 6.5
AC -- 10 to 20 in	sandy loam	moderately rapid	1.23 to 1.43 in	6.1 to 7.3
C1,C2 -- 20 to 60 in	sand	rapid	0.80 to 2.78 in	6.1 to 7.8

P42A--Whitewood silty clay loam, 0 to 2 percent slopes

Whitewood

Extent: 65 to 80 percent of the unit
Landform(s): hills on till plains
Slope gradient: 0 to 2 percent
Parent material: alluvium
Restrictive feature(s): greater than 60 inches
Flooding: none
Ponding: none
Drainage class: poorly drained

Soil loss tolerance (T factor): 5
Wind erodibility group (WEG): 6
Wind erodibility index (WEI): 48
Kw factor (surface layer) .32
Land capability, nonirrigated 2w
Hydric soil: yes
Hydrologic group: C/D
Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,Bw -- 0 to 25 in	silty clay loam	moderately slow	4.79 to 5.54 in	6.1 to 7.3
Bg1,Bg2 -- 25 to 43 in	silty clay loam	moderately slow	3.01 to 3.54 in	6.6 to 7.8
Bkg -- 43 to 60 in	silty clay loam	moderately slow	2.88 to 3.39 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P44E--Shindler clay loam, 15 to 45 percent slopes

Shindler

Extent: 80 to 90 percent of the unit

Landform(s): hills on till plains

Slope gradient: 15 to 45 percent

Parent material: till

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 4L

Wind erodibility index (WEI): 86

Kw factor (surface layer) .20

Land capability, nonirrigated 7e

Hydric soil: no

Hydrologic group: C

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
A -- 0 to 7 in	clay loam	moderately slow	1.13 to 1.28 in	7.4 to 8.4
Bw -- 7 to 11 in	clay loam	moderately slow	0.55 to 0.63 in	7.4 to 8.4
Bk1,Bk2 -- 11 to 35 in	clay loam	moderately slow	3.36 to 3.84 in	7.4 to 8.4
BC -- 35 to 60 in	clay loam	moderately slow	3.47 to 3.97 in	7.4 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P46--Trent silty clay loam, 1 to 3 percent slopes

Trent

Extent: 70 to 90 percent of the unit

Landform(s): drainageways on uplands

Slope gradient: 1 to 3 percent

Parent material: calcareous loess

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: moderately well drained

Soil loss tolerance (T factor): 5

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .28

Land capability, nonirrigated 1

Hydric soil: no

Hydrologic group: C

Potential for frost action: high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	silty clay loam	moderately slow	1.50 to 1.73 in	5.6 to 7.3
A -- 8 to 23 in	silty clay loam	moderately slow	2.92 to 3.38 in	5.6 to 7.3
Bw -- 23 to 44 in	silty clay loam	moderately slow	3.55 to 4.17 in	6.1 to 7.3
Bk -- 44 to 59 in	silt loam	moderate	2.54 to 2.99 in	6.6 to 8.4
C -- 59 to 80 in	silt loam	moderate	3.55 to 4.17 in	6.6 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P48A--Allendorf silty clay loam, 0 to 2 percent slopes

Allendorf

Extent: 80 to 90 percent of the unit

Landform(s): flats on outwash plains

Slope gradient: 0 to 2 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2s

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay loam	moderate	2.69 to 3.12 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 14 to 34 in	silty clay loam	moderate	3.35 to 3.94 in	6.1 to 7.3
2BC,2C1 -- 34 to 60 in	very gravelly loamy coarse sand	very rapid	0.52 to 1.04 in	6.1 to 8.4

P48B--Allendorf silty clay loam, 2 to 6 percent slopes

Allendorf

Extent: 80 to 90 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .24

Land capability, nonirrigated 2e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A -- 0 to 14 in	silty clay loam	moderate	2.69 to 3.12 in	6.1 to 7.3
Bw1,Bw2,Bw3 -- 14 to 34 in	silty clay loam	moderate	3.35 to 3.94 in	6.1 to 7.3
2BC,2C1 -- 34 to 60 in	very gravelly loamy coarse sand	very rapid	0.52 to 1.04 in	6.1 to 8.4

Map Unit Description (MN)

Pipestone County, Minnesota

P56B--Kanaranzi silt loam, 2 to 6 percent slopes

Kanaranzi

Extent: 75 to 85 percent of the unit

Landform(s): hills on outwash plains

Slope gradient: 2 to 6 percent

Parent material: loess over outwash

Restrictive feature(s): greater than 60 inches

Flooding: none

Ponding: none

Drainage class: well drained

Soil loss tolerance (T factor): 3

Wind erodibility group (WEG): 6

Wind erodibility index (WEI): 48

Kw factor (surface layer) .32

Land capability, nonirrigated 3e

Hydric soil: no

Hydrologic group: B

Potential for frost action: moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silt loam	moderate	1.56 to 1.70 in	6.1 to 7.3
BA,Bw -- 7 to 20 in	loam	moderate	2.60 to 2.86 in	6.1 to 7.3
2C1-3 -- 20 to 80 in	very gravelly coarse sand	rapid	1.20 to 2.39 in	6.1 to 8.4

W--Water

Water

Extent: 100 percent of the unit

Landform(s):

Slope gradient:

Parent material:

Restrictive feature(s): greater than 60 inches

Flooding:

Ponding:

Drainage class:

Soil loss tolerance (T factor):

Wind erodibility group (WEG):

Wind erodibility index (WEI):

Kw factor (surface layer)

Land capability, nonirrigated

Hydric soil:

Hydrologic group:

Potential for frost action:

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
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This report provides a semitabular listing of some soil and site properties and interpretations that are valuable in communicating the concept of a map unit. The report also provides easy access to the commonly used conservation planning information in one place. The major soil components in each map unit are displayed. Minor components may be displayed if they are included in the database and are selected at the time the report is generated.