

## Map Unit Description (MN)

Lac Qui Parle 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]

### 31D2--Storden loam, 12 to 18 percent slopes, eroded

#### Storden, moderately eroded

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 12 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

Ap -- 0 to 5 in loam  
Bk -- 5 to 60 in loam

*Permeability*

moderate  
moderate

*Available water*

*capacity* *pH*

1.0 to 1.1 in 7.4 to 8.4  
8.2 to 10.4 in 7.4 to 8.4

### 34--Parnell silty clay loam, depressional

#### Parnell, depressional

*Extent:* 85 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* C/D

*Potential frost action:* high

*Representative soil profile:*

*Texture*

A,Ap -- 0 to 18 in silty clay loam  
Btg1,Btg2 -- 18 to 38 in silty clay  
Btg3 -- 38 to 60 in silty clay loam

*Permeability*

moderately slow  
slow  
slow

*Available water*

*capacity* *pH*

3.3 to 4.0 in 6.1 to 7.3  
2.6 to 3.8 in 6.1 to 7.3  
2.4 to 4.1 in 6.6 to 8.4

### 47--Colvin silty clay loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 47--Colvin silty clay loam

#### Colvin

*Extent:* 75 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

lacustrine deposits *Kw (surface layer):* .32

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	silty clay loam
Bkg --	10 to 25 in	silty clay loam
Cg --	25 to 60 in	silty clay loam

#### *Permeability*

moderately slow
moderate
moderate

#### *Available water*

#### *capacity*

2.0 to 2.2 in	7.4 to 8.4
2.5 to 3.1 in	7.4 to 8.4
5.2 to 6.9 in	7.4 to 8.4

#### *pH*

### 51--La Prairie loam, occasionally flooded

#### La Prairie, occasionally flooded

*Extent:* 90 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	loam
A --	9 to 38 in	loam
Bw --	38 to 50 in	loam
C --	50 to 60 in	stratified fine sandy loam to silty clay loam

#### *Permeability*

moderate
moderate
moderate
moderate

#### *Available water*

#### *capacity*

1.5 to 2.0 in	6.6 to 8.4
5.0 to 6.4 in	6.6 to 8.4
1.8 to 2.6 in	6.6 to 8.4
1.5 to 2.2 in	6.6 to 8.4

#### *pH*

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 60--Glyndon silt loam

#### Glyndon

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	silt loam
Bk --	10 to 32 in	silt loam
C --	32 to 60 in	very fine sandy loam

#### *Available water*

<i>Permeability</i>	<i>capacity</i>	<i>pH</i>
moderate	2.0 to 2.3 in	7.4 to 8.4
moderately rapid	3.7 to 4.4 in	7.4 to 8.4
moderately rapid	4.2 to 5.3 in	7.4 to 8.4

### 67--Bearden silty clay loam

#### Bearden

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 11 in	silty clay loam
Bk --	11 to 46 in	silt loam
BC,C --	46 to 60 in	silt loam

#### *Available water*

<i>Permeability</i>	<i>capacity</i>	<i>pH</i>
moderately slow	1.9 to 2.5 in	7.4 to 8.4
moderately slow	5.6 to 7.7 in	7.4 to 8.4
moderately slow	2.2 to 3.0 in	7.4 to 8.4

### 70--Svea loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 70--Svea loam

#### Svea

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	loam
Bw --	10 to 26 in	loam
Bk --	26 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*      *pH*

2.0 to 2.4 in	6.1 to 7.3
2.7 to 3.6 in	6.6 to 7.3
4.7 to 6.4 in	7.4 to 8.4

### 85--Calco silty clay loam, occasionally flooded

#### Calco, occasionally flooded

*Extent:* 85 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* occasional

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	silty clay loam
A,Bg --	10 to 55 in	silty clay loam
Cg --	55 to 60 in	silty clay loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*      *pH*

2.1 to 2.3 in	7.4 to 8.4
9.5 to 10.4 in	7.4 to 8.4
0.9 to 0.9 in	7.4 to 8.4

### 108--McIntosh silt loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 108--McIntosh silt loam

#### McIntosh

*Extent:* 80 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*layer):* .28

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

lacustrine deposits over till *Kw (surface*

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	silt loam
Bk --	9 to 30 in	silt loam
2Bk,2C --	30 to 60 in	loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	1.8 to 2.2 in	7.4 to 8.4
moderate	3.3 to 4.6 in	7.4 to 8.4
moderate	4.2 to 5.7 in	7.4 to 8.4

### 113--Webster clay loam

#### Webster

*Extent:* 80 percent of the unit

*Landform(s):* swales

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 17 in	clay loam
Bg --	17 to 50 in	clay loam
Cg --	50 to 60 in	loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	3.2 to 3.6 in	6.6 to 7.3
moderate	5.3 to 6.0 in	6.6 to 7.3
moderate	1.7 to 1.9 in	7.4 to 8.4

### 127A--Sverdrup sandy loam, 0 to 2 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 127A--Sverdrup sandy loam, 0 to 2 percent slopes

#### Sverdrup

*Extent:* 85 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 4  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
 outwash *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.2 to 1.4 in	6.1 to 7.3
Bw,2Bw -- 9 to 43 in	loamy sand	moderately rapid	2.7 to 4.7 in	6.1 to 7.3
2C -- 43 to 60 in	sand	rapid	0.3 to 1.0 in	7.4 to 8.4

### 127B--Sverdrup sandy loam, 2 to 6 percent slopes

#### Sverdrup

*Extent:* 85 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 3  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
 outwash *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.5 to 1.8 in	6.1 to 7.3
Bw,2Bw -- 12 to 21 in	sandy loam	moderately rapid	0.7 to 1.3 in	6.1 to 7.3
2C -- 21 to 60 in	sand	rapid	0.8 to 2.3 in	7.4 to 8.4

### 127C--Sverdrup sandy loam, 6 to 12 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 127C--Sverdrup sandy loam, 6 to 12 percent slopes

#### Sverdrup

*Extent:* 90 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 3  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
 outwash *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

#### Representative soil profile:

	Texture
Ap -- 0 to 10 in	sandy loam
Bw,2Bw -- 10 to 15 in	sandy loam
2C -- 15 to 60 in	sand

#### Texture

Permeability	Available water	
	capacity	pH
moderately rapid	1.3 to 1.5 in	6.1 to 7.3
moderately rapid	0.4 to 0.7 in	6.1 to 7.3
rapid	0.9 to 2.7 in	7.4 to 8.4

### 137--Dovray silty clay

#### Dovray

*Extent:* 80 percent of the unit  
*Landform(s):* depressions  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* frequent  
*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4  
*Wind erodibility index (WEI):* 86  
 lacustrine deposits *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3w  
*Hydric soil:* yes  
*Hydrologic group:* C/D  
*Potential frost action:* moderate

#### Representative soil profile:

	Texture
Ap -- 0 to 10 in	silty clay
A -- 10 to 25 in	silty clay
Bg -- 25 to 47 in	silty clay
Cg -- 47 to 60 in	silty clay loam

#### Texture

Permeability	Available water	
	capacity	pH
moderately slow	1.4 to 1.8 in	6.1 to 7.3
moderately slow	2.0 to 2.5 in	6.1 to 7.3
moderately slow	2.8 to 3.5 in	6.6 to 7.3
slow	1.7 to 2.5 in	6.6 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 141A--Egeland sandy loam, 0 to 2 percent slopes

#### Egeland

*Extent:* 80 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
 outwash *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	sandy loam	moderately rapid	1.0 to 1.5 in	6.1 to 7.3
Bw -- 9 to 50 in	sandy loam	moderately rapid	3.7 to 6.1 in	6.1 to 7.3
C -- 50 to 60 in	loamy sand	moderately rapid	0.8 to 1.0 in	6.6 to 8.4

### 141B--Egeland sandy loam, 2 to 6 percent slopes

#### Egeland

*Extent:* 80 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
 outwash *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap,A -- 0 to 13 in	sandy loam	moderately rapid	1.4 to 2.2 in	6.1 to 7.3
Bw -- 13 to 45 in	sandy loam	moderately rapid	2.9 to 4.8 in	6.1 to 7.3
C -- 45 to 60 in	loamy sand	moderately rapid	1.2 to 1.5 in	6.6 to 8.4

### 141C--Egeland loam, 6 to 12 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 141C--Egeland loam, 6 to 12 percent slopes

#### Egeland

*Extent:* 85 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 5  
*Wind erodibility index (WEI):* 56  
 outwash *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 6e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 11 in	loam	moderate	2.0 to 2.2 in	6.1 to 7.3
Bw -- 11 to 25 in	sandy loam	moderately rapid	1.3 to 2.1 in	6.1 to 7.3
C -- 25 to 60 in	loamy sand	moderately rapid	2.8 to 3.5 in	6.6 to 8.4

### 168B--Forman clay loam, 2 to 6 percent slopes

#### Forman

*Extent:* 85 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	clay loam	moderately slow	1.5 to 1.7 in	6.6 to 7.3
Bt -- 9 to 25 in	clay loam	moderately slow	2.4 to 3.1 in	6.6 to 7.3
Bk -- 25 to 60 in	clay loam	moderately slow	4.9 to 6.6 in	7.4 to 8.4

### 184--Hamerly loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 184--Hamerly loam

#### Hamerly

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* somewhat poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

*Representative soil profile:*

	<i>Texture</i>
Ap -- 0 to 9 in	loam
Bk1,Bk2 -- 9 to 29 in	loam
Bk3 -- 29 to 60 in	loam

*Texture*

*Permeability*

moderate
moderate
moderate

*Available water*

*capacity*      *pH*

1.8 to 2.2 in	7.4 to 8.4
3.0 to 3.8 in	7.4 to 8.4
4.3 to 5.8 in	7.4 to 8.4

### 210--Fulda silty clay

#### Fulda

*Extent:* 65 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4

*Wind erodibility index (WEI):* 86

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* C/D

*Potential frost action:* high

*Representative soil profile:*

	<i>Texture</i>
Ap,A -- 0 to 13 in	silty clay
Bg -- 13 to 28 in	silty clay
Cg -- 28 to 60 in	silty clay

*Texture*

*Permeability*

slow
slow
slow

*Available water*

*capacity*      *pH*

1.8 to 2.6 in	6.6 to 7.3
1.9 to 2.4 in	6.6 to 7.3
5.1 to 6.1 in	7.4 to 8.4

### 212A--Sinai silty clay loam, 1 to 3 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 212A--Sinai silty clay loam, 1 to 3 percent slopes

#### Sinai

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* C

*Potential 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 10 in	silty clay loam	moderately slow	1.7 to 2.2 in	6.1 to 7.3
A -- 10 to 17 in	silty clay loam	slow	0.7 to 1.3 in	6.6 to 7.3
Bw -- 17 to 25 in	silty clay	slow	0.8 to 1.5 in	6.6 to 7.3
Bk -- 25 to 60 in	stratified silt loam to silty clay	slow	3.5 to 6.7 in	7.4 to 8.4

### 212B--Sinai silty clay, 3 to 6 percent slopes

#### Sinai

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 3 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4

*Wind erodibility index (WEI):* 86

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* C

*Potential 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 10 in	silty clay	slow	1.3 to 1.6 in	6.1 to 7.3
A -- 10 to 19 in	silty clay	slow	1.5 to 1.7 in	6.6 to 7.3
Bw -- 19 to 45 in	silty clay	slow	2.9 to 4.4 in	6.6 to 7.3
Bk -- 45 to 60 in	stratified silt loam to silty clay	slow	1.6 to 2.5 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 212B--Sinai silty clay, 3 to 6 percent slopes

### 219--Rolfe silt loam

#### Rolfe

*Extent:* 75 percent of the unit  
*Landform(s):* depressions  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* frequent  
*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 3  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .37  
*Land capability class, nonirrigated:* 3w  
*Hydric soil:* yes  
*Hydrologic group:* C  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
Ap,A,E -- 0 to 22 in	silt loam	moderate	4.9 to 5.3 in	5.6 to 7.3
Btg -- 22 to 34 in	silty clay	slow	1.3 to 1.5 in	6.1 to 7.3
2Btg,2Cg -- 34 to 60 in	clay loam	moderate	3.6 to 4.2 in	6.1 to 8.4

### 220D2--Langhei loam, 12 to 18 percent slopes, eroded

#### Langhei, moderately eroded

*Extent:* 75 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 12 to 18 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .32  
*Land capability class, nonirrigated:* 6e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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 6 in	loam	moderate	1.0 to 1.3 in	7.4 to 8.4
Bk -- 6 to 16 in	loam	moderate	1.5 to 1.9 in	7.4 to 8.4
C -- 16 to 60 in	loam	moderate	6.6 to 8.3 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 220D2--Langhei loam, 12 to 18 percent slopes, eroded

### 236--Vallers clay loam

#### Vallers

*Extent:* 75 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

		<i>Texture</i>
Ap,A --	0 to 15 in	clay loam
Bkg1,Bkg2 --	15 to 30 in	clay loam
Bkg3 --	30 to 60 in	clay loam

#### *Texture*

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

2.7 to 3.3 in
2.2 to 2.8 in
5.1 to 5.7 in

#### *pH*

7.4 to 8.4
7.4 to 8.4
7.4 to 8.4

### 246--Marysland loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 246--Marysland loam

#### Marysland

*Extent:* 85 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

outwash *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap,Ak --	0 to 17 in	loam
Bkg --	17 to 25 in	loam
2Cg --	25 to 60 in	stratified coarse sand to gravelly coarse sand to fine sand to fine sand

#### *Permeability*

moderate  
moderate  
rapid

#### *Available water*

#### *capacity*

2.9 to 3.7 in  
1.2 to 1.6 in  
0.7 to 2.4 in

#### *pH*

7.4 to 8.4  
7.4 to 8.4  
7.4 to 8.4

### 276--Oldham silty clay

#### Oldham

*Extent:* 75 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* C/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 17 in	silty clay
Bg --	17 to 55 in	silty clay
2Cg --	55 to 60 in	clay loam

#### *Permeability*

slow  
moderately slow  
moderately slow

#### *Available water*

#### *capacity*

2.2 to 3.2 in  
5.3 to 7.6 in  
0.7 to 0.9 in

#### *pH*

7.4 to 7.8  
7.4 to 8.4  
7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 284B--Poinsett silty clay loam, 1 to 4 percent slopes

#### Poinsett

*Extent:* 75 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 1 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*lacustrine deposits Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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 12 in	silty clay loam	moderate	2.2 to 2.6 in	6.1 to 7.3
Bw -- 12 to 20 in	silty clay loam	moderate	1.5 to 1.7 in	6.1 to 7.3
Bk1 -- 20 to 26 in	silt loam	moderate	1.1 to 1.2 in	7.4 to 8.4
Bk2,C -- 26 to 60 in	clay loam	moderately slow	5.4 to 6.4 in	7.4 to 8.4

### 288F--Esmond loam, 18 to 40 percent slopes

#### Esmond

*Extent:* 70 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 18 to 40 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
*till Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 7e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	loam	moderate	1.4 to 1.6 in	7.4 to 8.4
Bk,C -- 7 to 60 in	loam	moderate	7.4 to 11.6 in	7.4 to 8.4

### 290B--Rothsay silt loam, 1 to 4 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 290B--Rothsay silt loam, 1 to 4 percent slopes

#### Rothsay

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 4 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 5

*Wind erodibility index (WEI):* 56

lacustrine deposits *Kw (surface layer):* .32

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	silt loam
Bw --	10 to 25 in	very fine sandy loam
Bk,C --	25 to 60 in	very fine sandy loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	2.2 to 2.4 in	6.6 to 7.3
moderate	2.6 to 3.4 in	6.6 to 7.3
moderate	6.9 to 7.6 in	7.4 to 8.4

### 293B--Swenoda loam, 2 to 6 percent slopes

#### Swenoda

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 5

*Wind erodibility index (WEI):* 56

outwash over till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 10 in	loam
Bw --	10 to 25 in	sandy loam
2Bk --	25 to 60 in	loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	1.8 to 2.0 in	6.1 to 7.3
moderately rapid	1.7 to 2.6 in	6.6 to 7.3
moderate	5.9 to 6.9 in	7.4 to 8.4

### 314--Spottswood loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 314--Spottswood loam

#### Spottswood

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

outwash *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

Ap --	0 to 8 in	loam
Bw --	8 to 32 in	loam
2C --	32 to 60 in	very gravelly sand

*Permeability*

moderate
moderate
rapid

*Available water*

*capacity*

1.4 to 1.7 in	6.1 to 7.3
4.3 to 5.3 in	6.6 to 8.4
0.8 to 1.7 in	7.4 to 8.4

*pH*

### 338--Waubay silty clay loam

#### Waubay

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap,A --	0 to 12 in	silty clay loam
Bw --	12 to 23 in	silty clay loam
Bk --	23 to 34 in	silty clay loam
C --	34 to 60 in	silt loam

*Permeability*

moderate
moderate
moderate
moderate

*Available water*

*capacity*

2.2 to 2.6 in	6.1 to 7.3
2.0 to 2.3 in	6.6 to 7.3
1.9 to 2.2 in	7.4 to 8.4
4.2 to 4.7 in	7.4 to 8.4

*pH*

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 339--Fordville loam

#### Fordville

*Extent:* 80 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 0 to 4 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 4  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 outwash *Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 2s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	loam	moderate	1.6 to 1.8 in	6.1 to 7.3
Bw1 -- 9 to 16 in	loam	moderate	1.3 to 1.5 in	6.1 to 7.3
Bw2 -- 16 to 21 in	loam	moderately rapid	0.6 to 0.9 in	6.1 to 8.4
2C -- 21 to 60 in	gravelly sand	rapid	1.2 to 2.3 in	7.4 to 8.4

### 341A--Arvilla sandy loam, 0 to 2 percent slopes

#### Arvilla

*Extent:* 85 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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  
 outwash *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 13 in	sandy loam	moderately rapid	1.7 to 1.9 in	6.1 to 7.3
Bw -- 13 to 20 in	sandy loam	moderately rapid	0.7 to 0.9 in	6.6 to 7.3
2C -- 20 to 60 in	gravelly coarse sand	rapid	0.8 to 2.0 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 341A--Arvilla sandy loam, 0 to 2 percent slopes

### 341B--Arvilla sandy loam, 2 to 6 percent slopes

#### Arvilla

*Extent:* 90 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*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

outwash *K<sub>w</sub> (surface layer):* .20

*Land capability class, nonirrigated:* 4s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 10 in	sandy loam
Bw --	10 to 13 in	sandy loam
2C --	13 to 60 in	gravelly coarse sand

#### *Available water*

<i>Permeability</i>	<i>capacity</i>	<i>pH</i>
moderately rapid	1.3 to 1.5 in	6.1 to 7.3
moderately rapid	0.3 to 0.4 in	6.6 to 7.3
rapid	0.9 to 2.3 in	7.4 to 8.4

### 341C--Arvilla sandy loam, 6 to 12 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 341C--Arvilla sandy loam, 6 to 12 percent slopes

#### Arvilla

*Extent:* 90 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*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

outwash *Kw (surface layer):* .20

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* low

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 9 in	sandy loam
Bw --	9 to 14 in	sandy loam
2C --	14 to 60 in	gravelly coarse sand

#### *Available water*

<i>Permeability</i>	<i>capacity</i>	<i>pH</i>
moderately rapid	1.2 to 1.4 in	6.1 to 7.3
moderately rapid	0.6 to 0.7 in	6.6 to 7.3
rapid	0.9 to 2.3 in	7.4 to 8.4

### 344--Quam silty clay loam

#### Quam

*Extent:* 75 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	silty clay loam
A --	9 to 54 in	silty clay loam
Cg --	54 to 60 in	silty clay loam

#### *Available water*

<i>Permeability</i>	<i>capacity</i>	<i>pH</i>
moderately slow	1.6 to 2.0 in	6.6 to 7.3
moderately slow	7.2 to 9.9 in	6.6 to 7.3
moderately slow	0.8 to 1.1 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 347--Malachy loam

#### Malachy

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

outwash *Kw (surface layer):* .20

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 18 in	loam
Bk --	18 to 30 in	sandy loam
2Bk,2C --	30 to 60 in	loamy fine sand

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	3.6 to 4.0 in	7.4 to 8.4
moderately rapid	1.4 to 2.2 in	7.4 to 8.4
rapid	0.6 to 3.0 in	7.4 to 8.4

### 375--Forada loam

#### Forada

*Extent:* 75 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 4

*Wind erodibility group (WEG):* 5

*Wind erodibility index (WEI):* 56

outwash *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 21 in	loam
Bg --	21 to 35 in	sandy loam
2Cg --	35 to 60 in	gravelly loamy sand

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	4.2 to 4.6 in	6.1 to 7.3
moderately rapid	1.7 to 2.7 in	6.1 to 7.3
rapid	0.5 to 2.5 in	6.6 to 8.4

### 396D2--Sisseton loam, 12 to 18 percent slopes, eroded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 396D2--Sisseton loam, 12 to 18 percent slopes, eroded

#### Sisseton, moderately eroded

*Extent:* 85 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 12 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 6e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	0.9 to 1.1 in	7.4 to 8.4
Bk -- 6 to 18 in	loam	moderate	2.0 to 2.4 in	7.4 to 8.4
C -- 18 to 60 in	stratified sandy loam to silt	moderate	5.8 to 7.9 in	7.4 to 8.4

### 402F--Sioux gravelly loam, 12 to 40 percent slopes

#### Sioux

*Extent:* 85 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 12 to 40 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 8

*Wind erodibility index (WEI):* 0

outwash *Kw (surface layer):* .15

*Land capability class, nonirrigated:* 7s

*Hydric soil:* no

*Hydrologic group:* A

*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
A -- 0 to 7 in	gravelly loam	moderately rapid	0.7 to 1.1 in	7.4 to 8.4
AC -- 7 to 10 in	gravelly sandy loam	moderately rapid	0.3 to 0.4 in	7.4 to 8.4
C -- 10 to 60 in	very gravelly sand	rapid	1.5 to 3.0 in	7.4 to 8.4

### 418--Lamoure silty clay loam, occasionally flooded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 418--Lamoure silty clay loam, occasionally flooded

#### Lamoure, occasionally flooded

*Extent:* 75 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* occasional

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	silty clay loam
A --	9 to 55 in	silty clay loam
Cg --	55 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

1.7 to 2.0 in	7.4 to 8.4
7.8 to 9.2 in	7.4 to 8.4
0.8 to 0.9 in	7.4 to 8.4

#### *pH*

### 421B--Ves loam, 1 to 4 percent slopes

#### Ves

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 4 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	loam
Bw --	10 to 25 in	loam
Bk --	25 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

1.7 to 2.2 in	6.1 to 7.3
2.3 to 2.9 in	6.6 to 7.3
5.2 to 6.6 in	7.4 to 8.4

#### *pH*

### 423--Seaforth loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 423--Seaforth loam

#### Seaforth

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap --	0 to 9 in	loam
Bk --	9 to 30 in	loam
C --	30 to 60 in	loam

*Permeability*

*Available water*

*capacity*

*pH*

moderate	1.5 to 2.2 in	7.4 to 8.4
moderate	3.1 to 4.0 in	7.4 to 8.4
moderate	5.1 to 5.7 in	7.4 to 8.4

### 434--Perella silty clay loam

#### Perella

*Extent:* 75 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap,A --	0 to 16 in	silty clay loam
Bg --	16 to 25 in	silty clay loam
Bkg,Cg --	25 to 60 in	silt loam

*Permeability*

*Available water*

*capacity*

*pH*

moderate	2.9 to 3.7 in	6.6 to 7.3
moderate	1.4 to 2.0 in	6.6 to 7.3
moderate	5.5 to 7.6 in	7.4 to 8.4

### 437F--Buse loam, 18 to 40 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 437F--Buse loam, 18 to 40 percent slopes

#### Buse

*Extent:* 70 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 18 to 40 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 7e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### Representative soil profile:

A --	0 to 7 in	loam
Bk --	7 to 60 in	loam

#### Texture

#### Permeability

moderate
moderate

#### Available water

capacity	pH
1.2 to 1.6 in	7.4 to 8.4
7.4 to 10.0 in	7.4 to 8.4

### 450--Rauville silty clay loam, frequently flooded

#### Rauville, frequently flooded

*Extent:* 70 percent of the unit  
*Landform(s):* flood plains  
*Slope gradient:* 0 to 1 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* frequent  
*Ponding:* none  
*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 8  
*Wind erodibility index (WEI):* 0  
 alluvium *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 8w  
*Hydric soil:* yes  
*Hydrologic group:* D  
*Potential frost action:* high

#### Representative soil profile:

A --	0 to 42 in	silty clay loam
Cg --	42 to 60 in	silty clay loam

#### Texture

#### Permeability

moderate
moderate

#### Available water

capacity	pH
8.0 to 9.3 in	7.4 to 8.4
3.0 to 3.5 in	7.4 to 8.4

### 494B--Darnen loam, 2 to 6 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 494B--Darnen loam, 2 to 6 percent slopes

#### Darnen

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*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

colluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap,A,AB --	0 to 32 in	loam
Bw --	32 to 44 in	loam
2Bk --	44 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

6.4 to 7.7 in	6.6 to 7.3
1.8 to 2.3 in	6.1 to 7.3
2.2 to 3.0 in	7.4 to 8.4

#### *pH*

### 497--Hantho silt loam

#### Hantho

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* moderately well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 5

*Wind erodibility index (WEI):* 56

lacustrine deposits *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	silt loam
Bw --	10 to 22 in	silt loam
Bk,C --	22 to 60 in	very fine sandy loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

2.2 to 2.4 in	6.6 to 7.3
2.1 to 2.7 in	6.6 to 7.3
6.4 to 8.3 in	7.4 to 8.4

#### *pH*

### 509--Vallers clay loam, very stony

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 509--Vallars clay loam, very stony

#### Vallars, very stony

*Extent:* 75 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

A --	0 to 13 in	clay loam
Bkg1 --	13 to 19 in	clay loam
Bkg2 --	19 to 60 in	loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	2.3 to 2.9 in	7.4 to 8.4
moderate	0.9 to 1.1 in	7.4 to 8.4
moderate	7.0 to 7.8 in	7.4 to 8.4

### 574--Du Page loam, occasionally flooded

#### Du Page, occasionally flooded

*Extent:* 85 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap,A --	0 to 46 in	loam
C --	46 to 60 in	sandy loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	10.1 to 11.1 in	7.4 to 8.4
moderate	1.4 to 2.8 in	7.4 to 8.4

### 597--Tara silt loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 597--Tara silt loam

#### Tara

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

layer): .28

*Restrictive feature(s):*

*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

lacustrine deposits over till *Kw (surface*

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	silt loam
Bw --	10 to 25 in	silt loam
Bk1 --	25 to 36 in	silt loam
2Bk2 --	36 to 60 in	clay loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	2.0 to 2.4 in	6.1 to 7.3
moderate	2.6 to 3.4 in	6.6 to 7.3
moderate	1.8 to 2.2 in	7.4 to 8.4
moderate	3.6 to 4.6 in	7.4 to 8.4

### 610--Calco silty clay loam, frequently flooded

#### Calco, frequently flooded

*Extent:* 85 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* frequent

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 5w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

A --	0 to 41 in	silty clay loam
Bg --	41 to 46 in	silty clay loam
Cg --	46 to 60 in	silty clay loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	8.6 to 9.4 in	7.4 to 8.4
moderate	1.1 to 1.2 in	7.4 to 8.4
moderate	2.5 to 2.8 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 680--Parnell silty clay loam

#### Parnell

*Extent:* 80 percent of the unit  
*Landform(s):* swales  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* C/D  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap,A -- 0 to 17 in	silty clay loam	moderately slow	3.0 to 3.7 in	6.1 to 7.3
Btg1,Btg2 -- 17 to 39 in	silty clay	slow	2.9 to 4.2 in	6.1 to 7.3
Btg3 -- 39 to 60 in	silty clay loam	moderately slow	2.9 to 4.0 in	6.6 to 8.4

### 694C2--Zell silt loam, 6 to 12 percent slopes, eroded

#### Zell, moderately eroded

*Extent:* 80 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 lacustrine deposits *Kw (surface layer):* .32  
*Land capability class, nonirrigated:* 6e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 7 in	silt loam	moderate	1.3 to 1.6 in	7.4 to 8.4
Bk -- 7 to 11 in	silt loam	moderate	0.6 to 0.8 in	7.4 to 8.4
C -- 11 to 60 in	silt loam	moderate	7.3 to 9.8 in	7.4 to 8.4

### 706--Bigstone silty clay loam, ponded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 706--Bigstone silty clay loam, ponded

#### Bigstone, ponded

*Extent:* 70 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 8

*Wind erodibility index (WEI):* 0

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 8w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

A1 --	0 to 11 in	silty clay loam
A2 --	11 to 30 in	silty clay loam
2Cg --	30 to 60 in	clay loam

#### *Permeability*

moderately slow
moderate
moderate

#### *Available water*

#### *capacity*

2.0 to 2.4 in	7.4 to 8.4
3.0 to 4.2 in	7.4 to 8.4
4.2 to 5.7 in	7.4 to 8.4

#### *pH*

### 724--Bigstone silty clay loam

#### Bigstone

*Extent:* 70 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	silty clay loam
A --	9 to 54 in	silty clay loam
2Cg --	54 to 60 in	clay loam

#### *Permeability*

moderately slow
moderate
moderate

#### *Available water*

#### *capacity*

1.6 to 2.0 in	7.4 to 8.4
7.2 to 9.9 in	7.4 to 8.4
0.8 to 1.1 in	7.4 to 8.4

#### *pH*

### 741B--Poinsett-Buse complex, 2 to 6 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 741B--Poinsett-Buse complex, 2 to 6 percent slopes

#### Poinsett

*Extent:* 45 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 7  
*Wind erodibility index (WEI):* 38  
*lacustrine deposits Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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 9 in	silty clay loam	moderate	1.7 to 2.0 in	6.1 to 7.3
Bw -- 9 to 17 in	silty clay loam	moderate	1.4 to 1.7 in	6.1 to 7.3
Bk,C -- 17 to 60 in	silt loam	moderate	7.7 to 9.0 in	7.4 to 8.4

#### Buse

*Extent:* 30 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
*till Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.5 to 2.0 in	7.4 to 8.4
Bk -- 9 to 60 in	loam	moderate	7.1 to 9.6 in	7.4 to 8.4

### 748B--Hamlet loam, 1 to 4 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 748B--Hamlet loam, 1 to 4 percent slopes

#### Hamlet

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 4 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .32

*Land capability class, nonirrigated:* 2c

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	loam
Bw --	10 to 33 in	loam
Bk,C --	33 to 60 in	loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderate	2.0 to 2.2 in	6.6 to 7.3
moderate	3.4 to 4.3 in	6.6 to 7.3
moderate	3.8 to 5.2 in	7.9 to 8.4

### 769A--Mehurin clay loam, 0 to 2 percent slopes

#### Mehurin

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* C

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	clay loam
Bt1 --	9 to 14 in	clay loam
Bt2 --	14 to 21 in	clay loam
Bk --	21 to 60 in	clay loam

#### *Permeability*

#### *Available water*

#### *capacity*

#### *pH*

moderately slow	1.5 to 1.7 in	6.1 to 7.3
moderately slow	0.5 to 1.0 in	6.1 to 7.3
moderate	1.0 to 1.3 in	6.1 to 7.3
moderate	5.8 to 7.4 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 769B--Mehurin clay loam, 2 to 6 percent slopes

#### Mehurin

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 2 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* C

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 8 in	clay loam
Bt1 --	8 to 17 in	clay loam
Bt2 --	17 to 30 in	clay loam
Bk --	30 to 60 in	clay loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderately slow	1.3 to 1.5 in	6.1 to 7.3
moderately slow	0.9 to 1.7 in	6.1 to 7.3
moderate	1.9 to 2.5 in	6.1 to 7.3
moderate	4.5 to 5.7 in	7.4 to 8.4

### 774--Svea loam, very stony

#### Svea, very stony

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 6s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 10 in	loam
Bw --	10 to 23 in	loam
Bk --	23 to 60 in	loam

<i>Permeability</i>	<i>Available water</i>	
	<i>capacity</i>	<i>pH</i>
moderate	2.0 to 2.4 in	6.1 to 7.3
moderate	2.2 to 2.9 in	6.6 to 7.3
moderate	5.2 to 7.0 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 777C2--Sisseton-Heimdal complex, 6 to 12 percent slopes, eroded

#### Sisseton, moderately eroded

*Extent:* 60 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 6e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 6 in	loam	moderate	0.9 to 1.1 in	7.4 to 8.4
Bk -- 6 to 24 in	loam	moderate	2.9 to 3.6 in	7.4 to 8.4
C -- 24 to 60 in	stratified sandy loam to silt	moderate	5.0 to 6.8 in	7.4 to 8.4

#### Heimdal, moderately eroded

*Extent:* 30 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 5  
*Wind erodibility index (WEI):* 56  
 till *Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.6 to 1.7 in	6.1 to 7.3
Bw -- 8 to 26 in	loam	moderate	2.2 to 3.4 in	6.1 to 7.3
Bk -- 26 to 47 in	loam	moderate	2.3 to 4.0 in	7.4 to 8.4
C -- 47 to 60 in	loam	moderate	1.4 to 2.1 in	7.4 to 8.4

### 883--Du Page-Zumbro complex, occasionally flooded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 883--Du Page-Zumbro complex, occasionally flooded

#### Du Page, occasionally flooded

*Extent:* 55 percent of the unit  
*Landform(s):* flood plains  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*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  
 alluvium *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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 38 in	loam	moderate	8.4 to 9.2 in	7.4 to 8.4
C -- 38 to 60 in	sandy loam	moderate	2.2 to 4.3 in	7.4 to 8.4

#### Zumbro, occasionally flooded

*Extent:* 30 percent of the unit  
*Landform(s):* flood plains  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* occasional  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 3  
*Wind erodibility group (WEG):* 3  
*Wind erodibility index (WEI):* 86  
 alluvium *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 3s  
*Hydric soil:* no  
*Hydrologic group:* A  
*Potential 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	1.2 to 1.6 in	7.4 to 7.8
Bw -- 9 to 32 in	loamy sand	rapid	2.3 to 2.7 in	7.4 to 7.8
C1 -- 32 to 47 in	loamy sand	rapid	0.9 to 1.6 in	7.4 to 7.8
C2 -- 47 to 60 in	sand	rapid	0.3 to 0.9 in	7.4 to 7.8

### 891B--Doland-Buse complex, 3 to 6 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 891B--Doland-Buse complex, 3 to 6 percent slopes

#### Doland

*Extent:* 45 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 3 to 6 percent

*Parent material:*

*layer):* .32

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

lacustrine deposits over till *Kw (surface*

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

Ap --	0 to 10 in	silt loam
Bw --	10 to 28 in	silt loam
2Bk --	28 to 60 in	clay loam

*Permeability*

*Available water*

*capacity*

*pH*

moderate	2.4 to 2.8 in	6.1 to 7.3
moderate	3.1 to 4.0 in	6.1 to 7.3
moderate	4.5 to 6.1 in	6.6 to 8.4

#### Buse

*Extent:* 25 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 3 to 6 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

Ap --	0 to 8 in	loam
Bk --	8 to 60 in	loam

*Permeability*

*Available water*

*capacity*

*pH*

moderate	1.3 to 1.7 in	7.4 to 8.4
moderate	7.3 to 9.9 in	7.4 to 8.4

### 902B--Barnes-Buse complex, 2 to 6 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 902B--Barnes-Buse complex, 2 to 6 percent slopes

#### Barnes

*Extent:* 50 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	loam	moderate	1.8 to 2.4 in	6.1 to 7.3
Bw -- 10 to 21 in	loam	moderate	1.7 to 2.1 in	6.1 to 7.3
Bk,C -- 21 to 60 in	loam	moderate	5.5 to 7.4 in	7.4 to 8.4

#### Buse

*Extent:* 35 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.3 to 1.7 in	7.4 to 8.4
Bk -- 8 to 60 in	loam	moderate	7.3 to 9.9 in	7.4 to 8.4

### 915C2--Buse-Forman complex, 6 to 12 percent slopes, eroded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 915C2--Buse-Forman complex, 6 to 12 percent slopes, eroded

#### Buse, moderately eroded

*Extent:* 50 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### Representative soil profile:

	Texture
Ap -- 0 to 7 in	loam
Bk -- 7 to 60 in	clay loam

#### Texture

Permeability	Available water	
	capacity	pH
moderately slow	1.2 to 1.6 in	7.4 to 8.4
moderately slow	7.4 to 10.0 in	7.4 to 8.4

#### Forman, moderately eroded

*Extent:* 35 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### Representative soil profile:

	Texture
Ap -- 0 to 9 in	clay loam
Bt -- 9 to 15 in	clay loam
Bk -- 15 to 60 in	clay loam

#### Texture

Permeability	Available water	
	capacity	pH
moderately slow	1.5 to 1.7 in	6.6 to 7.3
moderately slow	0.9 to 1.1 in	6.6 to 7.3
moderately slow	6.3 to 8.5 in	7.4 to 8.4

### 942C2--Langhei-Barnes complex, 6 to 12 percent slopes, eroded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 942C2--Langhei-Barnes complex, 6 to 12 percent slopes, eroded

#### Langhei, moderately eroded

*Extent:* 55 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .32  
*Land capability class, nonirrigated:* 4e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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 5 in	loam	moderate	0.9 to 1.1 in	7.4 to 8.4
Bk -- 5 to 23 in	loam	moderate	2.7 to 3.4 in	7.9 to 8.4
C -- 23 to 60 in	loam	moderate	5.6 to 7.0 in	7.4 to 8.4

#### Barnes, moderately eroded

*Extent:* 30 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.6 to 2.2 in	6.1 to 7.3
Bw -- 9 to 32 in	loam	moderate	3.4 to 4.3 in	6.1 to 7.3
Bk,C -- 32 to 60 in	loam	moderate	3.9 to 5.3 in	7.4 to 8.4

### 954B--Ves-Swanlake complex, 3 to 6 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 954B--Ves-Swanlake complex, 3 to 6 percent slopes

#### Ves

*Extent:* 45 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 9 in loam		moderate	1.5 to 2.0 in	6.1 to 7.3
Bw -- 9 to 21 in loam		moderate	1.8 to 2.2 in	6.6 to 7.3
Bk -- 21 to 60 in loam		moderate	5.8 to 7.4 in	7.4 to 8.4

#### Swanlake

*Extent:* 30 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 8 in loam		moderate	1.6 to 1.9 in	7.4 to 8.4
Bk -- 8 to 60 in loam		moderate	8.8 to 9.9 in	7.4 to 8.4

### 954C2--Storden-Ves complex, 6 to 12 percent slopes, eroded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 954C2--Storden-Ves complex, 6 to 12 percent slopes, eroded

#### Storden, moderately eroded

*Extent:* 50 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### *Representative soil profile:*

Ap --	0 to 5 in	loam
Bk --	5 to 60 in	loam

#### *Texture*

#### *Permeability*

moderate
moderate

#### *Available water*

<i>capacity</i>	<i>pH</i>
-----------------	-----------

1.0 to 1.1 in	7.4 to 8.4
8.2 to 10.4 in	7.4 to 8.4

#### Ves, moderately eroded

*Extent:* 30 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 6 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till *Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential frost action:* moderate

#### *Representative soil profile:*

Ap --	0 to 8 in	loam
Bw --	8 to 22 in	loam
Bk --	22 to 60 in	loam

#### *Texture*

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

<i>capacity</i>	<i>pH</i>
-----------------	-----------

1.3 to 1.7 in	6.1 to 7.3
2.1 to 2.7 in	6.6 to 7.3
5.7 to 7.2 in	7.4 to 8.4

### 969B--Zell-Rothsay complex, 3 to 6 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 969B--Zell-Rothsay complex, 3 to 6 percent slopes

#### Zell

*Extent:* 45 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
*lacustrine depositsKw (surface layer):* .32  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	silt loam	moderate	1.7 to 2.0 in	7.4 to 8.4
Bk -- 9 to 21 in	silt loam	moderate	1.8 to 2.4 in	7.4 to 8.4
C -- 21 to 60 in	silt loam	moderate	5.8 to 7.8 in	7.4 to 8.4

#### Rothsay

*Extent:* 25 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 5  
*Wind erodibility index (WEI):* 56  
*lacustrine depositsKw (surface layer):* .32  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	silt loam	moderate	2.0 to 2.2 in	6.6 to 7.3
Bw -- 9 to 23 in	very fine sandy loam	moderate	2.3 to 3.0 in	6.6 to 7.3
Bk,C -- 23 to 60 in	silt loam	moderate	7.4 to 8.1 in	7.4 to 8.4

### 1013--Pits, quarry

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1013--Pits, quarry

#### Pits, quarry

*Extent:* 95 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 0 to 20 percent

*Parent material:*

*Restrictive feature(s):* bedrock (lithic) at 0 to 4 inches

*Flooding:* none

*Ponding:* none

*Drainage class:*

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):*

*Wind erodibility index (WEI):*

outwash *Kw (surface layer):*

*Land capability class, nonirrigated:* 8s

*Hydric soil:*

*Hydrologic group:*

*Potential frost action:* none

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

### 1016--Udorthents, loamy

#### Udorthents, loamy

*Extent:* 85 percent of the unit

*Landform(s):* moraines

*Slope gradient:*

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):*

*Wind erodibility index (WEI):*

outwash *Kw (surface layer):*

*Land capability class, nonirrigated:* 6s

*Hydric soil:*

*Hydrologic group:*

*Potential frost action:* moderate

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

### 1030--Udorthents-pits, gravel complex

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1030--Udorthents-pits, gravel complex

#### Udorthents

*Extent:* 50 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:*  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:*

*Soil loss tolerance (T factor):*  
*Wind erodibility group (WEG):*  
*Wind erodibility index (WEI):*  
 outwash      *Kw (surface layer):*  
*Land capability class, nonirrigated:*  
*Hydric soil:*  
*Hydrologic group:*  
*Potential frost action:*

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

#### Pits, gravel

*Extent:* 35 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:*  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:*

*Soil loss tolerance (T factor):*  
*Wind erodibility group (WEG):*  
*Wind erodibility index (WEI):*  
 outwash      *Kw (surface layer):*  
*Land capability class, nonirrigated:*  
*Hydric soil:*  
*Hydrologic group:*  
*Potential frost action:*

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

### 1051--Glencoe silty clay loam, ponded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1051--Glencoe silty clay loam, ponded

#### Glencoe, ponded

*Extent:* 85 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 8

*Wind erodibility index (WEI):* 0

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 8w

*Hydric soil:* yes

*Hydrologic group:* D

*Potential frost action:* high

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
A -- 0 to 45 in	silty clay loam	moderate	8.1 to 9.9 in	6.1 to 7.3
2Bg -- 45 to 57 in	clay loam	moderate	1.8 to 2.3 in	6.6 to 7.3
2Cg -- 57 to 60 in	loam	moderate	0.4 to 0.5 in	7.4 to 7.8

### 1106C--Storden-Hawick-Ves complex, 6 to 12 percent slopes, eroded

#### Storden, moderately eroded

*Extent:* 35 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 5 in	loam	moderate	1.0 to 1.1 in	7.4 to 8.4
Bk -- 5 to 60 in	loam	moderate	8.2 to 10.4 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1106C--Storden-Hawick-Ves complex, 6 to 12 percent slopes, eroded

#### Hawick

*Extent:* 30 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 8

*Wind erodibility index (WEI):* 0

outwash *Kw (surface layer):* .10

*Land capability class, nonirrigated:* 4s

*Hydric soil:* no

*Hydrologic group:* A

*Potential frost action:* low

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 9 in	gravelly sandy loam	rapid	0.3 to 1.2 in	7.4 to 7.8
Bw -- 9 to 20 in	gravelly loamy coarse sand	rapid	0.3 to 1.1 in	7.4 to 7.8
C -- 20 to 60 in	gravelly coarse sand	rapid	0.8 to 2.4 in	7.4 to 8.4

#### Ves, moderately eroded

*Extent:* 25 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.3 to 1.7 in	6.1 to 7.3
Bw -- 8 to 23 in	loam	moderate	2.2 to 2.8 in	6.6 to 7.3
Bk -- 23 to 60 in	loam	moderate	5.6 to 7.0 in	7.4 to 8.4

### 1107D--Sisseton-Sioux-Heimdal complex, 6 to 18 percent slopes, eroded

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1107D--Sisseton-Sioux-Heimdal complex, 6 to 18 percent slopes, eroded

#### Sisseton, moderately eroded

*Extent:* 35 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 6e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

Ap --	0 to 5 in	loam
Bk --	5 to 31 in	loam
C --	31 to 60 in	stratified sandy loam to silt

*Permeability*

*Available water*

*capacity*

*pH*

moderate	0.8 to 0.9 in	7.4 to 8.4
moderate	4.2 to 5.2 in	7.4 to 8.4
moderate	4.0 to 5.5 in	7.4 to 8.4

#### Sioux

*Extent:* 25 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* excessively drained

*Soil loss tolerance (T factor):* 3

*Wind erodibility group (WEG):* 8

*Wind erodibility index (WEI):* 0

outwash *Kw (surface layer):* .15

*Land capability class, nonirrigated:* 6s

*Hydric soil:* no

*Hydrologic group:* A

*Potential frost action:* low

*Representative soil profile:*

*Texture*

Ap --	0 to 7 in	gravelly loam
C1 --	7 to 29 in	gravelly loamy sand
C2 --	29 to 60 in	very gravelly sand

*Permeability*

*Available water*

*capacity*

*pH*

moderately rapid	0.7 to 1.1 in	7.4 to 8.4
moderately rapid	2.2 to 3.3 in	7.4 to 8.4
rapid	0.9 to 1.8 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1107D--Sisseton-Sioux-Heimdal complex, 6 to 18 percent slopes, eroded

#### Heimdal, moderately eroded

*Extent:* 20 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 18 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 5

*Wind erodibility index (WEI):* 56

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 4e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 7 in	loam
Bw --	7 to 21 in	sandy loam
Bk,C --	21 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

1.4 to 1.6 in
1.7 to 2.6 in
4.3 to 7.4 in

#### *pH*

6.1 to 7.3
6.1 to 7.3
7.4 to 8.4

### 1108--Harps-Glencoe-Seaforth complex

#### Harps

*Extent:* 35 percent of the unit

*Landform(s):* flats

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap,Ak --	0 to 16 in	loam
Bkg --	16 to 38 in	loam
Cg --	38 to 60 in	loam

#### *Permeability*

moderate
moderate
moderate

#### *Available water*

#### *capacity*

3.1 to 3.4 in
3.7 to 4.2 in
3.7 to 4.1 in

#### *pH*

7.9 to 8.4
7.9 to 8.4
7.4 to 8.4

This report shows only the major soils in each map unit

Tabular Data Version: 4

Tabular Data Version Date: 04/26/2006

Page 48 of 59

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1108--Harps-Glencoe-Seaforth complex

#### Glencoe

*Extent:* 25 percent of the unit

*Landform(s):* depressions

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* frequent

*Drainage class:* very poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 7

*Wind erodibility index (WEI):* 38

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap --	0 to 10 in	silty clay loam
A --	10 to 30 in	silty clay loam
2Bg --	30 to 57 in	clay loam
2Cg --	57 to 60 in	loam

*Permeability*

moderate
moderate
moderate
moderate

*Available water*

*capacity*      *pH*

1.8 to 2.2 in	6.1 to 7.3
3.6 to 4.4 in	6.1 to 7.3
4.1 to 5.2 in	6.6 to 7.3
0.4 to 0.5 in	7.4 to 7.8

#### Seaforth

*Extent:* 20 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap --	0 to 9 in	clay loam
Bk --	9 to 30 in	loam
C --	30 to 60 in	loam

*Permeability*

moderate
moderate
moderate

*Available water*

*capacity*      *pH*

1.5 to 2.2 in	7.4 to 8.4
3.1 to 4.0 in	7.4 to 8.4
5.1 to 5.7 in	7.4 to 8.4

### 1222--Parle clay loam

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1222--Parle clay loam

#### Parle

*Extent:* 80 percent of the unit  
*Landform(s):* flats  
*Slope gradient:* 0 to 2 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 outwash *Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 2w  
*Hydric soil:* yes  
*Hydrologic group:* C/D  
*Potential 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	clay loam	moderately slow	1.5 to 1.7 in	7.4 to 8.4
A -- 9 to 26 in	clay loam	moderate	2.9 to 3.7 in	7.4 to 8.4
Bkg1 -- 26 to 34 in	loam	moderate	1.2 to 1.5 in	7.4 to 8.4
Bkg2,Bkg3 -- 34 to 50 in	silt loam	moderate	2.4 to 3.6 in	7.4 to 8.4
2Cg -- 50 to 60 in	loamy fine sand	rapid	0.8 to 1.0 in	7.4 to 8.4

### 1233B--Esmond-Heimdal complex, 2 to 6 percent slopes

#### Esmond

*Extent:* 50 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 3e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.8 to 2.0 in	7.4 to 8.4
Bk,C -- 9 to 60 in	loam	moderate	7.1 to 11.2 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1233B--Esmond-Heimdal complex, 2 to 6 percent slopes

#### Heimdal

*Extent:* 35 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 6 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 5  
*Wind erodibility index (WEI):* 56  
 till *Kw (surface layer):* .24  
*Land capability class, nonirrigated:* 2e  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.8 to 2.0 in	6.1 to 7.3
Bw -- 9 to 25 in	sandy loam	moderate	1.9 to 3.1 in	6.1 to 7.3
Bk,C -- 25 to 60 in	loam	moderate	3.8 to 6.6 in	7.4 to 8.4

### 1266C--Yellowbank-Rock outcrop complex, 1 to 25 percent slopes

#### Yellowbank

*Extent:* 60 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 1 to 25 percent  
*Parent material:*  
*Restrictive feature(s):* bedrock (lithic) at 10 to 30 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  
 alluvium *Kw (surface layer):* .20  
*Land capability class, nonirrigated:* 6e  
*Hydric soil:* no  
*Hydrologic group:* D  
*Potential 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	loam	moderate	2.4 to 2.6 in	5.1 to 7.3
Bw -- 12 to 16 in	loam	moderately rapid	0.5 to 1.0 in	5.1 to 7.8
R -- 16 to 26 in	unweathered bedrock	impermeable		

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1266C--Yellowbank-Rock outcrop complex, 1 to 25 percent slopes

#### Rock outcrop

*Extent:* 25 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 1 to 25 percent

*Parent material:*

*Restrictive feature(s):* bedrock (lithic) at 0 to 4 inches

*Flooding:* none

*Ponding:* none

*Drainage class:*

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):* 8

*Wind erodibility index (WEI):* 0

*Kw (surface layer):*

*Land capability class, nonirrigated:* 8s

*Hydric soil:* unranked

*Hydrologic group:*

*Potential frost action:*

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water capacity</i>	<i>pH</i>
R --	0 to 60 in unweathered bedrock	rapid		

### 1295B--Doland silt loam, 2 to 4 percent slopes, moderately wet

#### Doland, moderately wet

*Extent:* 80 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 2 to 4 percent

*Parent material:*

*layer):* .32

*Restrictive feature(s):*

*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

lacustrine deposits over till *Kw (surface*

*Land capability class, nonirrigated:* 2e

*Hydric soil:* no

*Hydrologic group:* B

*Potential 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	1.6 to 1.9 in	6.1 to 7.3
Bw --	8 to 23 in silt loam	moderate	2.5 to 3.6 in	6.1 to 7.3
Bk1,2Bk2 --	23 to 42 in loam	moderate	2.9 to 3.7 in	7.4 to 8.4
2Bk3 --	42 to 60 in clay loam	moderate	2.5 to 3.4 in	7.4 to 8.4

### 1296--Swenoda sandy loam, 0 to 2 percent slopes, moderately wet

This report shows only the major soils in each map unit

Tabular Data Version: 4  
Tabular Data Version Date: 04/26/2006

Page 52 of 59

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1296--Swenoda sandy loam, 0 to 2 percent slopes, moderately wet

#### Swenoda, moderately wet

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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

*outwash over till Kw (surface layer):* .20

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap,A -- 0 to 16 in	sandy loam	moderately rapid	1.8 to 2.7 in	6.1 to 7.3
Bw -- 16 to 21 in	sandy loam	moderately rapid	0.5 to 0.8 in	6.6 to 7.3
2Bk -- 21 to 60 in	loam	moderate	6.6 to 7.8 in	7.4 to 8.4

### 1309C--Buse-Doland complex, 6 to 12 percent slopes, eroded

#### Buse, moderately eroded

*Extent:* 45 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 12 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

*till Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

<i>Representative soil profile:</i>	<i>Texture</i>	<i>Permeability</i>	<i>Available water</i>	
			<i>capacity</i>	<i>pH</i>
Ap -- 0 to 8 in	loam	moderate	1.3 to 1.7 in	7.4 to 8.4
Bk -- 8 to 60 in	loam	moderate	7.3 to 9.9 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1309C--Buse-Doland complex, 6 to 12 percent slopes, eroded

#### Doland, moderately eroded

*Extent:* 35 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 6 to 12 percent

*Parent material:*

*layer):* .32

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

lacustrine deposits over till *Kw (surface*

*Land capability class, nonirrigated:* 3e

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

*Representative soil profile:*

*Texture*

Ap --	0 to 9 in	silt loam
Bw --	9 to 18 in	silt loam
2Bk --	18 to 60 in	clay loam

*Permeability*

moderate
moderate
moderate

*Available water*

*capacity*

2.2 to 2.5 in	6.1 to 7.3
1.5 to 2.0 in	6.1 to 7.3
5.8 to 7.9 in	6.6 to 8.4

*pH*

### 1356--Water, miscellaneous

#### Water, miscellaneous

*Extent:* 100 percent of the unit

*Landform(s):*

*Slope gradient:*

*Parent material:*

*Restrictive feature(s):*

*Flooding:*

*Ponding:*

*Drainage class:*

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):*

*Wind erodibility index (WEI):*

*Kw (surface layer):*

*Land capability class, nonirrigated:*

*Hydric soil:*

*Hydrologic group:*

*Potential frost action:*

*Representative soil profile:*

*Texture*

*Permeability*

*Available water*

*capacity*

*pH*

### 1865C--Buse-Barnes complex, 2 to 12 percent slopes, extremely stony

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1865C--Buse-Barnes complex, 2 to 12 percent slopes, extremely stony

#### Buse, extremely stony

*Extent:* 55 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 3 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 4L  
*Wind erodibility index (WEI):* 86  
 till      *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 6s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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	1.3 to 1.7 in	7.4 to 8.4
Bk -- 8 to 60 in	loam	moderate	7.3 to 9.9 in	7.4 to 8.4

#### Barnes, extremely stony

*Extent:* 30 percent of the unit  
*Landform(s):* moraines  
*Slope gradient:* 2 to 12 percent  
*Parent material:*  
*Restrictive feature(s):*  
*Flooding:* none  
*Ponding:* none  
*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5  
*Wind erodibility group (WEG):* 6  
*Wind erodibility index (WEI):* 48  
 till      *Kw (surface layer):* .28  
*Land capability class, nonirrigated:* 6s  
*Hydric soil:* no  
*Hydrologic group:* B  
*Potential 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 15 in	loam	moderate	2.7 to 3.6 in	6.1 to 7.3
Bw -- 15 to 22 in	loam	moderate	1.1 to 1.3 in	6.1 to 7.3
Bk,C -- 22 to 60 in	loam	moderate	5.3 to 7.2 in	7.4 to 8.4

### 1865F--Buse loam, 12 to 40 percent slopes, extremely stony

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1865F--Buse loam, 12 to 40 percent slopes, extremely stony

#### Buse, extremely stony

*Extent:* 70 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 12 to 40 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* well drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 7s

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* moderate

#### *Representative soil profile:*

#### *Texture*

A --	0 to 7 in	loam
Bk --	7 to 60 in	loam

#### *Permeability*

moderate
moderate

#### *Available water*

#### *capacity*

1.2 to 1.6 in	7.4 to 8.4
7.4 to 10.0 in	7.4 to 8.4

#### *pH*

### 1870--Burr-Calco complex, occasionally flooded

#### Burr, occasionally flooded

*Extent:* 50 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* occasional

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* D

*Potential frost action:* high

#### *Representative soil profile:*

#### *Texture*

Ap --	0 to 9 in	silty clay loam
Aky,Ay,A,ACg	9 to 45 in	silty clay loam
--		
Cg --	45 to 60 in	stratified silt loam to clay

#### *Permeability*

moderate
moderately slow
--
moderately slow

#### *Available water*

#### *capacity*

1.6 to 2.0 in	7.4 to 8.4
4.7 to 6.8 in	7.4 to 8.4
--	
1.3 to 3.3 in	7.4 to 8.4

#### *pH*

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1870--Burr-Calco complex, occasionally flooded

#### Calco, occasionally flooded

*Extent:* 30 percent of the unit

*Landform(s):* flood plains

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* occasional

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 4L

*Wind erodibility index (WEI):* 86

alluvium *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap --	0 to 30 in	silty clay loam
Bg --	30 to 51 in	silty clay loam
Cg --	51 to 60 in	silty clay loam

*Permeability*

moderate
moderate
moderate

*Available water*

*capacity*      *pH*

6.3 to 6.9 in	7.4 to 8.4
4.5 to 4.9 in	7.4 to 8.4
1.6 to 1.7 in	7.4 to 8.4

### 1938--Lakepark loam

#### Lakepark

*Extent:* 70 percent of the unit

*Landform(s):* swales

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*Flooding:* none

*Ponding:* none

*Drainage class:* poorly drained

*Soil loss tolerance (T factor):* 5

*Wind erodibility group (WEG):* 6

*Wind erodibility index (WEI):* 48

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 2w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap --	0 to 10 in	loam
A --	10 to 26 in	clay loam
Bg --	26 to 37 in	loam
Bkg --	37 to 60 in	loam

*Permeability*

moderate
moderate
moderate
moderate

*Available water*

*capacity*      *pH*

1.9 to 2.1 in	6.1 to 7.3
3.1 to 3.4 in	6.1 to 7.3
1.7 to 2.1 in	6.6 to 7.3
3.2 to 4.3 in	7.4 to 8.4

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### 1994--Embden sandy loam

#### Embden

*Extent:* 75 percent of the unit

*Landform(s):* moraines

*Slope gradient:* 0 to 2 percent

*Parent material:*

*Restrictive feature(s):*

*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

outwash *Kw (surface layer):* .20

*Land capability class, nonirrigated:* 2s

*Hydric soil:* no

*Hydrologic group:* B

*Potential 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	2.2 to 3.0 in	6.1 to 7.3
Bw -- 17 to 60 in	sandy loam	moderately rapid	5.1 to 7.3 in	6.6 to 7.8

### L84A--Glencoe clay loam, depressional, 0 to 1 percent slopes

#### Glencoe, depressional

*Extent:* 75 to 100 percent of the unit

*Landform(s):* depressions on moraines

*Slope gradient:* 0 to 1 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .28

*Land capability class, nonirrigated:* 3w

*Hydric soil:* yes

*Hydrologic group:* B/D

*Potential 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 10 in	clay loam	moderate	1.8 to 2.2 in	6.1 to 7.8
A,ABg -- 10 to 35 in	clay loam	moderate	4.5 to 5.5 in	6.1 to 7.8
Bg -- 35 to 48 in	loam	moderate	1.9 to 2.5 in	6.6 to 7.8
Cg -- 48 to 60 in	loam	moderate	1.8 to 2.2 in	7.4 to 8.4

### L201A--Normania loam, 0 to 3 percent slopes

This report shows only the major soils in each map unit

## Map Unit Description (MN)

Lac Qui Parle 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]

### L201A--Normania loam, 0 to 3 percent slopes

#### Normania

*Extent:* 75 to 90 percent of the unit

*Landform(s):* flats on moraines, rises on moraines

*Slope gradient:* 1 to 3 percent

*Parent material:*

*Restrictive feature(s):*

*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

till *Kw (surface layer):* .24

*Land capability class, nonirrigated:* 1

*Hydric soil:* no

*Hydrologic group:* B

*Potential frost action:* high

*Representative soil profile:*

*Texture*

Ap,A,AB --	0 to 17 in	loam
Bw --	17 to 26 in	loam
Bk --	26 to 50 in	loam
Cg --	50 to 60 in	loam

*Permeability*

moderate
moderate
moderate
moderate

*Available water*

*capacity*

3.4 to 3.7 in
1.4 to 1.7 in
3.6 to 4.6 in
1.5 to 1.9 in

*pH*

6.1 to 7.3
6.6 to 7.3
7.4 to 8.4
7.4 to 8.4

### W--Water

#### Water

*Extent:* 100 percent of the unit

*Landform(s):*

*Slope gradient:*

*Parent material:*

*Restrictive feature(s):*

*Flooding:*

*Ponding:*

*Drainage class:*

*Soil loss tolerance (T factor):*

*Wind erodibility group (WEG):*

*Wind erodibility index (WEI):*

*Kw (surface layer):*

*Land capability class, nonirrigated:*

*Hydric soil:*

*Hydrologic group:*

*Potential frost action:*

*Representative soil profile:*

*Texture*

*Permeability*

*Available water*

*capacity*

*pH*

This report provides a semi tabular listing of some soil and site properties and interpretations valuable in communicating the concept of a map unit. It also includes commonly used conservation planning information in one place for easy access. Major soil components are always displayed and minor components are also displayed if they are included in the database and they are selected at the time the report is generated.

This report shows only the major soils in each map unit