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REPORT #
RRTAC 93-7

Soil Series Information for Reclamation Planning in Alberta Volume 2

by

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Prepared for

ALBERTA CONSERVATION AND RECLAMATION COUNCIL
(Reclamation Research Technical Advisory Committee)

1993

2.11 Soils of Correlation Area #11

General Description of the Area

- Dark Gray - Gray Soil Zone of central Alberta.
- Extends north from Sundre (between Edmonton and Drayton Valley) to Barrhead, then east to St. Paul and the Saskatchewan border. Also includes the Beaver Hills Upland.

Ecoregion/Climate

- Low Boreal Mixedwood ecoregion (transition between the Aspen Parkland and the Mid Boreal Mixedwood).
- Agroclimate is 2H and 3H (slight to moderate heat limitation).
- Growing season P-PE= -150 to -200 mm.
- The temperature is cooler and moisture is greater than the Black Soil Zone of the Aspen Parkland ecoregion.

Soils and Landscapes

- Soils in SCA 11 are Dark Gray Chernozemics and Luvisols with some Orthic Gray Luvisols. Depressional areas contain Gleysols (often with a peaty surface layer) and occasionally Organic soils.
- Solonetzic soils are common in areas where the Edmonton Formation softrock is exposed or is near the surface.
- Landscapes are dominantly undulating to hummocky moraines (till) with significant glaciolacustrine blankets over till.
- Profile development is generally 70 cm deep.
- Soils have 10 to 30 cm of dark gray colored A horizon, occasionally with a light gray, leached horizon (Ae) below.
- Cultivated Gray Luvisol soils have a dark colored Ap horizon but native soils have a gray, leached (Ae) horizon.

Soil Reclamation Issues

- Potential risk of soil erosion by water is generally severe to moderate, with some areas having a low risk.
- The potential risk of soil erosion by wind is low, except on sandy soils.
- Edmonton Formation softrock is typically sodic, Paskapoo Formation is typically not. Both occur in the area.
- Topsoil salvage of cultivated Luvisols should include the Ap and Ae horizons. In forested areas, the salvaged topsoil should include the Ae and all horizons above it.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ANTON (ATO)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	VFR	L	3.5	6.6			
BGJ	25-40	10YR 5/3	BROWN	WFSBK	VFR	L	0.7	7.3			
CKGJ	40-110	2.5Y 5/4	LIGHT OLIVE BROWN	STRAT	VFR	L		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	G				G (Topsoil)
BGJ	25-40	G	G		G				G (Subsoil)
CKGJ	40-110	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	15-45 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOME VARIABILITY MAY BE FOUND IN THE SUBSURFACE MATERIAL WHERE TEXTURES MAY RANGE FROM SANDY LOAMS TO CLAY LOAMS. IT IS A VERY DESIRABLE SOIL TO CULTIVATE. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BENALTO (BEN)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/3	DARK BROWN	MFGR	FR	SIL		7.4	0.8	66.	0.1
AE	18-22	10YR 6/3	PALE BROWN	MMPL	FR	SIL					
BT	22-80	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		7.3	0.4	50.	0.2
CK	80-120	2.5Y 4/4	OLIVE BROWN	MA	F	CL		7.8	0.2	51.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	G		G	G	F	G	F (Topsoil)
AE	18-22	G	G						F (Topsoil)
BT	22-80	F	F		G	G	G	G	F (Subsoil)
CK	80-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS HAVE VERY FEW STONES NEAR THE SURFACE. STONES ARE FOUND IN THE SUBSOIL. THE SURFACE HORIZON IS QUITE VARIABLE IN COLOR AND IS VERY APPARENT IN THE FIELDS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BENALTO-ST (stBEN)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/3	DARK BROWN	MFGR	FR	STSIL		7.4	0.8	66	0.1
AE	18-22	10YR 6/3	PALE BROWN	MMPL	FR	STSIL				50	
BT	22-80	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	STCL		7.3	0.4	51	0.2
CK	80-120	2.5Y 4/4	OLIVE BROWN	MA	F	STCL		7.8	0.2	0.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	P		G	G	F	G	P (Topsoil)
AE	18-22	G	P						P (Topsoil)
BT	22-80	F	P		G	G	G	G	P (Subsoil)
CK	80-120	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF BENALTO THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BENALTO-XS	(xsBEN)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL		USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL/GLACIOFLUVIAL		SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR	3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L	2.5	6.5	0.3	38.	0.3
BT	18-45	10YR	5/4	YELLOWISH BROWN	MMSBK	F	CL		6.2	0.2	36.	0.4
BC	45-110	2.5Y	5/4	LIGHT OLIVE BROWN	SGR	L	CSL		6.2	0.2	22.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	G	G	G	G	G	G	G (Topsoil)
BT	18-45	F	F		F	G	G	G	F (Subsoil)
BC	45-110	F	G		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:		SUBSOIL (TO 1.5 M) INTERPRETATIONS:	
TYPICAL THICKNESS:	20 cm	SEASONALLY HIGH W.T.:	NO
THICKNESS RANGE:	15-25 cm	HARD BEDROCK:	NO
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS	NON-SODIC SOFTROCK:	NO
STRIPPING LIMITATIONS:	NONE	SODIC SOFTROCK:	NO
WIND EROSION RISK:	LOW	GRAVEL:	NO
WATER EROSION K=:	0.053	STONY LAYER:	NO
RISK ON <5% SLOPE:	LOW	FACE INSTABILITY:	YES
RISK ON 5-9% SLOPE:	MODERATE	SOLONETZIC B HORIZON:	NO
RISK ON 9-15% SLOPE:	HIGH	SALINE OR SODIC LOWER SUBSOIL:	NO
		IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BENALTO THAT HAS SANDY TEXTURED MATERIAL WITHIN 1 M OF THE SURFACE. THE UNDERLYING MATERIAL MAY HAVE UNSTABLE EXPOSED FACES WHEN VERTICALLY DITCHED.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BLOOMSBURY (BLB)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY		KNOLLS
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	TYPICAL SLOPES:	2-15%
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	USUAL SOIL MOISTURE:	MOIST
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-17	10YR 5/3	BROWN	WFGR	FR	L	1.8	6.6			
BT	17-48	10YR 4/6	DARK YELLOWISH BROWN	MMSBK	F	C	0.8	6.4			
CK	48-120	2.5Y 6/4	LIGHT YELLOWISH BROWN	MA	FR-F	SICL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-17	G	G	F	G				F (Topsoil)
BT	17-48	F	P		F				P (Subsoil)
CK	48-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: BLOOMSBURY SOILS HAVE LITTLE OR NO TOPSOIL IN FORESTED AREAS. INSTEAD, THEY HAVE A DISTINCT LIGHT GRAY AE HORIZON UNDERLYING THE LEAF LITTER. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE LF AND AE HORIZONS AND IS FAIRLY LIGHT IN COLOR. THE AP HORIZON IS ABOUT 15 CM IN THICKNESS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BOSCOMBE (BOB)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 2/1	BLACK	MFGR	FR	L	4.1	7.	3.3	54.	0.
BTGJ	15-45	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	SCL		7.	3.5	36.	0.
CKGJ	45-120	10YR 5/2	GRAYISH BROWN	MA	F	SCL		7.4	3.4	44.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G	G	G	F	G	G	F (Topsoil)
BTGJ	15-45	F	F		G	F	G	G	F (Subsoil)
CKGJ	45-120	F	F		G	F	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: BOSCOMBE IS LIKE A GLEYED BENATLTO. THESE SOILS HAVE VERY FEW STONES NEAR THE SURFACE. STONES ARE FOUND IN THE SUBSOIL. THE SURFACE MATERIAL IS QUITE VARIABLE IN COLOR AND IS VERY APPARENT IN THE FIELDS. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BRETON (BTN)	LANDFORM:	UNDULATING, STEEP
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-45%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/4	DARK YELLOWISH BROWN	WFGR	FR	CL		6.8	1.	59.	
BT	15-55	10YR 5/4	YELLOWISH BROWN	SFSBK	F	CL		7.9	0.4	45.	0.7
CK	55-110	10YR 6/4	LIGHT YELLOWISH BROWN	MA	F	CL		7.9	0.3	49.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	F		G	G	G		F (Topsoil)
BT	15-55	F	F		F	G	G	G	F (Subsoil)
CK	55-110	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, BRETON SOILS HAVE LITTLE OR NO TOPSOIL (AH HORIZON). INSTEAD, THEY HAVE A THIN LH HORIZON AND A PLATY GRAYISH BROWN AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON IS A MIXTURE OF THE LH AND AE HORIZONS, IS ABOUT 15 CM IN THICKNESS AND LIGHT IN COLOR. THESE SOILS ARE DEVELOPED ON CONTINENTAL TILL OF THE PASKAPOO FORMATION. EXPOSURES OF PASKAPOO SANDSTONES ARE COMMONLY ASSOCIATED WITH BRETON SOILS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BRETON-ST (stBTN)	LANDFORM:	UNDULATING, STEEP
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-45%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/4	DARK YELLOWISH BROWN	WFGR	FR	STCL		6.8	1.	59	
BT	15-55	10YR 5/4	YELLOWISH BROWN	SFSBK	F	STCL		7.9	0.4	45	0.7
CK	55-110	10YR 6/4	DARK YELLOWISH BROWN	MA	F	STCL		7.9	0.3	49	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	P		G	G	G		P (Topsoil)
BT	15-55	F	P		F	G	G	G	P (Subsoil)
CK	55-110	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, STONY, TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF BRETON THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BRETON-XP	(xpBTN)	LANDFORM:	UNDULATING, STEEP
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	2-45%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL		USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL/SOFTROCK		SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	8-25	10YR	6/3	PALE BROWN	MMPL	FR	L		6.1	0.14		
AE	0-14	10YR	6/2	LIGHT BROWNISH GRAY	MMPL	VFR	SIL	0.9	6.6	0.3	33.	0.
BT	22-70	10YR	5/3	BROWN	MFSBK	F	CL		6.	0.2	33.	0.
BTGJ	33-50	10YR	5/3	BROWN	MMSBK	F	CL		5.5	0.14		
BC	75-100	10YR	4/3	BROWN-DARK BROWN	MA	F	SCL		5.4	0.24		
2BC	70-150	2.5Y	5/4	LIGHT OLIVE BROWN	SGR	FR	SL		6.6	0.1	33.	0.4
2CK	100-135	2.5Y	5/4	LIGHT OLIVE BROWN	STRAT	FR	SIL		7.5	0.41		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	8-25	G	G		F	G			F (Topsoil)
AE	0-14	G	G	P	G	G	G	G	P (Topsoil)
BT	22-70	F	F		F	G	G	G	F (Subsoil)
BTGJ	33-50	F	F		F	G			F (Subsoil)
BC	75-100	F	F		P	G			P (Subsoil)
2BC	70-150	G	G		G	G	G	G	G (Subsoil)
2CK	100-135	G	G		G	G			G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	0-5 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BRETON THAT HAS WEATHERED BEDROCK WITHIN 1 M OF THE SURFACE. THE UNDERLYING SOFTROCK IS USUALLY NON SALINE-SODIC AND SANDY LOAM TO SILT LOAM TEXTURED. EXPOSED FACES OF THE SANDIER TEXTURED SOFTROCK MAY BE UNSTABLE. OCCASIONALLY, A CONSOLIDATED BEDROCK SLAB MAY BE ENCOUNTERED.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BRIGHTBANK (BRK)	LANDFORM:	ROLLING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-20	10YRd 3/1	VERY DARK GRAY	WFGR	L	SL	6.8	6.7			
AE	20-70	10YRd 7/3	VERY PALE BROWN	SGR	L	LS	0.17	6.5			
BT1	70-115	10YRd 5/3	BROWN	WFSBK	SLH	SL	0.35	5.9			
BT2	115-160	10YRd 5/3	BROWN	SGR	L	LS	0.21	6.1			
C	160-210	10YRd 6/4	LIGHT YELLOWISH BROWN	SGR	L	SL	0.1	6.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-20	F	G	G	G				F (Topsoil)
AE	20-70	F	P	P	G				P (Topsoil)
BT1	70-115	G	G		F				F (Subsoil)
BT2	115-160	F	P		F				P (Subsoil)
C	160-210	F	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: BRIGHTBANK SOILS HAVE A THICK AE HORIZON UNDERNEATH THE TOPSOIL AND HAVE DISTINCTIVE BANDS IN THE BT HORIZON THAT ARE SEPARATED BY ELUVIATED HORIZONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BROSSEAU	(BSU)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY		USUAL SOIL MOISTURE:	MOIST
	CHERNOZEMIC		SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE SOFTROCK			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-13	10YRm 3/1	VERY DARK GRAY	WFGR	FR	SIC	6.16	6.6			
BT	13-30	2.5Ym 3/2	VERY DARK GRAYISH BROWN	SCABK	F	HC	2.09	6.7			
BC	30-53	2.5Ym 3/2	VERY DARK GRAYISH BROWN	WFSBK	F	L		7.			
CK	53-120	2.5Ym 4/4	OLIVE BROWN	MA	F	CL		7.2			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-13	G	P	G	G				P (Topsoil)
BT	13-30	F	P		G				P (Subsoil)
BC	30-53	F	G		G				F (Subsoil)
CK	53-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE FINE TEXTURED AND USUALLY IMPERFECTLY DRAINED.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BROSSEAU-CRZR (crzrBSU)	LANDFORM:	ROLLING
		TYPICAL SLOPES:	6-15%
SOIL ZONE:	DARK GRAY-GRAY	USUAL SOIL MOISTURE:	MOIST
SOIL CLASSIFICATION:	REGO DARK GRAY CHERNOZEMIC (CARBONATED)	SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE SOFTROCK		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHEK	0-13	10YR M 3/1	VERY DARK GRAY	WFGR	FR	SIC	6.2	6.6			
BCK	13-45	2.5Y M 3/2	VERY DARK GRAYISH	WFSBK	F	L		7.			
CK	45-100	2.5Y M 4/4	OLIVE BROWN	MA	F	CL		7.2			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHEK	0-13	G	P	G	G				P (Topsoil)
BCK	13-45	F	G		G				G (Subsoil)
CK	45-100	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF BROSSEAU THAT HAS REGO PROFILES AND IS CARBONATED.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	BROSSEAU-ER (erBSU)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY	USUAL SOIL MOISTURE:	MOIST
	CHERNOZEMIC (ERODED)	SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE SOFTROCK		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-6	10YRm 3/1	VERY DARK GRAY	WFGR	FR	SIC	6.2	6.6			
BT	6-23	2.5Ym 3/2	VERY DARK GRAYISH BROWN	SCABK	F	HC	2.1	6.7			
BC	23-46	2.5Ym 3/2	VERY DARK GRAYISH BROWN	WFSBK	F	L		7.			
CK	46-120	2.5Ym 4/4	OLIVE BROWN	MA	F	CL		7.2			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-6	G	P	G	G				P (Topsoil)
BT	6-23	F	P		G				P (Subsoil)
BC	23-46	F	G		G				F (Subsoil)
CK	46-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	5 cm
THICKNESS RANGE:	0-5 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: ERODED VARIANT OF BROSSEAU.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	CARVEL (CVL)	LANDFORM:	ROLLING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 4/2	DARK GRAYISH BROWN	WFGR	FR	SL	2.6	5.9	0.3	43.	0.
AE	20-40	10YR 5/2	GRAYISH BROWN	WFPL	VFR	SL	0.7	6.	0.3	27.	0.
BT	40-85	10YR 4/3	BROWN-DARK BROWN	WFSBK	FR	L		6.	0.3	29.	0.
BC	85-130	10YR 4/3	BROWN-DARK BROWN	MA	FR	SL		6.2	0.4	38.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	G	G	F	G	G	G	F (Topsoil)
AE	20-40	G	G	P	F	G	F	G	P (Topsoil)
BT	40-85	G	G		F	G	F	G	F (Subsoil)
BC	85-130	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: CARVEL SOILS ARE DISTINGUISHED BY THE OVERALL BROWN COLOR AND FINE TEXTURED BANDS IN THE B HORIZON. A LIGHT COLORED AE HORIZON USUALLY SEPARATES THE TOPSOIL FROM THE SUBSOIL.

COOKING LAKE

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	COOKING LAKE (COA)	LANDFORM:	UNDULATING, HUMMOCKY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-5	10YRm 2/2	VERY DARK BROWN	WMGR	VFR	L					
AE	5-15	10YRm 4/2	DARK GRAYISH BROWN	WFPL	VFR	L	1.03	6.9			
BT1	15-56	10YRm 4/3	BROWN-DARK BROWN	MFSBK	F	CL	0.6	5.8			
BC	56-92	10YRm 4/3	BROWN-DARK BROWN	MMSBK	F	L-CL	0.52	6.9			
CCA1	92-123	2.5Ym 4/2	DARK GRAYISH BROWN	WMSBK	FR	L-CL		7.6			
CCA2	123-194	10YRm 5/4	YELLOWISH BROWN	WMSBK	FR	L-CL		7.6			
CK	194-200	10YRm 4/2	DARK GRAYISH BROWN	WMSBK	FR	L		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-5	G	G						G (Topsoil)
AE	5-15	G	G	F	G				F (Topsoil)
BT1	15-56	F	F		F				F (Subsoil)
BC	56-92	F	F		G				F (Subsoil)
CCA1	92-123	G	F		F				F (Subsoil)
CCA2	123-194	G	F		F				F (Subsoil)
CK	194-200	G	G		G				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.057
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE A LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF LH AND AE HORIZONS AND IS LIGHT IN COLOR AND ABOUT 15 CM IN THICKNESS. COOKING LAKE SOILS ARE DEVELOPED ON CONTINENTAL TILL OF THE EDMONTON FORMATION.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	COOKING LAKE-ER (erCOA)	LANDFORM:	UNDULATING, HUMMOCKY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL (ERODED)	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-5	10YR	5/3	BROWN	MMPL	FR	CL	2.3	6.3	0.4		0.6
BT	5-45	10YR	4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		6.9	0.3		0.4
CK	45-130	2.5Y	5/4	LIGHT OLIVE BROWN	MA	F	CL		8.1	0.5		0.7

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-5	G	F	G	F	G		G	F (Topsoil)
BT	5-45	F	F		G	G		G	F (Subsoil)
CK	45-130	F	F		F	G		G	F (Subsoil)

TOPSOIL INTERPRETATIONS:		SUBSOIL (TO 1.5 M) INTERPRETATIONS:	
TYPICAL THICKNESS:	3 cm	SEASONALLY HIGH W.T.:	NO
THICKNESS RANGE:	0-5 cm	HARD BEDROCK:	NO
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS	NON-SODIC SOFTROCK:	NO
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS	SODIC SOFTROCK:	NO
		GRAVEL:	NO
WIND EROSION RISK:	LOW	STONY LAYER:	NO
WATER EROSION K=:	0.057	FACE INSTABILITY:	NO
RISK ON <5% SLOPE:	LOW	SOLONETZIC B HORIZON:	NO
RISK ON 5-9% SLOPE:	MODERATE	SALINE OR SODIC LOWER SUBSOIL:	NO
RISK ON 9-15% SLOPE:	HIGH	IMPORTANT TEXTURE CHANGE:	NO

NOTES: ERODED VARIANT OF COOKING LAKE. ERODED SOILS ARE EVIDENT IN CULTIVATED AREAS WHERE THE AP HORIZON IS NORMALLY ABOUT 15 CM THICK.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	COOKING LAKE-ST (stCOA)	LANDFORM:	UNDULATING, HUMMOCKY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-4	10YR 3/3	DARK BROWN	MFGR	VFR	STSIL	2.3	6.	0.5	40.	0.2
AE	4-22	10YR 7/1	LIGHT GRAY	MFL	FR	STSIL	2.3	6.	0.5	40.	0.2
BT	30-46	10YR 5/3	BROWN	MCSBK	F	STSIC		6.7		35.	
BC	46-86	10YR 4/4	DARK YELLOWISH BROWN	MA	F	STCL		6.7		35.	
C	86-115	2.5Y 4/4	OLIVE BROWN	MA	F	STCL		6.7		35.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-4	G	P	G	F	G	G	G	P (Topsoil)
AE	4-22	G	P	G	F	G	G	G	P (Topsoil)
BT	30-46	F	P		G		G		P (Subsoil)
BC	46-86	F	P		G		G		P (Subsoil)
C	86-115	F	P		G		G		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.057
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF COOKING LAKE THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DAKEN (DKN)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-20	10YR 2/1	BLACK	WFGR	FR	FSL		7.5	5.	87.	3.1
CKG1	20-50	10YR 7/1	LIGHT GRAY	SGR	FR	FSL		7.8	5.8	32.	6.2
CKG2	50-75	10YR 5/1	GRAY	STRAT	FR	SIL		7.9	3.8	43.	4.2
CKG3	75-110	10YR 5/1	GRAY	SGR	L	LS		7.9	2.7	31.	2.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-20	G	G		G	P	P	G	P (Topsoil)
CKG1	20-50	G	G		F	P	G	F	P (Subsoil)
CKG2	50-75	G	G		F	F	G	F	F (Subsoil)
CKG3	75-110	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE WET ALL YEAR AND VERY COARSE TEXTURED. AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DAKEN-PT (ptDKN)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	10YR 2/2	VERY DARK BROWN			O					
AH	20-40	10YR 2/1	BLACK	WFGR	FR	FSL		7.5		87.	
CKG	40-100	10YR 5/1	BRAY	SGR	L	LS		7.9		31.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								
AH	20-40	G	G		G		P		P (Topsoil)
CKG	40-100	F	P		F		G		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF DAKEN THAT HAS 15 TO 50 CM OF PEAT ON THE SURFACE. THE UNDERLYING TOPSOIL IS ABOUT 20 CM THICK. THESE SOILS ARE WET ALL YEAR AND VERY COARSE TEXTURED. AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DEVON (DEV)	LANDFORM:	LEVEL, DEPRESSIONAL,
SOIL ZONE:	DARK GRAY-GRAY		BOG
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF	0-30	7.5YR 4/6	STRONG BROWN			O	53.2	3.1			
OM1	30-70	10YR 3/2	VERY DARK GRAYISH BROWN			O	56.5	3.3			
OMF	70-110	10YR 3/3	DARK BROWN			O	54.7	4.			
OM2	110-170	10YR 2/1	BLACK			O	46.9	4.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF	0-30			G					
OM1	30-70			G	U				
OMF	70-110			G	U				
OM2	110-170			G	P				

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	- cm
COLOR CHANGE TO SUBSOIL:	-
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVON SOILS ARE CHARACTERIZED BY AN ACCUMULATION OF SPHAGNUM FOREST PEAT THAT IS GREATER THAN 1 M THICK.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DEVON-XC (xcDEV)	LANDFORM:	LEVEL, DEPRESSIONAL,
SOIL ZONE:	DARK GRAY-GRAY		BOG
SOIL CLASSIFICATION:	TERRIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC/GLACIOLACUSTRINE	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OMP	0-25	10YR 2/2	VERY DARK BROWN			O	45.6	6.6			
OM	25-65	10YR 3/2	VERY DARK GRAYISH BROWN			O	46.9	6.3			
AH	65-82	10YR 2/1	BLACK	MFGR	FR-F	CL	5.1	6.6			
CKG	82-110	10YR 7/1	LIGHT GRAY	MA	F	CL		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OMP	0-25			G					
OM	25-65			G	F				
AH	65-82	P	F	G	G				P (Topsoil)
CKG	82-110	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF DEVON THAT IS CHARACTERIZED BY AN ACCUMULATION OF SPHAGNUM FOREST PEAT THAT IS 0.5 TO 1 M. IN THICKNESS OVERLYING CLAY TEXTURED GLACIOLACUSTRINE MATERIAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DEVON-YC (ycDEV)	LANDFORM:	LEVEL, DEPRESSIONAL,
SOIL ZONE:	DARK GRAY-GRAY		BOG
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC/GLACIOLACUSTRINE	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OMP	0-15	10YR 2/2	VERY DARK BROWN			O	49.	6.3			
OM1	15-75	10YR 2/2	VERY DARK BROWN			O	51.3	5.7			
OF	75-115	7.5YR 3/2	DARK BROWN			O	50.5	5.6			
OM2	115-155	10YR 2/2	VERY DARK BROWN			O	52.5	5.7			
CKG	163-190	2.5Y 4/0	DARK GRAY	STRAT	F	SICL		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OMP	0-15			G					
OM1	15-75			G	F				
OF	75-115			G	F				
OM2	115-155			G	F				
CKG	163-190	F	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF DEVON THAT IS CHARACTERIZED BY AN ACCUMULATION OF SPHAGNUM FOREST PEAT THAT IS 1 TO 2 M IN THICKNESS OVERLYING CLAY TEXTURED GLACIOLACUUSTRINE MATERIAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DNISTER (DNT)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-5	10YRm 3/1	VERY DARK GRAY	WMGR	STVFR	CL	5.67	5.8			
AE	5-15	10YRm 7/3	VERY PALE BROWN	MFPL	STVFR	SIL	0.28	6.2			
BNT1	15-35	2.5Ym 3/2	VERY DARK GRAYISH BROWN	MMCOL	VF	CL	0.32	6.4			
BNT2	35-63	2.5Ym 4/2	DARK GRAYISH BROWN	MMPR	VF	CL	0.19	7.5			
CCA	63-101	2.5Ym 4/4	OLIVE BROWN	WCSBK	FR	CL-SCL	0.33	8.2			
CK1	101-167	10YRm 4/3	DARK BROWN	MA	F	CL	0.23	8.2			
CK2	167-243	10YRm 4/3	DARK BROWN	MA	F	CL	0.34	8.1			
2C	243-250	10YRm 4/2	DARK GRAYISH BROWN	MA	F	C		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-5	P	F	G	F				P (Topsoil)
AE	5-15	P	G	P	F				P (Topsoil)
BNT1	15-35	P	F		F				P (Subsoil)
BNT2	35-63	P	F		G				P (Subsoil)
CCA	63-101	G	F		F				F (Subsoil)
CK1	101-167	F	F		F				F (Subsoil)
CK2	167-243	F	F		F				F (Subsoil)
2C	243-250		P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DNISTER SOILS HAVE A VERY HARD BNT HORIZON AND A SALINE AND/OR SODIC SUBSOIL. IN MOST AREAS, SOME STONE REMOVAL WILL BE REQUIRED TO REDUCE INTERFERENCE TO FARM IMPLEMENTS. THE TILL HAS A BEDROCK APPEARANCE AND THE BEDROCK IS OFTEN WITHIN 2 M OF THE SURFACE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	DOWNING-AA (aaDWG)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY GRAVELLY, VERY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AEP	0-15	10YR	5/3	BROWN	SGR	L	CS	1.7	6.8	0.3	25.	
BM	15-75	10YR	4/3	BROWN-DARK BROWN	SGR	L	GRCS		7.	0.2	21.	
2BC	75-130	2.5Y	5/4	LIGHT OLIVE BROWN	MA	F	CL		6.3	0.4	43.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AEP	0-15	F	P	F	G	G	F		P (Topsoil)
BM	15-75	F	P		G	G	F		P (Subsoil)
2BC	75-130	F	F		F	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, GRAVELLY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: HOME SCA IS 12. THE UPPER MATERIAL IS VERY COARSE TEXTURED AND MAY HAVE UNSTABLE EXPOSED FACES WHEN VERTICALLY DITCHED. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS AN LH HORIOZN OVERLYING A PLATY, LIGHT GRAY AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON OR TOPSOIL IS MAINLY DERIVED FROM AE MATERIAL AND IS VERY LIGHT IN COLOR.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	EDWAND-AA (aaEDW)	LANDFORM:	UNDULATING, ROLLING,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	TYPICAL SLOPES:	2-15%
PARENT MATERIAL:	GRAVELLY, VERY COARSE GLACIOFLUVIAL	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH/AH	0-4	10YR 3/2	VERY DARK GRAYISH BROWN	SGR	L	LS		5.8	0.7	46.	0.1
AE	4-12	10YR 5/3	BROWN	SGR	L	S		5.5	0.2	25.	0.3
BM	12-50	10YR 5/4	YELLOWISH BROWN	SGR	L	CS		5.2	0.2	26.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH/AH	0-4	F	P		F	G	G	G	P (Topsoil)
AE	4-12	F	P		F	G	F	G	P (Topsoil)
BM	12-50	F	P		P	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, GRAVELLY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 12. THESE SOILS HAVE LITTLE OR NO TOPSOIL BUT HAVE A THIN LH HORIZON OVERLYING A PALE BROWN AE HORIZON. WEAK PROFILE DEVELOPMENT ON GRAVELLY COARSE SAND HAS RESULTED IN INDISTINCT HORIZONATION. EXPOSED FACES ARE UNSTABLE. EDWAND SOILS ARE DROUGHTY.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	EGREMONT (EGO)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-13	10YR 2/2	VERY DARK BROWN			O	20.1	6.6			
AHEGJ	13-38	2.5Ym 3/0	VERY DARK GRAY	WCPL	VFR	CL	1.74	6.5			
ABGJ	38-46	2.5Ym 4/2	DARK GRAYISH BROWN	MMPL	VFR	L	0.61	6.9			
BM	46-64	10YRm 3/3	DARK BROWN	MMSBK	FR	SCL	0.41	7.4			
CCA	64-94	10YRm 4/2	DARK GRAYISH BROWN	WMSBK	FR	L	0.33	7.7			
CK	94-140	10YRm 4/3	BROWN-DARK BROWN	MA	FR	L-CL	0.23	7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-13			G					
AHEGJ	13-38	G	F	F	G				F (Topsoil)
ABGJ	38-46	G	G		G				G (Subsoil)
BM	46-64	G	F		G				F (Subsoil)
CCA	64-94	G	G		F				F (Subsoil)
CK	94-140	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: EGREMONT SOILS ARE FOUND IN POSITIONS OF VERY LITTLE SLOPE WHERE SURFACE DRAINAGE IS IMPERFECT, RESULTING IN THE GLEYED CONDITIONS OF THIS SOIL. ORGANIC SURFACE DEPOSITS OF LESS THAN 15 CM ARE COMMON.

ELK POINT

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ELK POINT (ELP)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-30	10YR	3/1	VERY DARK GRAY	WFGR	FR	SL	1.7	6.5	0.3	37.	0.
BT	30-70	10YR	4/4	DARK YELLOWISH BROWN	WFSBK	FR	SL		6.1	0.2	28.	0.
BC	70-110	10YR	3/4	DARK YELLOWISH BROWN	SGR	FR	SL					
CK	110-150	2.5Y	5/4	LIGHT OLIVE BROWN	SGR	VFR	LS		7.3	0.4	30.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-30	G	G	F	G	G	G	G	F (Topsoil)
BT	30-70	G	G		F	G	F	G	F (Subsoil)
BC	70-110	G	G						G (Subsoil)
CK	110-150	G	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE CHARACTERIZED BY BANDING OR STRATIFICATION IN THE LOWER C HORIZON. EXPOSED FACES ARE UNSTABLE DUE TO THE SANDY TEXTURED MATERIAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	EVANSBURG (EBG)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	WATER TABLE/PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-8	/						5.7			
AH	8-11	10YRm 3/1	VERY DARK GRAY	SMGR	FR-F	SIC	4.27	5.6	0.3		
AEGJ	11-16	10YRm 6/4	LIGHT YELLOWISH BROWN	SMPL	FR-F	SIL	0.87	5.8	0.7		
BTGJ	16-47	10YRm 4/2	DARK GRAYISH BROWN	MFSBK	VF	HC	0.78	5.4	0.4		
BCGJ	47-80	10YRm 4/3	BROWN	STRAT	F	HC		6.	0.3		
CCA	80-88	10YRm 5/4	YELLOWISH BROWN	STRAT	FR	SIC		7.2	0.3		
CKGJ	88-100	10YRm 4/3	BROWN	STRAT	F	HC		7.1	0.3		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-8								
AH	8-11	P	P	G	F	G			P (Topsoil)
AEGJ	11-16	P	G	P	F	G			P (Topsoil)
BTGJ	16-47	P	P		P	G			P (Subsoil)
BCGJ	47-80	F	P		F	G			P (Subsoil)
CCA	80-88	G	P		G	G			P (Subsoil)
CKGJ	88-100	F	P		G	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, WETNESS
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: EVANSBURG SOILS HAVE LITTLE OR NO TOPSOIL, BUT HAVE AN AE HORIZON. THESE SOILS HAVE A RELATIVELY IMPERMEABLE SUBSOIL. BECAUSE OF HIGH WATER TABLES AND VERY FINE TEXTURES, WATER PENETRATION IS IMPEDED. LOCAL FLOODING OR WATER LOGGING IS A HAZARD IN RAINY SEASONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	FALUN (FLU)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY	USUAL SOIL MOISTURE:	MESIC
	CHERNOZEMIC	SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/2	VERY DARK GRAYISH BROWN	MMGR	FR	L					
BTJ	18-40	10YR 4/4	DARK YELLOWISH BROWN	WFSBK	F	CL					
BC	40-65	10YR 4/4	DARK YELLOWISH BROWN	WFSBK	F	CL					
CK	65-110	10YR 4/3	BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	G						G (Topsoil)
BTJ	18-40	F	F						F (Subsoil)
BC	40-65	F	F						F (Subsoil)
CK	65-110	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: FALUN SOILS ARE USUALLY FAIRLY UNIFORM IN CHARACTERISTICS SUCH AS TEXTURE, STRUCTURE AND COLOR.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	GLORY (GOY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 2/2	VERY DARK BROWN					5.8			
AE1	3-26	10YRm 4/4	DARK YELLOWISH BROWN	WFPL	VFR	SIL	0.49	5.			
AE2	26-41	10YRm 4/4	DARK YELLOWISH BROWN	WFPL	VFR	SIL	0.35	4.9			
BT1	41-59	10YRm 4/4	DARK YELLOWISH BROWN	MFSBK	FR	SICL-SIC	0.38	4.5			
BT2	59-87	10YRm 4/4	DARK YELLOWISH BROWN	MFSBK	FR	SICL	0.47	4.4			
BC	87-102	10YRm 4/4	DARK YELLOWISH BROWN	WFSBK	VFR-L	L	0.26	4.1			
C1	102-155	10YYR 4/3	BROWN-DARK BROWN	WFPL	L	SIL		4.5			
C2	155-216	10YRm 4/3	BROWN-DARK BROWN	MA	FR	SIL		4.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE1	3-26	G	G	P	P				P (Topsoil)
AE2	26-41	G	G	P	P				P (Topsoil)
BT1	41-59	G	P		P				P (Subsoil)
BT2	59-87	G	F		U				U (Subsoil)
BC	87-102	F	G		U				U (Subsoil)
C1	102-155	F	G		P				P (Subsoil)
C2	155-216	G	G		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:		SUBSOIL (TO 1.5 M) INTERPRETATIONS:	
TYPICAL THICKNESS:	15 cm	SEASONALLY HIGH W.T.:	NO
THICKNESS RANGE:	10-20 cm	HARD BEDROCK:	NO
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS	NON-SODIC SOFTROCK:	NO
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS	SODIC SOFTROCK:	NO
		GRAVEL:	NO
WIND EROSION RISK:	LOW	STONY LAYER:	NO
WATER EROSION K=:	0.063	FACE INSTABILITY:	NO
RISK ON <5% SLOPE:	MODERATE	SOLONETZIC B HORIZON:	NO
RISK ON 5-9% SLOPE:	MODERATE	SALINE OR SODIC LOWER SUBSOIL:	NO
RISK ON 9-15% SLOPE:	HIGH	IMPORTANT TEXTURE CHANGE:	NO

NOTES: GLORY SOILS ARE DEVELOPED ON STONE-FREE PITTED DELTAIC DEPOSITS. THESE SOILS HAVE A HIGH SILT CONTENT WITH NUMEROUS AND VARIABLE TEXTURED BANDS. LIME CARBONATES ARE ABSENT AND THIS IS REFLECTED IN THE VERY LOW PH VALUES IN ALL HORIZONS. THESE ACID SOIL CONDITIONS ARE UNSUITABLE FOR THE AGRICULTURAL CROPS GROWN IN THE REGION.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	GOLDEN SPIKE (GSP)	LANDFORM:	LEVEL, DEPRESSIONAL, FEN
SOIL ZONE:	DARK GRAY-GRAY		
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM1	0-40	10YR 3/2	VERY DARK GRAYISH BROWN			O		7.5	0.8	160.	1.2
OM2	40-80	10YR 4/6	DARK YELLOWISH BROWN					7.	0.3	300.	0.
OM3	80-140	10YR 4/3	BROWN-DARK BROWN					6.9	0.4	300.	0.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM1	0-40					G	U	G	
OM2	40-80				G	G	U	G	
OM3	80-140				G	G	U	G	

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	- cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE CHARACTERIZED BY AN ACCUMULATION OF SEDGE FEN PEAT GREATER THAN 1 M.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	GRATZ (GRZ)	LANDFORM:	FLOODPLAIN
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	CUMULIC HUMIC REGOSOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM FLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-15	10YR 4/1	DARK GRAY	WFGR	FR	SIL	6.2	7.5	0.6	66.	0.1
C1	15-50	10YR 4/1	DARK GRAY	MA	FR	SL		8.	0.3	53.	0.2
C2	50-120	10YR 4/1	DARK GRAY	MA	F	CL		8.	0.3	36.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-15	G	G	G	G	G	F	G	F (Topsoil)
C1	15-50	G	G		F	G	G	G	F (Subsoil)
C2	50-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: GRATZ SOILS OCCUR ON RECENT FLUVIAL FLOODPLAINS AND HAVE BURIED TOPSOIL HORIZONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	GRATZ-CAGL (caglGRZ)	LANDFORM:	FLOODPLAIN
		TYPICAL SLOPES:	0-5%
SOIL ZONE:	DARK GRAY-GRAY	USUAL SOIL MOISTURE:	TEMPORARY PONDING
SOIL CLASSIFICATION:	CALCAREOUS GLEYED CUMULIC HUMIC REGOSOL	SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-16	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	C	6.3	7.4			
CKGJ1	16-30	2.5Y 4/4	OLIVE BROWN	STRAT	FR	L	1.8	7.5			
CKGJ2	34-130	10YR 3/3	DARK BROWN	STRAT	FR	L		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-16	G	P	G	G				P (Topsoil)
CKGJ1	16-30	G	G		G				G (Subsoil)
CKGJ2	34-130	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF GRATZ THAT IS CALCAREOUS TO THE SURFACE, IMPERFECTLY DRAINED, AND EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS GENERALLY OCCUR IN LOWER LANDSCAPE POSITONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HELDAR (HDR)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-17	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	SIL	6.1	6.9	0.5	70.	0.
BT	17-35	10YR 5/4	YELLOWISH BROWN	MFSBK	F	SICL		7.	0.3	59.	0.
CK	35-150	10YR 5/2	GRAYISH BROWN	MA	F	SICL		7.5	0.3	58.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-17	G	G	G	G	G	F	G	F (Topsoil)
BT	17-35	F	F		G	G	G	G	F (Subsoil)
CK	35-150	F	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HELDAR SOILS ARE DEVELOPED ON WELL TO MODERATELY WELL DRAINED, SILTY CLAY TEXTURED GLACIOLACUSTRINE DEPOSITS THAT OCCUR ON A RANGE OF COMPLEX TOPOGRAPHY.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HELLIWELL (HLW)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-15	10YR 3/1	VERY DARK GRAY	WFGR	VFR	LS		5.9	0.2		
BC	70-150	10YR 5/6	YELLOWISH BROWN	SGR	L	S		6.7	0.16		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-15	G	P		F	G			P (Topsoil)
BC	70-150	F	P		G	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HELLIWELL SOILS ARE VERY DROUGHTY. THE GLACIOFLUVIAL SANDS ARE WELL SORTED AND OFTEN LAYERED. EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HELLIWELL-GL (glHLW)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 3/2	VERY DARK GRAYISH BROWN	SGR	L	LS	3.9	7.8	1.	55.	0.8
BGJ	20-75	10YR 5/3	BROWN	SGR	L	LS		8.	0.6	32.	1.
CKGJ	75-130	10YR 5/3	BROWN	SGR	L	SL-LS		7.9	0.8	39.	1.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	F	P	G	F	G	G	G	P (Topsoil)
BGJ	20-75	F	P		F	G	G	G	P (Subsoil)
CKGJ	75-130	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF HELLIWELL THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS ARE USUALLY FOUND IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HELLIWELL-XC (xcHLW)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN/GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-30	10YR 3/1	VERY DARK GRAY	WFGR	VFR	SL	2.	8.3	1.	36.	5.3
BM	30-75	10YR 5/3	BROWN	SGR	L	LS	0.1	8.2	0.3	25.	4.2
2BCGJ	75-105	10YR 5/1	GRAY	MA	F	L-SIL		7.8	0.3	43.	5.1
2CKGJ	105-120	10YR 5/1	GRAY	MA	F	SIL		8.	0.4	53.	4.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-30	G	G	F	F	G	G	F	F (Topsoil)
BM	30-75	F	P		F	G	F	F	P (Subsoil)
2BCGJ	75-105	F	G		F	G	G	F	F (Subsoil)
2CKGJ	105-120	F	G		F	G	G	F	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HELLIWELL THAT HAS FINE TEXTURED GLACIOLACUSTRINE MATERIAL WITHIN 1 M OF THE SURFACE. EXPOSED FACES OF THE UPPER MATERIAL ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HELLIWELL-XT (xtHLW)	LANDFORM:	UNDULATING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN/TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/2	VERY DARK GRAYISH BROWN	SGR	L	LS	2.2	6.2	0.5	31.	
BM	18-98	10YR 5/4	YELLOWISH BROWN	SGR	L	LS		7.	0.2	18.	
2CK	98-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL		6.7	0.1	39.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	F	P	G	F	G	G		P (Topsoil)
BM	18-98	F	P		G	G	P		P (Subsoil)
2CK	98-130	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HELLIWELL THAT HAS MODERATELY FINE TEXTURED TILL WITHIN 1 M OF THE SURFACE. EXPOSED FACES OF THE UPPER MATERIAL ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HIGHVALE (HGV)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5		/					11.7	6.1			
AE	5-23	10Yd	6/2	LIGHT BROWNISH GRAY	MMPL	VFR	SIL	1.3	6.			
BT1	23-46	10YRd	6/3	PALE BROWN	MFSBK	F	SICL	0.75	6.2			
BT2	46-61	10YRd	6/4	LIGHT YELLOWISH BROWN	WFSBK	FR	SICL	0.5	5.8			
C1	61-122	10YRd	6/4	LIGHT YELLOWISH BROWN	STRAT	F	SICL	0.7	5.6			
C2	122-152	10YRd	6/4	LIGHT YELLOWISH BROWN	STRAT	F	SICL		6.			
C3	152-200	10YRd	6/4	LIGHT YELLOWISH BROWN	STRAT	F	SIL		6.2			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5			G					
AE	5-23	G	G	F	F				F (Topsoil)
BT1	23-46	F	F		F				F (Subsoil)
BT2	46-61	G	F		F				F (Subsoil)
C1	61-122	F	F		F				F (Subsoil)
C2	122-152	F	F		F				F (Subsoil)
C3	152-200	F	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HIGHVALE SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE AN LH OVERLYING A PLATY, LIGHT BROWNISH GRAY AE HORIZON. THE SUBSOIL IS A YELLOWISH BROWN COLOR.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HOADLEY (HOD)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH/OAP	0-10	10YR 2/1	BLACK		-	O	5.8	6.6	0.7	56.	0.
AE	10-30	10YR 5/3	BROWN	WFPL	VFR	FSL		6.5	0.3	31.	0.
2BT	30-100	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		6.2	0.3	36.	0.
2CK	100-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL		7.7	0.4	39.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH/OAP	0-10			G		G	G	G	(Topsoil)
AE	10-30	G	G		G	G	G	G	F (Topsoil)
2BT	30-100	F	F		F	G	G	G	F (Subsoil)
2CK	100-130	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: HOADLEY SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE AN LH HORIZON OVERLYING A PLATY, LIGHT COLORED AE HORIZON. THE UPPER MATERIAL IS SANDY TEXTURED AND EXPOSED FACES MAY BE UNSTABLE. THE UNDERLYING TILL IS MODERATELY FINE TEXTURED.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HOADLEY-YP (ypHOD)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL/ SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-27	10YR 7/2	LIGHT GRAY	MMPL	VFR	FSL		6.1	0.2		
BT	27-44	10YR 5/6	YELLOWISH BROWN	WSBK	FR	FSL		4.9	0.2		
2BT	44-81	10YR 4/4	DARK YELLOWISH BROWN	SMSBK	F	FSCL		4.6	0.1		
2CK	81-150	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	L		7.6	0.3		
3CK	150-190	5Y 5/4	OLIVE	STRAT	FR	L		7.5	0.2		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-27	G	G		F	G			F (Topsoil)
BT	27-44	G	G		P	G			P (Subsoil)
2BT	44-81	F	F		P	G			P (Subsoil)
2CK	81-150	F	G		F	G			F (Subsoil)
3CK	150-190	G	G		G	G			G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HOADLEY THAT HAS WEATHERED BEDROCK 1 TO 2 M BELOW THE SURFACE. THE UPPER MATERIAL IS SANDY LOAM TEXTURED AND EXPOSED FACES MAY BE UNSTABLE. THE TILL IS ENCOUNTERED WITHIN 1 M OF THE SURFACE AND IS CLAY LOAM TEXTURED. THE UNDERLYING SOFTROCK IS USUALLY MODERATELY FINE TEXTURED, BUT CAN BE VARIABLE. THE TEXTURE CHANGE BETWEEN THE TILL AND SOFTROCK IS NOT SIGNIFICANT.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	HOADLEY-ZB (zbHOD)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR	4/3	BROWN-DARK BROWN	SGR	VFR	L	2.9	7.			
BM	10-25	10YR	6/4	LIGHT YELLOWISH BROWN	SGR	L	SL	0.3	6.4			
BT	25-52	10YR	4/6	DARK YELLOWISH BROWN	WFSBK	FR	L-CL	0.4	6.			
CKGJ	52-86	2.5Y	6/4	LIGHT YELLOWISH BROWN	SGR	L	SL		7.3			
2CK	86-130	2.5Y	5/4	LIGHT OLIVE BROWN	MA	F	C		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	G	G	G				G (Topsoil)
BM	10-25	F	G		F				F (Subsoil)
BT	25-52	G	F		F				F (Subsoil)
CKGJ	52-86	F	G		G				F (Subsoil)
2CK	86-130	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HOADLEY THAT HAS A BRUNISOLIC PROFILE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	JARVIE (JVE)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-30	10YR 2/1	BLACK	MMGR	FR	SICL	3.1	7.6	0.5	66.	0.1
AHE	30-35	10YR 3/1	VERY DARK GRAY	WMPL	FR	CL		7.7	0.4	59.	0.2
BTG	35-80	10YR 5/2	GRAYISH BROWN	MMSBK	F	CL		7.6	0.3	67.	0.4
CCAG	80-120	10YR 5/3	BROWN	MA	F	CL		8.2	0.5	53.	2.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-30	G	F	G	F	G	F	G	F (Topsoil)
AHE	30-35	G	F		F	G	G	G	F (Topsoil)
BTG	35-80	F	F		F	G	F	G	F (Subsoil)
CCAG	80-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-35 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	JARVIE-PT (ptJVE)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	10YR 2/2	VERY DARK BROWN			O					
AH	20-50	10YR 2/1	BLACK	MMGR	FR	SICL	3.1	7.6	0.5	66.	0.1
AHE	50-55	10YR 3/1	VERY DARK GRAY	WMPL	FR	CL		7.7	0.4	59.	0.2
BTG	55-100	10YR 5/2	GRAYISH BROWN	MMSBK	F	CL		7.6	0.3	67.	0.4
CCAG	100-120	10YR 5/3	BROWN	MA	F	CL		8.2	0.5	53.	2.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								
AH	20-50	G	F	G	F	G	F	G	F (Topsoil)
AHE	50-55	G	F		F	G	G	G	F (Topsoil)
BTG	55-100	F	F		F	G	F	G	F (Subsoil)
CCAG	100-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	55 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF JARVIE THAT HAS 15 TO 50 CM OF SURFACE PEAT. THE UNDERLYING TOPSOIL IS ABOUT 30-35 CM THICK. SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

KAWOOD

SCA 11

09/01/93

SOIL SERIES:	KAWOOD (KWO)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-12	10YR 5/2	GRAYISH BROWN	WFGR	FR	L	3.2	6.7	0.3	51.	0.6
AE	12-18	10YR 6/2	LIGHT BROWNISH GRAY	MMPL	FR	SIL					
BNTGJ	18-45	10YR 4/2	DARK GRAYISH BROWN	SCSBK	VF	CL		7.7	0.4	52.	7.7
CSK	45-120	10YR 6/3	PALE BROWN	MA	F	CL		8.4	0.8	55.	14.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-12	G	G	G	G	G	G	G	G (Topsoil)
AE	12-18	G	G						F (Topsoil)
BNTGJ	18-45	P	F		F	G	G	F	P (Subsoil)
CSK	45-120	F	F		F	G	G	U	U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	YES
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: ON CULTIVATED AREAS, KAWOOD SOILS HAVE VERY THIN TOPSOILS THAT OVERLY A PLATY, PALE BROWN AE HORIZON ABOUT 10 CM THICK. IN FORESTED AREAS, THE HORIZON SEQUENCE IS LH, AH AND AE WITH AH HORIZONS BEING VERY THIN AND SOMETIMES ABSENT. THE BNT HORIZON IS VERY HARD AND IMPERMEABLE. SUBSOILS ARE SALINE AND/OR SODIC.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	KEEPHILLS (KHS)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-8	10YRd 4/1	DARK GRAY	MFGR	VFR	L	3.5	6.8			
AHE	8-20	10YRd 4/2	DARK GRAYISH BROWN	WCPL	VFR	SL	2.07	6.5			
AE	20-33	10YRd 6/3	PALE BROWN	MFPL	VFR	SL	0.71	6.2			
BT1	33-53	10YRd 5/4	YELLOWISH BROWN	MFSBK	FR	SCL	0.46	5.8			
BT2	53-71	10YRd 5/4	YELLOWISH BROWN	WFSBK	F	SCL	0.4	6.3			
BC	71-122	2.5Ym 4/4	OLIVE BROWN	WMABK	F	SCL		6.9			
CK	122-150	2.5Ym 4/2	DARK GRAYISH BROWN	MA	FR	L		7.2			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-8	G	G		G				G (Topsoil)
AHE	8-20	G	G		G				G (Topsoil)
AE	20-33	G	G		F				F (Topsoil)
BT1	33-53	G	F		F				F (Subsoil)
BT2	53-71	F	F		F				F (Subsoil)
BC	71-122	F	F		G				F (Subsoil)
CK	122-150	G	G		G				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS HAVE YELLOWISH BROWN SUBSOILS AND DARK GRAY COLORED STRATA OF CLAY TEXTURE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	KERENSKY (KSY)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHG	0-12	10YR 2/1	BLACK	MFGR	FR	L	7.1	7.5	1.3	76.	
CKG	12-120	2.5Y 4/2	DARK GRAYISH BROWN	WFSBK	F	SICL		7.9	0.4	47.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHG	0-12	G	G	G	G	G	F		F (Topsoil)
CKG	12-120	F	F		F	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	KERENSKY-PTXC (ptxcKSY)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE/GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OMP	0-25	7.5YR 3/2	DARK BROWN			O	45.7	7.2			
OM	25-46	7.5YR 3/2	DARK BROWN			O	49.9	6.5			
AH	46-56	10YR 3/1	VERY DARK GRAY	SCPL	FR	L	7.	6.8			
BG	56-72	10YR 5/2	GRAYISH BROWN	WFSBK	FR	L	0.5	7.1			
2CKG	72-110	10YR 6/2	LIGHT BROWNISH GRAY	STRAT	F	CL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OMP	0-25			G					(Peat)
OM	25-46			G	G				(Peat)
AH	46-56	G	G	G	G				G (Topsoil)
BG	56-72	G	G		G				G (Subsoil)
2CKG	72-110	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	55 cm (PEAT AND TOPSOIL)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF KERENSKY THAT HAS 15 TO 50 CM OF SURFACE PEAT AND HAS FINE TEXTURED GLACIOLACUSTRINE MATERIAL WITHIN 1 M OF THE SURFACE.
SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.
THESE SOILS HAVE ABOUT 10 CM OF TOPSOIL UNDERLYING THE PEAT.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	KERENSKY-XT (xtKSY)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-26	10YR 2/1	BLACK	SFGR	FR	L	5.8	7.6			
BG1	26-52	10YR 5/3	BROWN	WFSBK	FR	L	0.5	7.2			
BG2	52-75	10YR 5/3	BROWN	STRAT	L	SL	0.4	7.3			
2CKG	75-110	10YR 6/1	LIGHT GRAY-GRAY	MA	F	CL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-26	G	G	G	F				F (Topsoil)
BG1	26-52	G	G		G				G (Subsoil)
BG2	52-75	F	G		G				F (Subsoil)
2CKG	75-110	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF KERENSKY THAT HAS MODERATELY FINE TEXTURED TILL WITHIN 1 M OF THE SURFACE. SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	LANONNE (LNN)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	SOLONETZIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YRm 3/2	VERY DARK GRAYISH BROWN	MFGR	F	L	3.24	6.7			
AE	10-25	10YRm 5/3	BROWN	PL	FR	L	0.64	5.7			
AB	25-33	10YRm 4/3	BROWN-DARK BROWN	SBK	F	CL	0.55	4.9			
BTNJ	33-61	10YRm 3/2	VERY DARK GRAYISH BROWN	MCPR	F	CL	0.52	5.			
BC	61-94	10YRm 4/3	BROWN-DARK BROWN	SBK	F	CL		5.8			
CSK	94-110	10YRm 4/4	DARK YELLOWISH BROWN	MA	F	L		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	P	G	G	G				P (Topsoil)
AE	10-25	G	G	P	F				P (Topsoil)
AB	25-33	F	F		P				P (Subsoil)
BTNJ	33-61	F	F		P				P (Subsoil)
BC	61-94	F	F		F				F (Subsoil)
CSK	94-110	F	G		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS HAVE A BTNJ HORIZON THAT IS ORGANIC STAINED AND FIRM.
LANONNE SOILS ARE WEAKLY SALINE AT DEPTH.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MACOLA (MLA)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 3/3	DARK BROWN	MMGR	F	CL		5.7	0.3	70.	
BT	20-75	2.5Y 4/4	OLIVE BROWN	MMSBK	F	C		5.2	0.3	82.	
CK	75-110	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	C		7.7	1.8	75.	1.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	P	F		F	G	F		P (Topsoil)
BT	20-75	F	P		P	G	P		P (Subsoil)
CK	75-110	F	P		F	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MACOLA SOILS ARE VERY FINE TEXTURED AND UNIFORM IN ALL PROFILE CHARACTERISTICS. THESE SOILS ARE USUALLY ONLY ASSOCIATED WITH OTHER GLACIOLACUSTRINE SOILS. EXPOSED FACES MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MACOLA-XT (xtMLA)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-20	10YRm 2/1	BLACK	MMSBK	F	SIC		6.6			
BT	20-70	10YRm 4/2	DARK GRAYISH BROWN	SMSBK	VF	SIC		5.4			
CK	70-90	10YRm 4/2	DARK GRAYISH BROWN	MA	VF	SIC		7.6			
2CK	90-120	2.5ym 4/4	OLIVE BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-20	P	P		G				P (Topsoil)
BT	20-70	P	P		P				P (Subsoil)
CK	70-90	P	P		F				P (Subsoil)
2CK	90-120	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF MACOLA THAT HAS MODERATELY FINE TEXTURED TILL WITHIN 1 M OF THE SURFACE. THE TEXTURE CHANGE BETWEEN MATERIALS IS NOT SIGNIFICANT.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MAPOVA-AA (aaMPV)	LANDFORM:	UNDULATING, LEVEL,
SOIL ZONE:	DARK GRAY-GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL	TYPICAL SLOPES:	0-2%
PARENT MATERIAL:	MODERATELY FINE TILL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-15	10YR 2/2	VERY DARK BROWN	MFGR	FR	SIL	3.6	5.9	2.5	62.	0.1
AEG	15-30	10YR 6/8	BROWNISH YELLOW	MMPL	FR	SICL	3.6	5.9	2.5	62.	0.1
BTG	52-92	10YR 2/2	VERY DARK BROWN	PR	F	C	0.5	6.3	0.3	31.	0.4
BCG	92-120	10YR 5/6	YELLOWISH BROWN	WMSBK	F	C	0.5	6.3	0.3	31.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-15	G	G	G	F	F	F	G	F (Topsoil)
AEG	15-30	G	F	G	F	F	F	G	F (Topsoil)
BTG	52-92	F	P		F	G	G	G	P (Subsoil)
BCG	92-120	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 12. THESE SOILS MAY HAVE UP TO 15 CM OF SURFACE PEAT.
SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.

MAUGHAN

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MAUGHAN (MAA)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	10-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						7.			
AE	3-10	7.5YR 4/2	BROWN	MFPL	FR	L	1.06	7.			
BT	10-25	10YRm 5/4	YELLOWISH BROWN	MMSBK	F	CL	0.53	6.8			
BC	25-45	10YRm 5/6	YELLOWISH BROWN	WFSBK	F	SCL		6.8			
C	45-120	1.5Ym 5/4	LIGHT OLIVE BROWN	MA	F	SCL		6.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								(Topsoil)
AE	3-10	G	G	F	G				F (Topsoil)
BT	10-25	F	F		G				F (Subsoil)
BC	25-45	F	F		G				F (Subsoil)
C	45-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MAUGHAN SOILS OCCUR ON MODERATELY FINE TEXTURED, NON SALINE-SODIC WEATHERED BEDROCK.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MAYWOOD (MYW)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	CL		5.9	0.7	55.	0.3
AE	10-18	10YR 5/3	BROWN	MMPL	FR	SICL					
BT	18-80	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	C		4.7	0.2	76.	1.5
CK	80-130	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.4	1.	75.	1.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	F		F	G	G	G	F (Topsoil)
AE	10-18	G	F						F (Topsoil)
BT	18-80	F	P		P	G	F	G	P (Subsoil)
CK	80-130	F	P		G	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, MAYWOOD SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE A LH HORIZON OVERLYING A GRAY, PLATY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF LH, AH AND AE HORIZONS AND IS VARIABLE IN COLOR. THESE SOILS ARE VERY FINE TEXTURED AND EXPOSED FACES MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MEWASSIN	(MEW)	LANDFORM:	ROLLING, HILLY
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	MESIC
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY FINE GLACIOLACUSTRINE			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR	4/1	DARK GRAY	MFGR	FR	SIL	5.2	6.2	0.4		0.5
BTJ	25-45	10YR	4/4	DARK YELLOWISH BROWN	MFSBK	F	CL		7.1	0.4		0.2
BC	45-60	10YR	5/4	YELLOWISH BROWN	WFSBK	F	SICL		7.4	0.3		0.4
CK	60-100	10YR	5/3	BROWN	MA	F	SICL		7.9	1.1		1.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	F	G		G	F (Topsoil)
BTJ	25-45	F	F		G	G		G	F (Subsoil)
BC	45-60	F	F		G	G		G	F (Subsoil)
CK	60-100	F	F		F	G		G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MEWASSIN SOILS HAVE FAIRLY THICK TOPSOILS. THE C HORIZON IS USUALLY STRATIFIED.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MICO (MCO)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY	USUAL SOIL MOISTURE:	MOIST
	CHERNOZEMIC	SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/2	VERY DARK GRAYISH BROWN	MMGR	F	SICL		6.9	0.5	68.	0.2
BTJ	18-60	10YR 3/3	DARK BROWN	MFSBK	F	C		6.3	0.1	83.	0.4
CK	60-100	10YR 5/2	GRAYISH BROWN	MA	F	C		7.8	0.5		0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	P	F		G	G	F	G	P (Topsoil)
BTJ	18-60	F	P		F	G	P	G	P (Subsoil)
CK	60-100	F	P		F	G		G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.028
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MICO SOILS ARE DEVELOPED ON STONE-FREE DARK GRAY CLAYS. THE INTERNAL DRAINAGE IS SLOW BECAUSE OF THE VERY FINE TEXTURED MATERIAL. EXPOSED FACES MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MICO-GL (glMCO)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-13	10YRm 3/2	VERY DARK GRAYISH BROWN	SMGR	FR	SIC	7.52	5.9			
ABGJ	13-28	10YRm 5/3	BROWN	MFSBK	F	C	0.75	4.8			
BMGJ	28-51	10YRm 4/3	DARK BROWN	SFABK	F	HC	0.75	4.8			
CCAGJ	51-64	10YRm 4/1	DARK GRAY	STRAT	FR	HC	0.54	7.7			
CKGJ	64-100	10YRm 4/1	DARK GRAY	MA	FR	HC	0.96	7.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-13	G	P	G	F				P (Topsoil)
ABGJ	13-28	F	P		P				P (Subsoil)
BMGJ	28-51	F	P		P				P (Subsoil)
CCAGJ	51-64	G	P		F				P (Subsoil)
CKGJ	64-100	G	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.028
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF MICO THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS USUALLY OCCUR IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MINISTIK (MNK)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR	5/1	GRAY	MFSBK	FR	SICL	3.8	4.7	1.		5.1
AE	10-20	10YR	7/1	LIGHT GRAY	MMPL	F	SIL	0.9	4.2	0.7		10.
BNT	20-43	10YR	4/3	BROWN-DARK BROWN	SMCOL	VF	SIC	0.9	4.7	0.6		7.9
CSK	43-120	10YR	4/1	DARK GRAY	MA	F	C	0.8	6.9	1.1		9.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	F	G	P	G		F	P (Topsoil)
AE	10-20	P	G	P	U	G		P	P (Topsoil)
BNT	20-43	P	P		P	G		F	P (Subsoil)
CSK	43-120	F	P		G	G		P	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MINISTIK SOILS USUALLY HAVE AN LH HORIZON OVERLYING A GRAY AE HORIZON AND A HARD, COLUMNAR, STAINED BNT HORIZON. THIN AHE/AH HORIZONS HAVE BEEN RECOGNIZED. UNDER CULTIVATION, AP HORIZONS ARE A MIXTURE OF THE SURFACE HORIZONS AND ARE OFTEN LIGHT IN COLOR DUE TO GREATER AMOUNTS OF THE AE MATERIAL. MINISTIK SOILS ARE SALINE AND/OR SODIC.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	MODESTE (MDE)	LANDFORM:	ROLLING, HILLY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/					36.1	5.5			
AE	3-16	10YRd 6/3	PALE BROWN	PL	SLH	SL	0.92	5.3			
AB	16-29	10YRm 4/4	DARK YELLOWISH BROWN	WFSBK	FR	SL	0.44	5.5			
BT	29-75	2.5Ym 4/4	OLIVE BROWN	WFSBK	F	SICL	0.31	5.5			
C	75-100	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	FR	LS	0.12	6.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3			G					
AE	3-16	G	G	P	P				P (Topsoil)
AB	16-29	G	G		F				F (Subsoil)
BT	29-75	F	F		F				F (Subsoil)
C	75-100	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MODESTE SOILS HAVE LITTLE OR NO TOPSOIL. THESE SOILS ARE DEVELOPED ON WEATHERED PASKAPOO SANDSTONE MATERIAL. FRAGMENTS OF WEATHERED BEDROCK ARE FOUND WITHIN THE SOLUM AND BEDROCK EXPOSURES CAN BE SEEN IN ROADCUTS. SOME TEXTURAL VARIATION OCCURS IN THESE PROFILES BECAUSE THE PARENT MATERIAL RANGES FROM COARSE TEXTURED SANDSTONE TO SILTSTONE. CONSOLIDATED SANDSTONE SLABS MAY BE ENCOUNTERED. THESE SOILS ARE USUALLY NON SALINE-SODIC.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	NAKAMUN (NKU)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/									
AE	3-21	10YRm 5/2	GRAYISH BROWN	WFPL	FR	SIL		5.7			
AB	21-36	10YRm 3/3	DARK BROWN	SMSBK	VF	CL		5.6			
BTNJ	36-56	10YRm 3/2	VERY DARK GRAYISH BROWN	SCSBK	VF	C		6.1			
BC	56-69	10YRm 4/2	DARK GRAYISH BROWN	SMSBK	F	SCL		6.5			
CSK	69-100	10YRm 4/2	DARK GRAYISH BROWN	MA	F	SCL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-21	G	G		F				F (Topsoil)
AB	21-36	P	F		F				P (Subsoil)
BTNJ	36-56	P	P		F				P (Subsoil)
BC	56-69	F	F		G				F (Subsoil)
CSK	69-100	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: NAKAMUN SOILS HAVE VERY THIN AH HORIZONS THAT ARE SOMETIMES ABSENT. THEY HAVE A STAINED, BLOCKY BT/BTNJ HORIZON OVERLYING A WEAKLY SALINE C HORIZON.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ONOWAY (ONW)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-30	10YR 2/1	BLACK	MMGR	FR	L					
BG	30-75	10YR 4/4	DARK YELLOWISH BROWN	WFSBK	F	CL					
CG	75-110	10YR 5/2	GRAYISH BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-30	G	G						G (Topsoil)
BG	30-75	F	F						F (Subsoil)
CG	75-110	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: TOPSOILS ARE FAIRLY THICK AND VERY DARK IN COLOR. THESE SOILS ARE WET ALL YEAR AND AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ONOWAY-PT (ptONW)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OH	0-25	10YR 2/2	VERY DARK BROWN			O	25.1	6.4	0.9	32.	
AH	25-33	10YR 2/1	BLACK	MMGR	FR	L					
BG	33-55	10YR 4/1	DARK GRAY	MFSBK	F	CL		6.8	0.4	49.	
CG	55-125	10YR 5/2	GRAYISH BROWN	MA	F	CL		6.7	0.3	38.	2.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OH	0-25			G		G	G		(Peat)
AH	25-33	G	G						G (Topsoil)
BG	33-55	F	F		G	G	G		F (Subsoil)
CG	55-125	F	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm (PEAT AND TOPSOIL)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF ONOWAY THAT HAS 15 TO 50 CM OF SURFACE PEAT. THERE IS ABOUT 10 CM OF TOPSOIL UNDERLYING THE PEAT. THESE SOILS ARE WET ALL YEAR AND EXPOSED FACES ARE UNSTABLE.

PATHFINDER

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	PATHFINDER (PHF)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	10-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-15	10YRd 4/1	DARK GRAY	WFGR	VFR	SL	1.72	7.			
AE	15-30	10YRd 6/3	PALE BROWN	SMPL	VFR	SL	1.29	7.			
BT	30-58	2.5Ym 5/4	LIGHT OLIVE BROWN	WFSBK	F	SL	0.35	6.8			
BC1	58-89	2.5Ym 5/6	LIGHT OLIVE BROWN	WFSBK	F	SL		6.3			
BC2	89-109	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	SL		6.7			
C	109-120	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	SL		6.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-15	G	G	F	G				F (Topsoil)
AE	15-30	G	G	F	G				F (Topsoil)
BT	30-58	F	G		G				G (Subsoil)
BC1	58-89	F	G		F				F (Subsoil)
BC2	89-109	F	G		G				G (Subsoil)
C	109-120	F	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.043
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: PATHFINDER SOILS ARE USUALLY SANDY LOAM TEXTURED AND EXPOSED FACES ARE UNSTABLE. THESE SOILS ARE USUALLY NON SALINE-SODIC. THE BEDROCK IS WEATHERED AND FRIABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	PRIMULA (PRM)	LANDFORM:	ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-3	10YR 5/2	GRAYISH BROWN	SGR	L	LS		6.2	0.1	38.	0.1
BM	3-70	10YR 6/8	BROWNISH YELLOW	SGR	L	LS		6.	0.1	25.	0.2
BC	70-110	2.5Y 6/6	OLIVE YELLOW	SGR	L	LS		5.5	0.1	25.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-3	F	P		F	G	G	G	P (Topsoil)
BM	3-70	F	P		F	G	F	G	P (Subsoil)
BC	70-110	F	P		F	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	5 cm
THICKNESS RANGE:	0-10 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE VERY COARSE TEXTURED WITH LOOSE CONSISTENCE AND EXPOSED FACES ARE UNSTABLE. PRIMULA SOILS ARE VERY DROUGHTY AND WIND EROSION RISK IS HIGH.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RAVEN (RVN)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YR 3/1	VERY DARK GRAY	MFGR	FR	CL		6.4	0.22		
BG	10-55	10YR 5/2	GRAYISH BROWN	MFSBK	F	C		6.9	0.19		
CKG	55-110	10YR 6/2	LIGHT BROWNISH GRAY	MA	F	C		7.6	0.24		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	G	F		F	G			F (Topsoil)
BG	10-55	F	P		G	G			P (Subsoil)
CKG	55-110	F	P		F	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: RAVEN SOILS MAY HAVE UP TO 15 CM OF SURFACE PEAT. THESE SOILS ARE WET ALL YEAR AND VERY FINE TEXTURED. AS A RESULT, EXPOSED FACES ARE UNSTABLE. THE CLAYS ARE USUALLY STONE-FREE BUT SOMETIMES SLIGHTLY STONY.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RAVEN-PT (ptRVN)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-45	10YR 3/3	DARK BROWN			O					
AHKG	45-65	10YR 3/1	VERY DARK GRAY	WFGR	FR	SICL		7.7	0.8	54.	0.8
CKG	65-85	10YR 5/2	GRAYISH BROWN	MA	F	CL		7.8	0.5	63.	1.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-45								(Peat)
AHKG	45-65	G	F		F	G	G	G	F (Topsoil)
CKG	65-85	F	F		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	65 cm (PEAT AND TOPSOIL)
THICKNESS RANGE:	35-70 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF RAVEN THAT HAS 15 TO 50 CM OF SURFACE PEAT. THERE IS ABOUT 20 CM OF TOPSOIL UNDERLYING THE PEAT. THESE SOILS ARE WET ALL YEAR AND VERY FINE TEXTURED. AS A RESULT, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	REDWATER (RDW)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 4/2	DARK GRAYISH BROWN	SGR	VFR	SL		6.1	0.3	37.	0.1
BM	15-90	10YR 5/3	BROWN	SGR	VFR	SL		6.3	0.1	29.	0.3
BC	90-120	10YR 5/3	BROWN	SGR	VFR	SL		6.3	0.1	29.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G		F	G	G	G	F (Topsoil)
BM	15-90	G	G		F	G	F	G	F (Subsoil)
BC	90-120	G	G		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: REDWATER SOILS ARE ASSOCIATED WITH RIVERS AND THEIR TRIBUTARIES. THEY HAVE LOW MOISTURE HOLDING CAPACITY AND ARE SUSCEPTIBLE TO WIND EROSION. EXPOSED FACES MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	REDWATER-CAXT (caxtRDW)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	CALCAREOUS DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-40	10YR 3/1	VERY DARK GRAY	SGR	VFR	SL	4.2	8.	0.9	67.	0.8
2BMK	40-80	10YR 5/3	BROWN	WFSBK	F	SL-SCL		8.1	4.1	45.	4.4
2CK	80-100	10YR 6/3	PALE BROWN	MA	F	SCL		7.9	5.2	52.	3.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-40	G	G	G	F	G	F	G	F (Topsoil)
2BMK	40-80	F	F		F	F	G	F	F (Subsoil)
2CK	80-100	F	F		F	P	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF REDWATER THAT IS CALCAREOUS TO THE SURFACE AND HAS MODERATELY FINE TILL WITHIN 1 M OF THE SURFACE. EXPOSED FACES OF THE UPPER MATERIAL MAY BE UNSTABLE. THE TILL IS USUALLY NON SALINE AND SODIC BUT MAY BE WEAKLY SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	REDWATER-ER (erRDW)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC (ERODED)	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-7	10YR 4/2	DARK GRAYISH BROWN	SGR	VFR	SL		6.1	0.3	37.	0.1
BM	7-83	10YR 5/3	BROWN	SGR	VFR	SL		6.3	0.1	29.	0.3
BC	83-120	10YR 5/3	BROWN	SGR	VFR	SL		6.3	0.1	29.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-7	G	G		F	G	G	G	F (Topsoil)
BM	7-83	G	G		F	G	F	G	F (Subsoil)
BC	83-120	G	G		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:		SUBSOIL (TO 1.5 M) INTERPRETATIONS:	
TYPICAL THICKNESS:	7 cm	SEASONALLY HIGH W.T.:	NO
THICKNESS RANGE:	0-10 cm	HARD BEDROCK:	NO
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS	NON-SODIC SOFTROCK:	NO
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS	SODIC SOFTROCK:	NO
		GRAVEL:	NO
WIND EROSION RISK:	HIGH	STONY LAYER:	NO
WATER EROSION K=:	0.013	FACE INSTABILITY:	YES
RISK ON <5% SLOPE:	LOW	SOLONETZIC B HORIZON:	NO
RISK ON 5-9% SLOPE:	LOW	SALINE OR SODIC LOWER SUBSOIL:	NO
RISK ON 9-15% SLOPE:	MODERATE	IMPORTANT TEXTURE CHANGE:	NO

NOTES: ERODED VARIANT OF REDWATER.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	REDWATER-SA	(saRDW)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC (SALINE)		USUAL SOIL MOISTURE:	TEMPORARY PONDING
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APSA	0-15	10YR 4/2	DARK GRAYISH BROWN	SGR	VFR	SL		6.1		37.	
BMSA	15-90	10YR 5/3	BROWN	SGR	VFR	SL		6.3		29.	
BCSA	90-120	10YR 5/3	BROWN	SGR	VFR	SL		6.3		29.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APSA	0-15	G	G		F		G		P (Topsoil)
BMSA	15-90	G	G		F		F		P (Subsoil)
BCSA	90-120	G	G		F		F		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF REDWATER THAT IS SALINE TO THE SURFACE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	REDWATER-XT	(xtRDW)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	DROUGHTY
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-30	10YR 3/1	VERY DARK GRAY	WFGR	VFR	SL		8.3	1.	36.	5.3
BM	30-75	10YR 5/3	BROWN	SGR	VFR	SL		8.2	0.3	25.	4.2
2BC	75-105	10YR 5/1	GRAY	MA	F	L		7.8	0.3	43.	5.1
2CK	105-120	10YR 5/1	GRAY	MA	F	SIL		8.	0.4	53.	5.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-30	G	G		F	G	G	F	F (Topsoil)
BM	30-75	G	G		F	G	F	F	F (Subsoil)
2BC	75-105	F	G		F	G	G	F	F (Subsoil)
2CK	105-120	F	G		F	G	G	F	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF REDWATER THAT HAS MODERATELY FINE TILL WITHIN 1 M OF THE SURFACE. EXPOSED FACES OF THE UPPER MATERIAL MAY BE UNSTABLE. THE TILL IS NON SALINE AND NON TO WEAKLY SODIC.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RICH LAKE (RLK)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L-SL	2.6	5.9	0.3	43.	
AE	20-40	10YR 5/3	BROWN	MFPL	FR	L-SL	0.7	6.	0.3	27.	
BTGJ	40-85	10YR 4/4	DARK YELLOWISH BROWN	MFSBK	FR-F	L		6.	0.3	29.	
BCGJ	85-130	2.5Y 5/4	LIGHT OLIVE BROWN	MA	FR-F	L-SL		6.2	0.4	38.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	G	G	F	G	G		F (Topsoil)
AE	20-40	G	G	P	F	G	F		F (Topsoil)
BTGJ	40-85	F	G		F	G	F		F (Subsoil)
BCGJ	85-130	F	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RIMBEY (RMY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH/AHE	0-40	10YR 3/1	VERY DARK GRAY	MFGR	FR	SCL		7.	0.44		
BM	40-65	10YR 5/3	BROWN	MA	F	SL		7.7	0.29		
CK	65-90	10YR 6/3	PALE BROWN	MA	F	SIL-L		7.8	0.31		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH/AHE	0-40	G	F		G	G			F (Topsoil)
BM	40-65	F	G		F	G			F (Subsoil)
CK	65-90	F	G		F	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-35 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: RIMBEY SOILS ARE DEVELOPED ON LAYERED FLUVIAL OR LACUSTRINE SEDIMENTS OF VARIABLE TEXTURES. LAYERS AND LENSES OF SAND OFTEN OCCUR WITHIN THE UPPER 1 M. THESE SOILS OFTEN OCCUR ADJACENT TO MELTWATER CHANNELS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RIMBEY-CA (caRMY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	CALCAREOUS DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-30	10YR	3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L		7.8	0.6	43.	0.1
BMK	30-55	10YR	5/4	YELLOWISH BROWN	MFSBK	F	L		7.6	1.2	50.	0.4
CK	55-110	10YR	6/4	LIGHT YELLOWISH BROWN	STRAT	FR	L-SIL		7.9	0.4	42.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-30	G	G		F	G	G	G	F (Topsoil)
BMK	30-55	F	G		F	G	G	G	F (Subsoil)
CK	55-110	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF RIMBEY THAT IS CALCAREOUS TO THE SURFACE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RIMBEY-GL	(glRMY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	TEMPORARY PONDING
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 2/2	VERY DARK BROWN	MFGR	FR	L	5.8	5.6	0.4	71.	
BTGJ	25-80	10YR 4/1	DARK GRAY	MFSBK	F	L		5.7	0.2	42.	
BCGJ	80-150	10YR 3/3	DARK BROWN	MA	F	L-SIL		6.2	0.2	38.	0.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	F	G	F		F (Topsoil)
BTGJ	25-80	F	G		F	G	G		F (Subsoil)
BCGJ	80-150	F	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF RIMBEY THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS USUALLY OCCUR IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RIMBEY-GLXT (glxtRMY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE/TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 2/2	VERY DARK BROWN	MFGR	FR	L	5.8	5.6	0.4	71.	
BTGJ	25-80	10YR 4/1	DARK GRAY	MFSBK	F	L		5.7	0.2	42.	
2BCGJ	80-150	10YR 3/3	DARK BROWN	MA	F	CL		6.2	0.2	38.	0.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	F	G	F		F (Topsoil)
BTGJ	25-80	F	G		F	G	G		F (Subsoil)
2BCGJ	80-150	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF RIMBEY THAT IS IMPERFECTLY DRAINED, EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL AND HAS MODERATELY FINE TILL WITHIN 1 M OF THE SURFACE. THE TEXTURE CHANGE BETWEEN THE TWO MATERIALS IS NOT SIGNIFICANT. THESE GLEYED SOILS USUALLY OCCUR IN LOWER LANDSCAPE POSITIONS. THERE IS SOMETIMES A STONY, GRAVELLY OR SANDY LAYER AT THE TILL CONTACT.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RIMBEY-XC	(xcRMY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	MOIST
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE/ GLACIOLACUSTRINE			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 2/2	VERY DARK BROWN	MFGR	FR	L	2.7	5.9	0.2	54.	
BT	25-75	10YR 3/3	DARK BROWN	MFSBK	F	SICL		5.6	0.1	41.	
2BT	75-110	10YR 4/1	DARK GRAY	MFSBK	F	C		5.8	0.1	42.	
2BC	110-150	10YR 3/3	DARK BROWN	MA	F	C		6.2	0.1	45.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	G	G	F	G	G		F (Topsoil)
BT	25-75	F	F		F	G	G		F (Subsoil)
2BT	75-110	F	P		F	G	G		P (Subsoil)
2BC	110-150	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF RIMBEY THAT HAS VERY FINE TEXTURED GLACIOLACUSTRINE MATERIAL WITHIN 1 M OF THE SURFACE. THE UNDERLYING MATERIAL IS OF POOR QUALITY DUE TO THE CLAYS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	RIMBEY-XT	(xtRMY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	MESIC
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE/TILL			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 2/2	VERY DARK BROWN	MFGR	FR	L	2.7	5.9	0.2	54.	
BT	25-75	10YR 3/3	DARK BROWN	MFSBK	F	SICL		5.6	0.1	41.	
2BT	75-110	10YR 4/1	DARK GRAY	MMSBK	F	CL		5.8	0.1	42.	
2BC	110-150	10YR 3/3	DARK BROWN	MA	F	CL		6.2	0.1	45.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	G	G	F	G	G		F (Topsoil)
BT	25-75	F	F		F	G	G		F (Subsoil)
2BT	75-110	F	F		F	G	G		F (Subsoil)
2BC	110-150	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF RIMBEY THAT HAS MODERATELY FINE TEXTURED TILL WITHIN ONE METRE OF THE SURFACE. THE TEXTURE CHANGE BETWEEN THE MATERIALS IS NOT SIGNIFICANT. THERE IS SOMETIMES A STONY, GRAVELLY OR SANDY LAYER AT THE TILL CONTACT. THE TOPOGRAPHY IS SOMETIMES STEEPER WHERE TILL IS NEAR THE SURFACE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ROCHESTER (RCS)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-20	10YR 3/1	VERY DARK GRAY	WFGR	VFR	L	6.2	7.8	1.2	67.	1.
BG	20-80	10YR 5/1	GRAY	WFSBK	FR	L-SIL	0.6	7.5	0.4	45.	1.3
CG	80-120	10YR 6/1	LIGHT GRAY-GRAY	STRAT	VFR	LS-SL		6.6	0.2	32.	0.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-20	G	G	G	F	G	F	G	F (Topsoil)
BG	20-80	G	G		G	G	G	G	G (Subsoil)
CG	80-120	G	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE WET ALL YEAR AND ARE SANDY LOAM TEXTURED. AS A RESULT, EXPOSED FACES MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ROCHESTER-PT (ptRCS)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-35	10YR 2/1	BLACK			O	46.	7.1	0.5	222.	0.
AH	35-45	10YR 3/1	VERY DARK GRAY	WMGR	FR	L	13.	7.3	0.65	65.	0.
BG	45-60	10YR 5/3	BROWN	WFSBK	FR	L	2.7	7.6	0.5	40.	0.
CKG	60-100	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	L	SL		7.8	0.3	30.	0.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-35			G		G	U		
AH	35-45	G	G	G	G	G	F		F (Topsoil)
BG	45-60	G	G		F	G	G		F (Subsoil)
CKG	60-100	F	G		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	45 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF ROCHESTER THAT HAS 15 TO 50 CM OF SURFACE PEAT. THERE IS ABOUT 10 CM OF TOPSOIL UNDERLYING THE PEAT. THESE SOILS ARE WET ALL YEAR AND SANDY LOAM TEXTURED. AS A RESULT, EXPOSED FACES MAY BE UNSTABLE.

ROLLY VIEW

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	ROLLY VIEW (RLV)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 3/1	VERY DARK GRAY	WFGR	FR	SL	4.6	6.8	0.6	67.	0.3
BM	25-85	10YR 4/4	DARK YELLOWISH BROWN	MFSBK	F	L		6.4	0.2	49.	0.3
CK	85-120	10YR 6/3	PALE BROWN	MA	F	CL		7.7	0.3	65.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	G	G	F	G	F (Topsoil)
BM	25-85	F	G		F	G	G	G	F (Subsoil)
CK	85-120	F	F		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON GROUND MORAINE OR DEAD ICE MORAINE THAT IS DARKER IN COLOR.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	THORSBY (TBY)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	DARK GRAY SOLOD	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L		6.	0.7	62.	8.5
BNT	18-38	10YR 3/3	DARK BROWN	COL	VF	CL		8.	2.1	89.	19.3
CSK	38-90	10YR 5/3	BROWN	MA	F	SCL		9.	1.6	81.	25.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	G		F	G	F	P	P (Topsoil)
BNT	18-38	P	F		F	G	P	U	U (Subsoil)
CSK	38-90	F	F		P	G	P	U	U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.043
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THORSBY SOILS ARE DEVELOPED ON EDMONTON TILL. THE BNT HORIZON IS VERY FIRM AND COLUMNAR AND THE C HORIZON IS SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	TIGERLILY (TGL)	LANDFORM:	UNDULATING, HILLY,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	TYPICAL SLOPES:	1-30%
PARENT MATERIAL:	MODERATELY COARSE	USUAL SOIL MOISTURE:	DROUGHTY
	GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-18	10YR	4/3	BROWN-DARK BROWN	WFGR	VFR	FSL	1.5	6.5	0.7	31.	0.5
BT	18-50	10YR	5/4	YELLOWISH BROWN	WFSBK	FR	SL		6.4	0.5	32.	0.3
BC	50-100	2.5Y	6/6	OLIVE YELLOW	SGR	FR-L	SL		6.6	0.5	36.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-18	G	G	F	G	G	G	G	F (Topsoil)
BT	18-50	G	G		F	G	G	G	F (Subsoil)
BC	50-100	F	G		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE A LH HORIZON OVERLYING A DISTINCT PALE, PLATY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS (LH,AE) AND IS FAIRLY LIGHT IN COLOR. EXPOSED FACES OF THESE SOILS MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	TIGERLILY-XCZB (xczbTGL)	LANDFORM:	UNDULATING, HILLY
		TYPICAL SLOPES:	1-15%
SOIL ZONE:	DARK GRAY-GRAY	USUAL SOIL MOISTURE:	MESIC
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/ GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-7	10YR 5/3	BROWN	SGR	L	SL	1.	6.5			
BM1	7-28	10YR 5/4	YELLOWISH BROWN	SGR	L	SL	0.4	6.			
BM2	28-42	10YR 4/4	DARK YELLOWISH BROWN	WFSBK	VFR	SL	0.4	6.1			
2BT	42-57	10YR 5/3	BROWN	MFSBK	F	CL	0.9	6.3			
2CK	57-120	10YR 6/4	LIGHT YELLOWISH BROWN	STRAT	F	SICL		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-7	F	G	F	G				F (Topsoil)
BM1	7-28	F	G		F				F (Subsoil)
BM2	28-42	G	G		F				F (Subsoil)
2BT	42-57	F	F		F				F (Subsoil)
2CK	57-120	F	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF TIGERLILY THAT HAS A BRUNISOLIC PROFILE AND HAS FINE TEXTURED GLACIOLACUSTRINE MATERIAL WITHIN 1 M OF THE SURFACE. EXPOSED FACES OF THE UPPER MATERIAL MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	TIGERLILY-ZB (zbTGL)	LANDFORM:	UNDULATING, HILLY,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	TYPICAL SLOPES:	1-30%
PARENT MATERIAL:	MODERATELY COARSE	USUAL SOIL MOISTURE:	DROUGHTY
	GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR	5/3	BROWN	WFGR	VFR	SL	2.5	6.			
BM	15-38	10YR	5/4	YELLOWISH BROWN	WFPL	VFR	SL	0.3	6.7			
BT	38-65	10YR	5/6	YELLOWISH BROWN	WFSBK	VFR	SL	0.4	6.3			
CKGJ	65-120	10YR	6/2	LIGHT BROWNISH GRAY	STRAT	FR	SL		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G	G	F				F (Topsoil)
BM	15-38	G	G		G				G (Subsoil)
BT	38-65	G	G		F				F (Subsoil)
CKGJ	65-120	G	G		G				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF TIGERLILY THAT HAS A BRUNISOLIC PROFILE.

TWO HILLS

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	TWO HILLS (TWH)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON
PARENT MATERIAL:	GRAVELLY, VERY COARSE GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-13	10YRm 2/1	BLACK	WFGR	FR	L	7.95	5.9			
AHE	13-20	10YRm 3/1	VERY DARK GRAY	MFPL	FR	L	4.6	6.1			
BTJ	20-40	10YRm 3/3	DARK BROWN	WFSBK	FR	GRSL	1.35	6.6			
BC	40-120	10YRm 3/3	DARK BROWN	SGR	L	GRLS		7.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-13	G	G	G	F				F (Topsoil)
AHE	13-20	G	G	G	F				F (Topsoil)
BTJ	20-40	G	P		G				P (Subsoil)
BC	40-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	GRAVELLY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON GLACIOFLUVIAL GRAVELS. THE GRAVEL IS AT OR NEAR THE SURFACE. THE TOPSOIL MAY OR MAY NOT BE GRAVELLY.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	UNCAS (UCS)	LANDFORM:	UNDULATING, ROLLING,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	TYPICAL SLOPES:	2-30%
PARENT MATERIAL:	MODERATELY FINE TILL	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.5			
AH	5-10	10YRm 2/1	BLACK	WFGR	VFR	L	8.28	6.1			
AHE	10-18	10YRm 3/2	VERY DARK GRAYISH BROWN	WFPL	VFR	SIL	1.18	5.6			
AE	18-23	10YRm 6/3	PALE BROWN	MFPL	VFR	SIL	0.48	5.5			
AB	23-31	10YRm 5/3	BROWN	MFSBK	F	SIL		5.3			
BT1	31-54	10YRm 5/4	YELLOWISH BROWN	MMSBK	F	L-CL		5.5			
BT2	54-74	10YRm 5/3	BROWN	MMSBK	F	L-CL	0.35	6.6			
BC	74-107	10YRm 4/2	DARK GRAYISH BROWN	WMSBK	FR	L-SCL		7.1			
CK	107-143	10YRm 5/2	GRAYISH BROWN	MA	FR	L-SCL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AH	5-10	G	G	G	F				F (Topsoil)
AHE	10-18	G	G	F	F				F (Topsoil)
AE	18-23	G	G	P	F				P (Topsoil)
AB	23-31	F	G		P				P (Subsoil)
BT1	31-54	F	F		F				F (Subsoil)
BT2	54-74	F	F		G				F (Subsoil)
BC	74-107	G	F		G				F (Subsoil)
CK	107-143	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON GROUND MORAINE OR DEAD ICE MORAINE OF THE EDMONTON FORMATION.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	UNCAS-ST (stUCS)	LANDFORM:	UNDULATING, ROLLING,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	TYPICAL SLOPES:	2-30%
PARENT MATERIAL:	STONY, MODERATELY FINE	USUAL SOIL MOISTURE:	MESIC
	TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 2/1	BLACK	WFGR	FR	STL	4.9	6.1	0.3	63.	
BT	23-60	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	STCL		6.2	0.4	38.	
CK	60-130	10YR 5/2	GRAYISH BROWN	MA	F	STCL		8.	0.9	43.	2.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	P	G	F	G	F		P (Topsoil)
BT	23-60	F	P		F	G	G		P (Subsoil)
CK	60-130	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF UNCAS THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WABAMUN (WAB)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	DARK GRAY SOLOD	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YRm 2/2	VERY DARK BROWN	SMGR	FR	SICL-SIC	4.9	5.3			
AE	10-20	10YRm 6/2	LIGHT BROWNISH GRAY	SMPL	FR	SIL	0.91	5.2			
AB	20-25	10YRm 2/2	VERY DARK BROWN	MFSBK	F-VF	SICL	1.31	4.5			
BNT1	25-40	10YRm 3/2	VERY DARK GRAYISH BROWN	SMCOL	VF	HC	1.05	4.1			
BNT2	40-58	10YRm 3/2	VERY DARK GRAYISH BROWN	SFCOL	VF	HC	0.67	5.			
CKSA	58-99	10YRm 3/2	VERY DARK GRAYISH BROWN	STRAT	VF	HC		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	G	P	G	P				P (Topsoil)
AE	10-20	G	G	P	P				P (Topsoil)
AB	20-25	P	F		P				P (Subsoil)
BNT1	25-40	P	P		U				U (Subsoil)
BNT2	40-58	P	P		P				P (Subsoil)
CKSA	58-99	P	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON MODERATELY SALINE AND/OR SODIC, VERY FINE TEXTURED GLACIOLACUSTRINE MATERIAL. THE BNT HORIZON IS VERY FIRM, ORGANIC STAINED AND COLUMNAR.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WABASH (WBH)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 2/1	BLACK	MMGR	FR	SICL	4.1	6.7	0.2		
BTGJ	20-100	10YR 5/3	BROWN	MMSBK	F	SIC		7.3	0.3	73.	0.3
CKGJ1	100-130	10YR 5/2	GRAYISH BROWN	MA	F	SIC		7.7	0.3	73.	0.4
CKGJ2	240-275	2.5Y 4/4	OLIVE BROWN	MA	F	SIC		7.7	0.3	69.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	F	G	G	G			F (Topsoil)
BTGJ	20-100	F	P		G	G	F	G	P (Subsoil)
CKGJ1	100-130	F	P		F	G	F	G	P (Subsoil)
CKGJ2	240-275	F	P		F	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.021
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS HAVE DEVELOPED ON STONE-FREE LACUSTRINE DEPOSITS IN LOCATIONS OF LEVEL TO GENTLY UNDULATING TOPOGRAPHY WHERE CONDITIONS OF IMPERFECT DRAINAGE EXIST. THESE SOILS HAVE GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WARBURG (WBG)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 4/2	DARK GRAYISH BROWN	MFGR	FR	SCL	2.9	5.8	0.7	52.	0.
BTGJ	15-50	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	SCL		6.4	2.9	42.	0.
CKGJ	80-120	10YR 3/3	DARK BROWN	MA	F	SCL		7.5	3.8	52.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	F	G	F	G	G	G	F (Topsoil)
BTGJ	15-50	F	F		F	G	G	G	F (Subsoil)
CKGJ	80-120	F	F		G	F	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE A LH HORIZON OVERLYING A GRAYISH AE HORIZON. CULTIVATED FIELDS HAVE AP HORIZONS ABOUT 15 CM IN THICKNESS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WESTEROSE (WSR)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-14	10YR 6/4	LIGHT YELLOWISH BROWN	MMPL	FR	L	1.	5.5			
BT	14-28	10YR 4/6	DARK YELLOWISH BROWN	MMSBK	F	SICL	0.7	6.2			
CK	28-110	2.5Y 5/4	LIGHT OLIVE BROWN	STRAT	FR	SIL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-14	G	G	F	F				F (Topsoil)
BT	14-28	F	F		F				F (Subsoil)
CK	28-110	G	G		G				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE A LH HORIZON OVERLYING A LIGHT COLORED, PLATY AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON IS ABOUT 15 CM THICK AND FAIRLY LIGHT IN COLOR.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WESTEROSE-GL (glWSR)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-20	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	SIL	5.4	7.5			
BKGJ	20-36	10YR 6/2	LIGHT BROWNISH GRAY	WFSBK	FR	SIL	0.6	7.6			
CKGJ1	36-90	2.5Y 5/4	LIGHT OLIVE BROWN	STRAT	FR-F	SICL		7.6			
CKGJ2	90-120	2.5Y 4/4	OLIVE BROWN	SGR	L	SL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-20	G	G	G	G				G (Topsoil)
BKGJ	20-36	G	G		F				F (Subsoil)
CKGJ1	36-90	F	F		F				F (Subsoil)
CKGJ2	90-120	F	G		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF WESTEROSE THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING IN THE SUBSOIL. THESE SOILS USUALLY OCCUR IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WINTERBURN (WTB)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHENOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-20	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	FSL		8.	0.6	47.	0.3
BTJK	40-80	10YR 5/4	YELLOWISH BROWN	WFSBK	FR	FSL		8.1	0.8	36.	0.2
CK	80-100	10YR 6/4	LIGHT YELLOWISH BROWN	STRAT	FR	FSL		8.2	0.6	33.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-20	G	G		F	G	G	G	F (Topsoil)
BTJK	40-80	G	G		F	G	G	G	F (Subsoil)
CK	80-100	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm
THICKNESS RANGE:	20-50 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: WINTERBURN SOILS ARE DEVELOPED ON MEDIUM TEXTURED PITTED DELTAIC MATERIAL. DISTINCT BANDS OF FINER OR COARSER TEXTURED MATERIAL CAN BE FOUND THROUGHOUT THE B AND C HORIZONS.

INTERPRETATION GUIDELINES

SCA 11

09/01/93

SOIL SERIES:	WINTERBURN-GL (glWB)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
APK	0-55	10YR 3/2	VERY DARK GRAYISH BROWN	WMGR	FR	L	3.9	7.9	0.4	64.	0.2
BKGJ	55-90	10YR 4/4	DARK YELLOWISH BROWN	WFSBK	FR	SIL		7.9	0.4	49.	0.3
CKGJ	90-130	10YR 3/3	DARK BROWN	STRAT	FR	SIL		7.9	0.4	58.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
APK	0-55	G	G	G	F	G	F	G	F (Topsoil)
BKGJ	55-90	G	G		F	G	G	G	F (Subsoil)
CKGJ	90-130	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm
THICKNESS RANGE:	20-50 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF WINTERBURN THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING IN THE SUBSOIL. THESE SOILS USUALLY OCCUR IN THE LOWER LANDSCAPE POSITIONS.

2.12 Soil Correlation Area #12

General Description of the Area

- Dark Gray - Gray Soil Zone of northeast-central Alberta.
- Occurs along the Athabasca River Valley from Whitecourt to Lesser Slave Lake, and east through Athabasca, Lac La Biche, Bonnyville and Grande Centre.

Ecoregion/Climate

- Mostly Mid-Boreal Mixedwood ecoregion with some Low Boreal Mixedwood along the south.
- Agroclimate is 3H (moderate heat limitation).
- Growing season P-PE= -150 to -200 mm.
- Precipitation between the Mid and Low Boreal Mixedwood ecoregions (SCA 11 and 12, respectively) is similar. Colder temperatures towards the north cause lower moisture deficits in the summer and a longer snowfall cover in the winter.

Soil and Landscapes

- Soils in SCA 12 are dominantly Orthic and Dark Gray Luvisolic with some Dark Gray and Black Chernozemics. Depressional areas contain Gleysolic and Organic soils.
- Landscapes are dominantly undulating moraine (till) with significant glaciolacustrine blankets over till and fluvial (river) deposits.
- Profile development is generally 55 cm deep.
- Soils have 10 to 30 cm of a dark gray to gray colored A horizon, occasionally with a light gray, leached horizon (Ae) below.
- Gray soil may have a thin, dark colored Ah horizon, but generally only a gray, leached Ae horizon is present.

Soil Reclamation Issues

- Potential risk of soil erosion by water is generally low. Areas with steeper topography however, such as along river valleys, have a high risk.
- A high risk of soil erosion by wind occurs on the Lesser Slave Plain.
- Topsoil salvage of cultivated Luvisols should include the Ap and Ae horizons. In forested areas, the salvaged topsoil should include the Ae and all horizons above it.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	BONNIE	(BNN)	LANDFORM:	LEVEL, DEPRESSIONAL,
SOIL ZONE:	DARK GRAY-GRAY			FEN
SOIL CLASSIFICATION:	TYPIC HUMISOL		TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC		USUAL SOIL MOISTURE:	WATERTABLE/PONDING
			SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OH1	0-13	5YRw 3/2	DARK REDDISH BROWN			O	35.57	5.6			
OM	13-64	5YRw 3/4	DARK REDDISH BROWN			O	37.94	5.8			
OH2	64-91	7.5YR 3/2	DARK BROWN			O	29.69	5.9			
OH3	91-152	5YRw 3/2	DARK REDDISH BROWN			O	45.32	5.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OH1	0-13			G	F				
OM	13-64			G	F				
OH2	64-91			G	F				
OH3	91-152			G	F				

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0	cm
THICKNESS RANGE:		cm
COLOR CHANGE TO SUBSOIL:		
STRIPPING LIMITATIONS:	WETNESS	
WIND EROSION RISK:		
WATER EROSION K=:	-	
RISK ON <5% SLOPE:	-	
RISK ON 5-9% SLOPE:	-	
RISK ON 9-15% SLOPE:	-	

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE CHARACTERIZED BY HUMIC ORGANIC FEN PEAT GREATER THAN 1 M THICK.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	CHATWIN (CTW)	LANDFORM:	LEVEL, DEPRESSIONAL,
SOIL ZONE:	DARK GRAY-GRAY		FEN
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF1	0-25	7.5YR 5/4	BROWN			O	39.91	5.5			
OM1	25-97	5YRw 2/1	BLACK			O	33.87	6.1			
OM2	97-143	5YRw 3/2	DARK REDDISH BROWN			O	33.83	5.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF1	0-25			G	F				
OM1	25-97			G	F				
OM2	97-143			G	F				

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE CHARACTERIZED BY MESIC ORGANIC FEN PEAT GREATER THAN 1 M THICK.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	COLUMBINE (CMB)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YR 3/1	VERY DARK GRAY	WFGR	FR	SIL	29.				
BG	10-50	10YR 4/2	DARK GRAYISH BROWN	WMSBK	F	CL	2.6	6.6	0.3	88.	0.3
BCG	50-120	10YR 5/1	GRAY	MA	F	CL		7.3	0.5	43.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	G	G	G					G (Topsoil)
BG	10-50	F	F		G		P	G	P (Subsoil)
BCG	50-120	F	F		G		G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	DIRLETON (DRN)	LANDFORM:	VENEER, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-10	10YR 4/2	DARK GRAYISH BROWN	WFGR	VFR	SL	1.2				
BM	10-40	10YR 4/4	DARK YELLOWISH BROWN	SGR	VFR	SL		6.6	0.2	26.	0.2
BC	40-90	10YR 5/4	YELLOWISH BROWN	STRAT	VFR	SL		6.4	0.3	21.	0.2
2C	90-100	10YR 4/2	DARK GRAYISH BROWN	MA	F	CL		5.2	0.1	55.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-10	G	G	F					F (Topsoil)
BM	10-40	G	G		G	G	F	G	F (Subsoil)
BC	40-90	G	G		F	G	F	G	F (Subsoil)
2C	90-100	F	F		P	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: THE UPPER MATERIAL IS SANDY LOAM TEXTURED AND EXPOSED FACES MAY BE UNSTABLE WHEN VERTICALLY DITCHED. THE UNDERLYING TILL IS MODERATELY FINE TEXTURED AND NON SALINE-SODIC.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	DIRLETON-GL	(glDRN)	LANDFORM:	VENEER, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	GLEYED DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	TEMPORARY PONDING
			SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-10	10YR 4/2	DARK GRAYISH BROWN	WFGR	VFR	SL	1.2				
BMGJ	10-40	10YR 4/4	DARK YELLOWISH BROWN	SGR	VFR	SL		6.6	0.2	26.	0.2
BCGJ	40-100	10YR 5/4	YELLOWISH BROWN	STRAT	VFR	SL		6.4	0.3	21.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-10	G	G	F					F (Topsoil)
BMGJ	10-40	G	G		G	G	F	G	F (Subsoil)
BCGJ	40-100	G	G		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.013
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF DIRLETON THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS USUALLY OCCUR IN LOWER LANDSCAPE POSITIONS.

DOWNING

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	DOWNING (DWG)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY GRAVELLY, VERY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AEP	0-15	10YR	5/3	BROWN	SGR	L	CS	1.7	6.8	0.3	25.	
BM	15-75	10YR	4/3	BROWN-DARK BROWN	SGR	L	GRCS		7.	0.2	21.	
2BC	75-130	2.5Y	5/4	LIGHT OLIVE BROWN	MA	F	CL		6.3	0.4	43.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AEP	0-15	F	P	F	G	G	F		P (Topsoil)
BM	15-75	F	P		G	G	F		P (Subsoil)
2BC	75-130	F	F		F	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, GRAVELLY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: THE UPPER MATERIAL IS VERY COARSE TEXTURED AND MAY HAVE UNSTABLE EXPOSED FACES WHEN VERTICALLY DITCHED. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS A LH HORIZON OVERLYING A PLATY, LIGHT GRAY AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON OR TOPSOIL IS MAINLY DERIVED FROM AE MATERIAL AND IS VERY LIGHT IN COLOR.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	EDWAND (EDW)	LANDFORM:	UNDULATING, ROLLING,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	TYPICAL SLOPES:	2-15%
PARENT MATERIAL:	VERY GRAVELLY, VERY COARSE GLACIOFLUVIAL	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YR 2/1	BLACK								
AE	5-20	10YR 5/2	GRAYISH BROWN	SGR	L	GRCS	6.7	6.5	0.5	61.	0.1
BM	20-48	10YR 5/4	YELLOWISH BROWN	SGR	L	GRCS	0.9	6.	0.2	25.	0.3
BC	48-65	10YR 4/4	DARK YELLOWISH BROWN	SGR	L	GRCS		6.1	0.1	21.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-20	F	P	G	G	G	F	G	P (Topsoil)
BM	20-48	F	P		F	G	F	G	P (Subsoil)
BC	48-65	F	P		F	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, GRAVELLY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS HAVE LITTLE OR NO TOPSOIL BUT HAVE A THIN LH HORIZON OVERLYING A PALE BROWN AE HORIZON. WEAK PROFILE DEVELOPMENT ON GRAVELLY COARSE SAND HAS RESULTED IN INDISTINCT HORIZONATION. EXPOSED FACES ARE UNSTABLE. EDWAND SOILS ARE DROUGHTY.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	FERGY (FRY)	LANDFORM:	UNDULATING, ROLLING,
SOIL ZONE:	DARK GRAY-GRAY		HUMMOCKY
SOIL CLASSIFICATION:	ELUVIATED BLACK	TYPICAL SLOPES:	1-15%
	CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 3/1	VERY DARK GRAY	WMGR	FR	SL	7.	6.9	0.7	75.	0.5
BT	25-75	10YR 5/3	BROWN	WCPR	F	L		7.8	0.4	54.	0.3
CCA	75-120	10YR 5/3	BROWN	MA	FR	L		8.1	0.4	65.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	G	G	F	G	F (Topsoil)
BT	25-75	F	G		F	G	G	G	F (Subsoil)
CCA	75-120	G	G		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON MODERATELY FINE GLACIAL TILL.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	GRATZ-AA	(aaGRZ)	LANDFORM:	FLOODPLAIN
SOIL ZONE:	DARK GRAY-GRAY		TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	CUMULIC HUMIC REGOSOL		USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM FLUVIAL		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-30	10YR 4/1	DARK GRAY	MFGR	FR	SIL	7.6				
CKGJ1	30-60	10YR 4/1	DARK GRAY	MA	FR	SIL		7.5	1.6	71.	4.2
CKGJ2	60-120	10YR 4/1	DARK GRAY	MA	FR	SIL		7.6	1.1	57.	2.8

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-30	G	G	G					G (Topsoil)
CKGJ1	30-60	G	G		G	G	F	F	F (Subsoil)
CKGJ2	60-120	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: GRATZ SOILS OCCUR ON RECENT FLUVIAL FLOODPLAINS AND HAVE BURIED TOPSOIL HORIZONS.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	KEHIWIN (KHW)	LANDFORM:	UNDULATING, HUMMOCKY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-35	10YR 3/2	VERY DARK GRAYISH BROWN	MMGR	FR	L	2.6	5.8	0.4	50.	0.
BT	35-75	10YR 5/4	YELLOWISH BROWN	MMSBK	F	CL		7.2	0.3	46.	0.
CK	75-130	10YR 5/3	BROWN	MA	F	CL		8.	0.3	46.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-35	G	G	G	F	G	G	G	F (Topsoil)
BT	35-75	F	F		G	G	G	G	F (Subsoil)
CK	75-130	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	25-35 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.034
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE FOUND MAINLY ON UNDULATING OR HUMMOCKY MORAINAL PLAINS.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	LA COREY (LCY)	LANDFORM:	LEVEL, ROLLING, HUMMOCKY
SOIL ZONE:	DARK GRAY-GRAY		
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	TYPICAL SLOPES:	1-30%
PARENT MATERIAL:	MODERATELY FINE TILL	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YR 2/1	BLACK								
AE	5-20	10YR 5/3	BROWN	MMPL	FR	STSL		6.7	0.3	24.	
BT	20-73	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		5.5	0.2	36.	
BC	73-95	10YR 3/4	DARK YELLOWISH BROWN	WFSBK	F	CL					
CK	95-125	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	CL		7.8	0.4	45.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-20	G	P		G	G	F		P (Topsoil)
BT	20-73	F	F		F	G	G		F (Subsoil)
BC	73-95	F	F						F (Subsoil)
CK	95-125	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	4-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS, STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: LA COREY SOILS OCCUR ON BROWN TO YELLOWISH BROWN GLACIAL TILL. THEY OCCUR ON LEVEL GROUND MORAINES, GENTLY UNDULATING FLUTINGS, AND MODERATELY ROLLING HUMMOCKY MORAINES. IN FORESTED AREAS, THESE SOILS HAVE A THIN LH HORIZON OVERLYING A LIGHT GRAY, PLATY AE HORIZON. THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). WITH CLEARING AND CULTIVATION, AN AP HORIZON IS DEVELOPED MAINLY FROM THE AE HORIZON MATERIAL. IT IS ABOUT 10 CM IN THICKNESS AND FAIRLY LIGHT IN COLOR. LA COREY SOILS MAY BE VERY STONY AND BOULDERY AT THE SURFACE.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	MANATOKAN (MNT)	LANDFORM:	DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	TERRIC MESISOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	ORGANIC/GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-60	10YR 3/3	DARK BROWN			O	31.2	6.9	1.6	189.	0.3
BG	60-90	10YR 5/2	GRAYISH BROWN	MA	F	CL-C		7.5	0.5	44.	0.3
CG	90-130	10YR 5/1	GRAY	STRAT	F	CL-C		7.4	0.3	50.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-60			G		G	U	G	
BG	60-90	F	P		G	G	G	G	P (Subsoil)
CG	90-130	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0	cm
THICKNESS RANGE:		cm
COLOR CHANGE TO SUBSOIL:		
STRIPPING LIMITATIONS:	WETNESS	
WIND EROSION RISK:		
WATER EROSION K=:	-	
RISK ON <5% SLOPE:	-	
RISK ON 5-9% SLOPE:	-	
RISK ON 9-15% SLOPE:	-	

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: THESE SOILS ARE CHARACTERIZED BY 50 TO 100 CM OF ORGANIC FEN PEAT OVERLYING MODERATELY FINE TEXTURED GLACIOLACUSTRINE MATERIAL.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	MAPOVA (MPV)	LANDFORM:	UNDULATING, LEVEL,
SOIL ZONE:	DARK GRAY-GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL	TYPICAL SLOPES:	0-2%
PARENT MATERIAL:	MODERATELY FINE TILL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-15	10YRm 3/1	VERY DARK GRAY	WFGR	VFR	L	7.49	7.5			
AEGJ	15-25	10YRm 6/2	LIGHT BROWNISH GRAY	WFPL	VFR	L-SL	0.49	7.7			
BTKG	25-33	10YRm 4/2	DARK GRAYISH BROWN	MMSBK	F	CL	0.61	7.7			
CKG1	33-91	10YRm 5/2	GRAYISH BROWN	MMSBK	F	SCL		7.7			
CKG2	91-150	10YRm 5/2	GRAYISH BROWN	MCSBK	F	L-SCL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-15	G	G	G	G				G (Topsoil)
AEGJ	15-25	G	G	P	F				P (Topsoil)
BTKG	25-33	F	F		F				F (Subsoil)
CKG1	33-91	F	F		F				F (Subsoil)
CKG2	91-150	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS MAY HAVE UP TO 15 CM OF SURFACE PEAT. SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	MAPOVA-PT (ptMPV)	LANDFORM:	LEVEL, DEPRESSIONAL
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	/				O					
AH	20-35	10YR 2/2	VERY DARK BROWN	MFGR	FR	SIL	3.6	5.9	2.5	62.	0.1
AEG	72-112	10YR 6/6	BROWNISH YELLOW	MMPL	FR	SICL	3.6	5.9	2.5	62.	0.1
BTG	112-132	10YR 2/2	VERY DARK BROWN	PR	F	C	0.5	6.3	0.3	31.	0.4
BCG	132-140	10YR 5/5	YELLOWISH BROWN	WMSBK	F	C	0.5	6.3	0.3	31.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								
AH	20-35	G	G	G	F	F	F	G	F (Topsoil)
AEG	72-112	G	F	G	F	F	F	G	F (Topsoil)
BTG	112-132	F	P		F	G	G	G	P (Subsoil)
BCG	132-140	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	30-65 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF MAPOVA THAT HAS 15 TO 50 CM OF SURFACE PEAT. THESE SOILS HAVE ABOUT 15 CM OF TOPSOIL (AH OR AHE HORIZON) AND A PEATY AEG HORIZON UNDERLYING THE PEAT.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	MISSAWAWI (MWI)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR	3/2	VERY DARK GRAYISH BROWN	WFGR	FR	SL	8.2	6.2	1.	74.	0.1
AE	10-30	10YR	5/3	BROWN	WFPL	VFR	SL	0.9	6.3	0.4	26.	0.2
2BT	30-75	10YR	4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		5.1	0.1	42.	0.5
2CK	75-130	2.5Y	4/4	OLIVE BROWN	MA	F	CL-C		7.5	0.4	59.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	G	G	F	G	F	G	F (Topsoil)
AE	10-30	G	G	P	F	G	F	G	P (Topsoil)
2BT	30-75	F	F		P	G	G	G	P (Subsoil)
2CK	75-130	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: THESE SOILS HAVE LITTLE OR NO TOPSOIL IN FORESTED LANDS. INSTEAD, THEY HAVE A LH HORIZON OVERLYING A PALE, PLATY AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON IS ABOUT 10 TO 15 CM IN THICKNESS AND IS LIGHTER IN COLOR DUE TO THE AE MATERIAL IT IS MAINLY COMPOSED OF. THE UPPER MATERIAL IS SANDY LOAM TEXTURED AND MAY HAVE UNSTABLE EXPOSED FACES WHEN VERTICALLY DITCHED. THE UNDERLYING TILL IS MODERATELY FINE TEXTURED.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	NICOT (NIT)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 5/2	GRAYISH BROWN	SGR	L	SL					
AE	15-28	10YR 7/2	LIGHT GRAY	SGR	L	SL		6.4	0.14		
BM	28-58	7.5YR 5/6	STRONG BROWN	SGR	L	LS-S		6.2	0.12		
BC1	58-100	10yr 5/6	YELLOWISH BROWN	SGR	L						
BC2	100-130	10YR 5/6	YELLOWISH BROWN	SGR	L	S		6.1	0.11		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	F	G						F (Topsoil)
AE	15-28	F	G		F	G			F (Topsoil)
BM	28-58	F	P		F	G			P (Subsoil)
BC1	58-100	F	P						P (Subsoil)
BC2	100-130	F	P		F	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, DISCONTINUOUS
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THE GLACIOFLUVIAL SANDS ARE STONE-FREE TO SLIGHTLY STONY AND FREQUENTLY STRATIFIED AND LAYERED. NICOT SOILS MAY BE EXCEEDINGLY DROUGHTY IN YEARS OF INADEQUATE RAINFALL. THEY ARE VERY SUSCEPTIBLE TO WIND EROSION. EXPOSED FACES ARE UNSTABLE. IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THEY HAVE A LEAF LITTER (LH) HORIZON OVERLYING A PLATY, LIGHT GRAY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS ABOUT 15 CM IN THICKNESS, IS COMPOSED MAINLY OF AE MATERIAL AND IS GRAYISH BROWN IN COLOR.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	PLAMONDON (PLM)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L-CL	3.1	5.9	0.7	55.	0.3
BT	18-80	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	C		4.7	0.2	76.	1.5
CK	80-130	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.4	1.	75.	1.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	F	G	F	G	G	G	F (Topsoil)
BT	18-80	F	P		P	G	F	G	P (Subsoil)
CK	80-130	F	P		G	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: ON CULTIVATED LAND, THESE SOILS HAVE A DARK GRAYISH BROWN AP HORIZON THAT IS ABOUT 10 CM IN THICKNESS.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	PLAMONDON-XT (xtPLM)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L-CL	3.1	5.9	0.7	55.	0.3
BT	10-80	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	C		4.7	0.2	76.	1.5
2CK	80-130	10YR 4/4	OLIVE BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	F	G	F	G	G	G	F (Topsoil)
BT	10-80	F	P		P	G	F	G	P (Subsoil)
2CK	80-130	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF PLAMONDON THAT HAS MODERATELY FINE TEXTURED TILL WITHIN 1 M OF THE SURFACE. THE TEXTURE CHANGE IN MATERIAL IS NOT SIGNIFICANT.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	SPEDDEN (SDN)	LANDFORM:	UNDULATING, HUMMOCKY
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-12	10YR 4/1	DARK GRAY	MFGR	FR	L		6.7	0.		
AE	12-30	10YR 5/2	GRAYISH BROWN	MFPL	VFR	L	1.6	7.1	1.	38.	
BT	30-60	10YR 4/3	BROWN-DARK BROWN	MMSBK	F	CL		6.5	0.4	38.	
BC	60-100	10YR 4/3	BROWN-DARK BROWN	MA	F	SCL		7.1	0.3	35.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-12	G	G		G	G			G (Topsoil)
AE	12-30	G	G	F	G	G	G		F (Topsoil)
BT	30-60	F	F		G	G	G		F (Subsoil)
BC	60-100	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS OCCUR ON UNDULATING MORAINAL PLAINS AND MODERATELY ROLLING HUMMOCKY MORAINAL PLAINS.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	TAWATINAW (TNW)	LANDFORM:	MORAINES, FLUTINGS
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	GRAVELLY, MEDIUM TILL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 5/3	BROWN	WFGR	VFR	SL		6.8	0.2	32.	0.2
AE	18-25	10YR 6/3	PALE BROWN	WFPL	VFR	FSL					
BT	25-80	10YR 5/3	BROWN	WFSBK	F	L		6.3	0.1	31.	0.5
BC	80-120	10YR 5/4	YELLOWISH BROWN	SGR	L	SL		6.8	0.1	23.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	G		G	G	G	G	G (Topsoil)
AE	18-25	G	G						F (Topsoil)
BT	25-80	F	G		F	G	G	G	F (Subsoil)
BC	80-120	F	G		G	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, GRAVELLY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THE GROUND AND DEAD ICE MORAINE IS STONY, PARTICULARILY WITH DEPTH. POCKETS OF SAND AND GRAVEL ARE COMMON AND TEXTURES ARE HIGHLY VARIABLE. TEXTURES BECOME COARSER WITH INCREASING DEPTH AND TOPOGRAPHY. IN FORESTED AREAS, THERE IS USUALLY NO TOPSOIL. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A PALE BROWN, PLATY, PROMINENT AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON RANGES FROM 10 TO 20 CM AND IS LIGHTER IN COLOR DUE TO THE AE MATERIAL IT IS MAINLY COMPOSED OF.

INTERPRETATION GUIDELINES

SCA 12

09/01/93

SOIL SERIES:	VILNA (VIL)	LANDFORM:	LEVEL, UNDULATING
SOIL ZONE:	DARK GRAY-GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	GLEYED ELUVIATED BLACK CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHP	0-20	10YRm 2/1	BLACK	MA	FR	L	3.58	6.3			
AHE	20-25	10YRm 3/1	VERY DARK GRAY	MA	FR	L	0.97	6.4			
AB	25-36	10YRm 5/4	YELLOWISH BROWN	MA	FR	SCL	0.42	6.4			
BTGJ	36-72	10YRm 3/3	DARK BROWN	WFSBK	FR	SCL	0.44	6.8			
CKG	72-100	2.5Ym 4/2	DARK GRAYISH BROWN	MA	FR	L-SCL		7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHP	0-20		G	G	F				F (Topsoil)
AHE	20-25		G	P	F				P (Topsoil)
AB	25-36		F		F				F (Subsoil)
BTGJ	36-72		F		G				F (Subsoil)
CKG	72-100		F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VILNA SOILS OCCUR ON THE LOWER SLOPES OF UNDULATING MORAINAL PLAINS WHERE DRAINAGE IS IMPERFECT. THESE SOILS EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

2.13 Soil Correlation Area #13

General Description of the Area

- Occurs in a narrow strip west of Sundre, Rocky Mountain House and Drayton Valley; a wider area between Hinton and Whitecourt, north of Fox Creek; and northeast to Slave Lake.

Ecoregion/Climate

- Lower boreal Cordilleran ecoregion of West-Central Alberta Plains.
- Agroclimate is 4H (severe heat limitation).
- Growing season P-PE= -150 to 0 mm.
- Average precipitation in the Lower Boreal-Cordilleran ecoregion is 460 mm, most of which occurs during the summer making this ecoregion the second wettest area in Alberta. The Upper Boreal-Cordilleran Ecoregion is the only area receiving more precipitation during the summer. Winter precipitation is similar to the Low and Mid Boreal Mixedwood Ecoregions.
- Summer temperatures are colder than the Low and Mid Boreal Mixedwood ecoregion. Winter temperatures are warmer because arctic highs rarely reach this area and numerous chinooks occur.
- Chinooks have a large effect on climate in the Saskatchewan River Valley.

Soil and Landscapes

- Soils in SCA 13 are dominantly Luvisolic with some Brunisolic soils present. Poorly drained areas contain Gleysolic and Organic soils.
- Landscapes are composed largely of Cordilleran till with the surface expression controlled by bedrock.
- Profile development generally 85 cm deep.
- A significant amount of the soils have gravel and/or hard bedrock contact.

Soil Reclamation Issues

- Potential risk of soil erosion by water is generally severe to moderate, on steep and long slopes, because of high summer rainfall. Undulating landscapes have a low risk.
- The risk of soil erosion by wind is generally low except in the Saskatchewan River Valley where it is moderate to high.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	ANSELL (ASL)	LANDFORM:	HUMMOCKY
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						4.3			
AE	5-17	10YRm 7/2	LIGHT GRAY	MFPL	FR	L	0.39	5.9			
BT1	17-27	10YRm 4/3	DARK BROWN	SFSBK	F	CL	0.47	5.7			
BT2	27-49	10YRm 5/6	YELLOWISH BROWN	SMSBK	F	L	0.23	5.6			
BC	49-66	2.5Ym 5/4	LIGHT OLIVE BROWN	WCSBK	F	SIL		5.5			
C	66-120	2.5Ym 4/4	OLIVE BROWN	MA	F	CL		5.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-17	G	G		G				G (Upper L)
BT1	17-27	G	F		G				F (Subsoil)
BT2	27-49	G	G		G				G (Subsoil)
BC	49-66	G	G		G				G (Subsoil)
C	66-120	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL. INSTEAD, THEY HAVE A LH AND A GRAY, PLATY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED LARGELY OF THE AE HORIZON AND IS ABOUT 15 CM IN THICKNESS. THESE SOILS ARE LOAM TO CLAY LOAM TEXTURED.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	ANSELL-ST (stASL)	LANDFORM:	HUMMOCKY
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						4.3			
AE	5-17	10YRm 7/2	LIGHT GRAY	MFPL	FR	STL	0.39	5.9			
BT1	17-27	10YRm 4/3	DARK BROWN	SFSBK	F	STCL	0.47	5.7			
BT2	27-49	10YRm 5/6	YELLOWISH BROWN	SMSBK	F	STL	0.23	5.6			
BC	49-66	2.5Ym 5/4	LIGHT OLIVE BROWN	WCSBK	F	STSIL		5.5			
C	66-120	2.5Ym 4/4	OLIVE BROWN	MA	F	STCL		5.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-17	G	P		G				P (Upper L)
BT1	17-27	G	P		G				P (Subsoil)
BT2	27-49	G	P		G				P (Subsoil)
BC	49-66	G	P		G				P (Subsoil)
C	66-120	G	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF ANSELL THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BEARBERRY (BAB)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	CL		5.5	0.3	69.	
BT	20-50	10YR 5/3	BROWN	MMSBK	F	HC		6.	0.1	77.	
BC	50-92	10YR 5/2	GRAYISH BROWN	WFSBK	F	HC					
CK	92-110	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	C		7.6	0.3	81.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	F		G	G	F		F (Upper L)
BT	20-50	G	P		G	G	F		P (Subsoil)
BC	50-92	G	P						P (Subsoil)
CK	92-110	G	P		F	G	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-35 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON HEAVY CLAY TEXTURED MATERIAL. TOPSOIL THICKNESS VARIES FROM 5 TO 15 CM IN FORESTED AREAS AND IS UP TO 35 CM IN CULTIVATED AREAS. THESE SOILS HAVE GOOD POTENTIAL FOR AGRICULTURAL DEVELOPMENT BECAUSE THEY HAVE A SIGNIFICANT DEPTH OF TOPSOIL, EVEN IN FORESTED AREAS.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BICKERDIKE-AA (aaBCR)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-7	/						7.1			
AE	7-22	7.5YR 5/2	BROWN	WCPL	L	SL	0.6	7.5			
BTJ	22-49	10YRm 5/6	YELLOWISH BROWN	WMSBK	L	SL	0.44	7.3			
BC	49-130	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	LS		7.3			
CK	130-150	2.5Ym 4/2	DARK GRAYISH BROWN	SGR	L	LS		8.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-7								
AE	7-22	F	G		F				F (Upper L)
BTJ	22-49	F	G		F				F (Subsoil)
BC	49-130	F	P		F				P (Subsoil)
CK	130-150	F	P		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON LOAMY SAND TEXTURED MATERIAL AND, AS A RESULT, EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THESE SOILS HAVE AN LH AND AE HORIZON. CULTIVATED AREAS HAVE AP HORIZONS ABOUT 10 TO 15 CM IN THICKNESS AND COMPOSED MAINLY OF AE HORIZON MATERIAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BIGORAY (BGY)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE OR TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-8	/						5.8			
AE	8-23	10YRd 7/2	LIGHT GRAY	SMPL	SO	SIL	0.51	5.2			
AB	23-31	10YRm 5/4	YELLOWISH BROWN	MFSBK	FR	C	0.51	4.6			
BT	31-72	10YRm 5/6	YELLOWISH BROWN	SFSBK	F	C	0.49	4.4			
BC	72-102	10YRm 4/4	DARK YELLOWISH BROWN	MA	VF	SIC		5.9			
CK	102-150	2.5Ym 4/4	OLIVE BROWN	MA	F	SIC		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-8								
AE	8-23	G	G		G				G (Upper L)
AB	23-31	G	P		F				P (Upper L)
BT	31-72	G	P		F				P (Subsoil)
BC	72-102	F	F		G				F (Subsoil)
CK	102-150	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY TEXTURED DEPOSITS. IN FORESTED AREAS, BIGORAY SOILS HAVE LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THEY HAVE AN LH AND AE HORIZON. AN AB HORIZON IS ALSO PRESENT BUT IT HAS POOR SUITABILITY AND SHOULD NOT BE INCLUDED IN THE UPPER LIFT. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED OF A MIXTURE OF THESE SURFACE HORIZONS, IS VARIABLE IN COLOR, AND ABOUT 10 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BLUE RIDGE (BLR)	LANDFORM:	UNDULATING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.4			
AE1	5-10	10YRm 5/3	BROWN	WFPL	L	LS	0.58	6.3			
AE2	10-28	10YRm 5/4	YELLOWISH BROWN	MFPL	L	LS	0.29	6.2			
BT	28-43	10YRm 5/8	YELLOWISH BROWN	WMSBK	FR	SCL	0.41	6.			
BC	43-104	2.5Ym 5/2	GRAYISH BROWN	SGR	L	LS		6.4			
CK	104-150	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	LS-S		7.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	F	P		G				P (Upper L)
AE2	10-28	F	P		G				P (Upper L)
BT	28-43	G	F		G				F (Subsoil)
BC	43-104	F	P		G				P (Subsoil)
CK	104-150	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAMY SAND TEXTURED MATERIAL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A THICK, DISTINCT, PLATY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED MAINLY OF AE HORIZON MATERIAL AND IS ABOUT 15 CM IN THICKNESS.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BREMAY (BMY)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-12	10YR 3/3	DARK BROWN	MFGR	FR	L					
AEGJ	12-22	10YR 5/2	GRAYISH BROWN	MMPL	FR	SIL					
BTGJ	22-74	2.5Y 4/4	OLIVE BROWN	MMSBK	F	CL					
BCGJ	74-85	2.5Y 4/4	OLIVE BROWN	MFSBK	F	CL					
CKGJ	85-110	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-12	G	G						G (Upper L)
AEGJ	12-22	G	G						G (Upper L)
BTGJ	22-74	G	F						F (Subsoil)
BCGJ	74-85	G	F						F (Subsoil)
CKGJ	85-110	G	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THERE IS A LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS, IS VARIABLE IN COLOR AND IS ABOUT 10 CM THICK. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BREMAY-PT (ptBMY)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL (PEATY)	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
0M	0-20	/									
AH	20-27	10YR 3/3	DARK BROWN	MFGR	FR	L					
AEGJ	27-37	10YR 5/2	GRAYISH BROWN	MMPL	FR	SIL					
BTGJ	37-89	2.5Y 4/4	OLIVE BROWN	MMSBK	F	CL					
BCGJ	89-100	2.5Y 4/4	OLIVE BROWN	MMSBK	F	CL					
CKGJ	100-120	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
0M	0-20								(Peat)
AH	20-27	G	G						G (Upper L)
AEGJ	27-37	G	G						G (Upper L)
BTGJ	37-89	G	F						F (Subsoil)
BCGJ	89-100	G	F						F (Subsoil)
CKGJ	100-120	G	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	30-65 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF BREMAY WITH 15 TO 50 CM OF SURFACE PEAT. THERE IS ABOUT 5 CM OF TOPSOIL (AH OR AHE HORIZON) AND ABOUT 10 CM OF GRAYISH BROWN, PLATY AEG HORIZON UNDERLYING THE PEAT.

BUCK LAKE

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BUCK LAKE (BLK)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.8			
AE1	5-13	10YRm 4/2	DARK GRAYISH BROWN	MFPL	FR	SIL	1.58	5.8			
BF	13-18	7.5YR 4/4	DARK BROWN	WFGR	FR	SIL	1.72	5.7			
AE2	18-31	10YRm 6/3	PALE BROWN	SMPL	FR	SIL	0.1	5.3			
AB	31-36	10YRm 5/6	YELLOWISH BROWN	MMSBK	F	SIL-SICL	0.69	4.8			
BT	36-72	2.5Ym 4/2	DARK GRAYISH BROWN	SFSBK	VF	C	0.61	5.2			
BC	72-105	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	C		5.5			
CK	105-150	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	CL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-13	G	G		G				G (Upper L)
BF	13-18	G	G		G				G (Upper L)
AE2	18-31	G	G		G				G (Upper L)
AB	31-36	F	F		F				F (Upper L)
BT	36-72	F	P		G				P (Subsoil)
BC	72-105	G	P		G				P (Subsoil)
CK	105-150	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED CONTINENTAL TILL. UNDER FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS A LH HORIZON OVERLYING AN AE, BF, AND ANOTHER AE HORIZON. AN AB HORIZON IS ALSO PRESENT, HAVING A FAIR SUITABILITY RATING. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED OF THE LH, AE AND PART OF THE BF HORIZON. THESE SOILS ARE FOUND AT HIGH ELEVATIOINS AND HAVE LOW FERTILITY AND THEREFORE, ARE USUALLY ONLY SUITABLE FOR PASTURE AND SODLAND.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	BUCK LAKE-ST (stBLK)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.8			
AE1	5-13	10YRm 4/2	DARK GRAYISH BROWN	MFPL	FR	STSIL	1.58	5.8			
BF	13-18	7.5YR 4/4	DARK BROWN	WFGR	FR	STSIL	1.72	5.7			
AE2	18-31	10YRm 6/3	PALE BROWN	SMPL	FR	STSIL	0.1	5.3			
AB	31-36	10YRm 5/6	YELLOWISH BROWN	MMSBK	F	SIL-SICL	0.69	4.8			
BT	36-72	2.5Ym 4/2	DARK GRAYISH BROWN	SFSBK	VF	STC	0.61	5.2			
BC	72-105	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	STC		5.5			
CK	105-150	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	STCL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-13	G	P		G				P (Upper L)
BF	13-18	G	P		G				P (Upper L)
AE2	18-31	G	P		G				P (Upper L)
AB	31-36	F	P		F				P (Upper L)
BT	36-72	F	P		G				P (Subsoil)
BC	72-105	G	P		G				P (Subsoil)
CK	105-150	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT ON BUCK LAKE THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	CAROLINE (CAR)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YR 3/2	VERY DARK GRAYISH BROWN								
BM	3-18	10YR 3/3	DARK BROWN	WFSBK	FR	SIL					
AE	18-25	10YR 5/3	BROWN	MMPL	FR	SIL					
BT	25-68	2.5Y 5/4	LIGHT OLIVE BROWN	MMSBK	F	SICL					
BC	68-93	2.5Y 5/4	LIGHT OLIVE BROWN	WFSBK	F	SICL					
CK	93-113	10YR 5/3	BROWN	MA	F	SIL		7.8	0.4	43.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
BM	3-18	G	G						G (Upper L)
AE	18-25	G	G						G (Upper L)
BT	25-68	G	F						F (Subsoil)
BC	68-93	G	F						F (Subsoil)
CK	93-113	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE ASSOCIATED WITH LAKES. UNDER FORESTED AREAS, THE TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS A LH HORIZON OVERLYING AN AE, BM, AND ANOTHER AE HORIZON. WHEN CULTIVATED, THE AP HORIZON IS COMPOSED OF ALL THESE SURFACE HORIZONS AND THE COLOR IS VARIABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	CHIP LAKE (CLK)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						6.1			
AH	3-6	10YRm 3/1	VERY DARK GRAY	MMGR	FR	SIC	10.5	6.5			
AE	6-18	10YRm 6/2	LIGHT BROWNISH GRAY	SCPL	FR	SIL	0.29	6.			
AB	18-25	10YRm 5/2	GRAYISH BROWN	MMSBK	F	C	0.61	5.3			
BT	25-63	10YRm 3/2	VERY DARK GRAYISH BROWN	WCPR	F	HC	0.58	5.3			
CCA	63-73	10YRm 3/2	VERY DARK GRAYISH BROWN	MA	FR	HC	0.66	7.6			
CK	73-111	10YRm 3/2	VERY DARK GRAYISH BROWN	MA	FR	HC	0.61	7.6			
2CK	111-150	2.5Ym 4/4	OLIVE BROWN	MA	FR	C	0.55	7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AH	3-6	G	P		G				P (Upper L)
AE	6-18	G	G		G				G (Upper L)
AB	18-25	F	P		G				P (Upper L)
BT	25-63	G	P		G				P (Subsoil)
CCA	63-73	G	P		F				P (Subsoil)
CK	73-111	G	P		F				P (Subsoil)
2CK	111-150	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON HEAVY CLAY TEXTURED MATERIAL. UNDER NATURAL CONDITIONS, TOPSOIL INCLUDES AN LH HORIZON OVER A THIN AH AND A GRAY, PLATY AE HORIZON. AN AB HORIZON IS ALSO PRESENT BUT IT HAS A POOR SUITABILITY RATING BECAUSE OF TEXTURE. THESE HORIZONS ARE INCORPORATED INTO THE AP HORIZON WHEN CULTIVATED AND THE COLORS ARE VARIABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	CODNER (COD)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-20	10YR 3/1	VERY DARK GRAY	WFGR	VFR	L		7.8	1.2	67.	1.
BG	20-80	10YR 5/1	GRAY	WFSBK	FR	L		7.5	0.4	45.	1.3
CG	80-120	10YR 6/1	LIGHT GRAY	SGR	VFR	SL		6.6	0.2	32.	0.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-20	G	G		P	G	F	G	P (Upper L)
BG	20-80	G	G		F	G	G	G	F (Subsoil)
CG	80-120	G	G		F	G	G	G	G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND THEREFOR EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	CODNER-PT (ptCOD)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-30	10YR 2/1	BLACK			O					
AHG	30-75	10YR 2/1	BLACK	WMGR	FR	L	14.9	6.	1.3	114.	0.3
BG	75-90	10YR 4/1	DARK GRAY	MA	F	SICL		5.8	0.2	92.	0.4
BCG	90-120	10YR 4/1	DARK GRAY	MA	F	SICL		5.5	0.1	67.	0.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-30								(Peat)
AHG	30-75	G	G		G	G	P	G	P (Upper L)
BG	75-90	G	F		G	G	P	G	P (Subsoil)
BCG	90-120	G	F		G	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	50 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	35-70 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF CODNER HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS USUALLY ABOUT 15 TO 25 CM OF TOPSOIL UNDERLYING THE PEAT.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	DALEHURST-AA (aaDAU)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	10-30%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
BM	0-5	7.5YR 5/4	BROWN	WFSBK	FR	SIL	1.97	7.7			
AE	5-15	10YRm 6/4	LIGHT YELLOWISH BROWN	WFPL	FR	L	0.67	7.6			
BT	15-25	10YRm 4/4	DARK YELLOWISH BROWN	MFSBK	F	CL	0.79	7.1			
BC	25-60	2.5Ym 5/4	LIGHT OLIVE BROWN	WFSBK	FR	L		7.			
CK	60-120	2.5Ym 4/4	OLIVE BROWN	MA	FR	L		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
BM	0-5	G	G		P				P (Upper L)
AE	5-15	G	G		P				P (Upper L)
BT	15-25	G	F		F				F (Subsoil)
BC	25-60	G	G		G				G (Subsoil)
CK	60-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON LOAM TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. HORIZON SEQUENCE INCLUDES A BM AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED OF THE SURFACE HORIZONS AND THE COLOR IS VARIABLE.

DEKALTA

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	DEKALTA (DKT)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-8	/						6.3			
AH	8-16	10YRm 4/3	DARK BROWN	WMGR	L	SIL	3.58	6.1			
AE	16-26	10YRm 6/3	PALE BROWN	SFPL	FR	SIL	0.48	5.5			
AB	26-34	10YRm 5/3	BROWN	MFSBK	FR	CL	0.38	5.4			
BT	34-75	10YRm 3/2	VERY DARK GRAYISH BROWN	WCPR	F	CL	0.4	5.8			
BC	75-126	10YRm 4/2	DARK GRAYISH BROWN	WMPR	F	CL		6.8			
CK	126-150	10YRm 4/2	DARK GRAYISH BROWN	MA	F	CL		7.2			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-8								
AH	8-16	F	G		G				F (Upper L)
AE	16-26	G	G		G				G (Upper L)
AB	26-34	G	F		G				F (Upper L)
BT	34-75	G	F		G				F (Subsoil)
BC	75-126	G	F		G				F (Subsoil)
CK	126-150	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL OF THE PASKAPOO FORMATION. IN FORESTED AREAS, THE TOPSOIL (AH OR AHE HORIZON) IS ABOUT 8 TO 10 CM THICK, OVERLYING AN AE AND AB HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON IS ABOUT 20 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	DRINNAN (DIN)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ORTHIC EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MEDIUM EOLIAN/ GLACIOFLUVIAL GRAVEL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LHK	0-3	5YRm 2/1	BLACK	WFGR	FR	SIL	25.22	7.6			
AHK	3-6	5YRm 2/1	BLACK	WFGR	FR	SIL	25.22	7.6			
BMK	6-21	5YRm 4/4	REDDISH BROWN	WFSBK	FR	SIL	2.11	7.7			
2CK	21-100	10YR 5/2	GRAYISH BROWN	SGR	L	GR					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LHK	0-3								
AHK	3-6	G	G		P				P (Upper L)
BMK	6-21	G	G		F				F (Subsoil)
2CK	21-100	F	U						U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-10 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON SILT LOAM TEXTURED MATERIAL OVER COBBLY AND GRAVELLY DEPOSITS. EXPOSED FACES ARE UNSTABLE WHEN VERTICALLY DITCHED.

EASYFORD

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	EASYFORD (ESF)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-13	/						6.4			
AH	13-23	10YRm 2/1	BLACK	SMGR	FR	SICL	2.86	6.6			
ABG	23-36	5Ym 5/1	GRAY	MFGR	FR	SIL	0.72	6.6			
BG	36-72	5Ym 6/1	LIGHT GRAY	MFABK	FR	C	0.76	6.9			
BCG	72-95	5Ym 5/1	GRAY	WFSBK	FR-F	CL		7.2			
CKG	95-120	5Ym 5/1	GRAY	MA	FR-F	CL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-13								
AH	13-23	G	F		F				F (Upper L)
ABG	23-36	G	G		F				F (Upper L)
BG	36-72	G	P		G				P (Subsoil)
BCG	72-95	G	F		F				F (Subsoil)
CKG	95-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	EASYFORD-PT (ptESF)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-15		/				O					
AH	15-25	10YRm	2/1	BLACK	SMGR	FR	SICL	2.86	6.6			
ABG	25-38	5Ym	5/1	GRAY	MFGR	FR	SIL	0.72	6.6			
BG	38-74	5Ym	6/1	LIGHT GRAY	MFABK	FR	C	0.76	6.9			
BCG	74-97	5Ym	5/1	GRAY	WFSBK	FR-F	CL		7.2			
CKG	97-120	5Ym	5/1	GRAY	MA	FR-F	CL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-15								
AH	15-25	G	F		F				F (Upper L)
ABG	25-38	G	G		F				F (Upper L)
BG	38-74	G	P		G				P (Subsoil)
BCG	74-97	G	F		F				F (Subsoil)
CKG	97-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm (PEAT & TOPSOIL)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF EASYFORD HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS ABOUT 10 CM OF TOPSOIL UNDERLYING THE PEAT.

EMBARRAS

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	EMBARRAS (ERS)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						5.6			
AE1	5-12	10YRm 6/1	LIGHT GRAY	MFPL	FR	SIL	0.94	5.5			
AE2	12-27	10YRm 6/3	PALE BROWN	MFPL	FR	SIL	0.35	5.7			
BT	27-72	10YRm 5/3	BROWN	MFSBK	FR	SIL	0.38	5.8			
BC	72-92	10YRm 4/3	BROWN-DARK BROWN	WFSBK	FR	SIL	0.3	6.			
CK	92-120	2.5Ym 5/4	LIGHT OLIVE BROWN	MA	FR	SIL		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-12	G	G		G				G (Upper L)
AE2	12-27	G	G		G				G (Upper L)
BT	27-72	G	G		G				G (Subsoil)
BC	72-92	G	G		G				G (Subsoil)
CK	92-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: EMBARRAS SOILS ARE DEVELOPED ON SILT LOAM TEXTURED MATERIAL. TOPSOIL IN FORESTED AREAS IS VERY THIN OR ABSENT. INSTEAD, THERE IS A LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS DERIVED FROM THE LH AND AE HORIZONS COMBINED, IS VARIABLE IN DEPTH AND FAIRLY LIGHT IN COLOR.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	ETA (ETA)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						4.8			
AEGJ	5-13	10YRm 5/3	BROWN	MMPL	VFR	L	0.33	5.2			
BTGJ	13-33	10YRm 4/3	DARK BROWN	MFSBK	FR	L	0.26	5.			
BCGJ	33-69	10YRm 4/3	DARK BROWN	STRAT	VFR	SL		5.7			
CGJ	69-82	10YRm 4/4	DARK YELLOWISH BROWN	STRAT	FR	L		6.4			
2CKGJ	82-100	10YRm 5/6	YELLOWISH BROWN	MA	FR-F	CL		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AEGJ	5-13	G	G		G				G (Upper L)
BTGJ	13-33	G	G		G				G (Subsoil)
BCGJ	33-69	G	G		G				G (Subsoil)
CGJ	69-82	G	G		G				G (Subsoil)
2CKGJ	82-100	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAM TEXTURED MATERIAL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A PLATY, LIGHT COLORED AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED MAINLY OF THE AE HORIZON MATERIAL AND IS THEREFORE, FAIRLY LIGHT IN COLOR. AP HORIZONS ARE ABOUT 10 TO 15 CM THICK.

GRANADA

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	GRANADA (GRN)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE BEDROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						6.7			
AH	3-6	10YRm 3/2	VERY DARK GRAYISH BROWN	MMGR	L	L	7.6	6.4			
AE	6-24	10YRm 5/4	YELLOWISH BROWN	SMPL	FR	L	0.27	6.8			
BT	24-42	10YRm 5/6	YELLOWISH BROWN	WMABK	F	CL	0.25	5.9			
BC	42-85	10YRm 6/6	BROWNISH YELLOW	MA	FR	SIL-SICL		5.9			
CCA	85-95	2.5Ym 5/4	LIGHT OLIVE BROWN	MA	FR	SIL	0.19	7.2			
CK	95-120	2.5Ym 4/4	OLIVE BROWN	MA	FR	SIL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AH	3-6	F	G		G				F (Upper L)
AE	6-24	G	G		F				F (Upper L)
BT	24-42	G	F		G				F (Subsoil)
BC	42-85	G	F		G				F (Subsoil)
CCA	85-95	G	G		F				F (Subsoil)
CK	95-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: GRANADA SOILS ARE DEVELOPED ON SANDY LOAM TO CLAY LOAM TEXTURED BEDROCK. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. ON CULTIVATED AREAS, THE MIXING OF THE SURFACE HORIZONS MAKE UP THE AP HORIZON.

GREEN COURT

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	GREEN COURT (GRC)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.8			
AH	5-13	10YRm 3/2	VERY DARK GRAYISH BROWN	MMGR	VFR	SICL	16.67	6.9			
AE	13-23	10YRd 7/2	LIGHT GRAY	MMPL	SO	SIL	0.3	6.3			
AB	23-33	10YRd 5/2	GRAYISH BROWN	MFSBK	H	SIC	0.92	5.4			
BT	33-63	10YRd 5/3	BROWN	WMPR	VH	C	0.79	5.1			
CCA	63-71	10YRd 8/2	WHITE	MA	SLH	SIC		7.8			
CK	71-120	10YRd 6/1	GRAY	MA	SLH	SIL		7.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AH	5-13	G	F		F				F (Upper L)
AE	13-23	G	G		G				G (Upper L)
AB	23-33	P	P		G				P (Subsoil)
BT	33-63	F	P		G				P (Subsoil)
CCA	63-71	G	F		F				F (Subsoil)
CK	71-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILTY CLAY TEXTURED MATERIAL. IN FORESTED AREAS, THE AH OR AHE HORIZON IS ABOUT 8 TO 10 CM THICK, WITH AN AE AND AB ALSO PRESENT, ALTHOUGH THE AB HORIZON HAS POOR SUITABILITY BECAUSE OF TEXTURE. IN CULTIVATED FIELDS, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS AND IS ABOUT 20 CM.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	GREGG-AA (aaGGG)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	GRAVELLY OR COBBLEY, VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-8	10YRm 6/1	GRAY	WFPL	L	GRSL	0.95	5.2			
BTJ	8-23	7.5YT 5/4	BROWN	WFSBK	FR	GRLS	0.27	5.7			
BC	23-36	10YRm 6/4	LIGHT YELLOWISH BROWN	SGR	L	GRLS		6.			
CK	36-120	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	GRSL		7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-8	F	P		G				P (Upper L)
BTJ	8-23	G	P		G				P (Subsoil)
BC	23-36	F	P		G				P (Subsoil)
CK	36-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-10 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, GRAVELLY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON LOAMY SAND TEXTURED DEPOSITS WITH 40% GRAVEL. IN FORESTED AREAS, AH OR AHE HORIZONS ARE VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON IS COMPOSED MAINLY OF AE MATERIAL, IS VERY LIGHT IN COLOR AND IS ABOUT 10 CM IN THICKNESS.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HANLAN-AA (aaHNL)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.			
AE1	5-15	10YRm 6/2	LIGHT BROWNISH GRAY	WMPL	FR	SIL	0.68	5.6			
AE2	15-18	10YRm 5/3	BROWN	WMPL	FR	L	0.3	5.7			
BT	18-33	10YRm 5/4	YELLOWISH BROWN	MMSBK	FR	L	0.33	6.2			
BC	33-60	2.5Ym 5/4	LIGHT OLIVE BROWN	WMSBK	FR	L		6.			
CK	60-120	2.5Ym 4/4	OLIVE BROWN	MA	FR	L		7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-15	G	G		G				G (Upper L)
AE2	15-18	G	G		G				G (Upper L)
BT	18-33	G	G		G				G (Subsoil)
BC	33-60	G	G		G				G (Subsoil)
CK	60-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. HANLAN SOILS ARE DEVELOPED ON LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP IS DERIVED FROM THE MIXING OF THE LH AND AE HORIZONS AND IS ABOUT 10 TO 20 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HANLAN-AAST (aastHNL)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MEDIUM TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/	.					6.			
AE1	5-15	10YRm 6/2	LIGHT BROWNISH GRAY	WMPL	FR	STSIL	0.68	5.6			
AE2	15-18	10YRm 5/3	BROWN	WMPL	FR	STL	0.3	5.7			
BT	18-33	10YRm 5/4	YELLOWISH BROWN	MMSBK	FR	STL	0.33	6.2			
BC	33-60	2.5Ym 5/4	LIGHT OLIVE BROWN	WMSBK	FR	STL		6.			
CK	60-120	2.5Ym 4/4	OLIVE BROWN	MA	FR	STL		7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-15	G	P		G				P (Upper L)
AE2	15-18	G	P		G				P (Upper L)
BT	18-33	G	P		G				P (Subsoil)
BC	33-60	G	P		G				P (Subsoil)
CK	60-120	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. VARIANT OF HANLAN THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HARGWEN-AA (aaHGW)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	10-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-15	10YRm 6/4	LIGHT YELLOWISH BROWN	WFPL	FR	SL	0.6	6.5			
BT	15-30	10YRm 5/6	YELLOWISH BROWN	SMSBK	F	L	0.65	6.5			
BC	30-55	2.5Ym 5/4	LIGHT OLIVE BROWN	WCSBK	FR	L		7.			
CK	55-120	2.5Ym 4/4	OLIVE BROWN	MA	FR	L		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-15	G	G		G				G (Upper L)
BT	15-30	G	G		G				G (Subsoil)
BC	30-55	G	G		G				G (Subsoil)
CK	55-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. HARGWEN SOILS ARE DEVELOPED ON LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE AN LH HORIZON OVERLYING AN AE HORIZON. IN CULTIVATED FIELDS, THE AP HORIZON IS ABOUT 15 CM THICK AND IS COMPOSED MAINLY OF AE MATERIAL.

HATTONFORD

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HATTONFORD (HAT)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						6.9			
AHEJ	3-6	10YRm 3/2	VERY DARK GRAYISH BROWN	WFPL	L	SL	5.06	6.9			
AEJ	6-18	10YRm 5/4	YELLOWISH BROWN	WFPL	L	SL	0.69	6.5			
BTJ	18-30	10YRm 3/3	DARK BROWN	SGR	L	SL	0.77	5.5			
BC	30-45	10YRm 5/4	YELLOWISH BROWN	SGR	L	LS		5.9			
2BC	45-105	2.5Ym 4/4	OLIVE BROWN	MMSBK	F	CL		5.3			
2C	105-143	2.5Ym 4/4	OLIVE BROWN	MA	F	CL		6.1			
2CK	143-153	2.5Ym 4/4	OLIVE BROWN	MA	FR	CL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AHEJ	3-6	F	G		F				F (Upper L)
AEJ	6-18	F	G		G				F (Upper L)
BTJ	18-30	F	G		G				F (Subsoil)
BC	30-45	F	P		G				P (Subsoil)
2BC	45-105	G	F		G				F (Subsoil)
2C	105-143	G	F		G				F (Subsoil)
2CK	143-153	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF SANDY LOAM MATERIAL OVER CLAY LOAM TEXTURED TILL. THE SANDY VENEER MATERIAL IS UNSTABLE ON EXPOSED FACES. IN FORESTED AREAS, HATTONFORD SOILS HAVE A THIN LH HORIOZN AND A RELATIVELY THICK AE HORIZON. THERE IS VERY LITTLE OR NO AH OR AHE HORIZONS. IN CULTIVATED FIELDS, THE AP HORIZON IS ABOUT 15 TO 20 CM THICK AND IS A MIXTURE OF ALL THE SURFACE HORIZONS (MAINLY AE MATERIAL).

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HATTONFORD-ST (stHAT)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.1			
AE	5-20	10YRm 6/2	LIGHT BROWNISH GRAY	WMPL	L	STSL	0.28	6.9			
BT	20-37	10YRm 5/3	BROWN	WFSBK	FR	STSL	0.54	6.4			
2BT	37-72	10YRm 4/3	DARK BROWN	MFSBK	F	STCL	0.62	5.8			
2BC	72-114	2.5Ym 4/2	DARK GRAYISH BROWN	MMSB	F	STC		6.			
2CK	114-150	2.5Ym 4/4	OLIVE BROWN	MA	F	STCL-C		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-20	F	P		F				P (Upper L)
BT	20-37	G	P		G				P (Subsoil)
2BT	37-72	G	P		G				P (Subsoil)
2BC	72-114	G	P		G				P (Subsoil)
2CK	114-150	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT ON HATTONFORD THAT IS STONIER THAN NORMAL.

HIGHTOWER-AA

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HIGHTOWER-AA (aaHTW)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	9-30%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY GRAVELLY, COBBLY, MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/									
AE	3-8	10YRm 6/1	GRAY	WFPL	L	VGSL	0.65	5.6			
BF	5-24	7.5YR 5/6	STRONG BROWN	WMSBK	L	VGSL	0.9	6.2			
AE2	8-13	10YRm 6/6	BROWNISH YELLOW	WMPL	L	VGSL					
BT	26-390	10YRm 6/6	BROWNISH YELLOW	MMSBK	F	VGSL	0.49	5.6			
CK	39-100	2.5Ym 4/4	OLIVE BROWN	SGR	L	VGSL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-8	F	U	P	G				U (Upper L)
BF	5-24	F	U		G				U (Upper L)
AE2	8-13	F	U		G				U (Upper L)
BT	26-390	F	U		G				U (Subsoil)
CK	39-100	F	U						U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	GRAVELLY, STONY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON SANDY LOAM TEXTURED MATERIAL WITH 60% GRAVELS AND COBBLES. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE WHEN VERTICALLY DITCHED. IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO AH OR AHE HORIZON. THE HORIZON SEQUENCE IS USUALLY LH, AE1, BF AND AE2. THESE SOILS ARE CLASSIFIED AS BRUNISOLIC GRAY LUVISOL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HORBURG (HBG)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR 3/3	DARK BROWN	WFGR	FR	SL		5.9	0.4	56.	
BM	10-40	10YR 5/4	YELLOWISH BROWN	SGR	FR	SL		5.7	0.2	28.	
BTJ	40-70	10YR 5/4	YELLOWISH BROWN	SGR	L	SL		5.2	0.1	27.	
C	70-120	10YR 4/3	BROWN	SGR	L	SL		7.1	0.4	24.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	G		G	G	G		G (Upper L)
BM	10-40	G	G		G	G	F		F (Subsoil)
BTJ	40-70	F	P		G	G	F		P (Subsoil)
C	70-120	F	P		F	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SANDY LOAM TEXTURED MATERIAL. EXPOSED FACES ARE UNSTABLE WHEN VERTICALLY DITCHED. IN FORESTED AREAS, AH OR AHE HORIZONS ARE VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE LH, BM AND AE HORIZONS. IN CULTIVATED AREAS, THE AP HORIZON IS ABOUT 10 TO 20 CM THICK AND IS A MIXTURE OF ALL THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HUBALTA (HUB)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR	6/3	PALE BROWN	WMGR	FR	L	1.2	6.5	1.	46.	0.1
BT	15-80	10YR	5/4	YELLOWISH BROWN	MMSBK	F	CL	0.1	6.9	0.5	44.	0.1
CK	80-200	2.5Y	5/4	LIGHT OLIVE BROWN	MA	F	CL		7.7	0.2	39.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G		G	G	G	G	G (Upper L)
BT	15-80	G	F		G	G	G	G	F (Subsoil)
CK	80-200	G	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HUBALTA SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. THERE IS A LH HORIZON AND A PLATY, LIGHT COLORED AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS DERIVED FROM THE LH AND AE HORIZONS AND IS 15 TO 25 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HUBALTA-ST (stHUB)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR	6/3	PALE BROWN	WMGR	FR	STL	1.2	6.5	1.	46.	0.1
BT	15-80	10YR	5/4	YELLOWISH BROWN	MMSBK	F	STCL	0.1	6.9	0.5	44.	0.1
CK	80-200	2.5Y	5/4	LIGHT OLIVE BROWN	MA	F	STCL		7.7	0.2	39.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	P		G	G	G	G	P (Upper L)
BT	15-80	G	P		G	G	G	G	P (Subsoil)
CK	80-200	G	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF HUBALTA THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	HUBALTA-XP (xpHUB)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL/SOFTROCK	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-12	10YR	6/4	LIGHT YELLOWISH BROWN	MMPL	FR	SIL	2.2	5.3	0.4	41.	
BT	12-48	10YR	5/4	YELLOWISH BROWN	MMSBK	F	L-CL		4.8	0.2	36.	
2BC	48-65	2.5Y	5/4	LIGHT OLIVE BROWN	SGR	FR	SL		5.2	0.1	29.	
2C	65-110	2.5Y	5/6	LIGHT OLIVE BROWN	SGR	FR	SL		5.3	0.2	29.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-12	G	G		G	G	G		G (Upper L)
BT	12-48	G	F		F	G	G		F (Subsoil)
2BC	48-65	G	G		G	G	F		F (Subsoil)
2C	65-110	G	G		G	G	F		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HUBALTA WITH SANDY LOAM TEXTURED SOFTROCK AT LESS THAN 1 M. THE UNDERLYING SANDIER MATERIAL IS NON SALINE-SODIC AND EXPOSED FACES MAY BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	JAMES RIVER (JMR)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP1	0-33	10YR 2/1	BLACK	MMGR	FR	SIL-L		7.7	0.6	72.	0.1
AP2	33-41	10YR 2/1	BLACK	MMGR	FR	SIL-L		7.7	0.6	63.	0.3
BMK	41-85	10YR 4/3	BROWN-DARK BROWN	WFSBK	F	SIL-SICL		7.9	0.4	44.	0.2
CK	85-130	10YR 5/2	GRAYISH BROWN	MA	F	SIL-SICL		8.	0.4	42.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP1	0-33	G	G		P	G	F	G	P (Upper L)
AP2	33-41	G	G		P	G	F	G	P (Upper L)
BMK	41-85	G	F		F	G	G	G	F (Subsoil)
CK	85-130	G	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm
THICKNESS RANGE:	35-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILT LOAM TEXTURED MATERIAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	JAMES RIVER-XS (xsJMR)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP1	0-33	10YR 2/1	BLACK	MMGR	FR	SIL-L		7.7	0.6	72.	0.1
AP2	33-41	10YR 2/1	BLACK	MMGR	FR	SIL-L		7.7	0.6	63.	0.3
BMK	41-85	10YR 4/3	BROWN-DARK BROWN	WFSBK	F	SIL-SICL		7.9	0.4	44.	0.2
CK	85-100	10YR 5/2	GRAYISH BROWN	MA	F	SIL-SICL		8.	0.4	42.	0.3
2CK	100-130	10YR 5/3	BROWN	SGR	L	LS					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP1	0-33	G	G		P	G	F	G	P (Upper L)
AP2	33-41	G	G		P	G	F	G	P (Upper L)
BMK	41-85	G	F		F	G	G	G	F (Subsoil)
CK	85-100	G	F		F	G	G	G	F (Subsoil)
2CK	100-130	F	P						P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm
THICKNESS RANGE:	35-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF JAMES RIVER HAVING SAND TEXTURED MATERIAL WITHIN 1 M. THE SANDY MATERIAL CAUSES EXPOSED FACES TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	JAMES RIVER-XT (xtJMR)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP1	0-33	10YR 2/1	BLACK	MMGR	FR	SIL-L		7.7	0.6	72.	0.1
AP2	33-41	10YR 2/1	BLACK	MMGR	FR	SIL-L		7.7	0.6	63.	0.3
BMK	41-85	10YR 4/3	BROWN-DARK BROWN	WFSBK	F	SIL-SICL		7.9	0.4	44.	0.2
CK	85-100	10YR 5/2	GRAYISH BROWN	MA	F	SIL-SICL		8.	0.4	42.	0.3
2CK	100-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP1	0-33	G	G		P	G	F	G	P (Upper L)
AP2	33-41	G	G		P	G	F	G	P (Upper L)
BMK	41-85	G	F		F	G	G	G	F (Subsoil)
CK	85-100	G	F		F	G	G	G	F (Subsoil)
2CK	100-130	G	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm
THICKNESS RANGE:	35-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF JAMES RIVER HAVING TILL WITHIN 1 M. THE TEXTURE DIFFERENCE BETWEEN THE TWO MATERIALS IS NOT SIGNIFICANT.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	JARVIS (JRV)	LANDFORM:	TERRACED, RIDGED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	GRAVELLY, VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-18	10YRm 6/1	GRAY	WFPL	L	VG	0.63	6.			
BT	18-72	10YRm 5/4	YELLOWISH BROWN	MMSBK	F	VG	0.67	6.6			
CK	72-120	2.5Ym 4/4	OLIVE BROWN	SGR	L	VG		7.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-18	F	U		G				U (Upper L)
BT	18-72	G	U		G				U (Subsoil)
CK	72-120	F	U		F				U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	GRAVELLY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SANDY LOAM TO SAND TEXTURED MATERIAL WITH 60% GRAVEL CONTENT. EXPOSED FACES ARE UNSTABLE WHEN VERTICALLY DITCHED. IN FORESTED AREAS, JARVIS SOILS HAVE LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THEY HAVE A THIN LH HORIZON OVERLYING A FAIRLY THICK, GRAY, PLATY AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	JUDY (JUY)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY GRAVELLY OR COBBLY, MODERATELY TEXTURED	SURFACE STONINESS:	EXCESSIVELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 2/1	BLACK					5.3			
AE	5-10	10YRm 5/2	GRAYISH BROWN	WFPL	FR	GRSIL		4.8			
BF	10-15	10YRm 4/8	DARK YELLOWISH BROWN	WF	FR	GRSIL		5.6			
BT	15-40	10YRm 5/8	YELLOWISH BROWN	MM	FR	GRSIL		5.			
BC	40-120	10YRm 4/4	DARK YELLOWISH BROWN	MA	FR	GRSCL		4.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-10	G	F		F				F (Upper L)
BF	10-15	G	F		G				F (Subsoil)
BT	15-40	G	F		G				F (Subsoil)
BC	40-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY, GRAVELLY, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON EXCESSIVELY STONY, GRAVELLY OR COBBLY, SANDY CLAY LOAM MATERIAL. EXPOSED FACES ARE UNSTABLE WHEN VERTICALLY DITCHED. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THERE IS USUALLY AN LH, AE AND BF HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	LOBLEY (LOB)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-60%
SOIL CLASSIFICATION:	BRUNISOLLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-13	10YR 4/3	BROWN	WFGR	FR	L		6.2	0.3	50.	
BT	13-60	10YR 5/4	YELLOWISH BROWN	MFSBK	F	L		5.7	0.1	35.	
BC	60-120	2.5Y 4/4	OLIVE BROWN	MA	F	CL		5.8	0.2	46.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-13	G	G		G	G	G		G (Upper L)
BT	13-60	G	G		G	G	G		G (Subsoil)
BC	60-120	G	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY, TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THERE IS A LH, AE, BM, AND ANOTHER AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS DERIVED FROM THESE HORIZONS AND IS USUALLY ABOUT 15 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	MACKAY (MKY)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						5.7			
AHEG	3-6	10YRm 5/2	GRAYISH BROWN	MFPL	FR	SIL	0.57	6.2			
AEG	6-21	10YRm 5/3	BROWN	SMPL	FR	SIL	0.22	5.8			
ABG	21-31	10YRm 5/3	BROWN	MFSBK	F	SICL	0.17	5.4			
BTG	31-102	10YRm 4/2	DARK GRAYISH BROWN	MMSBK	F	CL	0.34	6.1			
CKG	102-120	2.5Ym 4/4	OLIVE BROWN	MA	F	CL	0.36	7.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AHEG	3-6	G	G		G				G (Upper L)
AEG	6-21	G	G		G				G (Upper L)
ABG	21-31	F	F		G				F (Subsoil)
BTG	31-102	G	F		G				F (Subsoil)
CKG	102-120	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE. IN FORESTED AREAS, AH OR AHE HORIZONS ARE VERY THIN OR ABSENT. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A FAIRLY THICK, IRON STAINED, BROWN AEG HORIZON, AND AN AB HORIZON. MACKAY SOILS ARE NOT EXTENSIVELY CULTIVATED.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	MACKAY-PT (ptMKY)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	10YRm 2/2	VERY DARK BROWN			O					
AEG	20-38	10YRm 5/3	BROWN	SMPL	FR	SIL	0.22	5.8			
BTG	38-90	10YRm 4/2	DARK GRAYISH BROWN	MMSBK	F	CL	0.34	6.1			
CKG	90-120	2.5Ym 4/4	OLIVE BROWN	MA	F	CL	0.36	7.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								(Peat)
AEG	20-38	G	G		G				G (Upper L)
BTG	38-90	G	F		G				F (Subsoil)
CKG	90-120	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm (PEAT & AEG HORIZON)
THICKNESS RANGE:	35-70 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF MACKAY THAT HAS 15 TO 50 CM OF SURFACE PEAT. THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON) UNDERLYING THE PEAT. INSTEAD, THERE IS A BROWNISH, PLATY AEG HORIZON ABOUT 20 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	MARSH HEAD (MSH)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AEG	0-20	10YR 5/1	GRAY	WMPL	FR	FSL	0.8	7.5	0.3	34.	0.1
BTG	20-90	10YR 5/2	GRAYISH BROWN	WFSBK	FR-F	SL		7.6	0.2	33.	0.1
CKG	90-200	10YR 6/2	LIGHT BROWNISH GRAY	MA	FR-F	SIL		8.	0.2	50.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AEG	0-20	G	G		F	G	G	G	F (Upper L)
BTG	20-90	G	G		F	G	G	G	F (Subsoil)
CKG	90-200	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE. THESE SOILS HAVE LESS THAN 5 CM OF TOPSOIL (AH OR AHE HORIZON). INSTEAD, THEY HAVE A FAIRLY THICK, GRAY, PLATY AEG HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	MCDOUGALL	(MDL)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY		TYPICAL SLOPES:	16-30%
SOIL CLASSIFICATION:	ORHIC DARK GRAY CHERNOZEMIC		USUAL SOIL MOISTURE:	MESIC
			SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MEDIUM SOFTROCK			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L	7.5	6.2	0.5	80.	
BTJ	15-45	10YR 5/2	GRAYISH BROWN	WFSBK	F	SIL					
CK	45-100	10YR 6/4	LIGHT YELLOWISH BROWN	STRAT	F	SIL		7.9	0.2	41.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G		G	G	P		P (Upper L)
BTJ	15-45	G	G						G (Subsoil)
CK	45-100	G	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAM TO SILT LOAM TEXTURED WEATHERED BEDROCK. SANDSTONE SLABS MAY BE ENCOUNTERED NEAR THE SURFACE. THERE IS SOMETIMES A THIN VENEER (<20 CM) OF TILL OR GRAVEL ON THE SURFACE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	MCPHERSON-AA (aaMPH)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	16-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/									
AE	3-25	10YRm 5/3	BROWN	WCPL	FR	SIL-L	0.82	5.8			
BT	25-38	10YRm 5/4	YELLOWISH BROWN	MMSBK	F	L	0.49	5.3			
BC	38-120	10YRm 5/4	YELLOWISH BROWN	WCSBK	FR	SL		5.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-25	G	G	P	G				G (Upper L)
BT	25-38	G	G		G				G (Subsoil)
BC	38-120	G	G		G				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON LOAM TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THESE SOILS HAVE A THIN LH HORIZON OVERLYING A THICK, DISTINCT, PLATY AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	MCPHERSON-AAST (aastMPH)	LANDFORM:	ROLLING
		TYPICAL SLOPES:	16-30%
SOIL ZONE:	GRAY	USUAL SOIL MOISTURE:	MESIC
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	SURFACE STONINESS:	EXCEEDINGLY
PARENT MATERIAL:	STONY, MEDIUM TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/									
AE	3-25	10YRm 5/3	BROWN	WCPL	FR	STSIL-L	0.82	5.8			
BT	25-38	10YRm 5/4	YELLOWISH BROWN	MMSBK	F	STL	0.49	5.3			
BC	38-120	10YRm 5/4	YELLOWISH BROWN	WCSBK	FR	STSL		5.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-25	G	P		G				P (Upper L)
BT	25-38	G	P		G				P (Subsoil)
BC	38-120	G	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY, TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. VARIANT OF MCPHERSON THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	NOSEHILL-AA (aaNHL)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/					0.7	4.2			
AE1	5-10	10YRm 6/1	GRAY	MFPL	FR	SIL	1.4	4.5			
BF	10-15	10YRm 5/8	YELLOWISH BROWN	WFPL	FR	SIL	0.45	5.2			
AE2	15-25	10YRm 6/3	PALE BROWN	SFPL	FR	SIL	0.31	5.4			
AB	25-40	2.5Ym 5/4	LIGHT OLIVE BROWN	MCPL	F	L	0.22	4.9			
BT	40-65	10YRm 5/4	YELLOWISH BROWN	MFSBK	F	SICL		5.7			
BC	65-105	2.5Ym 4/4	OLIVE BROWN	MFSBK	F	SIC		4.8			
C	105-120	10YRm 4/4	DARK YELLOWISH BROWN	MA	F	CL		5.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	G		F				F (Upper L)
BF	10-15	G	G		G				G (Upper L)
AE2	15-25	G	G		G				G (Upper L)
AB	25-40	F	G		F				F (Upper L)
BT	40-65	G	F		G				F (Subsoil)
BC	65-105	G	F		F				F (Subsoil)
C	105-120	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. NOSEHILL SOILS ARE DEVELOPED ON LOAM TO CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THERE IS AN LH, AE, BF, A SECOND AE, AND AN AB HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	NOSEHILL-AAST (aastNHL)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/					0.7	4.2			
AE1	5-10	10YRm 6/1	GRAY	MFPL	FR	STSIL	1.4	4.5			
BF	10-15	10YRm 5/8	YELLOWISH BROWN	WFPL	FR	STSIL	0.45	5.2			
AE2	15-25	10YRm 6/3	PALE BROWN	SFPL	FR	STSIL	0.31	5.4			
AB	25-40	2.5Ym 5/4	LIGHT OLIVE BROWN	MCPL	F	STL	0.22	4.9			
BT	40-65	10YRm 5/4	YELLOWISH BROWN	MFSBK	F	STSICL		5.7			
BC	65-105	2.5Ym 4/4	OLIVE BROWN	MFSBK	F	STSIC		4.8			
C	105-120	10YRm 4/4	DARK YELLOWISH BROWN	MA	F	STCL		5.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	P		F				P (Upper L)
BF	10-15	G	P		G				P (Upper L)
AE2	15-25	G	P		G				P (Upper L)
AB	25-40	F	P		F				P (Upper L)
BT	40-65	G	P		G				P (Subsoil)
BC	65-105	G	P		F				P (Subsoil)
C	105-120	G	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY, VERY THICK
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. VARIANT OF NOSEHILL THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	OCHIESE-AA (aaOHS)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	PODZOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						6.8			
AE1	5-10	10YRm 4/2	DARK GRAYISH BROWN	MFPL	FR	SIL	1.58	5.8			
BF	10-18	7.5YR 4/4	DARK BROWN	WFGR	FR	SIL	1.72	5.7			
AE2	18-30	10YRm 6/3	PALE BROWN	SMPL	FR	SIL	0.01	5.3			
AB	30-35	10YRm 5/6	YELLOWISH BROWN	MMSBK	F	SIL	0.69	4.8			
BT	35-70	2.5Ym 4/2	DARK GRAYISH BROWN	SFSBK	VF	C	0.61	5.2			
BC	70-102	2.5Ym 4/2	DARK GRAYISH BROWN	MASBK	F	C		5.5			
CK	102-120	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	CL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	G		G				G (Upper L)
BF	10-18	G	G		G				G (Upper L)
AE2	18-30	G	G		G				G (Upper L)
AB	30-35	F	G		F				F (Upper L)
BT	35-70	F	P		G				P (Subsoil)
BC	70-102	G	P		G				P (Subsoil)
CK	102-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON CLAY LOAM TEXTURED TILL THAT IS BORDERING ON CLAY TEXTURED. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). HORIZON SEQUENCE INCLUDES THE LH, AE, BF, A SECOND AE, AND AN AB HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	ORCHARD-AA (aaORC)	LANDFORM:	BLANKET, ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	16-30%
SOIL CLASSIFICATION:	BRUNISOLIC DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE EOLIAN		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHK	0-15	10YRd 4/1	DARK GRAY	WFGR	FR	SIL	7.92	7.5			
AHEK	15-27	10YRd 4/2	DARK GRAYISH BROWN	WFGR	FR	SIL	3.57	7.9			
BMK	27-39	7.5YR 6/6	REDDISH YELLOW	MMSBK	FR	SL	0.11	8.1			
AEK	39-51	10YRd 6/4	LIGHT YELLOWISH BROWN	WCSBK	FR	SL	0.04	8.			
BT	51-69	10YRd 6/6	BROWNISH YELLOW	WFPR	FR	SL	0.34	7.8			
CK	69-120	10YRd 5/2	GRAYISH BROWN	SGR	FR	SL		8.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHK	0-15	G	G		F				F (Upper L)
AHEK	15-27	G	G		P				P (Upper L)
BMK	27-39	G	G		P				P (Subsoil)
AEK	39-51	G	G		F				F (Subsoil)
BT	51-69	G	G		F				F (Subsoil)
CK	69-120	G	G		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 15. DEVELOPED ON SANDY LOAM TEXTURED MATERIAL. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE WHEN VERTICALLY DITCHED.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PASS CREEK (PCR)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
H	0-8	10YRm 2/1	BLACK					6.8			
AH	8-18	10YRm 2/2	VERY DARK BROWN	SGR	L	LS	4.52	6.7			
BG	18-46	10YRm 4/4	DARK YELLOWISH BROWN	SGR	L	S	0.27	6.4			
BCG	46-76	2.5Ym 4/4	OLIVE BROWN	SGR	L	S		6.3			
CG	76-120	2.5Ym 5/2	GRAYISH BROWN	SGR	L	SL		6.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
H	0-8								
AH	8-18	F	P		F				P (Upper L)
BG	18-46	F	P		G				P (Subsoil)
BCG	46-76	F	P		G				P (Subsoil)
CG	76-120	F	G		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SAND TO SANDY LOAM TEXTURED SOILS ARE WET ALL YEAR AND LACK COHESION, THEREFORE, EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PEDLEY (PDY)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-15
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LHK	0-5	/				-		7.8			
BMK	5-20	7.5YR 4/4	DARK BROWN	WFSBK	FR	SL	0.86	7.7			
AEK	20-38	10YRm 6/4	LIGHT YELLOWISH BROWN	WFSBK	FR	SL	0.03	8.			
BTK	38-56	10YRm 4/4	DARK YELLOWISH BROWN	WCSBK	FR	SL	0.31	7.9			
CK	56-127	2.5Ym 5/2	GRAYISH BROWN	SGR	FR	SL		8.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LHK	0-5								
BMK	5-20	G	G		P				P (Upper L)
AEK	20-38	G	G		P				P (Upper L)
BTK	38-56	G	G		F				F (Subsoil)
CK	56-127	G	G		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SANDY LOAM TEXTURED MATERIAL. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). HORIZON SEQUENCE IS USUALLY AN LH, BM AND AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PEERS (PRS)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE1	0-10	10YR 5/2	GRAYISH BROWN	SGR	L	LS	2.	5.5	0.5	47.	0.1
BM1	10-18	10YR 4/4	DARK YELLOWISH BROWN	SGR	L	LS	0.6	6.3	0.2	34.	0.1
AE2	18-35	10YR 5/3	BROWN	SGR	L	LS		6.6	0.1	28.	0.1
BM2	35-85	10YR 5/4	YELLOWISH BROWN	SGR	L	LS		6.2	0.1	30.	0.1
BC	85-120	2.5Y 4/4	OLIVE BROWN	SGR	L	LS		6.2	0.1	26.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE1	0-10	F	P	F	G	G	G	G	P (Upper L)
BM1	10-18	F	P		G	G	G	G	P (Upper L)
AE2	18-35	F	P		F	G	F	G	P (Upper L)
BM2	35-85	F	P		G	G	F	G	P (Subsoil)
BC	85-120	F	P		G	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAMY SAND TO SAND TEXTURED DEPOSITS. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE WHEN VERTICALLY DITCHED. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THESE SOILS USUALLY HAVE AN LH, AE, BM AND ANOTHER AE HORIZON.

PEGASUS

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PEGASUS (PGS)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	9-60%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-20	10YR	5/3	BROWN	MMPL	VFR	SIL	0.9	6.1	0.4	44.	0.1
BT	20-40	10YR	5/4	YELLOWISH BROWN	MMSBK	F	CL	0.6	5.8	0.2	51.	0.1
BC	40-105	2.5Y	5/4	LIGHT OLIVE BROWN	WMSBK	FR-F	SCL		5.8	0.2	38.	0.1
CK	105-120	10YR	6/2	LIGHT BROWNISH GRAY	MA	FR-F	SICL		8.1	0.3	62.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-20	G	G		G	G	G	G	P (Upper L)
BT	20-40	G	F		G	G	G	G	F (Subsoil)
BC	40-105	G	F		G	G	G	G	F (Subsoil)
CK	105-120	G	F		P	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED SOFTROCK FROM THE PASKAPOO FORMATION. THE SOILS ARE SUSCEPTIBLE TO EROSION BY WATER WHEN THE VEGETATION IS REMOVED. IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THEY HAVE A THIN LH HORIZON OVERLYING A THICK, PLATY AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PEPPERS-AA (aaPPS)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						6.6			
BM	3-8	5YRm 3/4	DARK REDDISH BROWN	WMSBK	FR	L-SL	1.44	6.8			
AE	8-13	10YRm 5/4	YELLOWISH BROWN	SGR	FR	LS	0.21	7.1			
BT	13-28	10YRm 4/4	DARK YELLOWISH BROWN	MMSBK	F	SCL	0.55	7.2			
2BC	28-43	2.5Ym 5/4	LIGHT OLIVE BROWN	WMSBK	FR	SL		7.2			
2CK	43-120	2.5Ym 4/4	OLIVE BROWN	MA	FR	SL		7.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
BM	3-8	G	G		F				F (Upper L)
AE	8-13	G	P		F				P (Upper L)
BT	13-28	G	F		F				F (Subsoil)
2BC	28-43	G	G		F				F (Subsoil)
2CK	43-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: HOME SCA IS 14. DEVELOPED ON A VENEER OF SANDY LOAM TO LOAMY SAND TEXTURED MATERIAL OVER CLAY LOAM TEXTURED TILL AT LESS THAN 1 M. THE SANDY MATERIAL CAUSES EXPOSED FACES OF TRENCH WALLS TO BE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). THE HORIZON SEQUENCE IS USUALLY AN LH, BM AND AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PERCOTTE (PCO)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	16-60%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MEDIUM EOLIAN/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHK	0-3	10YRm 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	SIL	8.24	7.8			
AEK	3-18	7.5YR 6/4	LIGHT BROWN	WFGR	FR	SIL	1.7	8.			
BMK	18-30	5YRm 4/8	YELLOWISH RED	WFSBK	FR	SIL	0.44	8.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHK	0-3	G	G		P				P (Upper L)
AEK	3-18	G	G		P				P (Upper L)
BMK	18-30	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A SILT LOAM TEXTURED VENEER OVER SANDY CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, THE AH OR AHE HORIZON IS VERY THIN OR ABSENT. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A FAIRLY THICK, LIGHTER COLORED AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	PINTO-AA (aaPTO)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	PODZOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						5.6			
AE1	3-10	10YRm 5/2	GRAYISH BROWN	SGR	L	LS	0.58	5.3			
BF	10-15	7.5YR 5/6	STRONG BROWN	SGR	L	SL	0.81	5.6			
AE2	15-30	10YRm 5/6	YELLOWISH BROWN	SGR	L	LS	0.05	5.7			
BT	30-48	10YRm 5/8	YELLOWISH BROWN	SGR	VFR	SL	0.2	5.2			
BC	48-63	10YRm 5/4	YELLOWISH BROWN	SGR	L	LS		5.8			
2BC	63-75	10YRm 5/6	YELLOWISH BROWN	MA	F	SCL		6.6			
2CK	75-120	10YRm 5/4	YELLOWISH BROWN	MA	F	SCL		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE1	3-10	F	P		G				P (Upper L)
BF	10-15	F	G		G				F (Upper L)
AE2	15-30	F	P		G				P (Upper L)
BT	30-48	G	G		G				G (Subsoil)
BC	48-63	F	P		G				P (Subsoil)
2BC	63-75	G	F		G				F (Subsoil)
2CK	75-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: HOME SCA IS 14. DEVELOPED ON A VENEER OF SANDY LOAM TO LOAMY SAND TEXTURED MATERIAL OVER SANDY CLAY LOAM TEXTURED TILL. THE UPPER SANDY MATERIAL WILL CAUSE EXPOSED FACES OF TRENCH WALLS TO BE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THE HORIZON SEQUENCE IS USUALLY AN LH, AE, BF AND ANOTHER AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	RAT (RAT)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	/						4.8			
AEGJ	3-15	10YRm 6/4	LIGHT YELLOWISH BROWN	SGR	L	SL	0.99	4.9			
BTGJ	15-33	7.5YR 5/6	STRONG BROWN	SGR	L	SCL	0.49	5.1			
BCGJ	33-45	7.5YR 5/6	STRONG BROWN	SGR	L	SL		5.3			
2BTGJ	45-70	10YRm 4/3	DARK BROWN	MMSBK	F	CL	0.35	5.2			
2BCGJ	70-97	10YRm 4/3	DARK BROWN	WFSBK	FR	CL		6.			
2CKGJ	97-120	10YRm 5/6	YELLOWISH BROWN	MA	FR	CL		7.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AEGJ	3-15	F	G		F				F (Upper L)
BTGJ	15-33	F	F		G				F (Subsoil)
BCGJ	33-45	F	G		G				F (Subsoil)
2BTGJ	45-70	G	F		G				F (Subsoil)
2BCGJ	70-97	G	F		G				F (Subsoil)
2CKGJ	97-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF SANDY LOAM TEXTURED MATERIAL OVER CLAY LOAM TEXTURED TILL. THE SANDY SURFACE LAYER WILL CAUSE EXPOSED FACES TO BE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THESE SOILS HAVE A THIN LH HORIZON OVERLYING A LIGHTER COLORED AE HORIZON. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	ROSEVEAR (RSV)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/					0.52	5.9			
AE1	5-10	10YRm 6/2	LIGHT BROWNISH GRAY	SMPL	FR	SIL	0.5	5.8			
AE2	10-22	10YRm 6/3	PALE BROWN	SMPL	FR	SIL	0.5	5.6			
AB	22-30	10YRm 5/3	BROWN	MCPL	F	SIL	0.63	5.6			
BT	30-53	10YRm 5/3	BROWN	MFSBK	F	SICL		6.4			
BC	53-65	10YRm 4/4	DARK YELLOWISH BROWN	MFABK	F	SICL		6.6			
CK	65-120	2.5Ym 5/4	LIGHT OLIVE BROWN	MA	F	SIL		7.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	G		G				G (Upper L)
AE2	10-22	G	G		G				G (Upper L)
AB	22-30	F	G		G				F (Upper L)
BT	30-53	G	F		G				F (Subsoil)
BC	53-65	G	F		G				F (Subsoil)
CK	65-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILT LOAM TEXTURED MATERIAL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING TWO AE HORIZONS, AND AN AB HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	SUNCHILD (SCH)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOLACUSTRINE/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-2	/						6.			
AE1	2-7	10YRm 4/4	YELLOWISH BROWN	SMPL	VFR	SIL		5.8			
BF	7-12	10YRm 5/4	YELLOWISH BROWN	MMPL	VFR	SIL		6.			
AE2	12-25	10YRm 6/4	LIGHT YELLOWISH BROWN	MMPL	VFR	SIL		5.3			
BT	25-55	10YRm 5/3	BROWN	SFSBK	F	SICL		5.1			
BC	55-85	10YRm 4/3	DARK BROWN	MA	F	SICL		5.2			
2CK	85-	10YRm 4/3	DARK BROWN	MA	F	L		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-2								
AE1	2-7	G	G		G				G (Upper L)
BF	7-12	G	G		G				G (Upper L)
AE2	12-25	G	G		G				G (Upper L)
BT	25-55	G	F		G				F (Subsoil)
BC	55-85	G	F		G				F (Subsoil)
2CK	85-	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILTY TO LOAMY GLACIOLACUSTRINE VENEERS OVERLYING LOAM TO CLAY LOAM TILL. THE TEXTURE CHANGE IS NOT SIGNIFICANT. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THESE SOILS USUALLY HAVE AN LH, AE, BF AND ANOTHER AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	SUNDANCE (SUC)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	10-30%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE1	0-3	10YRm 5/1	GRAY	WFPL	L	SL	1.	5.1			
BF	3-8	10YRm 4/4	DARK YELLOWISH BROWN	WFSBK	L	SL	1.16	5.6			
AE2	8-18	10YRm 6/4	LIGHT YELLOWISH BROWN	SGR	L	SL	0.4	5.7			
BT	18-28	10YRm 5/4	YELLOWISH BROWN	WCSBK	FR	SL	0.76	5.5			
BC	28-66	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	LS		6.			
CK	66-120	2.5Ym 4/2	DARK GRAYISH BROWN	SGR	L	LS		7.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE1	0-3	F	G		G				F (Upper L)
BF	3-8	F	G		G				F (Upper L)
AE2	8-18	F	G		G				F (Upper L)
BT	18-28	G	G		G				G (Subsoil)
BC	28-66	F	P		G				P (Subsoil)
CK	66-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SANDY LOAM TO SAND TEXTURED MATERIAL. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THESE SOILS HAVE AN LH, AE, BF AND ANOTHER AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	SUNDANCE-ST (stSUC)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	10-30%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE1	0-3	10YRm 5/1	GRAY	WFPL	L	STSL	1.	5.1			
BF	3-8	10YRm 4/4	DARK YELLOWISH BROWN	WFSBK	L	STSL	1.16	5.6			
AE2	8-18	10YRm 6/4	LIGHT YELLOWISH BROWN	SGR	L	STSL	0.4	5.7			
BT	18-28	10YRm 5/4	YELLOWISH BROWN	WCSBK	FR	STSL	0.76	5.5			
BC	28-66	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	STLS		6.			
CK	66-120	2.5Ym 4/2	DARK GRAYISH BROWN	SGR	L	STLS		7.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE1	0-3	F	P		G				P (Upper L)
BF	3-8	F	P		G				P (Upper L)
AE2	8-18	F	P		G				P (Upper L)
BT	18-28	G	P		G				P (Subsoil)
BC	28-66	F	P		G				P (Subsoil)
CK	66-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF SUNDANCE THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	SUNDRE	(SUD)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY		TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	ORTHIC DARK GRAY		USUAL SOIL MOISTURE:	DROUGHTY
	CHERNOZEMIC		SURFACE STONINESS:	NON
PARENT MATERIAL:	MODERATELY COARSE			
	GLACIOFLUVIAL/ GRAVEL			

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-26	10YR 3/3	DARK BROWN	WFGR	FR	L	3.5	7.9	0.7	60.	0.1
BM	26-75	10YR 4/3	BROWN-DARK BROWN	WFSBK	FR	L		8.2	0.5	40.	0.1
CK	75-115	10YR 5/3	BROWN	SGR	L	SL					
2CK	115-120	10YR 6/2	LIGHT BROWNISH GRAY	SGR	L	GRSL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-26	G	G		P	G	F	G	P (Upper L)
BM	26-75	G	G		P	G	G	G	P (Subsoil)
CK	75-115	F	G						F (Subsoil)
2CK	115-120	F	P						P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.032
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF SANDY LOAM TEXTURED MATERIAL OVER GRAVELLY SAND. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE. THE DEPTH TO GRAVEL IS VARIABLE BUT IT USUALLY OCCURS GREATER THAN 20 CM BELOW THE SURFACE, THEREFORE, TOPSOILS ARE USUALLY GRAVEL-FREE.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	TOLMAN (TOM)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-9	10YR 4/2	DARK GRAYISH BROWN	WFGR	FR	SIL	1.9	6.5	0.5	58.	0.2
BT	9-50	10YR 5/3	BROWN	WFSBK	FR	SICL		6.	0.1	49.	0.4
BC	50-90	10YR 5/3	BROWN	MA	FR	SICL		6.3	0.1	70.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-9	G	G		G	G	G	G	G (Upper L)
BT	9-50	G	F		G	G	G	G	F (Subsoil)
BC	50-90	G	F		G	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: TOLMAN SOILS ARE ASSOCIATED WITH LAKES. A STONY OR GRAVELLY LAYER IS OFTEN LOCATED AT 1.2 M WHERE TILL IS OFTEN ENCOUNTERED. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A THICK, PLATY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS ABOUT 10 CM THICK AND IS DERIVED MAINLY FROM AE MATERIAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	TOM HILL-AA (aaTML)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						5.4			
AE1	5-10	10YRm 6/2	LIGHT BROWNISH GRAY	SFPL	FR	SIL		5.7			
AE2	10-20	10YRm 6/4	LIGHT YELLOWISH BROWN	MCPL	FR	SIL		6.1			
BT	20-45	10YRm 5/4	YELLOWISH BROWN	MFSBK	F	SIL		5.3			
BC	45-77	2.5Ym 4/4	OLIVE BROWN	WFSBK	F	L		5.4			
C	77-120	2.5Ym 4/4	OLIVE BROWN	MA	F	L		5.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	G		G				G (Upper L)
AE2	10-20	G	G		G				G (Upper L)
BT	20-45	G	G		G				G (Subsoil)
BC	45-77	G	G		G				G (Subsoil)
C	77-120	G	G		G				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. DEVELOPED ON LOAM TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THESE SOILS HAVE A THIN LH HORIZON OVERLYING A LIGHTER COLORED, PLATY, FAIRLY THICK AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	TOM HILL-AAST (aastTML)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MEDIUM TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						5.4			
AE1	5-10	10YRm 6/2	LIGHT BROWNISH GRAY	SFPL	FR	STSIL		5.7			
AE2	10-20	10YRm 6/4	LIGHT YELLOWISH BROWN	MCPL	FR	STSIL		6.1			
BT	20-45	10YRm 5/4	YELLOWISH BROWN	MFSBK	F	STSIL		5.3			
BC	45-77	2.5Ym 4/4	OLIVE BROWN	WFSBK	F	STL		5.4			
C	77-120	2.5Ym 4/4	OLIVE BROWN	MA	F	STL		5.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	P		G				P (Upper L)
AE2	10-20	G	P		G				P (Upper L)
BT	20-45	G	P		G				P (Subsoil)
BC	45-77	G	P		G				P (Subsoil)
C	77-120	G	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. VARIANT OF TOM HILL THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	WEALD (WLD)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	PODZOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						4.5			
AE1	5-10	10YRm 6/1	LIGHT GRAY	MFPL	FR	SL	0.78	5.6			
BF	10-15	10YRm 5/8	YELLOWISH BROWN	WFPL	FR	SIL	1.1	6.4			
AE2	15-22	10YRm 6/3	PALE BROWN	MMPL	FR	L	0.29	5.8			
BT	22-47	2.5Ym 5/6	LIGHT OLIVE BROWN	MFSBK	F	L	0.25	5.8			
BC	47-74	2.5Ym 5/4	LIGHT OLIVE BROWN	WFSBK	F	SIL		6.3			
CK	74-120	2.5Ym 5/2	GRAYISH BROWN	MA	F	SIL		7.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	G		G				G (Upper L)
BF	10-15	G	G		G				G (Upper L)
AE2	15-22	G	G		G				G (Upper L)
BT	22-47	G	G		G				G (Subsoil)
BC	47-74	G	G		G				G (Subsoil)
CK	74-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: WEALD SOILS ARE DEVELOPED ON SILT LOAM TEXTURED DEPOSITS. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THERE IS A LH, AE, BF, AND ANOTHER AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	WEASONE (WSN)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 4/2	DARK GRAYISH BROWN				23.35	6.4			
AE	3-11	10YRm 7/2	LIGHT GRAY	MMPL	FR	SIL	2.35	6.3			
BT	11-21	10YRm 4/3	DARK BROWN	MFSBK	F	SIC	1.41	5.6			
BC	21-48	10YRm 5/3	BROWN	MA	F	SIC	1.31	6.1			
CK	48-120	2.5Ym 4/4	OLIVE BROWN	MA	F	SIC		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-11	G	G		G				G (Upper L)
BT	11-21	G	F		G				F (Subsoil)
BC	21-48	G	F		G				F (Subsoil)
CK	48-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILTY CLAY TO CLAY TEXTURED MATERIAL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A PLATY, LIGHT GRAY COLORED AE HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	WILDHAY-AA (aaWHY)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	PODZOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						4.3			
AE1	5-8	10YRm 6/2	LIGHT BROWNISH GRAY	MFPL	VFR	SIL	1.1	5.1			
BFJ	8-13	7.5YR 4/4	DARK BROWN	MMPL	VFR	SIL	1.55	5.1			
AE2	13-28	10YRm 5/4	YELLOWISH BROWN	SMPL	VFR	SIL	0.46	5.4			
BT	28-45	10YRm 5/6	YELLOWISH BROWN	SFSBK	F	CL	0.26	5.9			
BC	45-55	2.5Ym 5/4	LIGHT OLIVE BROWN	WFSBK	FR	L		6.7			
CK	55-120	2.5Ym 5/4	LIGHT OLIVE BROWN	MA	FR	L		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-8	G	G		G				G (Upper L)
BFJ	8-13	G	G		G				G (Upper L)
AE2	13-28	G	G		G				G (Upper L)
BT	28-45	G	F		G				F (Subsoil)
BC	45-55	G	G		G				G (Subsoil)
CK	55-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14.

WILDHAY-AAST

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	WILDHAY-AAST (aastWHY)	LANDFORM:	ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	PODZOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, MODERATELY COARSE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	/						4.3			
AE1	5-8	10YRm 6/2	LIGHT BROWNISH GRAY	MFPL	VFR	STSIL	1.1	5.1			
BFJ	8-13	7.5YR 4/4	DARK BROWN	MMPL	VFR	STSIL	1.55	5.1			
AE2	13-28	10YRm 5/4	YELLOWISH BROWN	SMPL	VFR	STSIL	0.46	5.4			
BT	28-45	10YRm 5/6	YELLOWISH BROWN	SFSBK	F	STCL	0.26	5.9			
BC	45-55	2.5Ym 5/4	LIGHT OLIVE BROWN	WFSBK	FR	STL		6.7			
CK	55-120	2.5Ym 5/4	LIGHT OLIVE BROWN	MA	FR	STL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-8	G	P		G				P (Upper L)
BFJ	8-13	G	P		G				P (Upper L)
AE2	13-28	G	P		G				P (Upper L)
BT	28-45	G	P		G				P (Subsoil)
BC	45-55	G	P		G				P (Subsoil)
CK	55-120	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 14. VARIANT OF WILDHAY THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

WILDWOOD

SCA 13

09/01/93

SOIL SERIES:	WILDWOOD (WWO)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-10	/						6.2			
AH	10-15	10YRm 3/1	VERY DARK GRAY	SFGR	FR	C	9.49	5.9			
AEG	15-25	10YRm 5/3	BROWN	SFPL	VFR	SIL	0.65	5.8			
ABG	25-30	5Ym 5/1	GRAY	MFSBK	FR-F	SICL	0.78	5.7			
BTG1	30-52	5Ym 4/1	DARK GRAY	MFSBK	F	HC	0.84	5.4			
BTG2	52-84	10YRm 4/2	DARK GRAYISH BROWN	MFSBK	F	HC	0.65	6.4			
BCG	84-109	2.5Ym 4/4	OLIVE BROWN	MA	FR	HC		6.9			
CKG	109-120	2.5Ym 4/2	DARK GRAYISH BROWN	STRAT	FR	HC		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-10								
AH	10-15	G	P		G				P (Upper L)
AEG	15-25	G	G		G				G (Upper L)
ABG	25-30	F	F		G				F (Upper L)
BTG1	30-52	G	P		G				P (Subsoil)
BTG2	52-84	G	P		G				P (Subsoil)
BCG	84-109	G	P		G				P (Subsoil)
CKG	109-120	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE. IN FORESTED AREAS, AH OR AHE HORIZONS ARE VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH HORIZON OVERLYING A PLATY, BROWNISH COLORED AEG HORIZON, AND AN ABG HORIZON.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	WILDWOOD-PT (ptWWO)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE LACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OMP	0-20	10YR 3/2	VERY DARK GRAYISH BROWN			O					
AEG	20-30	10YRm 5/3	BROWN	SFPL	VFR	SIL	0.65	5.8			
BTG	30-80	10YRm 4/2	DARK GRAYISH BROWN	MFSBK	F	HC	0.84	5.4			
CKG	80-120	2.5Ym 4/2	DARK GRAYISH BROWN	STRAT	FR	HC		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OMP	0-20								(Peat)
AEG	20-30	G	G		G				G (Upper L)
BTG	30-80	G	P		G				P (Subsoil)
CKG	80-120	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm (PEAT & AEG HORIZON)
THICKNESS RANGE:	25-60 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF WILDWOOD HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON) UNDERLYING THE PEAT. INSTEAD, THERE IS A BROWNISH, PLATY AEG HORIZON ABOUT 10 CM THICK.

INTERPRETATION GUIDELINES

SCA 13

09/01/93

SOIL SERIES:	WINDFALL (WND)	LANDFORM:	RIDGED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY COARSE EOLIAN		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-6	10YR 5/4	YELLOWISH BROWN	SGR	L	LS	0.57	5.1			
BM1	6-16	10YR 5/6	YELLOWISH BROWN	SGR	L	LS	0.23	5.1			
BM2	16-56	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	L	LS	0.17	5.2			
BC1	56-110	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	L	SL	0.17	5.4			
BC2	110-200	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	L	SL-LS	0.23	5.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-6	F	P	P	G				P (Upper L)
BM1	6-16	F	P		G				P (Subsoil)
BM2	16-56	F	P		G				P (Subsoil)
BC1	56-110	F	G		G				F (Subsoil)
BC2	110-200	F	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	6 cm
THICKNESS RANGE:	0-10 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SAND TEXTURED MATERIAL. EXPOSED FACES OF TRENCH WALLS ARE UNSTABLE. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THERE IS A THIN LH HORIZON OVERLYING AN AE HORIZON.

2.14 Soil Correlation Area #14

General Description of the Area

- Occurs in the foothills, northwest from the Bow River through Hinton and to the British Columbia border, with outlying areas on the Mayberne Benchland and Clear Hills.

Ecoregion/Climate

- Upper Boreal-Cordilleran ecoregion of the Western Plateau-Benchlands.
- The ecoregion of SCA 14 is mostly Upper Boreal-Cordilleran with small inclusions of Subalpine.
- Agroclimate is estimated to be 5H (very severe heat limitation).
- Average annual precipitation is near 540 mm, most of which (340 mm) occurs during the summer, often creating a moisture surplus.
- Summer temperatures are cooler than the Lower Boreal-Cordilleran ecoregion, but warmer in the winter.
- Winds have a large effect on climate in the Saskatchewan and Athabasca River Valleys.

Soil and Landscapes

- Soils are largely Luvisolic and Brunisolic. Excessive moisture results in significant Organic soils as well.
- Profile development is generally 85 cm deep.
- Most landforms are influenced by the underlying bedrock. Veneers and blankets of Cordilleran till over Tertiary- and Cretaceous-aged bedrock of varying lithology dominate, with significant colluvium veneers.

Soil Reclamation Issues

- Severe Chinook winds in the Saskatchewan and Athabasca River valleys cause a high risk of erosion on disturbed sites.
- Potential soil erosion by water is very high given the steep slopes and high summer rainfall.
- Hard bedrock (usually within 1.5 m of the surface) requires blasting which results in large fragments.

NOTE: There are no SCA 14 profiles included in this edition of the manual. Major correlation work is required for the soil names in this area.

2.15 Soil Correlation Area # 15

This SCA is almost entirely made up of Banff and Jasper National Parks.

No information included.

2.16 Soil Correlation Area #16

General Description of the Area

- Occurs in the southern Alberta foothills from the Morley Indian Reserve, south to Waterton Park, and includes the Porcupine Hills.

Ecoregion/Climate

- The ecoregion of SCA 16 is montane, subalpine and alpine.
- Agroclimate is 6H to 7H.
- Climate varies greatly by ecoregion/landscape position (valley to exposed range).
- Growing season P-PE = greater than - 150 mm.

Soil and Landscapes

- Mineral landscapes are largely composed of till and colluvium, often over shallow bedrock.
- Soil types vary widely; from Dark Brown to Dark Gray, Chernozems, Luvisolic, Brunisolic and Gleysolic.

Soil Reclamation Issues

- Frequent chinook winds cause droughtiness.
- Potential soil erosion by wind is high on disturbed sites.
- Potential soil erosion by water is high because slopes are often steep and long.
- Short growing season due to late spring and early fall frost.
- Frost action in soil at exposed sites can increase the risk of erosion.

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	BRAGG CREEK (BRG)	LANDFORM:	TERRACED
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DRY
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/GRAVEL	SURFACE STONINESS:	YES

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-23	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	STSL		7.5	0.5	56.	0.1
BM	23-45	10YR 4/3	BROWN-DARK BROWN	WMGR	L	GRSL		7.5	0.8	39.	0.2
CK	45-90	10YR 5/2	GRAYISH BROWN	SGR	L	GR		7.8	0.9	24.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-23	G	P		G	G	G	G	P (Topsoil)
BM	23-45	F	P		G	G	G	G	U (Subsoil)
CK	45-90	F	U		F	G	F	G	U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	0-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	SLIGHT
RISK ON 5-9% SLOPE:	SLIGHT
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: BRAGG CREEK SOILS OCCUR IN VALLEYS AS TERRACES AND FILL. THESE SOILS ARE COARSE TEXTURED WITH SUBSURFACE GRAVEL, AND THE EXPOSED FACES ARE UNSTABLE. THE SOIL IS DROUGHTY AND CAN BE DIFFICULT TO REVEGETATE.

LEIGHTON CENTRE

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	LEIGHTON CENTRE (LTC)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	2-10%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-8	10YR 2/1	BLACK				26.4	5.8			
AHE	8-16	10YR 2/1	BLACK	MFGR	VFR	L	5.69	5.5			
AE	16-36	10YR 5/3	BROWN	WCPL	FR	L	0.97	6.3			
AB	36-46	10YR 4/3	BROWN-DARK BROWN	MFSBK	F	SICL	1.	5.7			
BT	46-93	10YR 3/3	DARK BROWN	MMSBK	F	SICL	0.65	5.7			
CK	93-120	2.5 Y 4/4	OLIVE BROWN	MA	F	SICL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating	
LH	0-8			G						
AHE	8-16	G	G	G	F				F	
AE	16-36	G	G	P	F				P	(Topsoil)
AB	36-46	F	F		F				F	(Topsoil)
BT	46-93	F	F		F				F	(Topsoil)
CK	93-120	F	F		G				F	(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20	cm
THICKNESS RANGE:	15-40	cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS	
STRIPPING LIMITATIONS:	NONE	
WIND EROSION RISK:	LOW	
WATER EROSION K=:	0.053	
RISK ON <5% SLOPE:	MODERATE	
RISK ON 5-9% SLOPE:	MODERATE	
RISK ON 9-15% SLOPE:	HIGH	

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES:

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	LEIGHTON CENTRE-GR(grLTC)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	2-10%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	GRAVELLY, MODERATELY FINE TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-22	10YR 3/3	DARK BROWN	MFGR	FR	GRL-SIL		7.4	0.8		0.1
BT	22-80	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	GRCL		7.3	0.4		0.2
CK	80-120	2.5Y 4/4	OLIVE BROWN	MA	F	GRCL		7.8	0.2		0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-22	G	P		G	G		G	P (Topsoil)
BT	22-80	F	P		G	G		G	P (Subsoil)
CK	80-120	F	P		F	G		G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-40 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: GRAVELLY VARIANT OF LEIGHTON CENTRE.

POTHOLE CREEK-AA

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	POTHOLE CREEK-AA (aaPOT)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-30	10YR 2/1	BLACK	MMGR	FR	L		6.5	0.2		
BG	50-65	10YR 3/2	VERY DARK GRAYISH BROWN	MA	S	SIL		6.8	0.1		
BCG	90-110	10YR 3/3	DARK BROWN	MA	VS	C		7.	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-30	G	G		G	G			G (Topsoil)
BG	50-65	F	G		G	G			F (Subsoil)
BCG	90-110	P	P		G	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm
THICKNESS RANGE:	20-40 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS, VERY THICK
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 8. THESE SOILS ARE FINE TEXTURED AND WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT.

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	ROBINSON (RSN)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-30	10YR 2/1	BLACK	MFGR	FR	SICL	5.6	5.4	0.2	59.	
BT	30-75	10YR 4/3	BROWN-DARK BROWN	MMSBK	F	C		5.5	0.2	64.	
CK	75-120	5Y 5/3	OLIVE	MA	F	C		7.8	0.4	52.	0.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-30	G	F	G	P	G	G		P (Topsoil)
BT	30-75	F	P		F	G	F		P (Subsoil)
CK	75-120	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: A LIGHTER COLORED AE HORIZON SOMETIMES OCCURS BETWEEN THE TOPSOIL AND SUBSOIL AND WILL AID IN SEPARATION OF THE TOPSOIL FROM SUBSOIL.

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	SPRUCE RIDGE (SPR)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	9-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-4						20.36	6.			
AE	4-19	7.5 YR 4/4	BROWN - DARK BROWN	WMPL	VFR	SIL	2.08	4.2			
BT	19-94	10YR 4/3	BROWN - DARK BROWN	MMSBK	F	SICL	1.38	4.8			
CK	94-120	10YR 3/3	DARK BROWN	MA	F	CL		7.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-4			G					
AE	4-19	G	G	G	U				U (Topsoil)
BT	19-94	F	F		P				P (Subsoil)
CK	94-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEPTH TO BEDROCK IS 1 TO 2 M IN VALLEYS, SHALLOWER ON VALLEY SIDES AND STEEP SLOPES. SOILS ARE OFTEN STONY.

INTERPRETATION GUIDELINES

SCA 16

09/01/93

SOIL SERIES:	SPRUCE RIDGE-XP (xpSPR)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY - GRAY	TYPICAL SLOPES:	9-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL/SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-15	10YR 5/1	GRAY	MMPL	FR	SIL		6.2	0.1		
BT	15-40	10YR 5/3	BROWN	MMABK	F	CL		6.7	0.1		
BC	50-60	10YR 5/3	BROWN	MA	F	CL		7.2	0.1		
2C	60-65	10YR 5/3	BROWN	MA	R	R					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-15	G	G		F	G			F (Topsoil)
BT	15-40	F	F		G	G			F (Subsoil)
BC	50-60	F	F		G	G			F (Subsoil)
2C	60-65	U	U						U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF SPRUCE RIDGE THAT HAS WEATHERED BEDROCK WITHIN 1 M OF THE SURFACE.

2.17 Soil Correlation Area #17

General Description of the Area

- The area occurs from Fox Creek and Valleyview, west; west of Spirit River; and from Grimshaw and Rainbow Lake, west.

Ecoregion/Climate

- The Lower Boreal-Cordilleran ecoregion of the North-Western Benchlands.
- Agroclimate is mostly 4H (severe heat limitation).
- Growing season P-PE= -200 to -100 mm.
- Average precipitation in the Lower Boreal-Cordilleran ecoregion is 460 mm, most of which occurs during the summer, making this ecoregion the second wettest area in Alberta. Winter precipitation is similar to the Low and Mid Boreal Mixedwood ecoregions.
- Summer temperatures are colder than the Low and Mid Boreal Mixedwood ecoregions. Temperatures are warmer in the winter however, because Arctic highs rarely reach this area and numerous chinooks occur.

Soil and Landscapes

- Dominantly Luvisolic with some Brunisolic soils. Excessive moisture results in significant Organics.
- The Clear Hills Uplands are dominated by undulating and hummocky moraines (till), with significant blankets of till over bedrock, and some glaciofluvial deposits.
- Profile development is generally 65 cm deep with 15 to 20 cm of topsoil.

Soil Reclamation Issues

- The risk of soil erosion by water is generally high to moderate on steep and long slopes, and low on undulating landscapes.
- The risk of soil erosion by wind is generally low.
- Topsoil salvage of cultivated Luvisols should include the Ap and Ae horizons. In forested areas, the salvaged topsoil should include the Ae and all horizons above it.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	ALBRIGHT (AGH)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL (SOLONETZIC)	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/3	DARK BROWN	MFGR	FR	SICL		6.1	0.5	51.	
BTNJGJ	18-65	10YR 4/2	DARK GRAYISH BROWN	MMCOL	F	CL		7.5	0.6	67.	2.2
CKGJ	65-110	10YR 4/2	DARK GRAYISH BROWN	MA	F	CL		7.8	1.4	75.	3.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	G	F		G	G	G		F (Upper L)
BTNJGJ	18-65	G	F		F	G	F	G	F (Subsoil)
CKGJ	65-110	G	F		F	G	F	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TO CLAY TEXTURED MATERIAL. UNDER FORESTED AREAS, THERE IS A THIN LH HORIZON OVERLYING AN AH OR AHE HORIZON AND A LIGHT GRAY, PLATY AE HORIZON. THESE SOILS ARE WIDELY CULTIVATED AND THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC. POOR PERMEABILITY AND LOSS OF ORGANIC MATTER IS CONTRIBUTING TO SERIOUS SOIL EROSION BY WATER. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

ALCAN

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	ALCAN (ALC)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-60%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 3/3	DARK BROWN					6.4			
AE	3-13	10YRm 6/2	LIGHT BROWNISH GRAY	PL	FR	SIL-L	0.73	5.4			
AB	13-21	10YRm 5/3	BROWN	SBK	F	C-HC	0.63	4.8			
BT	21-41	10YRm 4/4	DARK YELLOWISH BROWN	WMCOL	VF	CL-C	0.6	4.7			
BC	41-61	10YRm 3/3	DARK BROWN	SBK	F	C		5.1			
CK	61-120	10YRm 4/2	DARK GRAYISH BROWN	MA	F	CL-C		6.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-13	G	G		G				G (Upper L)
AB	13-21	F	P		F				P (Subsoil)
BT	21-41	F	P		F				P (Subsoil)
BC	41-61	G	P		G				P (Subsoil)
CK	61-120	G	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, TOPOGRAPHY
WIND EROSION RISK:	
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: OCCURING MOSTLY IN FORESTED AREAS, THESE SOILS HAVE LITTLE OR NO TOPSOIL (AH OR AHE HORIZONS). INSTEAD, THEY HAVE A THIN LH HORIZON OVERLYING A PLATY, LIGHT COLORED AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS COMPOSED OF THE MIXTURE OF THE SURFACE HORIZONS AND IS VARIABLE IN COLOR. THE AB HORIZON IS OF POOR QUALITY DUE TO CLAYEY TEXTURES AND SHOULD NOT BE INCLUDED IN THE UPPER LIFT.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	BOUNDARY (BUD)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL/SOFTROCK	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 3/3	DARK BROWN				2.6	4.6			
AE	5-12	10YRm 5/2	GRAYISH BROWN	WFPL	F	C	1.2	4.6			
BTFJ	12-22	7.5YR 5/5	STRONG BROWN	SBK	F	C	0.5	4.2			
BC	22-30	2.5Ym 5/4	LIGHT OLIVE BROWN	WFSBK	F	SICL	0.3	4.1			
C	30-60	2.5Ym 5/4	LIGHT OLIVE BROWN	MA	F	SIC		3.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-12	F	P		F				P (Upper L)
BTFJ	12-22	G	P		F				P (Subsoil)
BC	22-30	G	F		F				F (Subsoil)
C	30-60	G	F		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON A VENEER OF SILTY CLAY TEXTURED TILL OVER SOFT, SILTY CLAY TEXTURED BEDROCK. SOMETIMES THE TILL HAS ERODED AWAY LEAVING ONLY WEATHERED BEDROCK. THESE SOILS ARE RARELY CULTIVATED BECAUSE OF ACIDITY CAUSED BY VERY ACID SHALES. IN FORESTED AREAS, LH AND AE HORIZONS OCCUR IN PLACE OF TOPSOIL. CARE MUST BE TAKEN DURING TOPSOIL STRIPPING TO AVOID CONTAMINATION WITH ACID SUBSOIL.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	BRAEBURN (BBN)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 4/3	BROWN	WFPL	FR	SIL		6.5	0.3	43.	
BT	15-75	10YR 5/4	YELLOWISH BROWN	MMSBK	F	CL		6.9	0.2	49.	
CK	75-110	2.5Y 4/4	OLIVE BROWN	MA	F	CL		6.4	0.2	50.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G		G	G	G		G (Upper L)
BT	15-75	G	G		G	G	G		G (Subsoil)
CK	75-110	G	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, THE TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED AREAS WHICH ARE RARE, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	BRAEBURN-ST (stBBN)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 4/3	BROWN	WFPL	FR	STSIL		6.5	0.3	43.	
BT	15-75	10YR 5/4	YELLOWISH BROWN	MMSBK	F	STCL		6.9	0.2	49.	
CK	75-110	2.5Y 4/4	OLIVE BROWN	MA	F	STCL		6.4	0.2	50.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	P		G	G	G		P (Upper L)
BT	15-75	G	P		G	G	G		P (Subsoil)
CK	75-110	G	P		G	G	G		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF BRAEBURN THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	DEMMITT (DMT)	LANDFORM:	UNDULATING, ROLLING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 4/2	DARK GRAYISH BROWN				24.9	6.2			
AE	3-10	10YRm 7/2	LIGHT GRAY	WFPL	FR	SIL	0.680	6.3			
AB	10-22	10YRm 5/3	BROWN	WMPL	FR	SIL	0.348	5.9			
BT	22-52	10YRm 5/4	YELLOWISH BROWN	ABK	F	CL-C	0.651	5.4			
BC	52-67	10YRm 5/2	GRAYISH BROWN	ABK	F	CL	0.523	5.5			
C	67-120	10YRm 5/3	BROWN	MA	F	CL	0.482	6.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-10	G	G		G				G (Upper L)
AB	10-22	G	G		G				G (Upper L)
BT	22-52	G	P		G				P (Subsoil)
BC	52-67	G	F		G				F (Subsoil)
C	67-120	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SANDY CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS. THE AB HORIZON IS OF GOOD QUALITY AND SHOULD BE INCLUDED IN THE UPPER LIFT.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	DIXONVILLE (DXV)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 3/2	VERY DARK GRAYISH BROWN					6.1			
AE	5-12	10YRm 6/1	GRAY	MMPL	F	SIL	0.8	5.4			
AB	12-22	10YRm 4/3	BROWN	SBK	F	SIC	0.9	4.6			
BT	22-42	10YRm 4/4	DARK YELLOWISH BROWN	ABK	VF	C	0.4	4.6			
BC	42-64	10YRm 5/2	GRAYISH BROWN	SBK	F	C		4.6			
C	64-120	10YRm 5/2	GRAYISH BROWN	MA	F	CL		5.3			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-12	F	G	P	G				F (Topsoil)
AB	12-22	F	P		F				P (Subsoil)
BT	22-42	F	P		F				P (Subsoil)
BC	42-64	G	P		F				P (Subsoil)
C	64-120	G	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DIXONVILLE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. THE AB HORIZON IS OF POOR QUALITY DUE TO CLAYEY TEXTURE AND SHOULD NOT BE INCLUDED IN THE UPPER LIFT.

HALVERSON

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	HALVERSON (HVN)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE/AE	0-16	10YR 4/3	BROWN-DARK BROWN	MMPL	VFR	SL	0.6	6.2	0.2	41.	0.1
BT/BC	16-90	10YR 4/4	DARK YELLOWISH BROWN	MMABK	FR/F	SCL/CL		6.7	0.5	45.	1.5
2CK	90-120	10YR 3/3	DARK BROWN	MA	F	CL		7.8	0.7	57.	3.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE/AE	0-16	G	G		G	G	G	G	G (Upper L)
BT/BC	16-90	G	F		G	G	G	G	F (Subsoil)
2CK	90-120	G	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A SANDY LOAM VENEER OVER CLAY LOAM TEXTURED TILL. THE SANDY LAYER MAY HAVE UNSTABLE EXPOSED FACES.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	HALVERSON-GR (grHVN)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	GRAVELLY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE/AE	0-16	10YR 4/3	BROWN-DARK BROWN	MMPL	VFR	GRSL	0.6	6.2	0.2	41.	0.1
BT/BC	16-90	10YR 4/4	DARK YELLOWISH BROWN	MMABK	FR/F	GRSCL/CL		6.7	0.5	45.	1.5
2CK	90-120	10YR 3/3	DARK BROWN	MA	F	CL		7.8	0.7	57.	3.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE/AE	0-16	G	P		G	G	G	G	P (Upper L)
BT/BC	16-90	G	F		G	G	G	G	F (Subsoil)
2CK	90-120	G	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	GRAVELLY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HALVERSON THAT CONTAINS GRAVEL LAYERS IN THE VENEER MATERIAL.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	HALVERSON-ST (stHVN)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE/AE	0-16	10YR 4/3	BROWN-DARK BROWN	MMPL	VFR	STSL	0.6	6.2	0.2	41.	0.1
BT/BC	16-90	10YR 4/4	DARK YELLOWISH BROWN	MMABK	FR/F	STSCL/CL		6.7	0.5	45.	1.5
2CK	90-120	10YR 3/3	DARK BROWN	MA	F	CL		7.8	0.7	57.	3.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE/AE	0-16	G	P		G	G	G	G	P (Upper L)
BT/BC	16-90	G	P		G	G	G	G	P (Subsoil)
2CK	90-120	G	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF HALVERSON THAT IS STONIER THAN NORMAL IN THE VENEER MATERIAL.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	HAZELMERE (HZM)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-6	10YR	2/1	BLACK								
AH	6-8	10YR	2/1	BLACK	MFGR	FR	SIL					
AEGJ	8-24	10YR	6/3	PALE BROWN	MMPL	FR	SIL		5.7	0.2	37.	
BTNJGJ	24-88	10YR	3/3	DARK BROWN	MMCOL	F	CL		5.2	0.3	53.	
CKGJ	88-120	10YR	3/2	VERY DARK GREYISH BROWN	MA	F	CL		7.2	1.1	61.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-6								
AH	6-8	G	G						G (Upper L)
AEGJ	8-24	G	G		G	G	G		G (Upper L)
BTNJGJ	24-88	G	F		G	G	G		F (Subsoil)
CKGJ	88-120	G	F		F	G	F		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED TILL. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	HILLBURN (HBR)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	9-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-12	10YR 2/2	VERY DARK BROWN	MFGR	L	SL	3.6	6.3	0.5	63.	0.1
BT1	15-27	10YR 3/2	VERY DARK GRAYISH BROWN	COL	F	CL		6.1	0.2	41.	0.1
BT2	33-80	10YR 3/2	VERY DARK GRAYISH BROWN	COL	VF	C		5.6	0.2	49.	0.3
BC	80-120	10YR 3/2	VERY DARK GRAYISH BROWN	MA	VF	SC		6.3	0.4	52.	1.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-12	F	G		G	G	F	G	F (Upper L)
BT1	15-27	G	F		G	G	G	G	F (Subsoil)
BT2	33-80	F	P		G	G	G	G	P (Subsoil)
BC	80-120	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HILLBURN SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE A THIN LFH HORIZON OVERLYING A PLATY, LIGHT COLORED AE HORIZON. HILLBURN SOILS ARE CONSIDERED NON-ARABLE.

MOUNTAIN CREEK

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	MOUNTAIN CREEK (MCK)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-5	10YR 5/3	BROWN	WFPL	VFR	SL	0.5				
BM	5-15	10YR 5/4	YELLOWISH BROWN	SGR	L	SL		6.4	0.4	40.	0.2
C	15-200	10YR 5/3	BROWN	SGR	L	SL		7.7	0.4	35.	0.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-5	G	G						G (Upper L)
BM	5-15	F	G		G	G	G	G	F (Subsoil)
C	15-200	F	G		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	5 cm
THICKNESS RANGE:	1-10 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAMY SAND TO SAND TEXTURED MATERIAL. EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	MURDALE (MUD)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	9-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-7	10YRm 4/2	DARK GRAYISH BROWN	WFGR	FR	SL	4.54	6.4			
AE	7-17	10YRm 7/3	VERY PALE BROWN	PL	FR	SIL	0.55	5.3			
AB	17-27	10YRm 5/3	BROWN	WFSBK	F	SIL	0.6	5.			
BT	27-52	10YRm 4/3	DARK BROWN	WMCOL	VF	C	0.6	6.5			
BC	52-67	10YRm 3/2	VERY DARK GRAYISH BROWN	SBK	F	SIC		7.4			
CSK	67-120	2.5Ym 3/2	VERY DARK GRAYISH BROWN	MA	F	SICL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-7	G	G		G				G (Upper L)
AE	7-17	G	G		G				G (Upper L)
AB	17-27	F	G		F				F (Upper L)
BT	27-52	F	P		G				P (Subsoil)
BC	52-67	G	F		F				F (Subsoil)
CSK	67-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILTY CLAY LOAM TO CLAY TEXTURED TILL MATERIAL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZON) IS ABSENT OR VERY THIN. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS. THE AB HORIZON IS OF FAIR QUALITY AND SHOULD BE INCLUDED IN THE UPPER LIFT.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	SNIPE (SNP)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-15	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	SICL		5.9	1.2	83.	
BTG	15-45	10YR 5/3	BROWN	MFSBK	F	CL-C		6.4	0.5	66.	
BCG	45-100	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		6.6	0.4	76.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-15	G	F		G	G	P		P (Upper L)
BTG	15-45	G	P		G	G	F		P (Subsoil)
BCG	45-100	G	P		G	G	F		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS OCCASIONALLY ABSENT AND THESE SOILS MAY HAVE AN AEG HORIZON INSTEAD.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	SNIPE-PT (ptSNP)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20		/				O					
AH	20-35	10YR	3/2	VERY DARK GRAYISH BROWN	WFGR	FR	FSL-SIL		5.9	1.2	83.	
BTG	35-65	10YR	5/3	BROWN	MFSBK	F	C		6.4	0.5	66.	
BCG	60-100	10YR	4/2	DARK GRAYISH BROWN	MA	F	C		6.6	0.4	76.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								(Peat)
AH	20-35	G	G		G	G	P	P	(Upper L)
BTG	35-65	G	P		G	G	F	P	(Subsoil)
BCG	60-100	G	P		G	G	F	P	(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm (PEAT & TOPSOIL OR AEG HORIZON)
THICKNESS RANGE:	30-65 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF SNIPE WHICH HAS 15 TO 50 CM OF SURFACE PEAT. THERE IS SOMETIMES ABOUT 15 CM OF TOPSOIL (AH OR AHE HORIZON) AND OFTEN ONLY AN AEG HORIZON UNDERLYING THE PEAT.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	TEEPEE (TPE)	LANDFORM:	UNDULATING, STEEP
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-60%
SOIL CLASSIFICATION:	ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YR 3/3	DARK BROWN								
BM	5-13	10YR 5/3	BROWN	SGR	FR	SL					
AE	13-20	10YR 5/3	BROWN	WFPL	FR	SL					
BT	20-65	10YR 5/4	YELLOWISH BROWN	WFSBK	F	SCL					
BC	65-120	10YR 5/4	YELLOWISH BROWN	SGR	FR	SL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
BM	5-13	G	G						G (Upper L)
AE	13-20	G	G						G (Upper L)
BT	20-65	G	F						F (Subsoil)
BC	65-120	G	G						G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON WEATHERED SANDSTONE WITH A SANDY LOAM TEXTURE. THIN OR DISCONTINUOUS GLACIAL DRIFT MAY OCCUR. TOPSOIL IS GENERALLY ABSENT. INSTEAD THESE SOILS HAVE A THIN LH HORIZON OVERLYING A BM AND AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 17

09/01/93

SOIL SERIES:	TOAD (TOD)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	BRUNISOLIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 3/3	DARK BROWN				18.6	6.4			
AE1	5-10	10YRm 7/3	VERY PALE BROWN	WFPL	FR	SL	1.233	6.2			
AE2	10-20	10YRm 7/3	VERY PALE BROWN	MMPL	FR	SIL		6.			
BF	20-30	10YRm 5/4	YELLOWISH BROWN	PL	FR	SIL		5.7			
AE3	30-37	10YRm 6/4	LIGHT YELLOWISH BROWN	PL	FR	SIL		5.8			
BT1	37-49	10YRm 5/3	BROWN	COL	F	C		5.7			
BT2	49-61	10YRm 4/3	DARK BROWN	ABK	VF	HC		6.7			
CK1	61-83	10YRm 4/2	DARK GRAYISH BROWN	ABK	FR	SIC		7.7			
CK2	83-120	10YRm 5/1	GRAY	STRAT	F	SIC		8.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE1	5-10	G	G		G				G (Upper L)
AE2	10-20	G	G		G				G (Upper L)
BF	20-30	G	G		G				G (Upper L)
AE3	30-37	G	G		G				G (Upper L)
BT1	37-49	G	P		G				P (Subsoil)
BT2	49-61	F	P		G				P (Subsoil)
CK1	61-83	G	F		F				F (Subsoil)
CK2	83-120	G	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.072
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TO CLAY TEXTURED MATERIAL. TOPSOIL IS GENERALLY ABSENT. INSTEAD THESE SOILS HAVE A THIN LH HORIZON OVERLYING ALTERNATING AE AND BF HORIZONS. SEPARATION OF THE UPPER LIFT MATERIAL FROM SUBSOIL BY COLOR IS DIFFICULT.

2.18 Soil Correlation Area #18

General Description of the Area

- Dark-Gray and Black Soil Zone of the South Peace area.
- Occurs from Beaverlodge, east to Slave Lake, north to Peace River and Manning, and west to the border.

Ecoregion/Climate

- Low Boreal Mixedwood ecoregion (transition between Aspen Parkland and Low Boreal Mixedwood ecoregion).
- Agroclimate is 2H and 3H (slight to moderate heat limitation).
- Growing season P-PE= -200 to -250 mm.
- Precipitation is lower than both the Lower Boreal-Cordilleran and Mid Boreal Mixedwood ecoregions.
- Precipitation of this ecoregion is similar to the Mid Boreal Mixedwood and Aspen Parkland ecoregions.
- Summer temperatures are warmer than the other Boreal ecoregions while winter temperatures are colder than all but the Mid Boreal Mixedwood ecoregion.

Soil and Landscapes

- Mainly Dark Gray soils (Luvisols and some Solonetzic Luvisols) with significant Black soils (Chernozemic and some Solonetzic Chernozems).
- Landscapes are dominantly glaciolacustrine and moraines having long slopes.
- Profile development is generally 65 cm deep with 15 to 20 cm of topsoil.
- Acid soils are common in the northwest part of the SCA.

Soil Reclamation Issues

- The risk of soil erosion by water is generally moderate to low. However, serious erosion can occur on areas with long slope lengths, even when slope gradient is low (2 to 3%).
- The risk of soil erosion by wind is generally low.
- Soil salinity.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	ALBRIGHT-AA (aaAGH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL (SOLONETZIC)	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-17	10YR 4/2	DARK GRAYISH BROWN	MMGR	FR	L		5.5	0.5	52.	0.
BTNJGJ	17-45	10YR 5/3	BROWN	SMSBK	VF	C		6.6	0.9	56.	0.
CSKGJ	50-70	10YR 4/1	DARK GRAY	MA	F	CL		7.6	7.3	57.	4.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-17	G	G		F	G	G	G	F (Topsoil)
BTNJGJ	17-45	P	P		G	G	G	G	P (Subsoil)
CSKGJ	50-70	F	F		F	P	G	F	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 17. THESE SOILS ARE DEVELOPED ON CLAY LOAM TO CLAY TEXTURED, TILL MATERIAL. UNDER FORESTED AREAS, THERE IS A THIN LH HORIZON OVERLYING AN AH OR AHE HORIZON AND A LIGHT GRAY, PLATY AE HORIZON. THESE SOILS ARE WIDELY CULTIVATED AND THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC. POOR PERMEABILITY AND LOSS OF ORGANIC MATTER IS CONTRIUTING TO SERIOUS SOIL EROSION BY WATER. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BEATTON (BAT)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 4/2	DARK GRAYISH BROWN				3.38	6.7			
AE	3-10	10YRm 7/3	VERY PALE BROWN	SMPL	FR	SIL	0.48	5.3			
AB	10-17	10YRm 5/2	GRAYISH BROWN	SBK	F	SICL-SIC	1.08	5.1			
BTNJ	17-42	10YRm 3/3	DARK BROWN	COL	F	HC	1.06	5.1			
BC	42-62	10YRm 3/3	DARK BROWN	SBK	F	SIC	0.9	7.3			
CCASA	62-120	10YRm 4/2	DARK GRAYISH BROWN	MA	F	SIC	0.75	8.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3			G					
AE	3-10	G	G	P	P				P (Topsoil)
AB	10-17	F	P		P				P (Subsoil)
BTNJ	17-42	F	P		P				P (Subsoil)
BC	42-62	F	P		G				P (Subsoil)
CCASA	62-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES. THE LOWER SUBSOIL MAY BE SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BELLOY (BLY)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 2/2	VERY DARK BROWN	SGR	L	SL	3.7	6.4	0.6		41.
BTJ	18-30	10YR 5/4	YELLOWISH BROWN	SGR	L	LS		5.8	0.1		28.
BC	30-55	10YR 5/2	GRAYISH BROWN	SGR	L	LS		6.2	0.2		22.
2C	55-100	10YR 3/3	DARK BROWN	MA	F	CL		7.	0.8		53.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	F	G	G	F	G	G		F (Topsoil)
BTJ	18-30	F	P		F	G	F		P (Subsoil)
BC	30-55	F	P		F	G	F		P (Subsoil)
2C	55-100	F	G		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: BELLOY SOILS ARE DEVELOPED ON A VENEER OF SANDY LOAM TO LOAMY SAND TEXTURED MATERIAL OVER CLAY TEXTURED TILL. IN FORESTED AREAS, THIN TOPSOIL (AH OR AHE HORIZONS) MAY OCCUR OVER A LEACHED HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS. THE SANDY VENEER WILL CAUSE AN EXPOSED FACE TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BELLOY-GR (grBLY)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	GRAVELLY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/2	VERY DARK GREYISH BROWN	WFGR	VFR	GRSL		7.5	0.7	34.	0.2
BM	15-50	10YR 3/4	DARK YELLOWISH BROWN	SGR	VFR	GRSL		7.8	1.	29.	0.3
2BT	50-100	10YR 3/4	DARK YELLOWISH BROWN	MMSBK	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	P		G	G	G	G	P (Topsoil)
BM	15-50	G	P		F	G	F	G	P (Subsoil)
2BT	50-100	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BELLOY WITH GRAVEL IN THE VENEER MATERIAL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BELLOY-GRXC (grxcBL)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	GRAVELLY, MODERATELY COARSE GLACIOFLUVIAL/ GLACIOLACUSTRINE	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 2/2	VERY DARK BROWN	SGR	L	GRSL	3.7	6.4	0.6	41.	
BTJ	18-30	10YR 5/4	YELLOWISH BROWN	SGR	L	GRLS		5.8	0.1	28.	
BC	30-55	10YR 5/2	GRAYISH BROWN	SGR	L	GRLS		6.2	0.2	22.	
2C	55-100	10YR 3/3	DARK BROWN	MA	F	CL		7.	0.8	53.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	F	P	G	F	G	G		P (Topsoil)
BTJ	18-30	F	P		F	G	F		P (Subsoil)
BC	30-55	F	P		F	G	F		P (Subsoil)
2C	55-100	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BELLOY WITH GRAVEL IN THE VENEER MATERIAL, AND CLAY LOAM TEXTURED, WATER-LAID DEPOSITS AT LESS THAN 1 M.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BELLOY-ST (stBLY)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 2/2	VERY DARK BROWN	SGR	L	STSL	3.7	6.4	0.6	41.	
BTJ	18-30	10YR 5/4	YELLOWISH BROWN	SGR	L	STLS		5.8	0.1	28.	
BC	30-55	10YR 5/2	GRAYISH BROWN	SGR	L	STLS		6.2	0.2	22.	
2C	55-100	10YR 3/3	DARK BROWN	MA	F	CL		7.	0.8	53.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	F	P	G	F	G	G		P (Topsoil)
BTJ	18-30	F	P		F	G	F		P (Subsoil)
BC	30-55	F	P		F	G	F		P (Subsoil)
2C	55-100	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BELLOY THAT IS STONIER THAN NORMAL IN THE VENEER MATERIAL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BELLOY-STXC (stxcBL)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL/ GLACIOLACUSTRINE	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 2/2	VERY DARK BROWN	SGR	L	STSL	3.7	6.4	0.6	41.	
BTJ	18-30	10YR 5/4	YELLOWISH BROWN	SGR	L	STLS		5.8	0.1	28.	
BC	30-55	10YR 5/2	GRAYISH BROWN	SGR	L	STLS		6.2	0.2	22.	
2C	55-100	10YR 3/3	DARK BROWN	MA	F	CL		7.	0.8	53.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	F	P	G	F	G	G		P (Topsoil)
BTJ	18-30	F	P		F	G	F		P (Subsoil)
BC	30-55	F	P		F	G	F		P (Subsoil)
2C	55-100	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BELLOY THAT IS STONIER THAN NORMAL IN THE VENEER MATERIAL AND HAS CLAY LOAM TEXTURED, WATER-LAID DEPOSITS AT < 1 M.

BELLOY-XC

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BELLOY-XC (xcBLY)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/ GLACIOLACUSTRINE	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 2/2	VERY DARK BROWN	SGR	L	SL	3.7	6.4	0.6	41.	
BTJ	18-30	10YR 5/4	YELLOWISH BROWN	SGR	L	LS		5.8	0.1	28.	
BC	30-55	10YR 5/2	GRAYISH BROWN	SGR	L	LS		6.2	0.2	22.	
2C	55-100	10YR 3/3	DARK BROWN	MA	F	CL		7.	0.8	53.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	F	G	G	F	G	G		F (Topsoil)
BTJ	18-30	F	P		F	G	F		P (Subsoil)
BC	30-55	F	P		F	G	F		P (Subsoil)
2C	55-100	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF BELLOY HAVING CLAY LOAM TEXTURED, WATER-LAID DEPOSITS AT LESS THAN 1 M.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BERWYN (BWY)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 2/2	VERY DARK BROWN								
AHE	3-10	10YRm 4/1	DARK GRAY	WFGR	FR	SIL	7.	6.6			
AE	10-17	10YRm 6/3	PALE BROWN	PL	FR	SIL	0.72	6.4			
AB	17-24	10YRm 5/3	BROWN	MFSBK	F	CL	0.62	5.9			
BT1	24-34	10YRm 4/2	DARK GRAYISH BROWN	SBK	VF	C	0.75	5.			
BT2	34-54	10YRm 4/3	DARK BROWN	WMABK		CL	0.63	4.8			
BC	54-69	10YRm 3/3	DARK BROWN	WFSBK	F	CL	0.49	4.5			
CK	69-120	10YRm 4/3	DARK BROWN	MA	F	CL		6.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AHE	3-10	G	G	G	G				G (Topsoil)
AE	10-17	G	G	P	F				P (Subsoil)
AB	17-24	F	F		F				F (Subsoil)
BT1	24-34	P	P		P				P (Subsoil)
BT2	34-54		F		P				P (Subsoil)
BC	54-69	F	F		P				P (Subsoil)
CK	69-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZON) OVERLIES A LEACHED HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BRAEBURN-AA (aaBBN)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	16-60%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 6/3	PALE BROWN	MMPL	VFR	L		6.3	0.4	45.	
BT	25-60	10YR 3/2	VERY DARK GRAYISH BROWN	SMSBK	F	CL		5.1	0.4	43.	
BC	70-90	10YR 4/3	BROWN-DARK BROWN	SFSBK	F	CL		5.1	0.4	52.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G		F	G	G		F (Topsoil)
BT	25-60	F	F		P	G	G		P (Subsoil)
BC	70-90	F	F		P	G	G		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 17. THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, THE TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED AREAS WHICH ARE RARE, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	BRONCO (BOC)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC BLACK CHERNOZEMIC	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-16	10YR 2/1	BLACK	MA	L	SICL	5.	5.9	0.6	70.	0.9
BT	28-54	10YR 3/2	VERY DARK GRAYISH BROWN	MMABK	F	C		6.7	1.4	76.	2.3
CK1	69-89	10YR 3/2	VERY DARK GRAYISH BROWN	MA	F	L		7.5	3.1	83.	2.
CK2	89-120	10YR 3/2	VERY DARK GRAYISH BROWN	MA	F	L		7.6	3.8	85.	2.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-16	F	F	G	F		F	G	F (Topsoil)
BT	28-54	F	P		G		F	G	P (Subsoil)
CK1	69-89	F	G		G		P	G	P (Subsoil)
CK2	89-120	F	G		F		P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.033
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED DEPOSITS. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	CADOTTE-AA (aaCTE)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 2/2	VERY DARK BROWN					6.3			
AE	5-18	10YRm 7/2	LIGHT GRAY	SCPL	F	L	0.8	5.4			
AB	18-28	10YRm 5/2	GRAYISH BROWN	SBK	F	SIC	0.5	4.8			
BTNJ	28-51	10YRm 4/3	DARK BROWN	COL	VF	C	0.5	5.3			
BCK	51-69	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	C		7.2			
CCAS	69-120	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	SICL		7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-18	P	G	P	P				P (Topsoil)
AB	18-28	F	P		P				P (Subsoil)
BTNJ	28-51	P	P		P				P (Subsoil)
BCK	51-69	F	P		G				P (Subsoil)
CCAS	69-120	F	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 22. DEVELOPED ON CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	CARDINAL (CRN)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-10	10YRm 4/3	BROWN	GR	FR	SIL	2.11	6.4			
AE	10-18	10YRm 6/3	PALE BROWN	PL	FR	SIL	0.53	6.3			
BT1	18-28	10YRm 4/4	DARK YELLOWISH BROWN	SBK	F	SICL	0.52	6.3			
BT2	28-43	10YRm 5/4	YELLOWISH BROWN	SBK	F	SICL	0.37	6.2			
BC	43-63	10YRm 6/4	LIGHT YELLOWISH BROWN	WFSBK	FR	L		5.8			
C	63-120	10YRm 6/4	LIGHT YELLOWISH BROWN	MA	FR	SIL		5.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-10	G	G	G	F				F (Topsoil)
AE	10-18	G	G	P	F				P (Subsoil)
BT1	18-28	F	F		F				F (Subsoil)
BT2	28-43	F	F		F				F (Subsoil)
BC	43-63	G	G		F				F (Subsoil)
C	63-120	G	G		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED MATERIAL. IN CULTIVATED AREAS, THE AE HORIZON PROVIDES A GUIDE TO TOPSOIL STRIPPING.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	CODESA (COS)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR	3/2	VERY DARK GREYISH BROWN	WFGR	FR	SL		6.2	1.	74.	0.1
AE	10-30	10YR	5/3	BROWN	WFPL	VFR	SL		6.3	0.4	26.	0.2
2BT	30-75	10YR	4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		5.1	0.1	42.	0.5
2CK	75-130	2.5Y	4/4	OLIVE BROWN	MA	F	CL		7.5	0.4	59.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	G		F	G	F	G	F (Topsoil)
AE	10-30	G	G		F	G	F	G	F (Topsoil)
2BT	30-75	F	F		P	G	G	G	P (Subsoil)
2CK	75-130	F	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF SANDY LOAM TEXTUREED MATERIAL OVER CLAY LOAM TEXTURED TILL. THE AE HORIZON PROVIDES A GUIDE FOR TOPSOIL STRIPPING IN CULTIVATED AREAS. THE SANDY VENEER MAKES VERTICAL FACES UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	CODESA-GR (grCOS)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	GRAVELLY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	GRSL		6.2	1.	74.	0.1
AE	10-30	10YR 5/3	BROWN	WFPL	VFR	GRSL		6.3	0.4	26.	0.2
2BT	30-75	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		5.1	0.1	42.	0.5
2CK	75-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL		7.5	0.4	59.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	P		F	G	F	G	P (Topsoil)
AE	10-30	G	P		F	G	F	G	P (Topsoil)
2BT	30-75	F	F		P	G	G	G	P (Subsoil)
2CK	75-130	F	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF CODESA THAT IS GRAVELLY IN THE SURFACE VENEER.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	CODESA-ST (stCOS)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-20	10YR 6/3	PALE BROWN	SGR	L	STFSL	2.8	5.8	0.2	42.	
BM	20-40	10YR 5/4	YELLOWISH BROWN	SGR	L	STSL-LS		5.6	0.3	31.	
2BT	40-83	10YR 3/3	DARK BROWN	MMSBK	F	CL		6.4	0.5	55.	
2CK	83-120	2.5Y 4/4	OLIVE BROWN	MA	F	L-CL		7.2	0.7	52.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-20	F	P	G	F	G	G		P (Topsoil)
BM	20-40	F	P		F	G	G		P (Subsoil)
2BT	40-83	F	F		F	G	G		F (Subsoil)
2CK	83-120	F	F		G	G	G		F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF CODESA THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	CULP-ST (stCUL)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-12	10YR 3/3	DARK BROWN	MFGR	FR	STL	6.8	6.6	1.9	86.	0.
BT	12-60	10YR 5/4	YELLOWISH BROWN	MFSBK	FR	STL-STSL		6.5	0.2	30.	0.
BC	60-96	10YR 4/4	DARK YELLOWISH BROWN	SGR	VFR	STSL		6.4	0.1	28.	0.
CK	96-120	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	VFR	STSL		7.6	0.3	36.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-12	G	P	G	G	G	P	G	P (Topsoil)
BT	12-60	G	P		G	G	F	G	P (Subsoil)
BC	60-96	G	P		F	G	F	G	P (Subsoil)
CK	96-120	G	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF CULP THAT IS STONIER THAN NORMAL.

DEBOLT

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	DEBOLT (DBO)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	FINE SOFTTOCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-25	10YR 6/4	LIGHT YELLOWISH BROWN	MMPL	FR	SIL	1.4	6.2	0.5	31.	
BNT	30-60	10YR 3/2	VERY DARK GRAYISH BROWN	SCSBK	VF	C-SIC		8.	0.7	65.	7.3
CSK	60-120	10YR 3/3	DARK BROWN	MA	F	C-SIC		8.4	0.9	70.	11.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-25	G	G	F	F	G	G		F (Topsoil)
BNT	30-60	P	P		F	G	F	F	P (Subsoil)
CSK	60-120	F	P		F	G	F	P	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	YES
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY TO CLAY LOAM TEXTURED SOFTROCK. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS A LH HORIZON OVERLYING A PLATY, LIGHT COLORED AE HORIZON. THE BNT HORIZON HAS AN UNDESIREABLE STRUCTURE AND THE LOWER SUBSOIL IS SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	DOIG (DIG)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-7	10YRm 4/3	BROWN-DARK BROWN	WFGR	FR	SIL	4.66	5.9			
AE	7-12	10YRm 6/2	LIGHT BROWNISH GRAY	PL	FR	SIL	0.84	4.4			
AB	12-19	10YRm 5/2	GRAYISH BROWN	SBK	F	SIL	0.61	4.2			
BTN	19-39	10YRm 3/3	DARK BROWN	COL	VF	SIC	0.89	5.2			
BC	39-66	10YRm 3/4	DARK YELLOWISH BROWN	SBK	F	SIC	0.87	6.			
CCASA	66-120	10YRm 4/2	DARK GRAYISH BROWN	MA	F	SIC		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-7	G	G	G	F				F (Topsoil)
AE	7-12	G	G	P	U				U (Topsoil)
AB	12-19	F	G		U				U (Topsoil)
BTN	19-39	P	P		P				P (Subsoil)
BC	39-66	F	P		F				P (Subsoil)
CCASA	66-120	F	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC.

DONNELLY

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	DONNELLY (DON)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/3	DARK BROWN	WFGR	FR	SIL-SICL		6.4	0.9	50.	
BTNJGJ	15-65	10YR 4/4	DARK YELLOWISH BROWN	MMCOL	F	CL		5.	0.2	51.	
CKGJ	65-100	2.5Y 4/4	OLIVE BROWN	MA	F	CL		7.5	0.4	60.	0.8

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	F		F	G	G		F (Topsoil)
BTNJGJ	15-65	F	P		P	G	G		P (Subsoil)
CKGJ	65-100	F	P		G	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	DONNELLY-XT (xtDON)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE/ TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-6	10YR 3/2	VERY DARK GREYISH BROWN								
AP	6-21	10YR 3/3	DARK BROWN	WFPL	VFR	SIL		6.4	0.6	49.	
BTNJGJ	21-51	10YR 4/4	DARK YELLOWISH BROWN	MMCOL	F	CL-C		5.9	0.3	70.	
BCGJ	51-76	2.5Y 5/2	GRAYISH BROWN	MA	F	CL-C		4.7	0.2	42.	
2BCGJ	76-106	10YR 5/3	BROWN	MA	F	CL		5.1	0.3	60.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-6								
AP	6-21	G	G		F	G	G		F (Topsoil)
BTNJGJ	21-51	F	P		F	G	F		P (Subsoil)
BCGJ	51-76	F	P		P	G	G		P (Subsoil)
2BCGJ	76-106	F	F		P	G	F		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF DONNELLY HAVING TILL WITHIN 1 M.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	EAGLESHAM (EGL)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	DARK GRAY & BLACK		DEPRESSIONAL
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-120	10YR 3/3	DARK BROWN			O					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-120								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON DEEP DEPOSITS OF FEN PEAT, EXPOSED FACES ARE UNSTABLE. IN CULTIVATED AREAS, KEEP THE PLOW LAYER SEPARATED AND AVOID COMPACTION.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	EAGLESHAM-XS (xsEGL)	LANDFORM:	VENEER, LEVEL,
SOIL ZONE:	DARK GRAY & BLACK		DEPRESSIONAL
SOIL CLASSIFICATION:	TERRIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
	PEAT/GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-65	10YR 3/3	DARK BROWN			O					
AH	60-90	10YR 2/1	BLACK	MMGR	FR	L-SIL	6.2	6.2	0.6	48.	0.4
CG	90-130	10YR 6/1	LIGHT GRAY-GRAY	STRAT	FR-F	VFSL		6.5	0.8	43.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-65								(Peat)
AH	60-90	G	G	G	F	G	G	G	F (Topsoil)
CG	90-130	F	G		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF EAGLESHAM HAVING SANDY LOAM TEXTURED MATERIAL AT LESS THAN 1 M. IN CULTIVATED AREAS: SEPARATE THE PLOW LAYER; KEEP THE REMAINING ORGANIC AND MINERAL MATERIAL SEPARATED; AND AVOID COMPACTION TO PREVENT IMPEDED DRAINAGE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	EAGLESHAM-XT (xtEGL)	LANDFORM:	VENEER, LEVEL,
SOIL ZONE:	DARK GRAY & BLACK		DEPRESSIONAL
SOIL CLASSIFICATION:	TERRIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT/TILL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-60	10YR	3/3	DARK BROWN			O	31.2	6.9	1.6	189.	0.3
BG	60-90	10YR	5/1	GRAY	MA	F	CL-C		7.5	0.5	44.	0.3
CG	90-130	10YR	6/1	LIGHT GRAY-GRAY	MA	F	CL-C		7.4	0.3	50.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-60								(Peat)
BG	60-90	F	P		G	G	G	G	P (Subsoil)
CG	90-130	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF EAGLESHAM HAVING CLAY LOAM TO CLAY TEXTURED TILL WITHIN 1 M. IN CULTIVATED AREAS: SEPARATE THE PLOW LAYER; KEEP THE REMAINING ORGANIC AND MINERAL MATERIAL SEPARATED; AND AVOID COMPACTION TO PREVENT IMPEDED DRAINAGE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	ENILDA (END)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM FLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YR 2/1	BLACK	MFGR	FR	CL	18.2	6.5			
CG	10-100	2.5Y 6/2	LIGHT BROWN	STRAT	F	CL		6.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	G	F	G	G				F (Topsoil)
CG	10-100	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON FINE SAND TO SILTY CLAY STRATA. WET SOILS CAUSE EXPOSED FACES TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	ESHER (ESH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL (SOLONETZIC)	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 3/3	DARK BROWN				5.52	6.			
AHE	3-10	10YRm 4/2	DARK GRAYISH BROWN	WFGR	FR	C	5.5	5.8			
AE	10-13	10YRm 6/3	PALE BROWN	PL	FR	SIL	1.4	5.3			
AB	13-18	10YRm 6/3	PALE BROWN	SBK	F	C	0.94	4.8			
BTNJGJ1	18-33	10YRm 4/3	DARK BROWN	WMCOL	VF	HC	0.9	4.3			
BTNJGJ2	33-48	10YRm 4/3	DARK BROWN	SMSBK	VF	C	0.73	4.3			
BCGJ	48-68	10YRm 3/2	VERY DARK GRAYISH BROWN	WFSBK	F	C	0.79	6.5			
CSKGJ	68-120	10YRm 3/1	VERY DARK GRAY	MA	F	C	0.78	7.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AHE	3-10	G	P	G	F				P (Topsoil)
AE	10-13	G	G	F	P				P (Topsoil)
AB	13-18	F	P		P				P (Topsoil)
BTNJGJ	18-33	P	P		U				U (Subsoil)
BTNJGJ	33-48	P	P		U				U (Subsoil)
BCGJ	48-68	F	P		G				P (Subsoil)
CSKGJ	68-120	F	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC. LOW PERMEABILITY AND LOSS OF ORGANIC MATTTER IS CONTRIBUTING TO SOIL EROSION BY WATER. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	ESHER-XT (xtESH)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL (SOLONETZIC)	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE/ TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-14	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	L	SL	2.3	5.7	0.3	45.	2.
BTNJ1	24-34	10YR 5/2	GRAYISH BROWN	COL	VF	C		4.7	0.4	46.	5.3
BTNJ2	34-70	10YR 3/2	VERY DARK GRAYISH BROWN	COL	VF	C		4.6	0.5	59.	6.6
2CGJ	80-120	10YR 4/2	DARK GRAYISH BROWN	MA	F	SCL		6.7	5.8	60.	7.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-14	F	G	G	F	G	G	G	F (Topsoil)
BTNJ1	24-34	P	P		P	G	G	F	P (Subsoil)
BTNJ2	34-70	P	P		P	G	G	F	P (Subsoil)
2CGJ	80-120	F	F		G	P	F	F	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF ESHER HAVING SANDY CLAY LOAM TEXTURED TILL WITHIN 1 M.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	FAIRVIEW (FVW)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ORTHIC BLACK CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 4/1	DARK GRAY	WFGR	FR	L	2.5				
AE/AB	15-27	10YR 5/3	BROWN	MMPL	FR	L-CL	0.4				
BTN	27-60	10YR 4/2	DARK GRAYISH BROWN	MMSBK	VF	CL		7.8	1.1	64.	14.
CCA	60-100	10YR 4/1	DARK GRAY	MA	F	CL		8.2	1.8	79.	19.
CK	100-200	10YR 4/2	DARK GRAYISH BROWN	MA	F	CL		8.2	1.3	61.	24.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G	G					G (Topsoil)
AE/AB	15-27	G	F	P					P (Topsoil)
BTN	27-60	P	F		F	G	F	U	U (Subsoil)
CCA	60-100	F	F		F	G	F	U	U (Subsoil)
CK	100-200	F	F		F	G	F	U	U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TEXTURED TILL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	FALHER (FAL)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	SOLONETZIC DARK GRAY CHERNOZEMIC	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	CL		6.1	0.3	57.	0.
BTNJ	15-55	10YR 3/2	VERY DARK GRAYISH BROWN	SFSBK	VF	C		6.4	0.6	71.	0.
CSK	75-95	10YR 3/2	VERY DARK GRAYISH BROWN	MA	VF	C		7.5	3.6	82.	1.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	F		F	G	G	G	F (Topsoil)
BTNJ	15-55	P	P		F	G	F	G	P (Subsoil)
CSK	75-95	P	P		G	F	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED TILL. THE B HORIZON HAS SOLONETZIC TENDENCIES AND THE LOWER SUBSOIL MAY BE SALINE AND SODIC. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	GOOSE (GOS)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHG	0-22	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L	1.4	5.9	0.2	39.	0.4
BG	30-65	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	SCL		5.8	0.3	37.	0.7
CG	65-130	10YR 3/2	VERY DARK GRAYISH BROWN	MA	F	SIC		5.3	0.2	60.	1.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHG	0-22	G	G	F	F	G	G	G	F (Topsoil)
BG	30-65	F	F		F	G	G	G	F (Subsoil)
CG	65-130	F	P		P	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR CAUSING EXPOSED FACES TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	GOOSE-PT (ptGOS)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	/				O					
AHG	20-42	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L	1.4	5.9	0.2	39.	0.4
BG	42-77	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	SCL		5.8	0.3	37.	0.7
CG	77-130	10YR 3/2	VERY DARK GRAYISH BROWN	MA	F	SIC		5.3	0.2	60.	1.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								(Peat)
AHG	20-42	G	G	F	F	G	G	G	F (Topsoil)
BG	42-77	F	F		F	G	G	G	F (Subsoil)
CG	77-130	F	P		P	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm
THICKNESS RANGE:	35-70 cm (PEAT & TOPSOIL
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF GOOSE HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS ABOUT 20 CM OF TOPSOIL UNDERLYING THE PEAT.

INTERPRETATION GUIDELINES

GRIFFIN

SCA 18

09/01/93

SOIL SERIES:	GRIFFIN (GIF)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL (CARBONATED)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHK	0-20	10YRm 3/2	VERY DARK GRAYISH BROWN	GR	FR	CL	6.85	7.5			
CKG1	20-40	10YRm 5/1	GRAY	MA	F	CL	1.8	8.			
CKG2	40-50	10YRm 5/1	GRAY	MA	F	CL		7.9			
CSK	50-120	10YRm 5/1	GRAY	MA	F	CL		7.7	2.8		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHK	0-20	G	F	G	G				F (Topsoil)
CKG1	20-40	F	F		F				F (Subsoil)
CKG2	40-50	F	F		F				F (Subsoil)
CSK	50-120	F	F		F	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR CAUSING EXPOSED FACES TO BE UNSTABLE. THEY ARE USUALLY NON-SALINE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	GRIMSHAW (GMW)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	DARK GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE OR TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 2/1	BLACK	MFGR	FR	SIL	4.4				
BNT	18-45	10YR 4/2	DARK GRAYISH BROWN	COL	VF	C		7.2	5.5	74.	13.
CCASA	45-100	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.9	9.8	58.	12.
CSK1	100-130	10YR 4/2	DARK GRAYISH BROWN	MA	F	SIL		7.7	7.1	54.	14.
CSAK	130-165	10YR 4/2	DARK GRAYISH BROWN	MA	F	SICL		7.8	7.9	69.	11.
CSK2	165-200	10YR 4/2	DARK GRAYISH BROWN	MA	F	CL		7.6	7.7	58.	11.

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G	G					G (Topsoil)
BNT	18-45	P	P		G	P	F	U	U (Subsoil)
CCASA	45-100	F	P		F	P	G	P	P (Subsoil)
CSK1	100-130	F	G		F	P	G	U	U (Subsoil)
CSAK	130-165	F	F		F	P	F	P	P (Subsoil)
CSK2	165-200	F	F		F	P	G	P	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.043
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE BNT HORIZON HAS AN UNDESIREABLE STRUCTURE AND THE LOWER SUBSOIL IS SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	HAZELMERE-AA (aaHZM)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	GLEYED SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	SLIGHTLY
PARENT MATERIAL:	FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-12	10YR 5/2	GRAYISH BROWN	MMGR	FR	L		5.5	0.9	49.	
BTNJGJ	12-20	10YR 4/1	DARK GRAY	SCSBK	F	C		4.9	0.6	49.	
CSKGJ	60-80	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.6	3.6	83.	4.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-12	G	G		F	G	G	G	F (Topsoil)
BTNJGJ	12-20	F	P		P	G	G	G	P (Subsoil)
CSKGJ	60-80	F	P		F	F	P	F	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 17. THE B HORIZON HAS SOLONETZEIC TENDENCIES WHILE THE LOWER SUBSOIL MAY BE SALINE AND SODIC. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	HEART (HRT)	LANDFORM:	DUNED
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-6	10YR	3/3	DARK BROWN								
AE1	6-16	10YR	5/2	GRAYISH BROWN	SGR	L	LS		5.5	0.5	47.	0.1
BM	16-24	10YR	4/4	DARK YELLOWISH BROWN	SGR	L	LS		6.3	0.2	34.	0.1
AE2	24-41	10YR	5/3	BROWN	SGR	L	LS		6.6	0.1	28.	0.1
BM	41-91	10YR	5/4	YELLOWISH BROWN	SGR	L	LS		6.2	0.1	30.	0.1
BC	91-126	2.5Y	4/4	OLIVE BROWN	SGR	L	LS		6.2	0.1	26.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-6								
AE1	6-16	F	P		F	G	G	G	P (Topsoil)
BM	16-24	F	P		F	G	G	G	P (Subsoil)
AE2	24-41	F	P		G	G	F	G	P (Subsoil)
BM	41-91	F	P		F	G	F	G	P (Subsoil)
BC	91-126	F	P		F	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAMY SAND TO SAND TEXTURED MATERIAL. EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	HELEN (HEN)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL (SALINE)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHS	0-15	10YRm 2/1	BLACK	WFGR	FR	SL-SCL	3.19	8.	7.		
CSG1	15-30	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	SIC-C	0.75	8.	11.		
CSG2	30-120	5Ym 4/1	DARK GRAY	MA	F	SIC-C		7.8	7.5		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHS	0-15	G	F	G	F	P			P (Topsoil)
CSG1	15-30	F	P		F	U			U (Subsoil)
CSG2	30-120	F	P		F	P			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY TEXTURED GLACIOLACUSTRINE MATERIAL. SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	HIGH PRAIRIE (HPE)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC HUMIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM FLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHEJ	0-15	10YRm 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	SICL	10.6	5.9			
BTJG	15-35	10YRm 5/3	BROWN	WFSBK	F	SICL	2.51	5.5			
CG	35-57	10YRm 4/3	BROWN-DARK BROWN	MA	F	SICL	1.55	6.1			
CKG	57-120	10YRm 4/2	DARK GRAYISH BROWN	STRAT	F	SL-SCL	2.06	7.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHEJ	0-15	G	F	G	F				F (Topsoil)
BTJG	15-35	F	F		F				F (Subsoil)
CG	35-57	F	F		F				F (Subsoil)
CKG	57-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED MATERIAL. SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	HYTHE (HYH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-21	10YR 2/2	VERY DARK BROWN	MFGR	FR	SL	3.1	6.2	0.4	52.	0.2
BT	23-61	10YR 3/1	VERY DARK GRAY	MFSBK	F	C		5.2	0.1	48.	1.2
CK	83-120	10YR 3/3	DARK BROWN	MA	F	SL/SCL		7.7	1.	51.	2.7

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-21	G	G	G	F	G	G	G	F (Topsoil)
BT	23-61	F	P		P	G	G	G	P (Subsoil)
CK	83-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SANDY CLAY LOAM TEXTURED TILL. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT UNLESS AN AE HORIZON IS PRESENT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	JOSEPHINE (JOP)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 3/3	DARK BROWN								
AH	3-10	10YRm 2/2	VERY DARK BROWN	WFGR	FR	SICL	9.1	5.6			
AEG	10-13	10YRm 5/3	BROWN	WFPL	FR	SIC	3.18	5.3			
ABG	13-23	10YRm 4/3	BROWN-DARK BROWN	WFSBK	FR	C-HC	1.36	5.2			
BTG	23-53	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	HC	1.1	4.6			
BCG	53-68	5Ym 5/1	GRAY	WFSBK	F	HC	0.86	4.5			
CG	68-120	5Ym 4/1	DARK GRAY	MA	F	HC	0.66	4.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AH	3-10	G	F	G	F				F (Topsoil)
AEG	10-13	G	P	G	P				P (Topsoil)
ABG	13-23	G	P		P				P (Subsoil)
BTG	23-53	F	P		P				P (Subsoil)
BCG	53-68	F	P		P				P (Subsoil)
CG	68-120	F	P		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THESE SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. THE AEG AND ABG HORIZONS ARE OF POOR QUALITY DUE TO CLAYEY TEXTURE AND SHOULD NOT BE INCLUDED IN THE UPPER LIFT.

JUDAH

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	JUDAH (JUH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	SICL-L	3.4	6.7	0.5	54.	0.1
BT	25-85	10YR 3/2	VERY DARK GRAYISH BROWN	MMSBK	F	C-HC	1.3	5.4	0.4	81.	0.4
CK	85-130	10YR 3/1	VERY DARK GRAY	MA	F	C-HC		7.7	1.8	88.	0.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	F	G	G	G	G	G	F (Topsoil)
BT	25-85	F	P		P	G	P	G	P (Subsoil)
CK	85-130	F	P		F	G	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TO HEAVY CLAY TEXTURED MATERIAL. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT UNLESS AN AE HORIZON IS PRESENT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	KATHLEEN (KTH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-16	10YR 4/3	BROWN-DARK BROWN	SMGR	FR	L-CL	2.3	6.8	0.3	52.	
BT	23-96	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	C		7.1	0.7	74.	
CK	96-120	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		8.	0.3	84.	0.7

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-16	G	F	G	G	G	G		F (Topsoil)
BT	23-96	F	P		G	G	F		P (Subsoil)
CK	96-120	F	P		F	G	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: KATHLEEN SOILS ARE DEVELOPED ON SILTY CLAY TEXTURED MATERIAL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON). INSTEAD, THESE SOILS HAVE A LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	KENZIE (KNZ)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	DARK GRAY & BLACK		DEPRESSIONAL
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-120	10YR 3/3	DARK BROWN			O					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-120								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	YES
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON DEEP PEAT DEPOSITS. EXPOSED FACES ARE UNSTABLE. IN CULTIVATED AREAS, KEEP THE PLOW LAYER SEPARATED AND AVOID COMPACTION.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	KENZIE-XC (xcKNZ)	LANDFORM:	VENEER, LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	TERRIC MESISOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT/GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-75	10YR 3/3	DARK BROWN			O					
CG	75-120	2.5YR 3/4	DARK REDDISH BROWN	MA	F	SiCL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-75								(Peat)
CG	75-120	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	YES
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF PEAT OVER SILTY CLAY LOAM TEXTURED MATERIAL. IN CULTIVATED AREAS: SEPARATE THE PLOW LAYER; KEEP THE REMAINING ORGANIC AND MINERAL MATERIAL SEPARATED; AND AVOID COMPACTION TO PREVENT IMPEDED DRAINAGE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	LANDRY (LAD)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	BLACK SOLOD	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-28	10YR 3/1	VERY DARK GRAY	MCGR	FR	SICL	6.4	5.8		59.	
BTNJ	28-75	10YR 3/2	VERY DARK GRAYISH BROWN	COL	VF	C		6.7	1.4	81.	2.7
CSK	75-120	10YR 3/2	VERY DARK GRAYISH BROWN	MA	VF	C		7.2	4.4	90.	3.7

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-28	G	F	G	F		G		F (Topsoil)
BTNJ	28-75	P	P		G	G	P	G	P (Subsoil)
CSK	75-120	P	P		G	F	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE SOLONETZIC B HORIZON HAS AN UNDESIREABLE STRUCTURE AND THE SUBSOIL IS SALINE AND SODIC. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT UNLESS AN AE HORIZON IS PRESENT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	LANDRY-XT (xtLAD)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	BLACK SOLOD	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE /TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-28	10YR 3/1	VERY DARK GRAY	MCGR	FR	SICL	6.4	5.8		59.	
BTNJ	28-75	10YR 3/2	VERY DARK GRAYISH BROWN	COL	VF	C		6.7	1.4	81.	2.7
CSK	75-90	10YR 3/2	VERY DARK GRAYISH BROWN	MA	VF	C		7.2	4.4	90.	3.7
2CSK	90-120	10YR 4/4	OLIVE BROWN	MA	F	CL				0.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-28	G	F	G	F		G		F (Topsoil)
BTNJ	28-75	P	P		G	G	P	G	P (Subsoil)
CSK	75-90	P	P		G	F	P	G	P (Subsoil)
2CSK	90-120	F	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF LANDRY HAVING CLAY LOAM TEXTURED TILL WITHIN 1 M.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	LEITH (LIH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/2	VERY DARK GREYISH BROWN	WFGR	FR	SL					
BT	15-65	10YR 5/4	YELLOWISH BROWN	WFSBK	FR	SL					
BC	65-110	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	L	SL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G						G (Topsoil)
BT	15-65	G	G						G (Subsoil)
BC	65-110	F	G						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: LEITH SOILS ARE DEVELOPED ON SANDY LOAM TEXTURED MATERIAL AND EXPOSED FACES ARE UNSTABLE. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZONS) ARE THIN OVER A LEACHED HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	LEITH-ER (erLIH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MODERATELY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-7	10YR 3/2	VERY DARK GREYISH BROWN	SFGR	FR	SL					
BT	7-57	10YR 5/4	YELLOWISH BROWN	WFSBK	FR	SL					
BC	57-110	2.5Y 5/4	LIGHT OLIVE BROWN	SGR	L	SL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-7	G	G						G (Topsoil)
BT	7-57	G	G						G (Subsoil)
BC	57-110	F	G						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	7 cm
THICKNESS RANGE:	5-10 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF LEITH WITH ERODED TOPSOIL. THE POTENTIAL FOR FURTHER EROSION BY WIND AND WATER SHOULD BE A CONCERN.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	MURDALE-AA (aaMUD)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	9-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-7	10YRm 4/2	DARK GRAYISH BROWN	WFGR	FR	SL	4.54	6.4			
AE	7-17	10YRm 7/3	VERY PALE BROWN	PL	FR	SIL	0.55	5.3			
AB	17-27	10YRm 5/3	BROWN	WFSBK	F	SIL	0.6	5.			
BT	27-52	10YRm 4/3	DARK BROWN	WMCOL	VF	C	0.6	6.5			
BC	52-67	10YRm 3/2	VERY DARK GRAYISH BROWN	SBK	F	SIC		7.4			
CSK	67-120	2.5Ym 3/2	VERY DARK GRAYISH BROWN	MA	F	SICL		7.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-7	G	G	G	F				F (Topsoil)
AE	7-17	G	G	P	P				P (Topsoil)
AB	17-27	F	G		P				P (Topsoil)
BT	27-52	P	P		G				P (Subsoil)
BC	52-67	F	P		G				P (Subsoil)
CSK	67-120	F	F		G				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.046
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 17. THESE SOILS ARE DEVELOPED ON SILTY CLAY LOAM TO CLAY TEXTURED MATERIAL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZONS) ARE VERY THIN OR ABSENT. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS. THE AB HORIZON IS OF FAIR QUALITY AND SHOULD BE INCLUDED IN THE UPPER LIFT.

INTERPRETATION GUIDELINES

NAMPA

SCA 18

09/01/93

SOIL SERIES:	NAMPA (NMA)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYED SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-12	10YR	4/2	DARK GRAYISH BROWN	MMGR	FR-F	SICL	3.9	7.3	0.6	58.	0.2
BTNJGJ	12-50	10YR	3/1	VERY DARK GRAY	SCSBK	F-VF	C		8.1	0.6	93.	1.3
CKGJ	50-90	10YR	3/1	VERY DARK GRAY	MA	F	C		8.	3.5	97.	1.4
CSKGJ	90-120	10YR	3/1	VERY DARK GRAY	MA	F	C		7.8	5.3	88.	1.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-12	P	F	G	G	G	G	G	P (Topsoil)
BTNJGJ	12-50	P	P		F	G	P	G	P (Subsoil)
CKGJ	50-90	F	P		F	F	P	G	P (Subsoil)
CSKGJ	90-120	F	P		F	P	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES WHILE THE LOWER SUBSOIL IS WEAKLY TO MODERATELY SALINE AND SOMETIMES SODIC. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	NOTIKEWIN (NKW)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	DARK GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YRm 3/2	VERY DARK GRAYISH BROWN	GR	FR	SICL	4.86	5.5			
AE	10-13	10YRm 6/2	LIGHT BROWNISH GRAY	PL	FR	SIL	1.42	5.9			
BNT1	13-23	10YRm 4/2	DARK GRAYISH BROWN	COL	VF	C	1.49	6.4			
BNT2	23-43	10YRm 3/2	VERY DARK GRAYISH BROWN	WCCOL	VF	HC	1.13	7.6			
CCASA	43-120	10YRm 3/1	VERY DARK GRAY	MA	F	HC		7.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	G	F	G	F				F (Topsoil)
AE	10-13	G	G	F	F				F (Topsoil)
BNT1	13-23	P	P		F				P (Subsoil)
BNT2	23-43	P	P		F				P (Subsoil)
CCASA	43-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	10-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE SOLONETZIC B HORIZON HAS AN UNDESIREABLE STRUCTURE AND THE LOWER SUBSOIL IS SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	PEACE RIVER (PRV)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	GLEYED DARK GRAY LUVISOL (SOLONETZIC)	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-10	10YRm 3/2	VERY DARK GRAYISH BROWN	GR	FR	SICL		6.5			
AE	10-18	10YRm 7/2	LIGHT GRAY	PL	FR	SIL		5.8			
AB	18-25	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	SIC		5.4			
BTNJ	25-38	10YRm 3/2	VERY DARK GRAYISH BROWN	WCCOL	VF	SIC		5.6			
BC	38-48	10YRm 4/1	DARK GRAY	SBK	F	HC		6.9			
CK	48-95	10YRm 4/1	DARK GRAY	MA	F	HC		7.6			
CSK	95-120	10YRm 4/1	DARK GRAY	MA	F	SIC		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-10	G	F		G				F (Topsoil)
AE	10-18	G	G		F				F (Topsoil)
AB	18-25	F	P		P				P (Subsoil)
BTNJ	25-38	P	P		F				P (Subsoil)
BC	38-48	F	P		G				P (Subsoil)
CK	48-95	F	P		F				P (Subsoil)
CSK	95-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILTY CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES WHILE THE LOWER SUBSOIL MAY BE SALINE AND SODIC. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZON) OVERLIES AN AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THESE THREE HORIZONS. THESE SOILS ARE IMPERFECTLY DRAINED AND EXHIBIT GLEYING AND MOTTLING FEATURES IN THE SUBSOIL.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	PEORIA (PER)	LANDFORM:	VENEER
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	ELUVIATED BLACK CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/ GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	VFR	SL	3.3	6.2	0.	41.	0.
BM	25-50	10YR 5/4	YELLOWISH BROWN	SGR	VFR	SL		5.7	0.3	31.	2.3
2BC	80-100	10YR 4/2	DARK GRAYISH BROWN	MFSBK	F	CL		6.6	0.5	52.	3.9
2CK	100-120	10YR 4/2	DARK GRAYISH BROWN	MA	F	CL-C		7.3	1.	53.	3.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	G	G	F	G	G	G	F (Topsoil)
BM	25-50	G	G		F	G	G	G	F (Subsoil)
2BC	80-100	F	F		G	G	G	G	F (Subsoil)
2CK	100-120	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.036
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF LOAM TO SILT LOAM TEXTURED MATERIAL OVER CLAY TEXTURED DEPOSITS.

INTERPRETATION GUIDELINES

SCA · 18

09/01/93

SOIL SERIES:	RYCROFT (RYF)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	SOLONETZIC BLACK	USUAL SOIL MOISTURE:	TEMPORARY PONDING
	CHERNOZEMIC	SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-25	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR	L	4.	5.8	1.3		
BTNJK	25-60	10YR 4/2	DARK GRAYISH BROWN	COL	F-VF	C		7.5	4.8		3.5
CSK	60-120	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.9	3.4		3.9

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-25	G	G	G	F	G			F (Topsoil)
BTNJK	25-60	P	P		G	F		G	P (Subsoil)
CSK	60-120	F	P		F	F		G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-25 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES WHILE THE LOWER SUBSOIL MAY BE SALINE AND SODIC. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	SADDLE (SAD)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 3/2	VERY DARK GRAYISH BROWN	MMGR	FR	SIL-L		5.3	1.3	46.	0.1
BT	20-35	10YR 5/4	YELLOWISH BROWN	MMSBK	F	CL		5.	0.3	55.	0.4
CK	60-100	2.5Y 4/4	OLIVE BROWN	MA	F	CL		4.9	0.4	62.	0.5

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	G		P	G	G	G	P (Topsoil)
BT	20-35	F	F		P	G	G	G	P (Subsoil)
CK	60-100	F	F		P	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZONS) OCCUR OVER AN AE HORIZON. IN CULTIVATED AREAS, THESE HORIZONS ARE MIXED AND FORM THE AP LAYER.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	SEXSMITH (SXH)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	6-15%
SOIL CLASSIFICATION:	ELUVIATED BLACK	USUAL SOIL MOISTURE:	MESIC
	CHERNOZEMIC	SURFACE STONINESS:	MODERATELY
PARENT MATERIAL:	MODERATELY FINE TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-20	10YR 4/2	DARK GRAYISH BROWN	MFGR	FR	L					
AE	20-25	10YR 5/3	BROWN	MMPL	FR	SIL					
BT	25-70	10YR 5/4	YELLOWISH BROWN	MMSBK	F	CL					
CK	70-100	10YR 4/3	BROWN	MA	F	L					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-20	G	G						G (Topsoil)
AE	20-25	G	G						F (Topsoil)
BT	25-70	F	F						F (Subsoil)
CK	70-100	F	G						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TEXTURED TILL. TOPSOIL IS EASILY DISTINGUISHED FROM SUBSOIL BY THE PRESENCE OF AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	SNIPE-AA (aaSNP)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AEG	0-15	10YR 5/2	GRAYISH BROWN	MMPL	FR	FSL-SIL	0.9	5.4	0.2	48.	1.1
BTG	15-60	10YR 3/3	DARK BROWN	MMSBK	F	C		5.2	0.2	49.	0.3
CKG	80-130	10YR 3/3	DARK BROWN	MA	F	C		7.4	0.6	69.	1.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AEG	0-15	G	G	P	P	G	G	G	P (Topsoil)
BTG	15-60	F	P		P	G	G	G	P (Subsoil)
CKG	80-130	F	P		G	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 17. SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS OCCASIONALLY ABSENT AND THESE SOILS MAY HAVE AND AE HORIZON INSTEAD.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	SNIPE-AAPT (aaptSN)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	/				O					
AEG	20-35	10YR 5/2	GRAYISH BROWN	MMPL	FR	FSL-SIL	0.9	5.4	0.2	48.	1.1
BTG	35-80	10YR 3/3	DARK BROWN	MMSBK	F	C		5.2	0.2	49.	0.3
CKG	80-130	10YR 3/3	DARK BROWN	MA	F	C		7.4	0.6	69.	1.1

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								(Peat)
AEG	20-35	G	G	P	P	G	G	G	P (Topsoil)
BTG	35-80	F	P		P	G	G	G	P (Subsoil)
CKG	80-130	F	P		G	G	F	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm
THICKNESS RANGE:	30-65 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 17. VARIANT OF SNIPE HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS USUALLY LITTLE OR NO TOPSOIL (AH OR AHE HORIZON) UNDERLYING THE PEAT. INSTEAD, THERE IS A GRAYISH BROWN, PLATY AEG HORIZON ABOUT 15 CM THICK.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	SPIRIT RIVER (SRV)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC BLACK CHERNOZEMIC	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM FLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-15	10YRm 3/1	VERY DARK GRAY	WFSBK	FR	SICL		6.6			
BTJ	15-60	10YRm 3/3	DARK BROWN	SBK	F	SIC		5.6			
BM	60-85	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	SIC		5.7			
C	85-120	10YRm 4/3	DARK BROWN	MA	F	SIC		7.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-15	G	F		G				F (Topsoil)
BTJ	15-60	F	P		F				P (Subsoil)
BM	60-85	F	P		F				P (Subsoil)
C	85-120	F	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.032
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAM TO SILTY CLAY TEXTURED DEPOSITS.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	TANGENT (TAG)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHE	0-10	10YRm 4/2	DARK GRAYISH BROWN	WFGR	FR	SIL	6.35	5.6			
AE	10-15	10YRm 7/4	VERY PALE BROWN	WFPL	FR	SIL	0.65	6.			
AB	15-25	10YRm 6/4	LIGHT YELLOWISH BROWN	WFSBK	F	SIL	0.58	6.4			
BT	25-37	2.5Ym 5/4	LIGHT OLIVE BROWN	SMSBK	F	SIL-L	0.56	6.7			
BC	37-45	2.5Ym 4/4	OLIVE BROWN	WFSBK	F	SIL-L	0.56	7.5			
CCA	45-120	10YRm 5/4	YELLOWISH BROWN	WFSBK	FR	SIL-L	0.67	8.			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHE	0-10	G	G	G	F				F (Topsoil)
AE	10-15	G	G	P	F				P (Topsoil)
AB	15-25	F	G		F				F (Topsoil)
BT	25-37	F	G		G				F (Subsoil)
BC	37-45	F	G		G				F (Subsoil)
CCA	45-120	G	G		F				G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILT LOAM TEXTURED MATERIAL. IN FORESTED AREAS, TOPSOIL (AH OR AHE HORIZONS) MAY BE THIN AND OVERLIE AN AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THESE SURFACE HORIZONS.

VALLEYVIEW

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	VALLEYVIEW (VVW)	LANDFORM:	UNDULATING
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE SOFTROCK		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-13	10YR 2/2	VERY DARK BROWN	MFGR	FR	L	3.2	6.3	0.4	61.	1.2
BNT	21-60	10YR 3/2	VERY DARK GRAYISH BROWN	COL	VF	C		5.1	0.3	64.	7.2
CSK	70-120	10YR 4/2	DARK GRAYISH BROWN	MA	F	SICL		7.6	6.7	74.	6.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-13	G	G	G	F	G	F	G	F (Topsoil)
BNT	21-60	P	P		P	G	F	F	P (Subsoil)
CSK	70-120	F	F		F	P	F	F	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.043
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	YES
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TO CLAY TEXTURED BEDROCK. THE BNT HORIZON HAS AN UNDESIREABLE STRUCTURE AND THE LOWER SUBSOIL IS SALINE AND SODIC. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	WANHAM (WHM)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-10	10YR 2/1	BLACK				11.				
AEG	10-25	10YR 4/1	DARK GRAY	MMPL	FR	SIL	0.5				
BTG	25-60	10YR 5/1	BRAY	MMSBK	F	SICL		7.5	0.3	46.	0.3
CCAG	60-120	10YR 6/1	LIGHT GRAY-GRAY	STRAT	F	SICL		7.9	0.4	42.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-10								
AEG	10-25	G	G	P					P (Topsoil)
BTG	25-60	F	F		G	G	G	G	F (Subsoil)
CCAG	60-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED MATERIAL. SOILS ARE WET ALL YEAR THEREFORE VERTICALL FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	WANHAM-PT (ptWHM)	LANDFORM:	LEVEL
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	/				O	11.				
AEG	20-35	10YR 4/1	DARK GRAY	MMPL	FR	SIL	0.5				
BTG	35-70	10YR 5/1	GRAY	MMSBK	F	SICL		7.5	0.3	46.	0.3
CCAG	70-120	10YR 6/1	LIGHT GRAY-GRAY	STRAT	F	SICL		7.9	0.4	42.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating	
OM	0-20									(Peat)
AEG	20-35	G	G	P					P	(Topsoil)
BTG	35-70	F	F		G	G	G	G	F	(Subsoil)
CCAG	70-120	F	F		F	G	G	G	F	(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	35 cm
THICKNESS RANGE:	30-65 cm (PEAT & AEG HORIZON)
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF WANHAM THAT HAS A PEATY SURFACE 15 TO 50 CM THICK. THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON) UNDERLYING THE PEAT. INSTEAD, THERE IS A PEATY AEH HORIZON ABOUT 15 CM THICK.

INTERPRETATION GUIDELINES

SCA 18

09/01/93

SOIL SERIES:	WHITELAW (WHW)	LANDFORM:	BLANKET
SOIL ZONE:	DARK GRAY & BLACK	TYPICAL SLOPES:	1-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 2/2	VERY DARK BROWN					6.			
AHE	5-8	10YRm 4/1	DARK GRAY	WFGR	L	SIL	8.84	5.8			
AE	8-20	10YRm 6/3	PALE BROWN	PL	FR	SIL	0.67	5.6			
AB	20-40	10YRm 4/3	BROWN	SBK	F	CL	0.55	4.6			
BT	40-65	10YRm 3/3	DARK BROWN	SBK	F	SICL-CL	0.68	4.3			
BC	65-77	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	CL	0.59	4.4			
C	77-120	10YRm 4/2	DARK GRAYISH BROWN	STRAT	F	CL	0.71	4.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AHE	5-8	F	G	G	F				F (Topsoil)
AE	8-20	G	G	P	F				P (Topsoil)
AB	20-40	F	F		P				P (Subsoil)
BT	40-65	F	F		U				U (Subsoil)
BC	65-77	F	F		U				U (Subsoil)
C	77-120	F	F		P				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.055
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: WHITELAW SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE A LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF ALL THE SURFACE HORIZONS.

2.19 Soils of Soil Correlation Area #19

General Description of the Area

- The area is confined to the Birch Mountains, Buffalo Head Hills and the Cristina Upland.

Ecoregion/Climate

- High Boreal Mixedwood Ecoregion of northern Alberta.
- Agroclimate is 4H and 5H (severe to very severe heat limitation).
- Growing season P-PE= approximately 0 mm.
- Temperatures are slightly colder and precipitation is slightly higher than the Mid Boreal Mixedwood ecoregion, and as a result, snow cover persists a little longer.

Soil and Landscapes

- Soils are generally Luvisolic while Organic Crysolics are also present.
- Landforms are composed of undulating to hummocky moraine (till), often over bedrock. Colluvium material over bedrock often occurs on steep slopes at the base of prominent uplands.

Soil Reclamation Issues

- The risk of soil erosion by water is high on slopes that are steep or long.
- The risk of soil erosion by wind is low.
- Surface disturbance of Organic Cryosols, causing a loss of insulating cover, will result in flooding as permafrost melts.

INTERPRETATION GUIDELINES

SCA 19

09/01/93

SOIL SERIES:	MIKKWA (MKW)	LANDFORM:	BLANKET, LEVEL, DEPRESSIONAL
SOIL ZONE:	GRAY		
SOIL CLASSIFICATION:	MESIC ORGANIC CRYOSOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF1	0-20	10YR 6/4	LIGHT YELLOWISH BROWN			O		3.6	0.2		
OF2	20-40	10YR 5/4	YELLWISH BROWN			O		3.8	0.1		
OM	40-60	7.5YR 3/0	VERY DARK GRAY			O		4.3	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF1	0-20								
OF2	20-40								
OM	40-60								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: OCCURING ON FROZEN, SPHAGNUM PEAT, COMPACTION OF THE INSULATING SURFACE PEAT WILL CAUSE THE PERMAFROST TO MELT.

2.20 Soil Correlation Area #20

General Description of the Area

- Occurs east, from Lesser Slave Lake to the Saskatchewan border, and north to the North West Territories, excluding the upland regions.

Ecoregion/Climate

- Mid Boreal Mixedwood ecoregion of the Northern Alberta Plains.
- Agroclimate 3H and 4H (moderate to severe heat limitation).
- Precipitation is similar to the Low Boreal Mixedwood ecoregion, but temperatures are slightly colder and therefore snow cover persists slightly longer in the spring.
- Growing season P-PE= -150 to -200 mm.

Soil and Landscapes

- Mineral landscapes are composed largely of moraine in the southern areas and glaciolacustrine deposits towards the north. Organic terrain occupies extensive poorly drained areas.
- Luvisolic and Brunisolic soils are important on mineral terrain while poorly drained areas have Organic and Gleysolic soils.
- Profile development is generally 70 cm deep.

Soil Reclamation Issues

- The risk of soil erosion by water is generally low unless slopes are steep.
- The risk of soil erosion by wind is low except on sandy soils.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	ALGAR (ALG)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-40	10YR 2/1	BLACK			O		7.1	0.8	190.	0.2
CKG1	40-80	10YR 6/2	LIGHT BROWNISH GRAY	MA	F	C		7.5	0.7	45.	0.2
CKG2	80-130	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.8	0.4	55.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-40								(Peat)
CKG1	40-80	G	P		F	G	G	G	P (Subsoil)
CKG2	80-130	G	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm
THICKNESS RANGE:	15-50 cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. THESE SOILS HAVE 15 TO 50 CM OF SURFACE PEAT. ALGAR SOILS HAVE NO MINERAL TOPSOIL OR B HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	ALGAR-XT (xtALG)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
0M	0-40	10YR 2/1	BLACK			O		7.1	0.8	190.	0.2
CKG	40-80	10YR 6/2	LIGHT BROWNISH GRAY	MA	F	C		7.5	0.7	45.	0.2
2CKG	80-130	10YR 5/1	GRAY	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
0M	0-40								(Peat)
CKG	40-80	G	P		F	G	G	G	P (Subsoil)
2CKG	80-130	G	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	40 cm
THICKNESS RANGE:	15-50 cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF ALGAR HAVING MODERATELY FINE TEXTURED TILL WITHIN 1 M OF THE SURFACE.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	BITUMOUNT (BMT)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-15	10YR 2/2	VERY DARK BROWN		-	O					
CG1	15-59	10YR 5/2	GRAYISH BROWN	WFSBK	L	LS		4.9	0.1		
CG2	59-120	10YR 5/2	GRAYISH BROWN	WFSBK	L	LS		5.	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-15								(Peat)
CG1	15-59	F	P		F	G			P (Subsoil)
CG2	59-120	F	P		F	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm PEAT
THICKNESS RANGE:	15-50 cm PEAT
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAMY SAND TEXTURED MATERIAL. THESE SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. THE SURFACE IS COVERED BY A PEATY LAYER 15 TO 50 CM THICK. BITUMOUNT SOILS HAVE NO MINERAL TOPSOIL OR B HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	DOVER (DOV)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-10	10YR 5/2	GRAYISH BROWN	WMPL	FR	L		6.			
BT	20-40	7.5YR 4/4	BROWN-DARK BROWN	SMSBK	F	C		4.7			
BC	50-75	7.5YR 4/4	BROWN-DARK BROWN	MA	F	C		4.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-10	G	G		G				G (Upper L)
BT	20-40	G	P		F				P (Subsoil)
BC	50-75	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED, WATER-LAID DEPOSITS. TOPSOIL IS ABSENT. INSTEAD, THESE SOILS HAVE A THIN LF HORIZON OVERLYING AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	DOVER-XT (xtDOV)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE GLACIOLACUSTRINE/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-8	10YR 6/2	LIGHT BROWNISH GRAY	MMPL	FR	SL		6.			
BT	15-40	7.5YR 5/4	BROWN	SMSBK	F	C		4.8			
BC	40-75	5YR 5/3	REDDISH BROWN	MA	F	C		5.			
2BC	75-90	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.5	0.3		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-8	G	G		G				G (Upper L)
BT	15-40	G	P		F				P (Subsoil)
BC	40-75	G	P		F				P (Subsoil)
2BC	75-90	G	P		F	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF DOVER HAVING TILL WITHIN 1 M.

ELLS RIVER

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	ELLS RIVER (ELS)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	REGO GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF	0-25	10YR 2/2	VERY DARK BROWN		-	O					
CG	25-120	10YR 4/3	BROWN-DARK BROWN	MA	F	CL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF	0-25								(Peat)
CG	25-120	G	F						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm PEAT
THICKNESS RANGE:	15-50 cm PEAT
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TEXTURED TILL. THESE SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES UNSTABLE. THE SURFACE IS COVERED BY A PEATY LAYER 15 TO 50 CM THICK. THESE SOILS HAVE NO MINERAL TOPSOIL OR B HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	FIREBAG (FIR)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-4	/						5.2	0.7		
AE	4-9	10YR 6/2	LIGHT BROWNISH GRAY	WFPL	VFR	SL		5.1	0.1		
BM	9-44	10YR 5/4	YELLOWISH BROWN	WMPL	FR	L		5.	0.2		
BC	44-79	10YR 5/2	GRAYISH BROWN	SGR	FR	LS		5.7	0.2		
C	79-204	10YR 6/2	LIGHT BROWNISH GRAY	MA	F	SL		5.4	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-4								
AE	4-9	G	G		G	G			G (Upper L)
BM	9-44	G	G		F	G			F (Subsoil)
BC	44-79	G	P		G	G			P (Subsoil)
C	79-204	G	G		G	G			G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SANDY LOAM TO LOAMY SAND TEXTURED MATERIAL. EXPOSED FACES ARE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE AN LF HORIZON OVERLYING AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	FIREBAG-GL (glFIR)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	GLEYED ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-4	/						5.2	0.7		
AEGJ	4-9	10YR 6/2	LIGHT BROWNISH GRAY	WFPL	VFR	SL		5.1	0.1		
BMGJ	9-44	10YR 5/4	YELLOWISH BROWN	WMPL	FR	L		5.	0.2		
BCGJ	44-79	10YR 5/2	GRAYISH BROWN	SGR	FR	LS		5.7	0.2		
CGJ	79-204	10YR 6/2	LIGHT BROWNISH GRAY	MA	F	SL		5.4	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-4								
AEGJ	4-9	G	G		G	G			G (Upper L)
BMGJ	9-44	G	G		F	G			F (Subsoil)
BCGJ	44-79	G	P		G	G			P (Subsoil)
CGJ	79-204	G	G		G	G			G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF FIREBAG THAT IS IMPERFECTLY DRAINED AND EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS GENERALLY OCCUR IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	FIREBAG-ST (stFIR)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-30%
SOIL CLASSIFICATION:	ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	STONY, VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-4	/						5.2	0.7		
AE	4-9	10YR 6/2	LIGHT BROWNISH GRAY	WFPL	VFR	STSL		5.1	0.1		
BM	9-44	10YR 5/4	YELLOWISH BROWN	WMPL	FR	STL		5.1	0.2		
BC	44-79	10YR 5/2	GRAYISH BROWN	SGR	FR	STLS		5.7	0.2		
C	79-204	10YR 6/2	LIGHT BROWNISH GRAY	MA	F	STSL		5.4	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-4								
AE	4-9	G	P		G	G			P (Upper L)
BM	9-44	G	P		G	G			P (Subsoil)
BC	44-79	G	P		G	G			P (Subsoil)
C	79-204	G	P		G	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, STONY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF FIREBAG THAT IS STONY.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	FORT (FRT)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/ VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-3	10YR 2/1	BLACK					5.9	0.7		
AE	3-18	10YR 5/3	BROWN	WFPL	VFR	SL		6.7	0.1		
BT	18-53	10YR 4/4	DARK YELLOWISH BROWN	MFSBK	F	SCL		8.1	2.1	34.	0.3
BC	53-103	10YR 6/3	PALE BROWN	SGR	L	S		8.8	0.4		
C	103-150	10YR 6/3	PALE BROWN	SGR	L	S		8.3	0.3		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-3								
AE	3-18	G	G		F	G			F (Upper L)
BT	18-53	G	F		P	G	G	G	P (Subsoil)
BC	53-103	F	P		P	G			P (Subsoil)
C	103-150	F	P		P	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF SANDY LOAM MATERIAL OVER SAND. EXPOSED FACES ARE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS ABSENT. INSTEAD, THESE SOILS HAVE AN LF HORIZON OVERLYING AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	HORSE RIVER (HRR)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	6-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-8	10YR 3/2	VERY DARK GRAYISH BROWN					6.1	0.4		
AE	8-17	10YR 6/3	PALE BROWN	WFPL	FR	SIL		6.1	0.1		
AB	17-36	10YR 6/3	PALE BROWN	SFSBK	FR	SIL		6.2	0.1		
BT	36-88	10YR 4/4	DARK YELLOWISH BROWN	SFSBK	VF	C		6.3	0.1		
BC	88-133	10YR 4/3	BROWN-DARK BROWN	SFSBK	VF	C		7.7	0.1		
CK	133-200	10YR 4/4	DARK YELLOWISH BROWN	WFSBK	VF	C		7.8	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-8								
AE	8-17	G	G		G	G			G (Upper L)
AB	17-36	G	G		G	G			G (Upper L)
BT	36-88	F	P		G	G			P (Subsoil)
BC	88-133	F	P		F	G			P (Subsoil)
CK	133-200	F	P		F	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	15-35 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED TILL. TOPSOIL (AH OR AHE HORIZON) IS ABSENT. INSTEAD, THESE SOILS HAVE AN LF HORIZON OVERLYING AN AE HORIZON. THE AB HORIZON IS OF GOOD QUALITY AND SHOULD BE INCLUDED IN THE UPPER LIFT.

JOSEPHINE-AA

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	JOSEPHINE-AA (aaJOP)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	HUMIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE SOFTROCK	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 3/3	DARK BROWN								
AH	3-10	10YRm 2/2	VERY DARK BROWN	WFGR	FR	SICL	9.1	5.6			
AEG	10-13	10YRm 5/3	BROWN	WFPL	FR	SIC	3.18	5.3			
ABG	13-23	10YRm 4/3	BROWN-DARK BROWN	WFSBK	FR	C-HC	1.36	5.2			
BTG	23-53	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	HC	1.1	4.6			
BCG	53-68	5Ym 5/1	GRAY	WFSBK	F	HC	0.86	4.5			
CG	68-120	5Ym 4/1	DARK GRAY	MA	F	HC	0.66	4.6			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AH	3-10	G	F		G				F (Upper L)
AEG	10-13	G	P		G				P (Upper L)
ABG	13-23	G	P		G				P (Subsoil)
BTG	23-53	G	P		F				P (Subsoil)
BCG	53-68	G	P		F				P (Subsoil)
CG	68-120	G	P		F				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	YES
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME IS SCA 18. DEVELOPED ON CLAY TEXTURED MATERIAL. THESE SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. THE AEG AND ABG HORIZONS ARE OF POOR QUALITY DUE TO CLAYEY TEXTURE AND SHOULD NOT BE INCLUDED IN THE UPPER LIFT.

INTERPRETATION GUIDELINES

JOSLYN

SCA 20

09/01/93

SOIL SERIES:	JOSLYN (JSN)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-15	7.5YR 7/2	PINKISH GRAY	WMPL	FR	FSL		5.6			
BNT	15-30	7.5YR 5/4	BROWN	SCSBK	VF	C		4.7			
CSK	50-75	7.5YR 4/4	BROWN-DARK BROWN	MA	F	SICL		7.1			
2CK	75-100	10YR 4/3	BROWN-DARK BROWN	MA	F	SICL		8.3	1.2		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-15	G	G		G				G (Upper L)
BNT	15-30	F	P		F				P (Subsoil)
CSK	50-75	G	F		F				F (Subsoil)
2CK	75-100	G	F		P	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TO SILTY CLAY TEXTURED MATERIAL. THE BNT HORIZON HAS AN UNDESIREABLE STRUCTURE AND THE LOWER SUBSOIL IS SALINE AND SODIC. TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	JOSLYN-GLZS (glzsJS)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	GLEYED GRAY SOLOD	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AEGJ	0-10	10YR 5/2	GRAYISH BROWN	SMPL	FR	SIL		5.5			
BNTGJ	25-40	7.5YR 5/2	BROWN	SCSBK	VF	C		6.6			
CKGJ1	50-75	10YR 5/3	BROWN	MA	F	C		8.1	0.8		
CKGJ2	80-100	10YR 5/3	BROWN	MA	F	C		8.3	0.9		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AEGJ	0-10	G	G		G				G (Upper L)
BNTGJ	25-40	F	P		G				P (Subsoil)
CKGJ1	50-75	G	P		P	G			P (Subsoil)
CKGJ2	80-100	G	P		P	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF JOSLYN THAT IS IMPERFECTLY DRAINED, EXHIBITING GLEYING AND MOTTLING FEATURES IN THE SUBSOIL. THESE SOILS OCCUR IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	KINOSIS (KNS)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
BT	0-7	10YR 5/4	YELLOWISH BROWN	MMSBK	FR-F	L		5.2	0.2		0.4
BC	7-20	10YR 5/3	BROWN	MA	FR-F	L		6.2	0.2		0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
BT	0-7	G	G		G	G		G	F (Subsoil)
BC	7-20	G	G		G	G		G	G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAM TEXTURED TILL. TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS USUALLY HAVE AN LH HORIZON OVERLYING AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	KINOSIS-GL (glKNS)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-9%
SOIL CLASSIFICATION:	GLEYED GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
BTGJ	20-65	10YR 5/4	YELLOWISH BROWN	MMSBK	FR-F	L		5.2	0.2		0.4
BCGJ	65-130	10YR 5/3	BROWN	MA	FR-F	L		6.2	0.2		0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
BTGJ	20-65	G	G		G	G		G	G (Subsoil)
BCGJ	65-130	G	G		G	G		G	G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF KINOSIS THAT IS IMPERFECTLY DRAINED, EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL AND USUALLY OCCURS IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	LILLIAN (LLN)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	GLEYSOLIC STATIC CRYSOSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF	0-10	/			-	O					
CG	10-120	10YR 4/3	BROWN-DARK BROWN	WFSBK	F	SICL		4.2	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF	0-10								
CG	10-120	G	F		F	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED MATERIAL WITH PERMAFROST. COMPACTION OF THE INSULATING PEAT ON THE SURFACE WILL CAUSE THE PERMAFROST TO MELT. EXPOSED FACES ARE UNSTABLE.

LIVOCK

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	LIVOCK (LVK)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	20-30	10YR 5/2	GRAYISH BROWN	SGR	VFR	SL					
BT	30-45	10YR 5/4	YELLOWISH BROWN	WFSBK	FR	SL					
2BT	25-60	2.5Y 4/4	OLIVE BROWN	WMSBK	F	SCL		5.7	0.2		
2BC	60-85	10YR 4/4	DARK YELLOWISH BROWN	MA	FR-F	SCL		5.8	0.2		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	20-30	G	G						(Upper L)
BT	30-45	G	G						(Subsoil)
2BT	25-60	G	F		G	G			F (Subsoil)
2BC	60-85	G	F		G	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON MEDIUM TEXTURED MATERIAL OVER MODERATELY FINE TO FINE TEXTURED TILL. SANDY TEXTURED VENEER MAY CAUSE EXPOSED FACES TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	LIVOCK-XC (xcLVK)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL/ GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-8	/									
AE	8-18	10YR 6/4	LIGHT YELLOWISH BROWN	SGR	L	FSL					
BM	18-58	10YR 4/4	DARK YELLOWISH BROWN	SGR	L	SL		6.2	0.1		
BC	58-78	10YR 5/4	YELLOWISH BROWN	SGR	L	SL					
2C	78-120	10YR 4/2	DARK GRAYISH BROWN	MA	F	C		7.1	0.3		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-8								
AE	8-18	F	G						F (Upper L)
BM	18-58	F	G		G	G	F		F (Subsoil)
BC	58-78	F	G						F (Subsoil)
2C	78-120	G	P		F	G	F		P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF LIVOCK WITH VERY FINE TEXTURED, GLACIOLACUSTRINE MATERIAL WITHIN 1 M.

MCLELLAND

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MCLELLAND (MLD)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	TYPIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-120	10YR 3/1	VERY DARK GRAY		-	O		6.7	0.2		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-120								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON DEEP FEN PEAT DEPOSITS. EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MCLELLAND-XC (xcMLD)	LANDFORM:	VENEER, LEVEL, DEPRESSIONAL
SOIL ZONE:	GRAY		
SOIL CLASSIFICATION:	TERRIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT/GLACIOLACUSTRINE	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM1	0-30	/			-	O		6.1	0.		
OM2	30-70	/			-	O		6.1	0.		
CG	70-100	10YR 5/1	GRAY	MA	F	CL-SICL		6.2	0.		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM1	0-30								
OM2	30-70								
CG	70-100	G	F		G	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF MCLELLAND HAVING CLAY LOAM TO SILTY CLAY LOAM TEXTURED, GLCIOLACUSTRINE MATERIAL WITHIN 1 M.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MCMURRAY (MMY)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	CUMULIC REGOSOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM FLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
F	0-5	7.5YR 3/4	DARK BROWN					6.7	0.3		
C1	5-15	10YR 4/2	DARK GRAYISH BROWN	WFGR	FR	SIL		5.7	0.3		
C2	15-36	10YR 4/2	DARK GRAYISH BROWN	VFSBK	FR	SIL					
C3	36-85	10YR 5/3	BROWN	SGR	L	SL		6.5	0.2		
C4	85-155	10YR 4/2	DARK GRAYISH BROWN	SGR	FR	SL		6.6	0.2		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
F	0-5								
C1	5-15	G	G		G	G			G (Subsoil)
C2	15-36	G	G						G (Subsoil)
C3	36-85	F	G		G	G			F (Subsoil)
C4	85-155	G	G		G	G			G (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	NO TOPSOIL
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILT LOAM TO LOAM TEXTURED DEPOSITS ASSOCIATED WITH STREAMS AND TERRACES. THIS SOIL HAS NO TOPSOIL. EXPOSED FACES ARE UNSTABLE WHEN VERTICALLY DITCHED.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MCMURRAY-GL (glMMY)	LANDFORM:	TERRACED
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-5%
SOIL CLASSIFICATION:	GLEYED CUMULIC REGOSOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	MEDIUM FLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
F	0-5	7.5YR 3/2	DARK BROWN					5.7	0.2		
CGJ	5-40	10YR 4/2	DARK GRAYISH BROWN	WFSBK	F	SIL		4.4	0.2		
AHGJB	40-55	2.5Y 2/0	BLACK	MFGR	FR	SIL		7.5	0.33		
BGJB	55-95	10YR 3/2	VERY DARK GRAYISH BROWN	SFGR	F	SIC		7.3	0.2		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
F	0-5								
CGJ	5-40	G	G		F	G			F (Subsoil)
AHGJB	40-55	G	G		F	G			F (Subsoil)
BGJB	55-95	G	F		F	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	NO TOPSOIL
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIHG

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF MCMURRAY THAT IS IMPERFECTLY DRAINED, EXHIBITS GLEYING AND MOTTLING FEATURES IN THE SUBSOIL AND USUALLY OCCURS IN LOWER LANDSCAPE POSITIONS.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MEANDER (MER)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 2/1	BLACK				38.94	6.7			
AE	5-15	10YRd 7/2	LIGHT GRAY	SFPL	FR	SIL	1.17	5.2			
AB	15-22	7.5YR 5/4	BROWN	WFSBK	SLH	SICL	0.66	5.3			
BT	22-57	10YRm 3/3	DARK BROWN	WMCOL	F	C	0.76	5.			
BC	57-64	10YRm 3/2	VERY DARK GRAYISH BROWN	WFSBK	FR	SICL		7.2			
CK	64-94	10YRm 3/2	VERY DARK GRAYISH BROWN	MA	FR	SICL		7.5	3.4		
CSK	94-120	10YRm 3/2	VERY DARK GRAYISH BROWN	MA	FR	SICL		7.4	5.		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-15	G	G		G				G (Upper L)
AB	15-22	G	F		G				F (Upper L)
BT	22-57	G	P		F				P (Subsoil)
BC	57-64	G	F		F				F (Subsoil)
CK	64-94	G	F		F	F			F (Subsoil)
CSK	94-120	G	F		F	P			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SILTY CLAY LOAM TEXTURED TILL. TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE AN LH HORIZON OVERLYING AN AE HORIZON. THE AB HORIZON IS OF FAIR QUALITY AND SHOULD BE INCLUDED IN THE UPPER LIFT.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MIKKWA-AA (aaMKW)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	MESIC ORGANIC CRYOSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF1	0-20	10YR 6/4	LIGHT YELLOWISH BROWN		-	O		3.6	0.2		
OF2	20-40	10YR 5/4	YELLOWISH BROWN		-	O		3.8	0.1		
OM	40-60	7.5YR 3/0	VERY DARK GRAY		-	O		4.3	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF1	0-20								
OF2	20-40								
OM	40-60								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 19. OCCURRING ON FROZEN, SPHAGNUM PEAT, COMPACTION OF THE INSULATING SURFACE PEAT WILL CAUSE THE PERMAFROST TO MEET.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	MILDRED (MIL)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LF	0-5		/						4.7	0.2		
AE	5-11	10YR	5/3	BROWN	SGR	L	S		5.	0.1		
BM	11-55	10YR	6/8	BROWNISH YELLOW	SGR	L	S		5.7	0.1		
BC	55-110	10YR	6/4	LIGHT YELLOWISH BROWN	SGR	L	S		6.	0.1		
C	110-150	10YR	7/4	VERY PALE BROWN	SGR	L	S		6.4	0.1		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LF	0-5								
AE	5-11	F	P		F	G			P (Upper L)
BM	11-55	F	P		G	G			P (Subsoil)
BC	55-110	F	P		G	G			P (Subsoil)
C	110-150	F	P		G	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN, TOPOGRAPHY
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SAND TEXTURED MATERIAL. EXPOSED FACES ARE UNSTABLE.
TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE AN LF HORIZON OVERLYING AN AE HORIZON.
HORIZON INSTEAD.

INTERPRETATION GUIDELINES

SCA 20

09/01/93

SOIL SERIES:	RUTH LAKE (RUT)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL/GRAVEL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
BM	0-30	5YR 4/4	REDDISH BROWN	MMSBK	FR	SL		5.1			
BC	30-60	7.5YR 4/4	BROWN-DARK BROWN	MA	FR	SL		6.9			
2CK	60-70	7.5YR 4/4	BROWN-DARK BROWN	MA	FR	GRSL		7.7	0.4		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
BM	0-30	G	G		G				G (Upper L)
BC	30-60	G	G		G				G (Subsoil)
2CK	60-70	G	P		F	G			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	TOPOGRAPHY
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: DEVELOPED ON A VENEER OF SANDY LOAM TEXTURED MATERIAL OVER GRAVEL. EXPOSED FACES ARE UNSTABLE. TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS USUALLY HAVE AN LF HORIZON OVERLYING AN AE OR BM HORIZON.

2.21 Soil Correlation Area #21

General Description of the Area

- Gray Soil Zone of the north-east, central Alberta Mixedwood Ecoregion.
- Occurs in the vicinity of Calling Lake, east of Boyle, east of Muriel Lake, and east of Lac la Biche.

Ecoregion/Climate

- The ecoregions include the Low Boreal Mixedwood in the south, and the Mid Boreal Mixedwood to the north.
- Agroclimate is 4H (severe heat limitation).
- Growing season P-PE= -200 to -100 mm.
- Precipitation is similar to the Dark Gray-Gray Soil Zone of SCA 12. Summer temperatures are also similar although winter temperatures are slightly colder.

Soil and Landscapes

- Soils are generally Luvisolic, while poorly drained soils are Organic and Gleysolic.
- Undulating to hummocky moraines dominate the landscape while Organic terrain occupies many depressional areas.
- Profile development is generally 70 cm deep with 15 cm of topsoil.

Soil Reclamation Issues

- The risk of soil erosion by water is generally low, although hummocky topography has a high potential.
- The risk of soil erosion by wind is moderate to low. However, the potential for erosion of an area with sandy parent material, north of Cold Lake, is high.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	AMBER VALLEY (ARV)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-8	10YR 2/2	VERY DARK BROWN	MA	F	CL	3.6	7.5	1.8	99.	0.2
CKG	8-100	10YR 4/2	DARK GRAYISH BROWN	MA	F	CL		7.9	0.7	48.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-8	P	F	G	G	G	P	G	P (Topsoil)
CKG	8-100	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	5 cm
THICKNESS RANGE:	1-9 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TEXTURED TILL. THESE SOILS ARE WET ALL YEAR AND THEREFORE EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	AMISK (AMK)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	-
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE FLUVIAL EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR 4/2	DARK GRAYISH BROWN	SGR	L	S		6.2	0.2	29.	0.2
BM	15-60	2.5Y 4/4	OLIVE BROWN	SGR	L	S		6.7	0.1	24.	0.2
BC	60-120	10YR 5/3	BROWN	SGR	L	S		6.8	0.2	24.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	F	P	F	G	F	G	P	(Topsoil)
BM	15-60	F	P	G	G	F	G	P	(Subsoil)
BC	60-120	F	P	G	G	F	G	P	(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.026
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON LOAMY SAND TO SAND TEXTURED MATERIAL. THE LOOSE CONSISTENCE CAUSES VERTICAL FACES TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	ATHABASCA (ABCS)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-7	10YR 2/1	BLACK								
AE	7-32	10YR 5/3	BROWN	MMPL	FR	SL		6.3	0.5	34.	0.3
BT	32-72	10YR 5/4	YELLOWISH BROWN	MMSBK	F	CL		5.3	0.1	41.	0.8
BC	72-107	10YR 5/4	YELLOWISH BROWN	MFSBK	F	CL		6.1	0.2	32.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-7								
AE	7-32	G	G		F	G	G	G	F (Topsoil)
BT	32-72	F	F		P	G	G	G	P (Subsoil)
BC	72-107	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS A THIN LH HORIZON OVERLYING A PLATY, LIGHT GRAY AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS AND IS VARIABLE IN COLOR.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	ATHABASCA-ST (stABC)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	STONY, MODERATELY FINE TILL	SURFACE STONINESS:	EXCEEDINGLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	3-30	10YR 5/3	BROWN	MMPL	FR	STFSL	0.6	7.2	0.6	24.	0.1
BT	30-120	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	STCL		6.5	0.3	41.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	3-30	G	P	P	G	G	F	G	P (Topsoil)
BT	30-120	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-25 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF ATHABASCA THAT IS STONIER THAN NORMAL.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	BIRKLAND (BLA)	LANDFORM:	BLANKET, DEPRESSIONAL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	0-1%
SOIL CLASSIFICATION:	TERRIC FIBRISOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF1	0-69	/				O	48.83	3.4			
OF2	69-130	/				O	44.95	3.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF1	0-69								
OF2	69-130								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON 50 TO 130 CM OF SPHAGNUM PEAT OVER MINERAL DEPOSITS. THE HIGH WATERTABLE WILL CAUSE EXPOSED FACES TO BE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	BONNIE-AA	(aaBNN)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	GRAY			DEPRESSIONAL
SOIL CLASSIFICATION:	TYPIC HUMISOL		TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT		USUAL SOIL MOISTURE:	WATERTABLE/PONDING
			SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF	0-10	7.5 YR 5/4	BROWN			O	35.9	7.7			
OM	10-20	5 YR 3/4	DARK REDDISH BROWN			O	37.96	7.8			
OH1	20-71	7.5 YR 3/2	DARK BROWN			O	34.5	7.8			
OH2	71-127	5 YRW 3/2	DARK REDDISH BROWN			O	37.86	7.9			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF	0-10								
OM	10-20								
OH1	20-71								
OH2	71-127								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 12. THESE SOILS ARE CHARACTERIZED BY HUMIC ORGANIC FEN PEAT GREATER THAN 1 METRE THICK.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	FAWCETT (FWT)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-15%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE FLUVIAL OR LACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code		Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-15	10YR	3/2	VERY DARK GREYISH BROWN	MFGR	FR	SICL					
BT	15-55	10YR	4/4	DARK YELLOWISH BROWN	MMSBK	F	SIL					
BC	55-110	10YR	5/4	YELLOWISH BROWN	WFSBK	F	SIL					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-15	G	F						F (Topsoil)
BT	15-55	F	G						F (Subsoil)
BC	55-110	F	G						F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: FAWCETT SOILS ARE DEVELOPED ON SILT LOAM TEXTURED MATERIAL. IN FORESTED AREAS, THE TOPSOIL (AH OF AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE AN LH HORIZON OVERLYING AN AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THESE SURFACE HORIZONS AND COLOR IS QUITE VARIABLE. SEPARATION OF THE TOPSOIL FROM SUBSOIL BY COLOR IS SOMETIMES DIFFICULT.

GOODRIDGE

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	GOODRIDGE (GOG)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY COARSE TILL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-15	10YR 5/3	BROWN	MMPL	FR	SL	0.6	6.7	0.3	24.	0.
BT	15-68	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL-SCL		5.5	0.2	36.	0.
CK	90-120	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	CL-SCL		7.8	0.4	45.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-15	G	G	P	G	G	F	G	P (Topsoil)
BT	15-68	F	F		F	G	G	G	F (Subsoil)
CK	90-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SANDY CLAY LOAM TEXTURED TILL HAVING SOME SANDS, SILTS AND LAYERS OF STONE MIXED IN. EXPOSED FACES ARE OFTEN UNSTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	GOODRIDGE-GR (grGOG)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-9%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	GRAVELLY, MODERATELY COARSE TILL	SURFACE STONINESS:	VERY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-15	10YR 5/3	BROWN	MMPL	FR	GRSL	0.6	6.7	0.3	24.	0.
BT	15-68	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	GRCL-SCL		5.5	0.2	36.	0.
CK	90-120	2.5Y 5/4	LIGHT OLIVE BROWN	MA	F	GRCL-SCL		7.8	0.4	45.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-15	G	P	P	G	G	F	G	P (Topsoil)
BT	15-68	F	F		F	G	G	G	F (Subsoil)
CK	90-120	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	STONY, GRAVELLY
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	YES
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF GOODRIDGE HAVING LAYERS OF GRAVELLY MATERIAL.

GRANDIN

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	GRANDIN (GDI)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-30%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-8	10YR 3/2	VERY DARK GREYISH BROWN	MFGR	FR	CL					
AE	8-20	10YR 5/3	BROWN	MMPL	VFR	SIL		6.1	0.4	39.	0.3
BT	20-65	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		7.4	0.4	51.	0.6
CK	65-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL		7.7	0.5	52.	0.6

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-8	G	F						F (Topsoil)
AE	8-20	G	G		F	G	G	G	F (Topsoil)
BT	20-65	F	F		G	G	G	G	F (Subsoil)
CK	65-130	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: GRANDIN SOILS ARE DEVELOPED ON CLAY LOAM TO CLAY TEXTURED TILL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS AN LH HORIZON OVERLYING AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	GROSMONT (GMT)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE TILL	SURFACE STONINESS:	MODERATELY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-8	10YRm 2/1	BLACK					6.1			
AH	8-16	10YRm 2/2	VERY DARK BROWN	WFGR	FR	SIL	4.	5.8			
AE	16-21	10YRm 3/3	DARK BROWN	MFPL	FR	SIL	0.89	5.4			
AB	21-33	10YRm 3/3	DARK BROWN	WFSBK	FR	CL	0.67	5.			
BT	33-61	10YRm 3/2	VERY DARK GRAYISH BROWN	MMSBK	F	C	1.01	4.6			
BC	61-79	10YRm 2/2	VERY DARK BROWN	MA	F	CL		4.6			
C	79-120	10YRm 3/2	VERY DARK BROWN	MA	F	CL-C					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-8								
AH	8-16	G	G	G	F				F (Topsoil)
AE	16-21	G	G	P	P				P (Topsoil)
AB	21-33	G	F		P				P (Subsoil)
BT	33-61	F	P		P				P (Subsoil)
BC	61-79	F	F		P				P (Subsoil)
C	79-120	F	P						P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.053
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON CLAY LOAM TEXTURED TILL. IN FORESTED AREAS, TOPSOIL CAN BE VERY THIN OVER AN AE HORIZON. IN CULTIVATED AREAS, TOPSOIL IS A MIXTURE OF THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	LIZA (LIZ)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	ELUVIATED DYSTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE FLUVIAL OR EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 2/1	BLACK								
AEJ	5-13	10YRm 5/4	YELLOWISH BROWN	SGR	L	S	0.15	6.			
BM	13-38	10YRm 5/6	YELLOWISH BROWN	SGR	L	S	0.19	6.1			
BC	38-56	10YRm 5/4	YELLOWISH BROWN	SGR	L	S		5.9			
C1	56-81	10YRm 5/6	YELLOWISH BROWN	SGR	L	S		6.9			
C2	81-107	10YRm 5/4	YELLOWISH BROWN	SGR	L	S		6.2			
2C	107-120	2.5Ym 5/4	LIGHT OLIVE BROWN	SGR	L	LS		6.5			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AEJ	5-13	F	P	P	F				P (Topsoil)
BM	13-38	F	P		F				P (Subsoil)
BC	38-56	F	P		F				P (Subsoil)
C1	56-81	F	P		G				P (Subsoil)
C2	81-107	F	P		F				P (Subsoil)
2C	107-120	F	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	HIGH
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	LOW
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SAND TEXTURED MATERIAL. THE LOOSE CONSISTENCE CAUSES EXPOSED FACES TO BE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS ABSENT. INSTEAD, THESE SOILS HAVE AN LH HORIZON OVERLYING AN AE HORIZON.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	MALOY (MLY)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	TYPIC HUMIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM1	0-50	10YR 5/4	YELLOWISH BROWN			O		6.2	0.1	981.	0.2
OM2	50-110	10YR 5/4	YELLOWISH BROWN			O		6.	0.1	641.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM1	0-50								
OM2	50-110								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DERIVED OF THICK FEN PEAT MATERIAL. EXPOSED FACES ARE UNSTABLE BECAUSE OF THE HIGH WATERTABLE.

MOOSE HILLS

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	MOOSE HILLS (MHL)	LANDFORM:	VENEER
SOIL ZONE:	GRAY	TYPICAL SLOPES:	-
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	VERY COARSE GLACIOFLUVIAL/TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-10	10YR 3/2	VERY DARK GRAYISH BROWN	WFGR	FR	SL	8.2	6.2	1.	74.	0.1
AE	10-30	10YR 5/3	BROWN	WFPL	VFR	SL	0.9	6.3	0.4	26.	0.2
2BT	30-75	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL		5.1	0.1	42.	0.5
2CK	75-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL-C		7.5	0.4	59.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-10	G	G	G	F	G	F	G	F (Topsoil)
AE	10-30	G	G	P	F	G	F	G	P (Topsoil)
2BT	30-75	F	F		P	G	G	G	P (Subsoil)
2CK	75-130	F	P		G	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.049
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: MOOSE HILLS SOILS ARE DEVELOPED ON CLAY LOAM TO CLAY TEXTURED TILL. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE A LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THESE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	NEWBROOK (NWB)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	MEDIUM TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AEG	0-30	10YR 5/2	GRAYISH BROWN	MMPL	VFR	FSL	1.1	6.4	0.9	35.	0.4
BTG	30-60	10YR 4/2	DARK GRAYISH BROWN	MMSBK	F	CL-SCL	0.4	6.1	0.5	37.	0.5
BCG	60-90	10YR 5/2	GRAYISH BROWN	MA	F	SCL		7.	0.3	35.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AEG	0-30	G	G	F	F	G	G	G	F (Topsoil)
BTG	30-60	F	F		F	G	G	G	F (Subsoil)
BCG	60-90	F	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. TOPSOIL (AHE OR AHE HORIZON) IS USUALLY ABSENT. INSTEAD, THESE SOILS HAVE AN AEG HORIZON.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	NEWBROOK-PT (ptNWB)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM TILL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	10YR 3/3	DARK BROWN			O					
AEG	20-50	10YR 5/2	GRAYISH BROWN	MMPL	VFR	FSL		6.4	0.9	35.	0.4
BTG	50-80	10YR 4/2	DARK GRAYISH BROWN	MMSBK	F	CL		6.1	0.5	37.	0.5
BCG	80-120	10YR 5/2	GRAYISH BROWN	MA	F	SCL		7.	0.3	35.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								(Peat)
AEG	20-50	G	G		F	G	G	G	F (Topsoil)
BTG	50-80	F	F		F	G	G	G	F (Subsoil)
BCG	80-120	F	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	50 cm (PEAT & AEG HORIZON)
THICKNESS RANGE:	30-70 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF NEWBROOK HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON) UNDERLYING THE PEAT. INSTEAD, THERE IS A GRAYISH BROWN, PLATY AEG HORIZON ABOUT 25 CM THICK.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	OWL RIVER (OWR)	LANDFORM:	BLANKET, UNDULATING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-28	10YR 4/2	DARK GRAYISH BROWN	WFGR	FR	FSL	3.2	6.1	0.5	57.	0.3
AEGJ	28-35	10YR 6/2	LIGHT BROWNISH GRAY	MMPL	FR	FSL	0.4	5.6	0.3	34.	0.3
BTGJ	35-80	10YR 4/2	DARK GRAYISH BROWN	WMSBK	F	SL-SCL		7.	0.3	42.	0.4
BC	80-120	10YR 5/3	BROWN	MA	FR	SL-SCL		6.9	0.1	34.	0.4

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-28	G	G	G	F	G	G	G	F (Topsoil)
AEGJ	28-35	G	G	P	F	G	G	G	P (Topsoil)
BTGJ	35-80	F	F		G	G	G	G	F (Subsoil)
BC	80-120	G	F		G	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SANDY LOAM TO SANDY CLAY LOAM TEXTURED MATERIAL. THE SANDY LOAM TEXTURED MATERIAL IS UNSTABLE ON EXPOSED FACES. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THERE IS AN LH AND AE HORIZON. IN CULTIVATED AREAS, THE AP HORIZON IS A MIXTURE OF THE SURFACE HORIZONS.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	OWL RIVER-XT (xtOWR)	LANDFORM:	VENEER, UNDULATING
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-5%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MODERATELY FINE GLACIOLACUSTRINE/TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AE	0-40	10YR 5/3	BROWN	MMPL	VFR	FSL	0.8	7.	0.4	25.	
2BT	40-80	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	L-CL		6.7	0.2	33.	
2BC	80-100	10YR 5/4	YELLOWISH BROWN	WFSBK	F	L-CL		6.8	0.3	40.	
2CK	100-130	10YR 5/3	BROWN	MA	F	L-CL		7.6	0.4	40.	

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AE	0-40	G	G	P	G	G	F		P (Topsoil)
2BT	40-80	F	F		G	G	G		F (Subsoil)
2BC	80-100	F	F		G	G	G		F (Subsoil)
2CK	100-130	F	F		F	G	G	G	F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	25 cm
THICKNESS RANGE:	20-30 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.063
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	YES

NOTES: VARIANT OF OWL RIVER HAVING LOAM TO CLAY LOAM TEXTURED TILL WITHIN 1 M.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	PINEHURST (PIN)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY GRAVELLY, VERY COARSE GLACIOFLUVIAL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AH	0-8	10YR 3/3	DARK BROWN	SGR	VFR	GRL	7.8	6.9	1.2	158.	0.3
AE	8-25	10YR 5/3	BROWN	SGR	L	GRFS	0.6	7.7	0.6	44.	0.4
BM	25-50	10YR 3/3	DARK BROWN	SGR	L	GRCS		7.3	0.6	18.	0.3
CK	50-120	10YR 4/4	DARK YELLOWISH BROWN	SGR	L	GRCS		7.2	0.5	20.	0.2

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AH	0-8	G	P	G	G	G	U	G	U (Topsoil)
AE	8-25	F	P	P	F	G	G	G	P (Topsoil)
BM	25-50	F	P		G	G	P	G	P (Subsoil)
CK	50-120	F	P		G	G	P	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	5-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.040
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	YES
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: PINEHURST SOILS ARE DEVELOPED ON GRAVELLY SAND TEXTURED MATERIAL. EXPOSED FACES ARE UNSTABLE. IN FORESTED AREAS, TOPSOIL IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE A THIN LH HORIZON OVERLYING A LIGHT COLORED AE HORIZON.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	ST.LINA (SLN)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	TERRIC HUMIC MESISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC FEN PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF	0-25	/				O					
OM1	25-51	5YRw 2/2	DARK REDDISH BROWN			O	40.02	6.3			
OM2	51-97	7.5YR 3/2	DARK BROWN			O	45.43	5.8			
OH	97-120	5YRw 2/2	DARK REDDISH BROWN			O	42.69	5.7			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF	0-25								
OM1	25-51								
OM2	51-97								
OH	97-120								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: EXPOSED FACES ARE UNSTABLE BECAUSE OF THE HIGH WATERTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	STEBBING (SBN)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	TYPIC FIBRISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF1	0-33	5YRw 5/4	REDDISH BROWN			O	38.72	3.4			
OF2	33-142	5YRw 3/4	DARK REDDISH BROWN			O	44.77	3.5			
OF3	142-157	5YRw 3/3	DARK REDDISH BROWN			O	45.79				

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF1	0-33								
OF2	33-142								
OF3	142-157								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0	cm
THICKNESS RANGE:		cm
COLOR CHANGE TO SUBSOIL:		
STRIPPING LIMITATIONS:	WETNESS	
WIND EROSION RISK:		
WATER EROSION K=:	-	
RISK ON <5% SLOPE:	-	
RISK ON 5-9% SLOPE:	-	
RISK ON 9-15% SLOPE:	-	

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: EXPOSED FACES ARE UNSTABLE BECAUSE OF THE HIGH WATERTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	TUCKER (TCK)	LANDFORM:	BLANKET, LEVEL,
SOIL ZONE:	GRAY		DEPRESSIONAL
SOIL CLASSIFICATION:	TERRIC MESIC FIBRISOL	TYPICAL SLOPES:	0-1%
PARENT MATERIAL:	ORGANIC SPHAGNUM PEAT	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OF	0-41	5YRw 3/3	DARK REDDISH BROWN			O	39.15	4.4			
OM	41-66	2.5Yw 2/2	VERY DUSKY RED			O	34.73	7.1			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OF	0-41								
OM	41-66								

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: EXPOSED FACES ARE UNSTABLE BECAUSE OF THE HIGH WATERTABLE.

INTERPRETATION GUIDELINES

SCA 21

09/01/93

SOIL SERIES:	WINSTON (WST)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY	TYPICAL SLOPES:	2-30%
SOIL CLASSIFICATION:	DARK GRAY LUVISOL	USUAL SOIL MOISTURE:	MOIST
PARENT MATERIAL:	FINE TILL	SURFACE STONINESS:	SLIGHTLY

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AP	0-18	10YR 3/2	VERY DARK GRAYISH BROWN	MFGR	FR-F	CL	4.5	6.8	0.3	42.	0.2
BT	18-70	10YR 4/4	DARK YELLOWISH BROWN	MMSBK	F	CL-C		6.8	0.3	42.	0.2
CK	70-130	2.5Y 4/4	OLIVE BROWN	MA	F	CL-C		7.8	0.3	45.	0.3

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AP	0-18	P	F	G	G	G	G	G	P (Topsoil)
BT	18-70	F	P		G	G	G	G	P (Subsoil)
CK	70-130	F	P		F	G	G	G	P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	15-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.050
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY LOAM TO CLAY TEXTURED TILL. SEPARATION OF TOPSOIL FROM SUBSOIL BY COLOR IS DIFFICULT UNLESS AN AE HORIZON IS PRESENT.

2.22 Soil Correlation Area #22

General Description of the Area

- Gray and Dark Gray Soil Zone of the North Peace area.
- Occurs north from Manning to High Level, then east to Fox Lake.

Ecoregion/Climate

- Low Boreal Mixedwood ecoregion.
- Agroclimate 3H (moderate heat limitations)
- Growing season P-PE= -200 to -250 mm.
- Precipitation is similar to the Mid Boreal Mixedwood and Aspen Parkland ecoregions but is lower than both the Lower Boreal-Cordilleran and Mid Boreal Mixedwood ecoregions.
- Summer temperatures are warmer than all other Boreal ecoregions. During the winter, only the Mid Boreal Mixedwood is colder.

Soil and Landscapes

- Mainly Dark Gray and Gray Luvisolic with some Solonetzic soils. Gleysolic and Organic soils occupy the poorly drained areas.
- Undulating to level glaciolacustrine deposits are the dominant landforms with some moraine material. Organic terrain occurs in many poorly drained, depressional locations.
- Profile development is generally 55 cm deep with 10 to 15 cm of topsoil.

Soil Reclamation Issues

- The risk of soil erosion by water is generally low, with a moderate to high risk along the Peace River Valley.
- The risk of soil erosion by wind is low.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	BOYER (BYR)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	GRAY SOLODIZED SOLONETZ	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE OR TILL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 4/2	DARK GRAYISH BROWN					7.			
AE	5-17	10YRm 7/3	VERY PALE BROWN	SFPL	F	SIL	0.6	5.2			
AB	17-25	5YRm 3/3	DARK REDDISH BROWN	MMSBK	VF	C	0.9	4.9			
BNT	25-40	5YRm 3/3	DARK REDDISH BROWN	MMCOL	VF	C	1.32	6.2			
BC	40-52	7.5YR 4/2	DARK BROWN	SFSBK	VF	C		7.4			
CSK1	52-82	5YRm 4/3	REDDISH BROWN	MA	F	C		7.8	7.7		
CSK2	82-120	10YRm 3/3	DARK BROWN	STRAT	F	C		7.8	7.		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-17	P	G	P	P				P (Topsoil)
AB	17-25	P	P		P				P (Subsoil)
BNT	25-40	P	P		F				P (Subsoil)
BC	40-52	P	P		G				P (Subsoil)
CSK1	52-82	F	P		F	P			P (Subsoil)
CSK2	82-120	F	P		F	P			P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	8-15 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	VERY THIN
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	YES
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE A THIN LH HORIZON OVERLYING A PLAE BROWN, PLATY AE HORIZON. THE BNT HAS AN UNDESIRABLE STRUCTURE AND THE LOWER SUBSOIL IS SALINE AND SODIC.

CADOTTE

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	CADOTTE (CTE)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	1-5%
SOIL CLASSIFICATION:	SOLONETZIC GRAY LUVISOL	USUAL SOIL MOISTURE:	TEMPORARY PONDING
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 2/2	VERY DARK BROWN					6.3			
AE	5-18	10YRm 7/2	LIGHT GRAY	SCPL	F	L	0.8	5.4			
AB	18-28	10YRm 5/2	GRAYISH BROWN	SBK	F	SIC	0.5	4.8			
BTNJ	28-51	10YRm 4/3	DARK BROWN	COL	VF	C	0.5	5.3			
BCK	51-69	10YRm 4/2	DARK GRAYISH BROWN	SBK	F	C		7.2			
CCAS	69-120	2.5Ym 4/2	DARK GRAYISH BROWN	MA	F	SICL		7.8			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
AE	5-18	P	G	P	P				P (Topsoil)
AB	18-28	F	P		P				P (Subsoil)
BTNJ	28-51	P	P		P				P (Subsoil)
BCK	51-69	F	P		G				P (Subsoil)
CCAS	69-120	F	F		F				F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.066
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	SPR
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON CLAY TEXTURED MATERIAL. THE B HORIZON HAS SOLONETZIC TENDENCIES WHILE THE LOWER SUBSOIL MAY BE SALINE AND SODIC.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	CHILD LAKE (CHL)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-5	10YRm 2/2	VERY DARK BROWN			O		5.5			
AEG	5-20	5GYm 7/1	LIGHT GREENISH GRAY	SFPL	FR	SICL	0.62	6.5			
BTG	20-50	5GYm 6/1	GREENISH GRAY	WFGR	S	SIC-C	0.54	7.2			
BCG	50-80	5GYm 4/1	DARK GREENISH GRAY	MA	S	SICL		7.4			
CKG	80-120	2.5Ym 4/0	DARK GRAY	MA	S	SICL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-5								
AEG	5-20								(Topsoil)
BTG	20-50								(Subsoil)
BCG	50-80								(Subsoil)
CKG	80-120								(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS GENERALLY ABSENT. INSTEAD, THESE SOILS HAVE A PLATY AEG HORIZON.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	CHILD LAKE-PT (ptCHL)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC LUVIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-15	10YRm 2/2	VERY DARK BROWN			O		5.5			
AEG	15-30	5GYm 7/1	LIGHT GREENISH GRAY	SFPL	FR	SICL	0.62	6.5			
BTG	35-65	5GYm 6/1	GREENISH GRAY	WFGR	S	SIC-C	0.54	7.2			
BCG	65-95	5GYm 4/1	DARK GREENISH GRAY	MA	S	SICL		7.4			
CKG	95-120	2.5Ym 4/0	DARK GRAY	MA	S	SICL		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-15								
AEG	15-30								(Topsoil)
BTG	35-65								(Subsoil)
BCG	65-95								(Subsoil)
CKG	95-120								(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	30 cm (PEAT & AEH HORIZON)
THICKNESS RANGE:	30-65 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF CHILD LAKE HAVING 15 TO 50 CM OF SURFACE PEAT. THERE IS LITTLE OR NO TOPSOIL (AH OR AHE HORIZON) UNDERLYING THE PEAT. INSTEAD, THERE IS A GRAYISH, PLATY AEG HORIZON ABOUT 15 CM THICK.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	GRIFFIN-AA (aaGIF)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL (CARBONATED)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHK	0-20	10YRm 3/2	VERY DARK GRAYISH BROWN	GR	FR	CL	6.85	7.5			
CKG1	20-40	10YRm 5/1	GRAY	MA	F	CL	1.8	8.			
CKG2	40-50	10YRm 5/1	GRAY	MA	F	CL		7.9			
CSK	50-120	10YRm 5/1	GRAY	MA	F	CL		7.7	2.8		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHK	0-20	G	F	G	G				F (Topsoil)
CKG1	20-40	F	F		F				F (Subsoil)
CKG2	40-50	F	F		F				F (Subsoil)
CSK	50-120	F	F		F	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 18. SOILS ARE WET ALL YEAR CAUSING EXPOSED FACES TO BE UNSTABLE. THEY ARE USUALL NON-SALINE.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	HELEN-AA (aaHEN)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO HUMIC GLEYSOL (SALINE)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
		SURFACE STONINESS:	NON
PARENT MATERIAL:	VERY FINE GLACIOLACUSTRINE		

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
AHSA	0-15	10YRm 2/1	BLACK	MMGR	FR	SIC	7.53	7.7	15.		
CSAG	15-30	2.5Ym 4/2	DARK GRAYISH BROWN	MA	S	CL		7.8	15.		
CSKG1	30-50	2.5Ym 4/2	DARK GRAYISH BROWN	MA	S	SIC		8.	15.		
CSKG2	50-90	5Ym 4/1	DARK GRAY	MA	S	SIC		7.9	15.		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
AHSA	0-15	G	P	G	F	U			U (Topsoil)
CSAG	15-30	F	F		F	U			U (Subsoil)
CSKG1	30-50	F	P		F	U			U (Subsoil)
CSKG2	50-90	F	P		F	U			U (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	WETNESS
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	YES
IMPORTANT TEXTURE CHANGE:	NO

NOTES: HOME SCA IS 18. DEVELOPED ON SILTY CLAY TEXTURED. GLACIOLACUSTRINE MATERIAL. SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	HIGH LEVEL (HLL)	LANDFORM:	BLANKET
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	1-2%
SOIL CLASSIFICATION:	ORTHIC GRAY LUVISOL	USUAL SOIL MOISTURE:	MESIC
PARENT MATERIAL:	MEDIUM GLACIOFLUVIAL	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 2/1	BLACK				42.04	5.9			
AE	3-15	10YRm 6/4	LIGHT YELLOWISH BROWN	MFPL	L	SIL	0.87	5.3			
BT	15-43	10YRm 5/6	YELLOWISH BROWN	SCGR	FR	SIL	0.45	5.5			
BC	43-55	10YRm 5/6	YELLOWISH BROWN	MFGR	FR	SIL		6.5			
CCASA	55-62	10YRm 6/3	PALE BROWN	MA	FR	SIL		7.6	3.2		
CK	62-120	10YRm 6/3	PALE BROWN	STRAT	FR	SIL		8.	1.7		

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
AE	3-15	F	G	P	P				P (Topsoil)
BT	15-43	G	G		F				F (Subsoil)
BC	43-55	G	G		G				G (Subsoil)
CCASA	55-62	G	G		F	F			F (Subsoil)
CK	62-120	G	G		F	G			F (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	10 cm
THICKNESS RANGE:	8-15 cm
COLOR CHANGE TO SUBSOIL:	NOT OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	LOW
WATER EROSION K=:	0.059
RISK ON <5% SLOPE:	MODERATE
RISK ON 5-9% SLOPE:	HIGH
RISK ON 9-15% SLOPE:	HIGH

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	NO
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: THESE SOILS ARE DEVELOPED ON SILT LOAM TEXTURED, GLACIOFLUVIAL MATERIAL. IN FORESTED AREAS, THERE IS LITTLE OR NO TOPSOIL. INSTEAD, THERE IS AN LH AND AE HORIZON.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	KEG (KEG)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC GLEYSOL	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-5	10YRm 3/2	VERY DARK GRAYISH BROWN				4.5	7.2			
BG	5-25	2.5Ym 3/0	VERY DARK GRAY	SMSBK	VF	HC	1.5	7.			
CG	25-120	10YRm 2/2	VERY DARK BROWN	MA	VF	HC		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-5								
BG	5-25	P	P		G				P (Subsoil)
CG	25-120	P	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	0 cm
THICKNESS RANGE:	0-5 cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: SOILS ARE WET ALL YEAR THEREFORE EXPOSED FACES ARE UNSTABLE. TOPSOIL IS VERY THIN OR ABSENT.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	KEG-PT (ptKEG)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	ORTHIC GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OM	0-20	/				O					
BG	20-40	2.5Ym 3/0	VERY DARK BROWN	SMSBK	VF	HC	1.5	7.			
CG	40-120	10YRm 2/2	VERY DARK BROWN	MA	VF	HC		7.4			

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OM	0-20								(Peat)
BG	20-40	P	P		G				P (Subsoil)
CG	40-120	P	P		G				P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	20 cm PEAT
THICKNESS RANGE:	15-50 cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF KEG WITH 15 TO 50 CM OF SURFACE PEAT. TOPSOIL IS VERY THIN OR ABSENT.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	SAVAGE-PT (ptSVG)	LANDFORM:	LEVEL
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	0-2%
SOIL CLASSIFICATION:	REGO GLEYSOL (PEATY)	USUAL SOIL MOISTURE:	WATERTABLE/PONDING
PARENT MATERIAL:	FINE GLACIOLACUSTRINE	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
OH	0-15	10YRm 2/2	VERY DARK BROWN			O					
CG1	15-47	5Ym 4/1	DARK GRAY	MA	S	C					
CG2	47-87	5Ym 4/1	DARK GRAY	STRAT	S	C					
CG3	87-105	5Ym 6/3	PALE OLIVE	STRAT	S	C					
CG4	105-120	5Ym 4/1	DARK GRAY	MA	S	C					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
OH	0-15								(Peat)
CG1	15-47	P	P					P	(Subsoil)
CG2	47-87	P	P					P	(Subsoil)
CG3	87-105	P	P					P	(Subsoil)
CG4	105-120	P	P					P	(Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm (PEAT)
THICKNESS RANGE:	15-50 cm
COLOR CHANGE TO SUBSOIL:	
STRIPPING LIMITATIONS:	WETNESS, VERY THIN
WIND EROSION RISK:	
WATER EROSION K=:	-
RISK ON <5% SLOPE:	-
RISK ON 5-9% SLOPE:	-
RISK ON 9-15% SLOPE:	-

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	ALL
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: VARIANT OF SAVAGE HAVING 15 TO 50 CM OF SURFACE PEAT. TOPSOIL IS VERY THIN OR ABSENT.

INTERPRETATION GUIDELINES

SCA 22

09/01/93

SOIL SERIES:	SURETTE LAKE (SKE)	LANDFORM:	DUNED
SOIL ZONE:	GRAY AND DARK GRAY	TYPICAL SLOPES:	2-9%
SOIL CLASSIFICATION:	ELUVIATED EUTRIC BRUNISOL	USUAL SOIL MOISTURE:	DROUGHTY
PARENT MATERIAL:	VERY COARSE EOLIAN	SURFACE STONINESS:	NON

TYPICAL SOIL PROFILE:

Horizon	Depth	Color Code	Color Name	Structure	Consistence	Texture	O.C.	pH	EC	Sat%	SAR
LH	0-3	10YRm 2/2	VERY DARK BROWN					5.9			
BM	3-23	7.5YR 4/4	BROWN	SGR	L	S	0.19	6.3			
C1	23-38	7.5YR 6/4	LIGHT BROWN	SGR	L	LFS		6.3			
C2	38-73	10YRm 6/6	BROWNISH YELLOW	SGR	L	S		6.7			
C3	73-154	2.5Ym 6/4	LIGHT YELLOWISH BROWN	SGR	L	S		6.3			
CK	154-200	2.5Ym 6/4	LIGHT YELLOWISH BROWN	SGR	L	S					

SOIL QUALITY RATINGS:

Horizon	Depth	Consistence	Texture	O.C.	pH	EC	Sat%	SAR	Overall Rating
LH	0-3								
BM	3-23	F	P		F				P (Topsoil)
C1	23-38	F	P		F				P (Subsoil)
C2	38-73	F	P		G				P (Subsoil)
C3	73-154	F	P		F				P (Subsoil)
CK	154-200	F	P						P (Subsoil)

TOPSOIL INTERPRETATIONS:

TYPICAL THICKNESS:	15 cm
THICKNESS RANGE:	10-20 cm
COLOR CHANGE TO SUBSOIL:	OBVIOUS
STRIPPING LIMITATIONS:	NONE
WIND EROSION RISK:	MODERATE
WATER EROSION K=:	0.020
RISK ON <5% SLOPE:	LOW
RISK ON 5-9% SLOPE:	MODERATE
RISK ON 9-15% SLOPE:	MODERATE

SUBSOIL (TO 1.5 M) INTERPRETATIONS:

SEASONALLY HIGH W.T.:	NO
HARD BEDROCK:	NO
NON-SODIC SOFTROCK:	NO
SODIC SOFTROCK:	NO
GRAVEL:	NO
STONY LAYER:	NO
FACE INSTABILITY:	YES
SOLONETZIC B HORIZON:	NO
SALINE OR SODIC LOWER SUBSOIL:	NO
IMPORTANT TEXTURE CHANGE:	NO

NOTES: DEVELOPED ON SAND TEXTURED WIND DEPOSITS, EXPOSED FACES ARE UNSTABLE. TOPSOIL (AH OR AHE HORIZON) IS VERY THIN OR ABSENT. INSTEAD, THESE SOILS HAVE A THIN LH HORIZON OVERLYING AN AE OR BM HORIZON.

2.23 Soil Correlation Area #23

General Description of the Area

- Occupies the Cameron Hills Uplands, the Caribou Mountains Upland, and the McIvor Upland in the northeast portion of the Birch Mountains Uplands.

Ecoregion/Climate

- Boreal Subarctic ecoregion of northern Alberta.
- Agroclimate 6H to 7H.
- Growing season P-PE= less than 150 mm.
- Temperatures are colder than the High Boreal Mixedwood ecoregion and the permafrost does not thaw. Temperatures during an Arctic high are warmer at higher elevations.
- Chinooks do not occur.

Soil and Landscapes

- The landscape is composed of shallow, Organic Cryosols over moraine and bedrock.

Soil Reclamation Issues

- Permafrost melt occurs when insulating layers are removed.

NOTE: There are no soil series established in this SCA.

2.24 Soil Correlation Area #24

General Description of the Area

- Canadian Shield - Kazan Upland.
- Occurs in the northeast corner of Alberta around Lake Athabasca.

Ecoregion/Climate

- High Boreal Mixedwood Ecoregion.
- Agroclimate = 6H (very severe heat limitations).
- Growing season P-PE = approximately 0 mm.

Soil and Landscapes

- Landscapes to the north of Lake Athabasca are composed of rolling bedrock with discontinuous veneer and blanket of moraines. To the south, the Harrison River Plain is composed of undulating glaciofluvial deposits.

NOTE: There are no soil series established in this SCA.

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