Appendix 7A Soil Unit Descriptions (Alberta)

7A.1.1 Alliance (ACE, ACEgl) Soil Units

Extent (kilometres/percentage)			ACE: 2.3/0.8 ACEgl:		
Soil Classification			Orthic Black Chernozem ACEgl: Gleyed Black Chernozem		
Parent Material			Glaciolacustrine/Morainal		
Texture: (topsoil/subsoil)			Loam, silt loam/loam, clay loam		
Topography/Percent Slope			1–4/0–9%		
Surface Stoniness			S0-S2 (non-stony to moderately stony)		
Drainage Class			Moderately well drained ACEgl: Imperfectly drained		
Topsoil Depth/Relationship to Topography			12–46 cm/deeper in lower slope positions		
Land Use			ACE: ACEgl:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Black/Brown, dark grayish brown, dark brown, dark yellowish brown (good)		
PROFILE SITE # PM127					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–12	Black	Loam	Granular	Fraible
Bm	12–50	Brown	Silt loam	Weak prismatic	Friable
Ck	50–60	Light yellowish brown	Loam	Massive	Friable
IICk	60–140+	Light olive brown	Loam to sandy loam	Massive	Friable

Comments:

- Colour transition from topsoil to subsoil is good – strip to colour change.
- Textural change between topsoil and subsoil is generally poor.
- Fine textures of the subsoils may result in compaction. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion is moderate. The risk of water erosion is low on slopes less than five percent, moderate on slopes between five to nine percent and moderate on slopes nine to 15%.
- Poor trafficability may be a concern in ACEgl soil units.

7A.1.2 Antonio (ANO, ANOsc) Soil Units

Extent (kilometres/percentage)			ANO: 0.5/0.2 ANOsc:		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciofluvial/Morainal		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam/sandy loam, loamy sand/clay loam, silty clay loam, loam		
Topography/Percent Slope			2–5/2–15%		
Surface Stoniness			S1-2 (slightly stony to moderately stony)		
Drainage Class			Well to moderately well drained		
Topsoil Depth/Relationship to Topography			5–12 cm/no relationship		
Land Use			ANO: ANOsc:		
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Dark brown, brown, dark grayish brown/brown, dark yellowish brown (poor)		
PROFILE SITE # WP199					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–7	Dark brown	Fine sandy loam	Single grain	Very friable
Bm	7–16	Brown	Sandy loam	Single grain	Loose
BC	16–45	Light brownish gray	Fine sandy loam	Single grain	Loose
IICca	45–200	Brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from five to 12 cm.
- Coarse fluvial material may pose trench instability problems in the upper metre of the trench.
- The risk of wind erosion for ANO soils is high – tackifier should be used. The risk of water erosion for ANO soils on slopes less than nine percent is low, but is moderate on slopes of nine to 15 percent.
- ANO soils have up to one metre of fluvial material overlying till. Inclusions of MAB and/or BVL soils within ANO map units are likely, given the variable depths of fluvial overlay.
- ANO soils are droughty and vegetation will be difficult to re-establish – minimal disturbance on pasture and native range areas should be practiced.
- ANOsc soils have saline or sodic lower subsoils and may require alternative handling – refer to the accompanying alignment sheets.

7A.1.3 Brownfield (BFD) Soil Unit

Extent (kilometres/percentage)			BFD: 0.2/<0.1		
Soil Classification			Dark Brown Solod		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam/clay loam, clay		
Topography/Percent Slope			3–6/2–30%		
Surface Stoniness			S2 (moderately stony)		
Drainage Class			Moderately well to well drained		
Topsoil Depth/Relationship to Topography			5–12 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark grayish brown/very dark gray, very dark grayish brown (poor)		
PROFILE SITE # PM338					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–12	Very dark grayish brown	Clay loam	Granular	Friable
AB	12–22	Very dark gray	Clay	Subangular blocky	Fraible
Bnt	22–53	Very dark grayish brown	Clay	Columnar	Firm
Csk	53–90	Very dark grayish brown	Clay loam to clay	Massive	Firm
Cskg	90–200	Very dark gray	Clay loam to clay	Massive	Very firm

Comments:

- Colour transition from surface soil to subsoil is poor, so strip to the depth indicated.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from five to 12 cm.
- Fine textures of the subsoil may result in compaction. Subsoiling in dry soil conditions prior to replacement will help to ameliorate compaction in areas of concern.
- Inclusions of HND and HKR soils are common within BFD map units.
- BFD subsoil is generally saline and sodic.
- The Bnt horizon is undesirable material – do not overstrip.

7A.1.4 Bingville (BVL, BVLsc) Soil Units

Extent (kilometres/percentage)			BVL: 10.6/3.9 BVLsc: 0.7/0.2 BVLxt: 0.8/0.3 BVLyc: 0.5/0.2		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciofluvial		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam/sandy loam, loamy fine sand, loamy sand		
Topography/Percent Slope			2–7/0.6–45 (usually 0.6–5%)		
Surface Stoniness			S0-1 (non-stony to slightly stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			4–37 cm/deeper in lower slope positions		
Land Use			BVL: BVLsc:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Dark grayish brown, very dark grayish brown, brown/dark yellowish brown, yellowish brown, brown (good)		
PROFILE SITE # LW58					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–19	Very dark grayish brown	Fine sandy loam	Granular	Very friable
Bm	19–50	Olive brown	Silt loam	Weak subangular blocky	Friable
Cca	50–200	Light yellowish brown	Very fine sandy loam	Massive	Friable

Comments:

- Topsoil salvage should be to colour change, as there is generally a distinct boundary.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from four to 37 cm for BVL soils. Topsoil is commonly deeper at mid and lower slope positions.
- The coarse fluvial material is likely to pose trench instability problems.
- The risk of wind erosion for BVL soils is high – tackifier should be used during windy conditions. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is moderate on slopes greater than nine percent.
- Inclusions of ANO soils can be expected within BVL soil units where the glaciofluvial material overlying morainal deposits is within trench depth. ANO soils are equivalent to shallow BVL soils over morainal (till) material.

7A.1.5 Cecil (CCL) Soil Unit

Extent (kilometres/percentage)			CCL: 3.6/1.3		
Soil Classification			Solonetzic Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, silt loam/clay loam, loam, silty clay loam		
Topography/Percent Slope			2–4/0.6–9%		
Surface Stoniness			S1-S3 (slightly stony to very stony)		
Drainage Class			Well to moderately well drained		
Topsoil Depth/Relationship to Topography			5–18 cm/deeper in mid to lower slope positions		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, dark grayish brown/dark yellowish brown, yellowish brown, dark grayish brown, dark gray (poor)		
PROFILE SITE # TS210					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–14	Brown	Loam	Granular	Friable
Bntj	14–33	Dark yellowish brown	Clay loam	Subangular blocky	Firm
BC	33–75	Dark yellowish brown	Clay loam	Massive	Firm
Cca	75–110+	Light brownish gray	Loam to clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is poor – strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Fine textures of the subsoils may result in compaction. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion is moderate. The risk of water erosion is low on slopes less than nine percent and moderate on slopes nine to 15percent.
- The Btnj horizon is undesirable material – do not overstrip.
- Inclusions of MAB, HDY and HUK soils may occur within CCL map units.

7A.1.6 Cranford (CFD, CFDsc) Soil Units

Extent (kilometres/percentage)			CFD: 0.4/0.1 CFDsc: 0.1/<0.1		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciolacustrine/Morainal		
Texture: (topsoil/subsoil)			Loam, silt loam/loam, clay loam, silty clay loam, silt loam		
Topography/Percent Slope			2–3/0.6–5%		
Surface Stoniness			S0-S1 (non-stony to slightly stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			7–17 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Dark brown, brown, dark grayish brown/brown, dark yellowish brown, yellowish brown (good)		
PROFILE SITE # WP18					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–15	Dark brown	Loam	Granular	Friable
Bm	15–53	Brown	Loam	Weak subangular blocky	Friable
IICca	53–200	Dark grayish brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is generally good. Areas with poor colour change have been accounted for on the soils alignment sheets and should be stripped to the depth indicated.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for CFD soils range from 7–17 cm.
- Compaction may be a concern. Subsoiling in dry soil conditions and discing the topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion is moderate. The risk of water erosion on CFD soils along the proposed RoW is low (all slopes are less than nine percent).
- The CFDsc map unit occurs in native range and will not require alternative soil handling.

7A.1.7 Chin (CHN, CHNsc, CHNyt) Soil Units

Extent (kilometres/percentage)			CHN: 11.4/ CHNsc: 2.2/0.8 CHNyt: 0.6/0.2 CHNzr: 0.4/0.1		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Silt loam, loam, fine sandy loam/silt loam, loam, silty clay loam, clay loam, fine sandy loam		
Topography/Percent Slope			1–5/0–15%		
Surface Stoniness			S0-S1 (non-stony to slightly stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			7–25 cm/deeper in mid to lower slope positions		
Land Use			CHN: CHNsc: CHNyt:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, Dark grayish brown, dark brown/Brown, dark yellowish brown, pale brown (variable)		
PROFILE SITE # TS67					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–13	Brown	Fine sandy loam	Granular	Very friable
Bm	13–45	Yellowish brown	Loam	Weak subangular blocky	Friable
Cca	45–200	Pale brown	Silt loam	Massive	Firm

Comments:

- Consult the alignment sheets for stripping requirements since the colour change between topsoil and subsoil is not always obvious.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from seven to 25 cm for CHN soils, but are most commonly ten to 20 cm. Topsoil is deeper at lower slope positions.
- Note also that soil profiles in lower slope positions commonly have poor colour changes between topsoil and subsoil – use depths on the alignment sheets as a guide.
- Soil handling concerns include potential compaction under large amounts of traffic or under wet conditions. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.
- The wind erosion risk is high for CHN soils, while the water erosion risk is low on slopes less than nine percent and moderate on slopes greater than nine percent.

- Some CHNsc soils are subject to three-lift handling due to subsoil salinity. Follow instructions on the accompanying alignment sheets for stripping specifications.
- Inclusions of CHZ soils (weak solonetzic features) can be expected in CHN soil units.
- In some areas, CHNyt soils will be found where till is within trench depth. Textures are usually similar (i.e. within one textural class) to the overlying CHN glaciolacustrine material.

7A.1.8 Chinz (CHZ) Soil Unit

Extent (kilometres/percentage)			CHZ: 0.8/0.3		
Soil Classification			Solonetzic Brown Chernozem		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Silt loam, loam/silty clay, silty clay loam, clay, clay loam		
Topography/Percent Slope			2–3/0.6–5%		
Surface Stoniness			S0 (non-stony)		
Drainage Class			Well to moderately well drained		
Topsoil Depth/Relationship to Topography			2–11 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Dark grayish brown/dark grayish brown, brown (poor)		
PROFILE SITE # LW87					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–8	Dark grayish brown	Silt loam	Granular	Friable
Btnj	8–29	Dark grayish brown	Silty clay	Subangular blocky	Firm
Csk	29–200	Olive brown	Clay	Massive	Very firm

Comments:

- Colour transition from topsoil to subsoil is poor – strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Fine textures of the subsoils may result in compaction. Subsoiling in dry soil conditions prior to replacement of topsoil, and discing topsoil will help to ameliorate compaction in areas of concern.
- The wind erosion risk is moderate for CHZ soils, while the water erosion risk is low on slopes less than nine percent and moderate on slopes greater than nine percent.
- The Btnj horizon is undesireable material – do not overstrip.
- Inclusions of CHN soils are common within CHZ map units.

7A.1.9 Coronation (CNN, CNNxs) Soil Units

Extent (kilometres/percentage)			CNN: 0.4/0.1 CNNxs: 0.1/<0.1		
Soil Classification			Orthic Dark Brown Chernozem		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Loam, silt loam/loam, silt loam, sandy loam, silty clay loam		
Topography/Percent Slope			2–3/0.6–5%		
Surface Stoniness			S1-S2 (slightly stony to moderately stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			13–20 cm/no relationship		
Land Use			CNN: CNNxs:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark grayish brown, dark brown/dark yellowish brown, yellowish brown (good)		
PROFILE SITE # LL110					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–18	Very dark grayish brown	Loam	Granular	Friable
Bm	18–34	Dark yellowish brown	Loam	Subangular blocky	Friable
Cca	34–200	Yellowish brown	Sandy Loam	Single grain	Friable

***Comments**:*

- The colour transition from topsoil to subsoil is generally good - strip to colour change.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from 13–20 cm.
- The risk of wind and water erosion for CNN soils is low for the slopes along the proposed right-of-way.
- CNNxs soils have sandy deposits within one metre that may affect trench stability.

7A.1.10 Current Lake (CUR, CURgl) Soil Units

Extent (kilometres/percentage)	CUR: 2.2/0.8 CURgl: 0.6/0.2
Soil Classification	Dark Brown Solodized Solonetz CURgl: Gleyed Dark Brown Solodized Solonetz
Parent Material	Glaciolacustrine
Texture: (topsoil/subsoil)	Loam, silty clay loam, silt loam/clay loam, clay, silty clay loam, silty clay
Topography/Percent Slope	1–3/0–5%
Surface Stoniness	S0 (non-stony)
Drainage Class	Well drained to moderately well drained CURgl: Imperfectly drained
Topsoil Depth/Relationship to Topography	8–13 cm (8–23 including Ae)/no relationship
Land Use	CUR: CURgl:
Sod Quality (good/poor)	Variable
Colour Transition (topsoil/subsoil); (good/poor)	Very dark grayish brown, dark gray, dark grayish brown/dark grayish brown, brown, pale brown (good when Ae horizon intact)

PROFILE SITE # KD7					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–8	Very dark grayish brown	Silty clay loam	Granular	Friable
Ae	8–23	Brown	Silty clay	Platy	Friable
Bnt	23–46	Very dark grayish brown	Silty clay	Columnar	Firm
BC	46–80	Olive	Silty clay loam	Subangular blocky	Firm
Csak	80–130	Olive gray	Silty clay loam	Massive	Firm
Cskgj	130–200	Olive	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is good when the Ae horizon remains. Strip to hardpan or the depth indicated on the alignments sheets, whichever comes first.
- Textural change between topsoil and subsoil is poor, but the sodic Bnt horizon provides an obvious hardpan layer.
- Fine textures of the subsoils may result in compaction. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion for CUR soils is high. The risk of water erosion is low on slopes less than five percent.
- The Bnt material is undesirable – do not overstrip.
- Lower subsoil material is usually saline and sodic.

7A.1.11 Cavendish (CVD, CVDsc) Soil Units

Extent (kilometres/percentage)			CVD: 10.2/3.8 CVDsc: 0.2/<0.1		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciofluvial or Eolian		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam, loamy fine sand/sandy loam, fine sandy loam, loamy fine sand		
Topography/Percent Slope			2–3/0.6–5%		
Surface Stoniness			S0-S1 (non-stony to slightly stony)		
Drainage Class			Rapidly drained to well drained		
Topsoil Depth/Relationship to Topography			6–32 cm/no relationship		
Land Use			CVD: CVDsc:		
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Dark brown, brown, very dark grayish brown/brown, dark yellowish brown, yellowish brown (good)		
PROFILE SITE # LL34					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–30	Very dark grayish brown	Fine sandy loam	Single grain	Very friable
Bm	30–94	Brown	Loamy fine sand	Single grain	Loose
Cca	94–200	Yellowish brown	Loamy fine sand	Single grain	Loose

Comments:

- Topsoil salvage should be to colour change, as there is generally a distinct boundary.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from six to 32 cm for CVD soils. Topsoil depth does not seem to be related to slope position.
- The coarse fluvial material is likely to pose trench instability problems.
- The risk of wind erosion for CVD soils is high – tackifier should be used during windy conditions. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is moderate on slopes greater than percent.
- Inclusions of coarser BVL soils can be expected within CVD soil units. Occasional instances of finer-textured material (morainal or glaciolacustrine) within trench depth can be expected.
- CVDsc soils are saline and/or sodic in the lower subsoil.

7A.1.12 Dolcy (DCY, DCYsc) Soil Units

Extent (kilometres/percentage)	DCY: 6.6/2.4 DCYsc: 0.9/0.3
Soil Classification	Orthic Dark Brown Chernozem
Parent Material	Glaciofluvial/Morainal
Texture: (topsoil/subsoil)	Sandy loam, loamy sand/sandy loam, loamy sand/loam, clay loam, sandy clay loam (morainal)
Topography/Percent Slope	2–5/0.6–15%
Surface Stoniness	S2-S2 (non-stony to moderately stony)
Drainage Class	Well to moderately well drained
Topsoil Depth/Relationship to Topography	8–27 cm/no relationship
Land Use	DCY: DCYsc:
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Very dark grayish brown, dark brown, brown, dark grayish brown/Dark yellowish brown, brown, yellowish brown (good)

PROFILE SITE # TS176

Horizon	Depth (cm)	Colour	Texture	Structure	Consistence
Ap	0–9	Very dark grayish brown	Loamy sand	Single grain	Loose
Bm	9–49	Dark yellowish brown	Sandy loam	Weak subangular blocky	Very friable
IIBC	49–68	Dark yellowish brown	Loam to clay loam	Massive	Firm
Cca	68–104	Olive brown	Clay loam	Massive	Firm
Ck	104–200	Olive brown	Sandy clay loam	Massive	Firm

***Comments**:*

- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from eight to 27 cm but are usually ten to 15 cm.
- Topsoil salvage should be to colour change as there is generally a distinct boundary. In cases where the colour change is poor, strip to the depth indicated.
- Coarse fluvial material may pose trench instability problems in the upper metre of the trench.
- The risk of wind erosion for DCY soils is high – tackifier should be used, particularly in this windy area of the province. The risk of water erosion for DCY soils is low on slopes less than nine percent and moderate on slopes of nine to 15 percent.
- Dolcy soils have up to one metre of fluvial material overlying till. Inclusions of Hughendon and/or Metisko soils within Dolcy map units will be common, given the variable depths of fluvial overlay.
- DCYsc soils may require alternative handling – refer to the alignment sheets for directions.

7A.1.13 Dishpan (DHP) Soil Unit

Extent (kilometres/percentage)			DHP: 0.2/<0.1		
Soil Classification			Orthic Gleysol (Saline)		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Clay loam/clay loam, clay		
Topography/Percent Slope			1–2/0–2%		
Surface Stoniness			S1-S2 (slightly stony to moderately stony)		
Drainage Class			Poorly drained		
Topsoil Depth/Relationship to Topography			3–6 cm/no relationship		
Land Use			Native range 100%		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, very dark grayish brown, dark grayish brown/grayish brown, pale brown (variable)		
PROFILE SITE # WP252					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ahg	0–3	Brown	Clay loam	Granular	Friable
Bg	3–15	Grayish brown	Clay	Massive	Friable
Cgsa	15–100	Light brownish gray	Clay loam	Massive	Firm
Cskg	100–200	Light yellowish brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is often poor, so strip to the specified depth.
- Textural change between topsoil and subsoil is generally poor.
- Fine textures of the subsoils may result in compaction. Subsoiling in relatively dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction.
- Wetness and poor trafficability are concerns in DHP map units. Given the wet conditions, trench instability is also a concern. The water table may be present within trench depth in DHP units.
- The risk of wind and/or water erosion is low.
- DHP soils are saline and sodic, and occur in many wet “potholes” in the southern prairie.

7A.1.14 Elnora (EOR, EORsc, EORst) Soil Units

Extent (kilometres/percentage)	EOR: 25.5/9.4 EORer: 0.2/<0.1 EORsc: 1.9/0.7 EORst: 1.6/0.6
Soil Classification	Orthic Black Chernozem
Parent Material	Morainal
Texture: (topsoil/subsoil)	Loam/loam, clay loam, sandy clay loam, silty clay loam
Topography/Percent Slope	2–6/0.6–30%
Surface Stoniness	S1-S3 (slightly stony to very stony)
Drainage Class	Well to moderately well drained
Topsoil Depth/Relationship to Topography	9–30 cm/deeper in lower slope positions
Land Use	EOR: EORsc: EORst:
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray, very dark grayish brown/dark brown, brown, yellowish brown (good)

PROFILE SITE # PM160					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–10	Very dark gray	Loam	Granular	Friable
Bm	10–30	Dark brown	Loam	Subangular blocky	Friable
BC	30–40	Dark grayish brown	Loam	Subangular blocky	Friable
Cca	40–55	Light olive brown	Loam	Massive	Friable
Ck	55–155+	Dark grayish brown	Clay loam	Massive	Firm

Comments:

- Topsoil salvage should be to colour change, as there is generally a distinct boundary.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from nine to 30 cm for EOR soils, but are most commonly ten to 20 cm. Topsoil is deeper at lower slope positions, and in level or depressional areas.
- Note also that soil profiles in lower slope positions commonly have poor colour changes between topsoil and subsoil – use depths on the alignment sheets as a guide.
- Soil handling concerns include potential compaction under large amounts of traffic or under wet conditions. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.

- The wind erosion risk is low for EOR soils, while the water erosion risk is low on slopes less than nine percent and moderate on slopes greater than nine percent.
- Some EOR-sc and soil units are subject to three-lift handling due to salinity. Refer to the accompanying alignment sheets for specifications.

7A.1.15 Expanse (EXP) Soil Unit

Extent (kilometres/percentage)			EXP: 0.7/0.2		
Soil Classification			Calcareous Brown Chernozem		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Silt loam, loam/silt loam, silty clay loam, clay loam		
Topography/Percent Slope			2/0.6–2%		
Surface Stoniness			S0 (non-stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			12–15 cm/no relationship		
Land Use			Native range 100%		
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, dark grayish brown/yellowish brown, light yellowish brown (poor)		
PROFILE SITE # TS28					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ahk	0–15	Dark grayish brown	Silt loam	Granular	Friable
Bmk	15–30	Light yellowish brown	Silt loam	Weak subangular blocky	Friable

Comments:

- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated on the accompanying alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for EXP soils range from 12 to 15 cm.
- Compaction may be a concern. Subsoiling in dry soil conditions and discing the topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion is moderate. For the locations where EXP soils occur on the proposed route the risk of water erosion is low.

7A.1.16 Foremost (FMT) Soil Unit

Extent (kilometres/percentage)			FMT: 1.0/0.4		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam/loam, silt loam, sandy loam		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S1-S2 (slightly stony to moderately stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			6–11 cm/no relationship		
Land Use			Native range 100%		
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Dark grayish brown, brown, very dark grayish brown, dark brown/dark yellowish brown, yellowish brown, brown (good)		
PROFILE SITE # LW132					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–11	Dark grayish brown	Loam	Granular	Friable
Btj	11–32	Dark yellowish brown	Loam	Subangular blocky	Friable
Cca1	32–105	Light olive brown	Silt loam	Massive	Firm
Cca2	105–200	Dark grayish brown	Sandy loam	Massive	Friable to firm

***Comments**:*

- Colour transition from topsoil to subsoil is generally good. Areas with poor colour change have been accounted for on the soils alignment sheets and should be stripped to the depth indicated.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for FMT soils range from six to 11 cm.
- The risk of wind and/or water erosion is generally low. On slopes greater than nine percent, water erosion control measures should be utilized.
- FMT soils are very similar to HND soils, but typically have occurrences of sandy lenses or layers in the soil profile. Thicker sandy layers may create unstable trench walls.

7A.1.17 Flagstaff (FST) Soil Unit

Extent (kilometres/percentage)	FST: 5.6/2.1
Soil Classification	Solonetzic Dark Brown Chernozem
Parent Material	Morainal
Texture: (topsoil/subsoil)	Loam, sandy loam/clay loam, sandy clay loam, silty clay loam
Topography/Percent Slope	2–5/0.6–15%
Surface Stoniness	S1-S3 (slightly stony to very stony)
Drainage Class	Moderately well to well drained
Topsoil Depth/Relationship to Topography	5–40 cm/deeper in mid to lower slope positions
Land Use	
Sod Quality (good/poor)	Variable
Colour Transition (topsoil/subsoil); (good/poor)	Dark brown, very dark grayish brown, dark grayish brown, brown/dark yellowish brown, very dark grayish brown, dark grayish brown (variable)

PROFILE SITE # CA41					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–7	Dark brown	Sandy loam	Granular	Friable
Btnj	7–30	Dark yellowish brown	Sandy clay loam	Subangular blocky	Firm
Cks	30–58	Light olive brown	Sandy clay loam	Massive	Firm
Ccas	58–200	Light olive brown	Sandy clay loam	Massive	Very firm

Comments:

- Colour transition from topsoil to subsoil is variable. Strip to the depth indicated or to colour change, whichever comes first.
- Textural change between topsoil and subsoil is generally poor.
- Fine textures of the subsoils may result in compaction. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction.
- The risk of wind erosion FST soils is low. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is moderate on slopes greater than nine percent.
- The Btnj horizon is undesireable material – do not overstrip.
- Inclusions of HND and HKR soils can be expected in FST soil units.

7A.1.18 Halkirk (HKR) Soil Unit

Extent (kilometres/percentage)			HKR: 8.3/3.1		
Soil Classification			Dark Brown Solodized Solonetz		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam/clay loam, sandy clay loam, silty clay loam		
Topography/Percent Slope			2–7/0.6–45% (commonly 2–5/0.6–15%)		
Surface Stoniness			S0-S3 (non-stony to very stony)		
Drainage Class			Moderately well drained		
Topsoil Depth/Relationship to Topography			2–31 cm/deeper in lower slope positions		
Land Use					
Sod Quality (good/poor)			Usually poor		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark brown, dark grayish brown/dark yellowish brown, very dark gray, very dark grayish brown, dark gray (poor)		
PROFILE SITE # CA85					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–7	Very dark grayish brown	Loam	Granular	Friable
Bnt	7–35	Dark yellowish brown	Clay loam	Columnar – Prismatic	Very firm
Csk1	35–89	Olive brown	Sandy clay loam	Massive	Very firm
Csk2	89–200	Light olive brown	Clay loam	Massive	Very firm

Comments:

- Follow alignment sheet directions for topsoil stripping since HKR soils often have a poor colour change between topsoil and subsoil.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from two to 31 cm for HKR soils.
- The risk of wind erosion for HKR soils is low. The risk of water erosion for these soils on slopes less than five percent is low, while the risk is moderate on slopes between five and nine percent, and high on slopes greater than nine percent.
- Some three-lift handling of HKR soils is required on cultivated lands – see alignment sheets for specific guidance.
- HKR soils have a Bnt, or hardpan, horizon that is undesirable. Care should be taken to ensure that overstripping does not occur.

7A.1.19 Helmsdale (HMS, HMSsc) Soil Units

Extent (kilometres/percentage)			HMS: 2.4/0.9 HMSsa: 0.1/<0.1 HMSsc: 0.9/0.3 HMSst: 0.1/<0.1		
Soil Classification			Rego Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam, sandy clay loam/clay loam, sandy clay loam, silty clay loam, loam		
Topography/Percent Slope			2–6/0.6–30%		
Surface Stoniness			S2-S3 (moderately stony to very stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			3–25 cm/no relationship		
Land Use			HMS: HMSsc:		
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Dark brown, brown, very dark grayish brown, dark grayish brown/light olive brown, olive brown, grayish brown, light yellowish brown (good)		
PROFILE SITE # SB86					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–11	Dark brown	Sandy clay loam	Granular	Friable
Cca	11–60	Light olive brown	Clay loam	Massive	Firm
Ck	60–200	Olive brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is generally good. Areas with poor colour change have been accounted for on the soils alignment sheets and should be stripped to the depth indicated.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for HMS soils range from three to 25 cm, but are typically ten to 15 cm.
- Compaction may be a concern. Subsoiling in dry soil conditions and discing the topsoil will help to ameliorate compaction.
- The risk of wind erosion for HMS soils is moderate. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is high on slopes greater than nine percent.
- HMSsc soils may be subject to alternative handling procedures – consult the accompanying alignment sheets.

7A.1.20 Hughendon (HND, HNDsc, HNDst, HNDxs, HNDyp) Soil Units

Extent (kilometres/percentage)	HND: 44.0/16.3 HNDglsc: 0.2/<0.1 HNDsc: 4.2/1.5 HNDst: 0.9/0.3 HNDxs: 0.2/<0.1 HNDyp: 1.0/0.4
Soil Classification	Orthic Dark Brown Chernozem/Gleyed Dark Brown Chernozem
Parent Material	Morainal
Texture: (topsoil/subsoil)	Loam, silt loam, clay loam/clay loam, sandy clay loam, silty clay loam, loam
Topography/Percent Slope	2–6/0.6–30%
Surface Stoniness	S1-S3 (slightly stony to very stony)
Drainage Class	Well drained to moderately well drained
Topsoil Depth/Relationship to Topography	4–53 cm/no relationship
Land Use	HND: HNDsc: HNDst: HNDxs: HNDyp:
Sod Quality (good/poor)	Variable
Colour Transition (topsoil/subsoil); (good/poor)	Very dark grayish brown, dark brown, very dark gray, dark grayish brown/brown, dark yellowish brown, yellowish brown, olive brown (generally good)

PROFILE SITE # LL3					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–17	Very dark grayish brown	Silt loam	Platy	Friable
Bm	17–40	Brown	Loam	Subangular blocky	Friable
BC	40–70	Dark grayish brown	Loam	Subangular blocky	Friable
Cca	70–200	Dark grayish brown	Clay loam	Massive	Firm

***Comments**:*

- Colour transition from topsoil to subsoil is generally good. Areas with poor colour change have been accounted for on the soils alignment sheets and should be stripped to the depth indicated.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths for HND soils range from four to 53 cm, but are typically ten to 20 cm.
- Compaction may be a concern. Subsoiling in dry soil conditions and discing the topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion for HND soils is low. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is moderate on slopes greater than nine percent.
- Trench instability is a concern in the HNDxs map unit.
- Some areas of HNDsc soils require alternative handling procedures; these areas have been identified on the accompanying alignment sheets.
- The HNDyp soil units require alternative handling (three-lift) to return bedrock to depth. Consult the alignment sheets for specific stripping requirements.

7A.1.21 Hemaruka (HUK) Soil Unit

Extent (kilometres/percentage)			HUK: 6.2/2.3		
Soil Classification			Brown Solodized Solonetz		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam/clay loam, clay, sandy clay loam		
Topography/Percent Slope			2–4/0.6–9%		
Surface Stoniness			S1-S4 (slightly stony to excessively stony)		
Drainage Class			Well drained, Moderately well drained		
Topsoil Depth/Relationship to Topography			3–23 cm/deeper in mid to lower slope positions		
Land Use					
Sod Quality (good/poor)			Generally poor		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, dark grayish brown, dark gray/brown, dark grayish brown, very dark grayish brown (poor)		
PROFILE SITE # TS221					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–6	Brown	Loam	Granular	Friable
Bnt	6–33	Brown	Clay loam	Subangular blocky	Very hard
Cca	33–118+	Light olive brown	Loam	Massive	Hard

Comments:

- Colour transition from surface soil to subsoil is poor, so strip to the depth indicated or to hardpan (Bnt horizon).
- Textural change between topsoil and subsoil is poor.
- Some Hemaruka map units in cultivated areas are subject to three-lift criteria. See soils alignment sheets for handling recommendations.
- Topsoil depths range from three to 23 cm but are generally five to 10 cm deep.
- Inclusions of CCL and MAB soils are common within HUK map units.
- HUK subsoil is generally saline and sodic.
- The risk of wind erosion for HUK soils is moderate. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is high on slopes greater than nine percent.
- The Bnt horizon is undesirable material – do not overstrip.
- Topsoil depths can be highly variable over a small distance – blowout pits are common.

7A.1.22 Irma (IRM, IRMsc, IRMst) Soil Units

Extent (kilometres/percentage)			IRM: 0.6/0.2 IRMsc: 0.5/0.2 IRMst: 1.1/0.4		
Soil Classification			Orthic Black Chernozem		
Parent Material			Glaciofluvial		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam, loamy fine sand/sandy loam, loamy sand		
Topography/Percent Slope			2–6/0.6–30%		
Surface Stoniness			S0-S2 (non-stony to moderately stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			10–30 cm/deeper at mid to lower slope positions		
Land Use			IRM: IRMsc: IRMst:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray/dark brown, brown, dark yellowish brown, yellowish brown (good)		
PROFILE SITE # PM143					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–26	Black	Sandy loam	Granular	Friable
Bm	26–62	Dark brown	Sandy loam	Weak subangular blocky	Friable
BC	62–100	Brown	Loamy sand	Single grain	Loose
C	100–120	Very dark grayish brown	Loamy sand	Single grain	Loose
Ck1	120–160	Yellowish brown	Sandy loam	Massive	Friable
Ck2	160–200	Dark yellowish brown	Sand	Single grain	Loose

***Comments**:*

- Topsoil salvage is generally to colour change, as there is a distinct boundary.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from ten to 30 cm for IRM soils. Topsoil is deeper at mid to lower slope positions.
- The coarse glaciofluvial material is likely to pose trench instability problems.

- The risk of wind erosion for IRM soils is high – tackifier should be used during windy conditions. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is moderate on slopes greater than nine percent.
- As gravels and saline subsoils were encountered within IRM soil units, alternative handling practices may be required – consult the alignment sheets.
- Inclusions of ROS soils within IRM soil units can be expected wherever the glaciofluvial blanket is thinner.

7A.1.23 Killam (KLM) Soil Unit

Extent (kilometres/percentage)			KLM: 0.6/0.2		
Soil Classification			Black Solodized Solonetz		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, sandy loam, clay loam/clay loam, clay, loam		
Topography/Percent Slope			3–6/2–30%		
Surface Stoniness			S0 (non-stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			7–27 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark gray, black, very dark grayish brown/ brown, very dark gray, very dark grayish brown (good if Ae horizon is present)		
PROFILE SITE # PM218					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–11	Very dark gray	Sandy loam	Granular	Friable
Ae	11–27	Brown	Loamy sand	Platy	Very friable
Bnt	27–46	Very dark grayish brown	Clay	Columnar	Very firm
Csak	46–100	Olive brown	Loam to clay loam	Massive	Firm
Csk	100–120	Olive brown	Sandy loam	Massive	Friable
Csak2	120–200	Olive brown	Loam to clay loam	Massive	Firm

Comments:

- The colour change between topsoil and subsoil is good where a light gray or brown Ae horizon is present - where absent strip to the depth indicated.
- Compaction is a concern for these finer-textured soils. Subsoiling in dry conditions and discing the topsoil will help to mitigate this concern. Do not allow heavy traffic during wet conditions.
- The Bnt horizon is undesirable material and care must be taken to ensure that the topsoil is not overstripped. A noticeable Bnt ‘hardpan’ will be felt when stripping.
- The risk of wind is low for Killam soils. The risk of water erosion is low on slopes less than five percent, moderate for slopes between five and nine percent, and high for steeper slopes.
- KLM subsoils are saline and sodic.

7A.1.24 Kitsim (KTM) Soil Unit

Extent (kilometres/percentage)			KTM: 2.4/0.9 KTMsa: 0.4/0.1		
Soil Classification			Rego Gleysol, Rego Humic Gleysol, Orthic Gleysol, Orthic Humic Gleysol		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam, silt loam/clay loam, clay, sandy clay loam, silty clay loam, loam		
Topography/Percent Slope			1–3/0–5%		
Surface Stoniness			S0-S2 (non-stony to moderately stony)		
Drainage Class			Poorly or imperfectly drained		
Topsoil Depth/Relationship to Topography			8–30 cm/KTM soils are depressional		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Dark gray, dark grayish brown, grayish brown, very dark grayish brown/brown, dark grayish brown, very dark grayish brown (generally poor)		
PROFILE SITE # CA269					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ahe	0–10	Grayish brown	Silt loam	Granular	Friable
Bg	10–45	Brown	Loam	Weak subangular blocky	Friable
Cg	45–200	Light olive brown	Loam to clay loam	Massive	Firm

***Comments**:*

- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated.
- Textural change between topsoil and subsoil is generally poor.
- Trench stability is a potential concern due to soil wetness. The water table may be present within trench depth.
- Because these areas are generally wet, trafficability is a concern.
- The risk of wind and/or water erosion is low.
- Fine textures of the subsoil may result in compaction. Subsoiling in agricultural areas during relatively dry soil conditions prior to replacement will help to ameliorate compaction.

7A.1.25 Kirriemuir (KUR) Soil Unit

Extent (kilometres/percentage)			KUR: 4.2/1.5		
Soil Classification			Orthic Dark Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, silt loam/loam, silt loam		
Topography/Percent Slope			3–5/2–15%		
Surface Stoniness			S2 (moderately stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			10–21cm/no relationship		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Dark grayish brown, brown, very dark grayish brown/light olive brown, olive brown, yellowish brown (good)		
PROFILE SITE # PM262					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–18	Dark grayish brown	Loam	Granular	Friable
Bm	18–60	Light olive brown	Loam	Subangular blocky	Friable
Ck	60–120+	Light olive brown	Loam	Massive	Friable

Comments:

- Colour transition from topsoil to subsoil is generally good. Areas with poor colour change have been accounted for on the soils alignment sheets and should be stripped to the depth indicated.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths for KUR soils range from ten to 21 cm.
- The risk of wind erosion for KUR soils is low. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is moderate on slopes greater than nine percent.

7A.1.26 Lanfine (LFE, LFEst) Soil Units

Extent (kilometres/percentage)			LFE: 1.3/0.5 LFEst:		
Soil Classification			Eluviated Black Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam/clay loam, sandy clay loam, silty clay loam		
Topography/Percent Slope			2–4/0.6–9%		
Surface Stoniness			S0-S1 (non-stony to slightly stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			9–39 cm/deeper in lower areas		
Land Use			LFE: LFEst:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, black, very dark gray/dark yellowish brown, yellowish brown (good)		
PROFILE SITE # TS140					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–9	Very dark grayish brown	Loam	Granular	Friable
Bt	9–33	Dark yellowish brown	Clay loam	Subangular blocky	Firm
BC	33–49	Yellowish brown	Clay loam	Massive	Friable
Cca	49–89	Light olive brown	Clay loam	Massive	Firm
Ck	89–200	Olive brown	Clay loam	Massive	Firm

***Comments**:*

- Topsoil salvage should be to colour change, as there is generally a distinct boundary.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from nine to 39 cm for LFE soils. Topsoil is deeper at lower slope positions, and in level or depressional areas.
- Note also that soil profiles in lower slope positions commonly have poor colour changes between topsoil and subsoil – use depths on the alignment sheets as a guide.
- Soil handling concerns include potential compaction under large amounts of traffic or under wet conditions. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.
- The wind erosion risk is low for LFE soils, while the water erosion risk is low on slopes less than nine percent and moderate on slopes greater than nine percent.

7A.1.27 Maleb (MAB, MABsc, MABgl, MABst) Soil Units

Extent (kilometres/percentage)			MAB: 49.0/18.1 MABer: 0.1/<0.1 MABsc: 1.0/0.4 MABgl: 0.1/<0.1 MABst: 0.3/0.1		
Soil Classification			Orthic Brown Chernozem MABgl: Gleyed Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, silt loam, sandy loam/loam, clay loam, sandy clay loam		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S1-S3 (slightly stony to very stony) MABst: S4 (exceedingly stony)		
Drainage Class			Well drained to moderately well drained MABgl: Imperfectly drained		
Topsoil Depth/Relationship to Topography			4–32 cm/thinner in upper and crest positions		
Land Use			MAB: MABsc: MABgl: MABst:		
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Dark brown, brown, dark grayish brown/dark yellowish brown, yellowish brown, brown (good)		
PROFILE SITE # CA147					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–15	Dark brown	Loam	Granular	Friable
Bm	15–40	Dark yellowish brown	Clay loam	Weak subangular blocky	Friable
Ck	40–124+	Olive brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is generally good. Areas with poor colour change have been accounted for on the soils alignment sheets and should be stripped to the depth indicated.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for MAB soils range from four to 32 cm, but are typically ten to 20 cm.
- Compaction may be a concern. Subsoiling in dry soil conditions and discing the topsoil will help to ameliorate compaction in areas of concern.
- The risk of wind erosion for MAB soils is moderate, while the risk of water erosion is low except for slopes greater than nine percent, where the erosion risk is moderate.
- MABsc soils may be subject to alternative soil handling – refer to the alignment sheets.

7A.1.28 Metisko (MET, METst) Soil Units

Extent (kilometres/percentage)			MET: 3.8/1.4 METst: 0.7/0.3		
Soil Classification			Orthic Dark Brown Chernozem		
Parent Material			Glaciofluvial		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam/sandy loam, fine sandy loam, loamy five sand		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S0-S2 (non-stony to moderately stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			7–24 cm/no relationship		
Land Use			MET: METst:		
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark grayish brown, dark gray/dark yellowish brown, yellowish brown, brown (good)		
PROFILE SITE # WP170					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–16	Very dark grayish brown	Fine sandy loam	Granular	Very friable
Bm	16–31	Dark yellowish brown	Sandy loam	Single grain	Loose
BC	31–75	Yellowish brown	Sandy loam	Single grain	Loose
Ck1	75–160	Brown	Sandy loam	Single grain	Loose
Ck2	160–200	Yellowish brown	Very fine sandy loam	Single grain	Loose

***Comments**:*

- Colour transition from topsoil to subsoil is generally good – strip to colour change.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from sevem to 24 cm, but are most commonly ten to 20 cm.
- Metisko soils have at least one metre of fluvial material. In some cases this may overlie finer-textured morainal deposits within trench depth.
- Trench instability is a concern due to the coarse textured MET material.
- MET soils are at high risk of wind erosion – use tackifier where required. Water erosion risk is low on slopes of less than nine percent.

7A.1.29 Neutral (NUT) Soil Unit

Extent (kilometres/percentage)			NUT: 2.1/0.8		
Soil Classification			Rego Dark Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam, silt loam/clay loam, silty clay loam, sandy clay loam, silt loam		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S1-S3 (slightly stony to very stony)		
Drainage Class			Well to moderately well drained		
Topsoil Depth/Relationship to Topography			4–30 cm/deeper in mid to lower slope positions		
Land Use					
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark grayish brown, dark gray/dark grayish brown, yellowish brown, light olive brown, olive brown (good)		
PROFILE SITE # LL60					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–13	Very dark grayish brown	Loam to clay loam	Granular	Friable
Cca	13–30	Dark grayish brown	Clay loam	Subangular blocky	Friable
Ccas	30–200	Dark grayish brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is generally good – strip to colour change.
- Textural change between topsoil and subsoil is generally poor (change of one textural class).
- Topsoil depths range from four to 30 cm, but are most commonly ten to 15 cm.
- The risk of wind and water erosion is generally low, but becomes moderate for water erosion on slopes greater than nine percent.
- Fine textures of the subsoil may result in compaction. Subsoiling in dry soil conditions prior to replacement will help to ameliorate compaction in areas of concern.

7A.1.30 Onnevue (OVE, OVEst, OVEsc) Soil Units

Extent (kilometres/percentage)			OVE: 4.4/1.6 OVEst: OVEsc: 0.2/<0.1		
Soil Classification			Solonetzic Dark Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, clay loam/loam, clay loam		
Topography/Percent Slope			3–6/2–30%		
Surface Stoniness			S0-S4 (non-stony to exceedingly stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			7–14 cm/no relationship		
Land Use			OVE: OVEst: OVEsc:		
Sod Quality (good/poor)					
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark grayish brown, dark gray, dark brown/dark yellowish brown, brown, dark grayish brown (variable)		
PROFILE SITE # KD12					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–13	Very dark grayish brown	Clay loam	Granular	Friable
Bm	13–49	Dark yellowish brown	Clay loam	Weak subangular blocky	Firm
Bntjk	49–75	Dark brown	Silty clay	Subangular blocky	Firm
Ck	75–200	Light olive brown	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is variable – strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is poor (loam over loam).
- Topsoil depths range from seven to 14 cm.
- The risk of wind and water erosion is generally low, but becomes moderate for water erosion on slopes greater than nine percent.
- Take care to not overstrip – SAR levels are elevated in the Bntj horizon.

7A.1.31 Patricia (PTA, PTAer, PTAgl) Soil Units

Extent (kilometres/percentage)			PTA: 0.2/<0.1 PTAer: 0.5/0.2 PTAgl: 0.3/0.1		
Soil Classification			Brown Solonetz PTAgl: Gleyed Brown Solonetz		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Loam, clay loam/silty clay loam, clay loam, clay		
Topography/Percent Slope			1–3/0–5%		
Surface Stoniness			S0 (non-stony)		
Drainage Class			Moderately well to well drained PTAgl: Imperfectly drained		
Topsoil Depth/Relationship to Topography			0–8 cm/no relationship		
Land Use			PTA: Native Range 100% PTAer: Native Range 100% PTAgl: Native Range 100%		
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark grayish brown/ dark grayish brown, very dark grayish brown (poor)		
PROFILE SITE # LW75					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–8	Very dark grayish brown	Loam	Granular	Friable
Bnt	8–20	Dark grayish brown	Silty clay loam	Columnar	Firm
Ccas	20–200	Light olive brown	Silty clay loam	Massive	Firm

***Comments**:*

- Colour transition from surface soil to subsoil is poor, so strip to the depth indicated or to hardpan (Bnt horizon).
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from zero to 8 cm; PTA soils are frequently highly eroded and ‘blowouts’ are common.
- Fine textures of the subsoil may result in compaction. Subsoiling in dry soil conditions prior to replacement will help to ameliorate compaction in areas of concern.
- Inclusions of CHN and CHZ soils are common within PTA map units.
- PTA subsoil is generally saline and sodic.
- The Bnt horizon is undesirable material – do not overstrip.
- PTAgl soil units have the potential for poor trafficability due to wetness.

7A.1.32 Pemukan (PUN) Soil Unit

Extent (kilometres/percentage)			PUN: 1.1/0.4		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciofluvial (gravelly at depth)		
Texture: (topsoil/subsoil)			Loamy sand/loamy sand, gravelly loamy sand		
Topography/Percent Slope			3/2–5%		
Surface Stoniness			S2-S4 (moderately stony to exceedingly stony)		
Drainage Class			Rapidly to well drained		
Topsoil Depth/Relationship to Topography			8–15 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Dark brown, brown/brown, dark yellowish brown (poor)		
PROFILE SITE # SB106					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–15	Dark brown	Loamy sand	Single grain	Loose
Bm	15–36	Dark yellowish brown	Loamy sand	Single grain	Loose
BC	36–110+	Dark yellowish brown	Gravelly loamy sand	Single grain	Loose

***Comments**:*

- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated on the alignment sheet.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from eight to 15 cm.
- Trench instability is a concern due to the coarse textured and gravelly PUN material.
- PUN soils are at high risk of wind erosion – use tackifier where required. Water erosion risk is low on slopes of less than nine percent, and moderate on slopes greater than nine percent
- PUN soils usually have a very stony/gravelly B-horizon, hence overstripping is not recommended.

7A.1.33 Red Willow (RED) Soil Unit

Extent (kilometres/percentage)			RED: 4.7/1.7		
Soil Classification			Orthic Black Chernozem		
Parent Material			Glaciofluvial		
Texture: (topsoil/subsoil)			Loamy sand/loamy sand, sand		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S1-S3 (slightly stony to very stony)		
Drainage Class			Rapidly drained, Well drained		
Topsoil Depth/Relationship to Topography			6–30 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, very dark gray/dark yellowish brown, dark brown, brown, yellowish brown (good)		
PROFILE SITE # CA6					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–19	Very dark grayish brown	Loamy sand	Granular	Very friable
Bm	19–36	Dark brown	Sand	Single grain	Loose
BC	36–62	Olive brown	Sand	Single grain	Loose
C	62–200	Light olive brown	Sand	Single grain	Loose

Comments:

- RED soils are a coarser version of IRM soil series (loamy sand to sand versus sandy loam).
- Colour transition from topsoil to subsoil is generally good – strip to colour change.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from six to 30 cm, but are most commonly ten to 25 cm.
- Trench instability is a concern due to the coarse textured material.
- RED soils are at high risk of wind erosion – use tackifier where required. Water erosion risk is low on slopes of less than nine percent, and moderate on slopes greater than nine percent.

7A.1.34 Rainier (RIR) Soil Unit

Extent (kilometres/percentage)			RIR: 1.4/0.5		
Soil Classification			Orthic Brown Chernozem		
Parent Material			Glaciofluvial/Glaciolacustrine		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam, loamy fine sand/sandy loam, loamy sand/		
Topography/Percent Slope			2/0.6–2%		
Surface Stoniness			S0-S1 (non-stony to slightly stony)		
Drainage Class			Rapidly drained		
Topsoil Depth/Relationship to Topography			9–18 cm/no relationship		
Land Use					
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark brown, brown/ dark yellowish brown, yellowish brown (good)		
PROFILE SITE # WP30					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–13	Brown	Loamy fine sand	Single grain	Very friable
Bm	13–38	Dark yellowish brown	Sandy loam	Single grain	Very friable
Ck	38–76	Brown	Fine sandy loam	Single grain	Very friable
IICca	76–200	Yellowish brown	Silt loam	Massive	Firm

***Comments**:*

- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from nine to 18 cm.
- Topsoil salvage should be to colour change as there is generally a distinct boundary. In cases where the colour change is poor, strip to the depth indicated.
- Coarse fluvial material may pose trench instability problems in the upper metre of the trench.
- The risk of wind erosion for RIR soils is high – tackifier should be used, particularly in this windy area of the province. The risk of water erosion for DCY soils is low on slopes less than nine percent and moderate on slopes of nine to 15 percent.
- RIR soils have up to one metre of fluvial material overlying glaciolacustrine deposits. Inclusions of CHN or BVL soils within RIR map units may occur, given the variable depths of fluvial overlay.

7A.1.35 Ronalaine (ROL) Soil Unit

Extent (kilometres/percentage)	ROL: 2.5/0.9
Soil Classification	Solonetzic Brown Chernozem
Parent Material	Morainal
Texture: (topsoil/subsoil)	Loam, fine sandy loam, sandy loam/clay loam, silty clay loam, loam
Topography/Percent Slope	2–5/0.6–15%
Surface Stoniness	S0-S3 (non-stony to very stony)
Drainage Class	Moderately well to well drained
Topsoil Depth/Relationship to Topography	6–14 cm/no relationship
Land Use	
Sod Quality (good/poor)	Usually good
Colour Transition (topsoil/subsoil); (good/poor)	Very dark grayish brown, brown, dark grayish brown, dark brown/dark grayish brown, very dark grayish brown, dark yellowish brown, brown (variable)

PROFILE SITE # CA101

Horizon	Depth (cm)	Colour	Texture	Structure	Consistence
Ap	0–13	Very dark grayish brown	Fine sandy loam	Granular	Friable
Btnj	13–35	Dark yellowish brown	Clay loam	Subangular blocky	Firm
Ck	35–83	Dark grayish brown	Loam	Massive	Firm
Csk	83–200	Dark grayish brown	Loam	Massive	Firm

***Comments**:*

- Colour transition from topsoil to subsoil is often poor. Strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for ROL soils ranged from six to 14 cm.
- Fine textures of the subsoils may result in compaction. Subsoiling in dry soil conditions prior to replacement of topsoil and discing topsoil will help to ameliorate compaction in areas of concern.
- The wind erosion risk is moderate, while the water erosion risk is moderate on slopes greater than nine percent and low on gentler slopes.
- The Btnj horizon is undesirable material – do not overstrip.
- The lower subsoil of ROL soils is typically somewhat sodic.

7A.1.36 Rosebank (ROS, ROSgl, ROSsc) Soil Unit

Extent (kilometres/percentage)	ROS: 3.4/1.2 ROSgl: ROSsc: 1.3/0.5
Soil Classification	Orthic Black Chernozem ROSgl: Gleyed Black Chernozem
Parent Material	Glaciofluvial/Morainal
Texture: (topsoil/subsoil)	Sandy loam, loamy sand/sandy loam, loamy sand/clay loam, sandy clay loam, silty clay loam
Topography/Percent Slope	3–6/2–30%
Surface Stoniness	S0-S2 (non-stony to moderately stony)
Drainage Class	Well drained ROSgl: Imperfectly drained
Topsoil Depth/Relationship to Topography	9–40 cm/deeper in lower slope positions
Land Use	ROS: ROSgl: ROSsc:
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray, very dark grayish brown/dark brown, brown, dark yellowish brown (good)

PROFILE SITE # PM20

Horizon	Depth (cm)	Colour	Texture	Structure	Consistence
Ah	0–40	Black	Sandy loam	Granular	Friable
Bm	40–73	Dark brown	Loam	Weak subangular blocky	Friable
IICk	73–130	Dark grayish brown	Clay loam	Massive	Friable
Cks	130–200	Dark grayish brown	Clay loam	Massive	Firm

***Comments**:*

- Colour transition from topsoil to subsoil is good – strip to colour change.
- Textural change between topsoil and subsoil is generally poor, although the textural change between the glaciofluvial veneer and the underlying morainal material is good.
- Topsoil depths for ROS soils range from nine to 40 cm but are usually ten to 20 cm.
- The wind erosion risk is high, while the water erosion risk is moderate on slopes greater than nine percent and low on gentler slopes.
- The coarse-textured veneer may be unstable on exposed trench walls.
- The lower subsoil of ROSsc soils is saline/sodic – see the alignment sheets for any required alternative soil handling techniques.
- During wetter periods of the year ROSgl soils may have a water table within trench depth and offer poor trafficability.

7A.1.37 Scollard (SCD) Soil Unit

Extent (kilometres/percentage)			SCD: 2.1/0.8		
Soil Classification			Orthic Dark Brown Chernozem		
Parent Material			Glaciofluvial (gravelly)		
Texture: (topsoil/subsoil)			Loamy sand, loamy fine sand/loamy sand, sandy loam, gravelly loamy sand		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S0-S3 (non-stony to very stony)		
Drainage Class			Well to rapidly drained		
Topsoil Depth/Relationship to Topography			8–30 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark brown, dark grayish brown/dark brown, yellowish brown, dark yellowish brown, brown (good)		
PROFILE SITE # TS203					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–17	Very dark grayish brown	Loamy sand	Single grain	Very friable
Bm	17–48	Dark brown	Loam	Weak subangular blocky	Friable
Cca1	48–64	Grayish brown	Loamy sand	Single grain	Loose
Cca2	64–134+	Light olive brown	Gravelly sand	Single grain	Loose

Comments:

- Colour transition from topsoil to subsoil is generally good – strip to colour change or use the depths indicated on the alignment sheets as a guide.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from eight to 30 cm, but are almost most commonly ten to 25 cm.
- Trench instability is a concern due to the coarse textured material.
- SCD soils have a high risk of wind erosion – use tackifier where required. Water erosion risk is low on slopes of less than nine percent, and moderate on slopes greater than nine percent.

7A.1.38 Throne (THR, THRsa) Soil Units

Extent (kilometres/percentage)	THR: 0.3/0.1 THRsa: 1.0/0.3
Soil Classification	Rego Gleysol, Rego Humic Gleysol, Orthic Gleysol, Orthic Humic Gleysol
Parent Material	Glaciolacustrine
Texture: (topsoil/subsoil)	Silt loam, loam, clay loam/silty clay loam, clay loam, clay
Topography/Percent Slope	1–2/0–2%
Surface Stoniness	S0-S1 (non-stony to slightly stony)
Drainage Class	Poorly drained
Topsoil Depth/Relationship to Topography	2–11 cm/all depressional
Land Use	THR: THRsa:
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Very dark grayish brown, very dark gray, dark grayish brown/dark gray, dark grayish brown, gray (poor)

PROFILE SITE # LL152					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ahgk	0–10	Very dark grayish brown	Silt loam	Subangular blocky	Firm
Bgsk	10–40	Dark gray	Silty clay loam	Massive	Firm
Ccasg	40–200	Grayish brown	Loamy fine sand	Massive	Friable

***Comments**:*

- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Trench stability is a concern due to soil wetness. The water table may be present within trench depth.
- Because these areas are generally wet, trafficability is a concern.
- Topsoil depths range from two to 11 cm.
- The risk of wind and/or water erosion is low.
- Most THR soils are saline to the surface (THRsa).

7A.1.39 Travers (TVS) Soil Unit

Extent (kilometres/percentage)			TVS: 0.7/0.2		
Soil Classification			Calcareous Brown Chernozem		
Parent Material			Morainal		
Texture: (topsoil/subsoil)			Loam, silt loam/loam, clay loam, silty clay loam		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S1-S3 (slightly stony to very stony)		
Drainage Class			Well drained		
Topsoil Depth/Relationship to Topography			9–14 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, dark grayish brown/brown, yellowish brown (poor)		
PROFILE SITE # CA137					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–8	Brown	Loam	Granular	Friable
Bmk	8–26	Brown	Loam to clay loam	Subangular blocky	Friable
Cca	26–70	Light olive brown	Clay loam	Massive	Firm
Ck	70–147	Olive brown	Clay loam	Massive	Firm
Csk	147–200	Olive brown	Clay loam	Massive	Firm

Comments:

- TVS soils are equivalent to a calcareous version of MAB soils.
- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated on the accompanying alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Topsoil depths for TVS soils range from nine to 14 cm.
- Compaction may be a concern. Subsoiling in dry soil conditions and discing the topsoil will help to ameliorate compaction.
- The risk of wind erosion for TVS soils is moderate. The risk of water erosion for these soils on slopes less than nine percent is low, while the risk is high on slopes greater than nine percent.

7A.1.40 Vendisant (VST) Soil Unit

Extent (kilometres/percentage)			VST: 3.0/1.1		
Soil Classification			Rego Brown Chernozem		
Parent Material			Eolian		
Texture: (topsoil/subsoil)			Loamy sand, sand, loamy fine sand/loamy sand, loamy fine sand, sand, sandy loam		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S0 (non-stony)		
Drainage Class			Rapidly drained		
Topsoil Depth/Relationship to Topography			5–29 cm/usually deeper in lower slope positions		
Land Use					
Sod Quality (good/poor)			Poor		
Colour Transition (topsoil/subsoil); (good/poor)			Brown, dark grayish brown, dark brown/light yellowish brown, light olive brown, grayish brown, yellowish brown (good)		
PROFILE SITE # LW4					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–8	Brown	Loamy fine sand	Single grain	Loose
C	8–200	Light yellowish brown	Loamy fine sand	Single grain	Loose

Comments:

- Colour transition from topsoil to subsoil is generally good – strip to colour change or use the depths indicated on the alignment sheets as a guide.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from five to 29 cm, but are almost most commonly ten to 25 cm.
- Trench instability is a concern due to the coarse textured material.
- VST soils have a high risk of wind erosion – use tackifier where required. Water erosion risk is low on slopes of less than nine percent, and moderate on slopes greater than nine percent
- VST soils occur in duned areas in close proximity to the South Saskatchewan River.
- VST soils are prone to drought and pose reclamation/revegetation challenges – care should be taken to keep disturbance to a minimum.

7A.1.41 Victor (VTR) Soil Unit

Extent (kilometres/percentage)			VTR: 0.6/0.2		
Soil Classification			Dark Brown Solonetz		
Parent Material			Glaciolacustrine		
Texture: (topsoil/subsoil)			Silt loam, loam/silty clay, silty clay loam, clay, clay loam		
Topography/Percent Slope			2–5/0.6–15%		
Surface Stoniness			S0-S1 (non-stony to slightly stony)		
Drainage Class			Moderately well drained		
Topsoil Depth/Relationship to Topography			3–17 cm/VTR soils usually in level or lower slope positions		
Land Use					
Sod Quality (good/poor)			Variable		
Colour Transition (topsoil/subsoil); (good/poor)			Dark grayish brown, brown, very dark grayish brown/		
PROFILE SITE # KD6					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ah	0–16	Dark grayish brown	Silt loam	Granular	Friable
Bnt	16–45	Very dark grayish brown	Silty clay	Columnar	Firm
Csk1	45–80	Olive brown	Silty clay	Massive	Firm
Csk2	80–150	Light yellowish brown	Silt loam	Massive	Firm
Csk3	150–200	Dark grayish brown	Silty clay loam	Massive	Firm

Comments:

- The colour change between topsoil and subsoil is poor – strip to hardpan, or to the depth indicated on the alignment sheets, whichever is first.
- Compaction is a concern for these finer-textured soils. Subsoiling in dry conditions and discing the topsoil (when deep enough to avoid admixing) where needed will help to mitigate this concern. Do not allow traffic during wet conditions.
- The Bnt horizon is undesirable material and care must be taken to ensure that the topsoil is not overstripped.
- The risk of wind erosion is low for VTR soils. The risk of water erosion is low on less than 5% slopes, moderate on five to nine percent slopes and high on slopes greater than nine percent.
- Topsoil depths for VTR soils are three to 17 cm.
- VTR subsoils are typically saline and sodic.

7A.1.42 Wainwright (WWT) Soil Unit

Extent (kilometres/percentage)			WWT: 0.4/0.2		
Soil Classification			Orthic Dark Brown Chernozem		
Parent Material			Glaciofluvial		
Texture: (topsoil/subsoil)			Sandy loam, fine sandy loam/loamy sand sand, sandy loam		
Topography/Percent Slope			3–4/2–9%		
Surface Stoniness			S2 (moderately stony)		
Drainage Class			Rapidly drained, Well drained		
Topsoil Depth/Relationship to Topography			13–14 cm/no relationship		
Land Use					
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Very dark grayish brown, dark brown, dark gray, dark grayish brown/dark yellowish brown, brown, yellowish brown (good)		
PROFILE SITE # LL157					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–14	Very dark grayish brown	Sandy loam	Granular	Friable
Bm	14–40	Dark yellowish brown	Loamy sand	Granular	Friable
BC	40–100	Yellowish brown	Sand	Single grain	Loose
Cca	100–200	Yellowish brown	Sand	Single grain	Loose

***Comments**:*

- Colour transition from topsoil to subsoil is good – strip to colour change.
- Textural change between topsoil and subsoil is poor.
- Topsoil depths range from 13 to 14 cm.
- WWT map units may have inclusions of DCY soils (glaciofluvial veneer overlying till) due to variable depths of fluvial overlay.
- Trench instability is a concern due to the coarse textures of WWT material.
- WWT soils are at high risk for wind erosion – use tackifier where required. Water erosion risk is low on slopes of less than nine percent, and moderate on slopes greater than nine percent.

7A.1.43 Miscellaneous Gleysol (ZGW, ZGWsa) Soil Units

Extent (kilometres/percentage)			ZGW: 2.8/1.0 ZGWsa: 0.9/0.3		
Soil Classification			Miscellaneous Gleysol		
Parent Material			Morainal, Glaciolacustrine, Glaciofluvial		
Texture: (topsoil/subsoil)			Variable		
Topography/Percent Slope			Depressional		
Surface Stoniness			Variable		
Drainage Class			Imperfectly to very poorly drained		
Topsoil Depth/Relationship to Topography			2–35 cm/all depressional		
Land Use			ZGW: ZGWsa:		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Generally poor		
PROFILE SITE # LL65					
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0–12	Very dark grayish brown	Silt loam	Granular	Friable
Bg	12–35	Brown	Silty clay loam	Subangular blocky	Firm
Cg	35–200	Dark gray	Clay loam	Massive	Firm

Comments:

- Colour transition from topsoil to subsoil is generally poor – strip to the depth indicated on the alignment sheets.
- Textural change between topsoil and subsoil is generally poor.
- Trench stability is a concern due to soil wetness. The water table may be present within trench depth.
- Because these areas are generally wet, trafficability is a concern.
- Topsoil depths range from two to 35 cm but are commonly ten to 25 cm.
- The risk of wind and/or water erosion is low.
- Fine textured subsoils are subject to compaction. Subsoiling in agricultural areas during relatively dry soil conditions prior to replacement will help to ameliorate compaction.

7A.1.44 Miscellaneous Units

Miscellaneous Soil Units

A variety of miscellaneous soil units that do not have an associated soil series name were also encountered within the LSA and are described below. The linear extent of each of these soil units is provided in Table 7-5.

Alluvium (AV)

Alluvium soil units are mapped in proximity to water, and cover active floodplains. The parent material is fluvial and textures vary between coarse sands and moderately fine silt loams and silty clay loams. The pipeline will be bored under most, if not all, AV map units. Handling concerns include trench instability from coarse textures as well as potential water tables.

Disturbed Land (DL)

Areas mapped as DL should be stripped to the depth indicated on the accompanying alignment sheets.

Miscellaneous Regosol (ZUN)

Miscellaneous Regosol (ZUN) soil units are often associated with steeper slopes or in proximity to significant watercourses where profile development is in the early stages. Topsoil depths can vary widely – strip to the depth indicated on the accompanying alignment sheets.

Rough Broken (RB)

Rough Broken soil units are mapped in areas with steep, complex slopes that encompass a range of soil types and parent materials. Along the proposed route this typically includes coulees and slopes into river valleys. These areas are potentially highly erosive following reclamation and may require significant grading during construction. Strip to the depths indicated on the alignment sheets.

Appendix 7B Sample Site Locations for Alberta and Saskatchewan

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1005	CA001	OBLC	RED	GF	SW	17	42	9	481940	5828840	U	S0	3	--	--	IP	19	R	--
1006	CA002	OBLC	RED	GF	SW	17	42	4	481977	5828961	U	S0	3	--	3	IP	21	R	--
1007	CA003	OBLC	REDyg	GF	SW	17	42	9	481985	5829076	U	S1	--	--	3	IP	18	R	--
1008	CA004	OBLC	RED	GF	SW	17	42	9	481978	5829172	U	S0	--	--	3	IP	18	R	--
1009	CA005	OBLC	RED	GF	SW	17	42	9	481979	5829291	U	S0	--	--	3	IP	18	R	--
1010	CA006	OBLC	RED	GF	SW	17	42	9	482013	5829344	U	S0	--	--	2	IP	19	R	
1011	CA007	OBLC	RED	GF	SE	17	42	9	482112	5829579	U	S-0	--	--	3	IP	20	R	
1012	CA008	OBLC	IRM	GF	NE	17	42	9	482171	5829654	U	S-0	--	--	2	IP	15	W	
1013	CA009	OBLC	RED	GF	NE	17	42	9	482244	5829776	U	S-0	--	--	3	IP	14	R	
1014	CA010	OBLC	RED	GF	NE	17	42	9	482338	5829880	U	S-0	--	--	2	IP	23	W	
1015	CA011	OBLC	RED	GF	NE	17	42	9	482469	5830015	H	S-0	--	--	4 – 5	Wo	12	R	
1016	CA012	OBLC	RED	GF	NE	17	42	9	482621	5830198	U	S-0	--	--	3	IP	25	W	
1017	CA013	OBLC	RED	GF	NE	17	42	9	482862	5830385	H	S-1	--	--	4 – 5	Wo	11	R	--
1018	CA014	OBLC	REDyt	GF	SW	21	42	9	482948	5830446	U	S-1	--	--	2	IP	26	W	--
1019	CA015	OBLC	RED	GF	SW	21	42	9	482952	5830579	H	S-0	--	M	4 – 5	IP	10	W	--
1020	CA016	OBLC	RED	GF	SW	21	42	9	482950	5830713	U	S-0	--	D	2	IP	23	R	--
1021	CA017	OBLC	RED	GF	SW	21	42	9	482950	5830788	U	S-0	--	T	3	IP	16	R	--
1022	CA018	OBLC	RED	GF	SW	21	42	9	482951	5830916	U	S-0	--	L	--	IP	6	R	Some surface stones around site.
1023	CA019	OBLC	RED	GF	SW	21	42	9	482951	5831046	U	S-1	--	U	3	IP	30	R	--
1024	CA020	OBLC	ROS	GF/M	NE	21	41	9	484379	5822171	U	S-1	--	M	3	HL	13	--	
1025	CA021	OBLC	IRM	GF	NE	21	41	9	484379	5822046	H	S-0	--	L	4 – 5	HL	12	W	--
1026	CA022	OBLC	IRM	GF	NE	21	41	9	484379	5821918	U	S-0	--	M	3	HL	19	W	--
1027	CA023	OBLC	IRM	GF	NE	21	41	9	484392	5821812	U	S-0	--	U	3	HL	14	W	--
1028	CA024	RBLC	EORzr	M	NE	21	41	9	484405	5821731	U	S-1	--	U	3	HL	14	MW	--
1029	CA025	OBLC	IRM	GF	NE	21	41	9	484403	5821611	H	S-1	--	L	4 – 5	HL	22	W	--
1030	CA026	RBLC	ROSzr	GF/M	SE	21	41	9	484395	5821416	H	S-1	--	M	4 – 5	HL	22	W	--
1031	CA027	OBLC	ROS	GF/M	SE	21	41	9	484397	5821310	H	S-1	--	U	3	HL	20	MW	
1032	CA028	OBLC	EOR	M	SE	21	41	9	484403	5821178	H	S-1	--	U	4 – 5	HL	14	R	
1033	CA029	OBLC	EOR	M	SE	21	41	9	484399	5821087	U	S-1	--	M	3	HL	20	W	
1034	CA030	OBLC	EOR	M	SE	21	41	9	484398	5820961	U	S-1	--	U	3	HL	12	W	
1035	CA031	OBLC	EOR	M	SE	21	41	9	484386	5820823	U	S-1	--	C	3	HL	18	W	
1036	CA032	RHG	DSJ	GF	NE	16	41	9	484400	5820582	L	S-1	--	D	1	HL	25	I	
1037	CA033	OBLC	EOR	M	NE	16	41	9	484388	5820495	U	S-2	--	M	3	HL	20	W	
1038	CA034	OBLC	EOR	M	NE	16	41	9	484405	5820399	U	S-1	--	M	3	HL	18	W	
1039	CA035	OBLC	EOR	M	NE	16	41	9	484400	5820268	H	S-2	--	L	4 – 5	HL	16	W	
1042	CA036	OBLC	EOR	M	NE	16	41	9	484398	5820140	U	S-1	--	--	3	HL	13	W	
1043	CA037	OBLC	EOR	M	NE	16	41	9	484402	5819961	U	S-2	--	M	3	--	19	W	
1044	CA038	DBSS	HKR	M	SW	27	38	8	495320	5793162	L	S-1	--	E	2	NR	5	MW	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1047	CA039	DBSS	HKR	M	SW	27	38	8	495252	5793272	L	S-1	--	E	1	NR	4	MW	--
1049	CA040	DBSS	HKR	M	SW	27	38	8	495208	5793352	L	S-2	--	E	2	NR	5	MW	--
1050	CA041	SZDBC	FST	M	SW	27	38	8	495124	5793427	H	S-2	--	L	4 – 5	HL	7	MW	--
1052	CA042	OBLC	EOR	M	SW	27	38	8	495031	5793583	H	S-1	--	T	4 – 5	HL	17	W	
1053	CA043	OBLC	EOR	M	SW	27	38	8	494944	5793708	H	S-1	--	M	4 – 5	HL	9	W	
1054	CA044	OBLC	EOR	M	SW	27	38	8	494839	5793850	I	S-1	8	M	--	HL	11	W	Too stony and dry to auger past 110 cm.
1056	CA045	DBSS	HKR	M	NW	22	38	8	495420	5793056	L	S-1	--	E	1	NR	3	W	--
1058	CA046	DBSS	HKR	M	NW	22	38	8	495494	5792942	L	S-1	--	E	2	NR	10	W	--
1059	CA047	RBLC	NUT	M	NW	22	38	8	495594	5792816	L	S-1	--	E	2	NR	12	W	--
1060	CA048	DBSS	HKR	M	NE	22	38	8	495774	5792644	H	S-1	--	L	4 – 5	NR	5	W	Site South of Creek (30m approx).
1065	CA049	DBSS	HKR	M	NE	22	38	8	495796	5792533	H	S-2	--	M	4 – 5	NR	3	R	--
1066	CA050	ODBC	HND	M	NE	22	38	8	495892	5792463	U	S-1	--	U	3	Cu	11	W	--
1067	CA051	ODBC	HNDsc	M	SE	22	38	8	495963	5792288	U	S-1	--	U	3	HL	17	W	
1068	CA052	DBSS	HKR	M	SE	22	38	8	496049	5792193	U	S-2	--	M	3	HL	8	W	--
1069	CA053	ODBC	HND	M	SE	22	38	8	496177	5791989	U	S-2	--	M	3	HL	15	W	--
1070	CA054	DBSS	HKR	M	SE	22	38	8	496248	5791873	U	S-1	--	L	3	HL	9	W	--
1071	CA055	ODBC	PRO	GL/M	SE	22	38	8	496369	5791705	H	S-1	--	U	4 – 5	HL	13	W	--
1072	CA056	ODBC	PRO	GL/M	SW	23	38	8	496487	5791567	U	S-1	--	M	3	Cu	8	W	--
1073	CA057	ODBC	HND	M	NW	14	38	8	496618	5791406	U	S-1	--	T	3	Cu	53	W	Some admixing 5–10%
1074	CA058	ODBC	HND	M	NW	14	38	8	496688	5791345	H	S-1	--	M	4 – 5	HL	14	W	
1075	CA059	ODBC	HND	M	NW	14	38	8	496783	5791225	U	S-2	--	--	--	HL	12	W	
1076	CA060	RHG	ZGW	M	NW	14	38	8	496870	5791089	U	S-1	--	--	--	IP	28	I	
1082	CA061	DBSS	HKR	M	NW	14	38	8	496955	5790899	U	S-1	--	--	3	IP	8	W	--
1087	CA062	DBSS	HKR	M	SW	6	38	7	500473	5786862	U	S-1	--	T	3	IP	31	W	
1088	CA063	OBLC	HND	M	SE	6	38	7	500329	5786794	U	S-1	--	L	3	NR	18	W	
1089	CA064	DBSS	HKR	M	SE	6	38	7	500622	5786686	H	S-2	--	U	4 – 5	NR	15	MW	
1091	CA065	ODBC	MET	GF	SE	19	32	4	530607	5733492	H	S-2	--	--	3	HL	16	W	
1092	CA066	ODBC	DCY	GF/M	SE	19	32	4	530652	5734034	H	S-1	--	L	4 – 5	HL	14	W	
1093	CA067	ODBC	HND	M	SE	19	32	4	530616	5734176	H	S-1	--	U	4 – 5	HL	10	R	
1094	CA068	ODBC	HND	M	NE	19	32	4	530601	5734325	H	S-1	--	M	4 – 5	HL	12	W	
1095	CA069	ODBC	HND	M	NE	19	32	4	530579	5734728	H	S-1	--	L	4 – 5	HL	14	W	
1096	CA070	RDBC	NUT	M	NE	19	32	4	530601	5734861	H	S-1	--	T	4 – 5	HL	15	W	--
1097	CA071	ODBC	HND	M	NE	19	32	4	530574	5734996	H	S-1	--	M	5	HL	14	W	
1098	CA072	ODBC	DCY	GF/M	NE	18	32	4	530564	5733211	U	S-1	--	L	3	HL	14	W	
1099	CA073	RHG	THRsa	GL	NE	18	32	4	530724	5732931	L	S-1	--	D	1	Wt	11	I	
1100	CA074	ODBC	HND	M	NE	18	32	4	530757	5732745	U	S-1	--	U	3	Cu	11	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
101	CA075	OHG	ZGW	M	NE	18	32	4	530780	5732463	U	S-1	5	L	3	Cu	15	P	Very wet.
1102	CA076	ODBC	HND	M	SE	18	32	4	530877	5732086	H	S-1	--	M	4 – 5	Cu	20	W	
1103	CA077	ODBC	HND	M	SE	18	32	4	530879	5731977	H	S-2	--	M	4 – 5	Cu	18	MW	
1104	CA078	ODBC	HNDsc	M	SE	18	32	4	530892	5731855	H	S-2	--	U	4 – 5	Cu	15	MW	
1105	CA079	ODBC	HND	M	NE	7	32	4	530940	5731331	H	S-2	--	L	4 – 5	HL	14	W	
1106	CA080	RBBC	NUT	M	NE	7	32	4	530976	5731225	H	S-1	--	U	5	HL	12	W	
1114	CA081	ODBC	HND	M	NE	7	32	4	530976	5731124	H	S-1	--	T	3	HL	17	W	
1115	CA082	ODBC	HNDsc	M	NE	7	32	4	530991	5731019	H	S-1	--	U	4 – 5	HL	10	MW	
1116	CA083	ODBC	HNDsc	M	SE	7	32	4	531043	5730623	U	S-1	--	L	3	Cu	17	MW	
1117	CA084	SZDBC	FST	M	SW	6	38	7	500319	5786942	U	S-1	--	L	3	HL	12	MW	
1118	CA085	DBSS	HKR	M	SW	6	38	7	500255	5787033	U	S-1	--	L	3	NR	7	MW	
1119	CA086	DBSS	HKR	M	SW	6	38	7	500108	5787059	U	S-1	--	M	3	HL	12	MW	Topsoil has minor admixing
1120	CA087	ODBC	HND	M	SW	6	38	7	499992	5787079	H	S-1	--	M	4 – 5	HL	16	MW	
1121	CA088	ODBC	HND	M	SW	6	38	7	499878	5787096	H	S-1	--	L	3	HL	12	MW	
1122	CA089	ODBC	HND	M	SW	6	38	7	499718	5787137	H	S-1	--	U	3	HL	18	W	
1123	CA090	ODBC	HND	M	SE	1	38	8	499545	5787297	H	S-1	--	T	5	Cu	20	MW	
1124	CA091	OHG	ZGW	M	SE	1	38	8	499476	5787390	H	S-1	--	D	3	Cu	20	I	Depression approx 70m wide
1125	CA092	ODBC	HND	M	NE	31	37	7	500683	5786621	H	S-1	--	M	5	NR	10	MW	
1126	CA093	RBC	NUTsc	M	NE	31	37	7	501071	5786557	S	S-1	--	U	7 – 8	NR	6	MW	
1127	CA094	ODBC	HND	M	NW	32	37	7	501528	5786533	H	S-1	--	U	5	NR	4	W	
1128	CA095	ODBC	HND	M	NW	32	37	9	501611	5786564	H	S-1	--	M	6	NR	6	W	
1129	CA096	DBSS	HKR	M	NW	32	37	7	502085	5786563	S	S-1	--	M	7 – 8	NR	3	MW	
1142	CA097	BSS	HUK	M	NE	17	29	4	532584	5704288	U	S-1	--	M	3	NR	7	MW	
1143	CA098	OHG	KTM	M	NE	17	29	4	532598	5704088	L	S-0	--	D	1	Wt	11	P	
1144	CA099	SZBC	ROL	M	SE	17	29	4	532668	5703322	U	S-2	--	T	3	Cu	9	MW	
1145	CA100	SZBC	ROL	M	SE	17	29	4	532684	5703015	U	S-2	--	U	3	NR	8	W	
1146	CA101	SZBC	ROL	M	SE	17	29	4	532668	5702853	U	--	--	L	3	Cu	13	MW	--
1147	CA102	SZBC	ROL	M	SE	17	29	4	532678	5702713	U	S-2	--	U	3	Cu	11	W	--
1148	CA103	DBSS	HKR	M	NE	20	38	4	532974	5695888	U	S-2	--	L	4 – 5	Cu	13	MW	--
1149	CA104	SZDBC	FST	M	SE	20	28	4	532978	5695358	U	S-2	--	M	3	NR	8	MW	Erosion on parallel RoW
1150	CA105	DBSS	HKR	M	SE	20	28	4	533040	5695082	U	S-2	--	T	2	NR	6	MW	--
1151	CA106	DBSS	HKR	M	SE	20	28	4	533056	5695007	U	S-2	--	L	4 – 5	NR	6	MW	--
1152	CA107	DBSS	HKR	M	SE	20	28	4	533117	5694628	U	S-2	--	M	4 – 5	NR	11	MW	Too stony to auger 130cm +.
1153	CA108	SZDBC	FST	M	NE	17	28	4	533140	5694391	U	S-2	--	M	4 – 5	Cu	10	W	--
1154	CA109	ODBC	HND	M	NE	17	28	4	533110	5694244	U	S-2	--	L	3	Cu	9	MW	--
1155	CA110	SZDBC	FST	M	NE	17	28	4	533110	5693791	U	S-2	--	T	3	Ot	10	MW	Site located 35m North of Wetland.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1156	CA111	OG	KTM	M	SE	17	28	4	533118	5693735	L	S-0	--	D	1	Wt	9	P	Surface water table
1157	CA112	SZDBC	FST	M	SE	17	28	4	533111	5693556	U	S-2	--	L	3	Ot	11	MW	--
1158	CA113	SZDBC	FST	M	SE	17	28	4	533092	5693258	U	S-2	--	M	4 - 5	Ot	12	W	--
1159	CA115	ODBC	HND	M	NE	29	27	4	533121	5687924	Ro	S-2	--	M	4 - 5	IP	7	W	--
1160	CA116	ODBC	HNDyg	M	NE	29	27	4	533112	5687754	U	S-2	--	U	3	NR	13	W	--
1161	CA117	ODBC	HND	M	NE	29	27	4	533135	5687500	U	S-2	--	M	3	IP	11	W	Erosion on parallel RoW
1162	CA118	ODBC	HND	M	SE	29	27	4	533129	5687216	U	S-2	--	L	3	IP	12	W	--
1163	CA119	ODBC	HND	M	SE	29	27	4	533109	5686959	U	S-2	--	C	3	NR	9	W	--
1164	CA120	ODBC	HNDer	M	SE	29	27	4	533121	5686515	U	S-2	--	M	3	NR	5	W	--
1165	CA121	RDB	NUT	M	NE	20	27	4	533131	5686285	Ro	S-3	--	M	4 - 5	Cu	9	W	--
1166	CA122	ODBC	HND	M	NE	20	27	4	533133	5685889	U	S-2	--	L	3	Cu	15	W	--
1167	CA123	ODBC	HND	M	SE	20	27	4	533123	5685504	U	S-2	--	L	4 - 5	Cu	10	W	--
1168	CA124	OHG	KTM	M	SE	20	27	4	533182	5685303	L	S-0	--	D	1	Wt	30	P	Seasonal Water Table, site located on slough (60m wide).
1169	CA125	OBLC	MAB	M	NE	8	27	4	533211	5683033	U	S-2	--	L	3	NR	6	W	--
1170	CA126	OBLC	MAB	M	NE	8	27	4	533156	5682727	U	S-2	--	M	3	NR	9	W	--
1171	CA127	OBLC	MAB	M	SE	8	27	4	533132	5682392	U	S-2	--	L	3	HL	13	W	--
1172	CA128	RBC	HMS	M	SE	8	27	4	533121	5682101	U	S-2	--	L	3	HL	13	MW	
1173	CA129	RBC	MABzr	M	SE	8	27	4	533122	5681946	U	S-2	--	L	3	Cu	10	--	
1174	CA130	OBLC	MAB	M	NE	5	27	4	533175	5680918	U	S-2	--	L	4 - 5	Cu	25	W	--
1175	CA131	OBLC	MAB	M	NE	5	27	4	533127	5681059	U	S-2	--	L	3	Cu	18	MW	--
1176	CA132	OG	KTM	M	NE	5	27	4	533068	5681322	L	S-2	--	D	1	Wt	8	P	
1177	CA133	OBLC	MABsc	M	SE	5	27	4	533242	5680413	U	S-2	--	M	3	Cu	12	MW	--
1178	CA134	OBLC	MAB	M	NE	32	26	4	533373	5679914	Ro	S-2	--	M	3	Cu	10	W	--
1179	CA135	OBLC	MABsc	M	NE	32	26	4	533399	5679413	Ro	S-2	--	L	3	Cu	8	MW	--
1180	CA136	CABC	TVS	M	SE	32	26	4	533446	5678454	Ro	S-2	--	L	3	Cu	11	W	--
1181	CA137	CABC	TVS	M	SE	32	26	4	533431	5678608	Ro	S-3	--	M	4 - 5	Cu	9	MW	--
1182	CA138	OBLC	MAB	M	NE	29	26	4	533461	5677933	Ro	S-3	--	M	4 - 5	Ot	10	W	--
1183	CA139	OBLC	MAB	M	NE	29	26	4	533455	5677792	Ro	S-3	--	M	4 - 5	Ot	11	MW	--
1184	CA140	OBLC	MAB	M	NE	29	26	4	533456	5677639	Ro	S-2	--	M	3	Ot	13	W	--
1185	CA141	OBLC	MAB	M	SE	29	26	4	533466	5677397	Ro	S-2	--	M	3	Ot	20	MW	--
1186	CA142	OBLC	MAB	M	SE	29	26	4	533524	5676892	Ro	S-2	--	M	3	Ot	11	W	--
1187	CA143	OBLC	MAB	M	NE	20	26	4	533515	5676292	U	S-2	--	L	4 - 5	Cu	12	W	--
1188	CA144	RBC	HMS	M	NE	20	26	4	533492	5676160	U	S-2	--	M	3	Cu	13	MW	Sandy layer in Csk3 (15cm thick).
1189	CA145	RBC	HMS	M	NE	20	26	4	533515	5675999	U	S-2	--	L	3	Cu	10	W	--
1190	CA146	OBLC	MAB	M	SE	20	26	4	533493	5675871	U	S-2	--	T	3	Cu	20	MW	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1191	CA147	OBLC	MAB	M	SE	20	26	4	533458	5675763	U	S-2	--	T	3	Ot	15	MW	--
1192	CA148	OBLC	MAB	M	SE	20	26	4	533433	5675642	U	S-2	--	L	3	Ot	14	W	--
1193	CA149	CABC	TVS	M	NE	17	26	4	533363	5674811	U	S-3	--	T	4 - 5	Cu	9	W	--
1194	CA150	OBLC	MAB	M	NE	17	26	4	533383	5674682	U	S-3	--	M	3	Cu	11	W	--
1195	CA151	RBC	HMS	M	SE	17	26	4	533439	5673862	U	S-3	--	M	3	Ot	9	MW	--
1196	CA152	OBLC	MABsc	M	SE	17	26	4	533417	5673757	U	S-3	--	T	3	Ot	15	MW	--
1197	CA153	OBLC	MAB	M	SE	17	26	4	533437	5673582	U	S-3	--	L	--	Ot	12	MW	--
1198	CA155	OBLC	MAB	M	NE	8	26	4	533439	5673455	U	S-2	--	L	3	NR	7	W	--
1199	CA156	OBLC	MAB	M	NE	8	26	4	533426	5673211	U	S-2	--	L	3	NR	8	W	--
1200	CA157	SZBC	ROL	M	NE	8	26	4	533446	5673051	U	S-2	--	M	3	NR	10	MW	--
1201	CA158	SZBC	ROL	M	NE	8	26	4	533427	5672922	U	S-2	--	U	4 - 5	NR	7	MW	--
1202	CA159	OBLC	MAB	M	SE	8	26	4	533453	5672495	U	S-2	--	L	3	NR	7	MW	--
1203	CA160	OBLC	MAB	M	SE	8	26	4	533491	5672366	U	S-2	--	M	3	NR	8	MW	--
1204	CA161	OBLC	MAB	M	SE	8	26	4	533530	5672220	U	S-2	--	M	4 - 5	HL	8	MW	--
1205	CA162	OBLC	MAB	M	NE	5	26	4	533538	5671471	U	S-2	--	M	3	HL	11	W	--
1206	CA163	OBLC	MAB	M	NE	5	26	4	533520	5671335	U	S-2	--	M	4 - 5	HL	9	MW	--
1207	CA164	OBLC	MAB	M	NE	5	26	4	533561	5671233	U	S-2	--	U	3	HL	8	W	--
1208	CA165	OBLC	MAB	M	SE	5	26	4	533520	5670828	U	S-3	--	M	4 - 5	Ot	15	W	--
1209	CA166	CABC	TVS	M	SE	5	26	4	533540	5670678	U	S-2	--	L	3	Ot	13	W	--
1210	CA167	OBLC	MABsc	M	SE	5	26	4	533454	5670531	L	S-2	--	D	1	Cu	15	I	--
1211	CA168	OBLC	MABsc	M	SE	5	26	4	533399	5670341	U	S-3	--	L	3	Ot	10	W	--
1213	CA169	RBC	HMSsc	M	NE	32	25	4	533376	5669872	U	S-3	--	L	3	Ot	25	MW	
1214	CA170	OHG	KTM	M	NE	32	25	4	533375	5669719	U	S-1	--	D	3	Wt	25	I	Edge of depression
1215	CA171	OBLC	MAB	M	NE	32	25	4	533394	5669564	U	S-2	--	M	--	Ot	22	W	--
1216	CA172	RBC	HMS	M	SE	32	25	4	533410	5669401	U	S-2	--	L	3	Ot	13	MW	--
1217	CA173	RBC	HMS	M	SE	32	25	4	533371	5669279	U	S-2	--	M	3	Ot	6	MW	--
1218	CA174	OBLC	MAB	M	SE	32	25	4	533370	5669141	U	S-2	--	T	3	Ot	14	W	--
1219	CA175	RBC	HMS	M	SE	32	25	4	533381	5668929	U	S-3	--	M	4 - 5	Ot	9	MW	--
1220	CA176	OBLC	MAB	M	SE	32	25	4	533391	5668691	U	S-3	--	M	4 - 5	Ot	15	W	--
1221	CA177	OBLC	MAB	M	NE	29	25	4	533346	5668185	U	S-2	--	T	3	NR	11	W	--
1222	CA178	OBLC	MABsc	M	NE	29	25	4	533331	5668007	U	S-2	--	M	4 - 5	NR	10	MW	--
1223	CA179	OBLC	MAB	M	NE	29	25	4	533345	5667907	U	S-2	--	M	--	NR	8	W	--
1224	CA180	OBLC	MAB	M	SE	29	25	4	533336	5667521	U	S-2	--	U	4 - 5	NR	8	MW	--
1225	CA181	OBLC	MAB	M	SE	29	25	4	533325	5667380	U	S-2	--	L	4 - 5	NR	10	W	--
1226	CA182	OBLC	MABsc	M	SE	29	25	4	--	--	U	S-2	--	L	3	NR	6	MW	--
1227	CA183	OBLC	MAB	M	SE	29	25	4	533323	5667099	U	S-2	--	T	3	NR	7	W	--
1228	CA184	RBC	HMS	M	NE	20	25	4	533300	5666694	Ro	S-3	--	U	5	Cu	10	MW	--
1229	CA185	OBLC	MAB	M	NE	20	25	4	533331	5666547	Ro	S-2	--	L	4 - 5	Cu	20	W	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1230	CA186	OBLC	MAB	M	NE	20	25	4	533281	5666371	Ro	S-2	--	T	3	Cu	15	W	--
1231	CA187	OBLC	MAB	M	SE	20	25	4	533240	5665506	Ro	S-2	--	L	4 - 5	Cu	17	W	--
1232	CA188	OBLC	MAB	M	SE	20	25	4	533247	5665589	Ro	S-2	--	--	4 - 5	Cu	18	W	--
1233	CA189	OBLC	MAB	M	SE	20	25	4	533259	5665725	Ro	S-2	--	L	4 - 5	Cu	12	MW	--
1234	CA190	OBLC	MAB	M	NE	17	25	4	533256	5664997	U	S-3	--	U	3	IP	9	W	--
1235	CA191	OBLC	MAB	M	NE	17	25	4	533342	5664864	U	S-3	--	M	3	IP	8	W	--
1236	CA192	OBLC	MAB	M	NE	17	25	4	533275	5664725	U	S-4	--	L	3	IP	11	W	--
1237	CA193	OBLC	MAB	M	SE	17	25	4	533432	5664138	U	S-2	--	M	3	Cu	8	MW	--
1238	CA194	OBLC	MAB	M	SE	17	25	4	533449	5664054	U	S-2	--	U	3	Cu	8	MW	--
1239	CA195	RBC	HMS	M	SE	17	25	4	533440	5663923	U	S-2	--	M	3	Cu	6	MW	--
1241	CA196	OBLC	MAB	M	NE	8	25	4	533517	5663745	U	S-2	--	L	3	NR	11	W	--
1242	CA197	OBLC	MAB	M	NE	8	25	4	533513	5663577	U	S-2	--	M	4 - 5	NR	11	MW	--
1243	CA198	OBLC	MAB	M	NE	8	25	4	533627	5663071	U	S-2	--	--	3	NR	11	W	--
1244	CA199	OBLC	MAB	M	NE	5	25	4	533663	5661800	U	S-2	--	U	3	NR	9	W	--
1245	CA200	OBC	MAB	M	NE	5	25	4	533646	5661518	U	S-2	--	L	4 - 5	NR	9	W	--
1246	CA201	OBLC	MAB	M	NE	5	25	4	533689	5661426	U	S-2	--	T	4 - 5	NR	10	W	--
1247	CA202	OBLC	MAB	M	SE	5	25	4	533687	5661307	L	S-2	--	E	2	NR	12	W	--
1248	CA203	OBLC	MAB	M	SE	5	25	4	533691	5661120	U	S-2	--	L	--	NR	10	MW	--
1249	CA204	SZBC	ROL	M	SE	5	25	4	533717	5660990	U	S-2	--	T	3	NR	14	I	--
1250	CA205	SZBC	ROL	M	NE	32	24	4	533775	5660536	U	S-2	--	M	4 - 5	NR	8	MW	--
1251	CA206	OBLC	MAB	M	NE	32	24	4	533763	5660406	U	S-2	--	M	4 - 5	NR	8	MW	--
1252	CA207	OBLC	MAB	M	NE	32	24	4	533771	5660217	U	S-2	--	M	3	NR	11	MW	--
1253	CA208	OBLC	MAB	M	SE	32	24	4	533800	5659674	U	S-2	--	M	3	NR	10	MW	--
1254	CA209	OBLC	MAB	M	SE	32	24	4	533805	5659568	U	S-2	--	M	3	NR	10	MW	--
1255	CA210	OBLC	MAB	M	SE	32	24	4	533797	5659408	U	S-2	--	U	3	NR	10	MW	--
1256	CA211	OBLC	MAB	M	NE	29	24	4	533827	5658901	U	S-2	--	U	3	NR	11	W	--
1257	CA212	OBLC	MAB	M	NE	29	24	4	533852	5658702	U	S-2	--	M	3	NR	9	MW	--
1258	CA213	OBLC	MAB	M	NW	28	24	4	533898	5658572	U	S-2	--	M	--	HL	9	MW	--
1259	CA214	OBLC	MAB	M	NW	28	24	4	533913	5658476	U	S-3	--	M	4 - 5	HL	10	MW	--
1260	CA215	OBLC	MAB	M	SW	28	24	4	534052	5657968	U	S-2	--	M	3	NR	9	MW	--
1261	CA216	OBLC	MAB	M	SW	28	24	4	534075	5657878	U	S-2	--	L	4 - 5	NR	12	W	--
1262	CA217	BSS	HUK	M	SW	28	24	4	534080	5657766	L	S-2	--	T	2	NR	10	MW	--
1263	CA218	OBLC	MAB	M	NW	21	24	4	534306	5656865	U	S-3	--	U	4 - 5	NR	8	MW	--
1264	CA219	OBLC	MAB	M	NW	21	24	4	534336	5656677	U	S-2	--	M	4 - 5	NR	7	MW	--
1265	CA220	OHG	KTM	M	NW	21	24	4	534343	5656565	L	S-1	--	E	3	Wt	12	I	Edge of large slough 80x50m
1349	CA221	OBLC	MAB	M	SW	21	24	4	534530	5655797	U	S-2	--	U	4 - 5	NR	7	MW	--
1350	CA222	OBLC	MAB	M	SW	21	24	4	534533	5655926	U	S-2	--	M	4 - 5	NR	6	W	--
1351	CA223	OBLC	MAB	M	SW	21	24	4	534498	5656030	U	S-3	--	M	4 - 5	NR	7	MW	--
1352	CA224	OBLC	MAB	M	NW	16	24	4	534581	5655717	U	S-3	--	U	4 - 5	NR	7	W	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1353	CA225	OBLC	MAB	M	NW	16	24	4	534603	5655585	U	S-2	--	L	4 - 5	NR	9	W	Thistle on existing ROW.
1354	CA226	OBLC	MAB	M	NW	16	24	4	534602	5655396	--	--	--	--	--	NR	12	W	--
1355	CA227	OBLC	MAB	M	SW	16	24	4	534696	5654854	U	S-2	--	M	3	Cu	11	W	--
1356	CA228	OBC	MAB	M	SE	16	24	4	534727	5654635	U	S-2	--	M	3	Cu	9	MW	--
1357	CA229	OBC	MAB	M	NE	9	24	4	534904	5653614	U	S-3	--	M	3	HL	7	W	--
1358	CA230	OBC	MAB	M	NE	9	24	4	534945	5653483	U	S-2	--	M	3	NR	8	W	--
1359	CA231	OBC	MAB	M	NE	9	24	4	534933	5653374	U	S-2	--	U	4 - 5	NR	6	MW	--
1360	CA232	OBC	MAB	M	SE	9	24	4	535040	5652848	U	S-2	--	L	4 - 5	NR	11	W	--
1361	CA233	OBC	MAB	M	SE	9	24	4	535108	5652699	U	S-2	--	L	3	NR	10	W	--
1362	CA234	OBC	MAB	M	SE	9	24	4	535061	5652563	U	S-2	--	L	3	NR	9	W	--
1364	CA235	BSS	PTA	GL	NE	17	22	3	543875	5635752	L	S-2	--	T	2	NR	2	I	Edge of large saline basin.
1365	CA236	OBC	BVL	GF	NE	17	22	3	544095	5635585	Ro	S-2	--	L	3	NR	4	W	--
1366	CA237	OHR	ZUN	GF	NE	17	22	3	544288	5635408	Ro	S-2	--	M	7 - 8	NR	30	W	--
1367	CA238	OBC	BVL	GF	SW	16	22	3	544728	5635085	L	S-2	--	E	2	NR	9	W	--
1368	CA239	OBC	BVL	GF	SW	16	22	3	544847	5634934	Ro	S-2	--	T	4 - 5	NR	7	W	--
1369	CA240	OBC	BVL	GF	SE	9	22	3	544983	5634783	L	S-2	--	E	2	NR	8	W	Thistle on existing ROW.
1370	CA241	OBC	BVLsc	GF	SE	9	22	3	545050	5634695	L	S-1	--	E	2	NR	7	W	
2108	CA242	OBC	MAB	M	NE`	28	23	4	535410	5649142	U	S-2	8	U	--	NR	7	MW	--
2109	CA243	RBC	HMS	M	NE	28	23	4	535409	5648918	U	S-3	5	U	4 - 5	NR	10	W	--
2110	CA244	OBC	MAB	M	NE	28	23	4	535415	5648719	U	S-3	--	U	4 - 5	NR	11	W	--
2111	CA245	OBC	MAB	M	SE	28	23	4	535411	5648324	U	S-3	--	C	4 - 5	NR	11	W	--
2112	CA246	OBC	MAB	M	SE	28	23	4	535414	5648229	U	S-2	--	M	4 - 5	NR	9	W	--
2113	CA247	OBC	MAB	M	SE	28	23	4	535414	5647754	U	S-2	--	L	4 - 5	NR	10	W	--
2114	CA248	OBC	MAB	M	NE	21	23	4	535432	5647492	U	S-2	--	U	4 - 5	NR	9	W	--
2115	CA249	OBC	MAB	M	NE	21	23	4	535442	5647282	U	S-4	--	M	4 - 5	NR	6	W	--
2116	CA250	OBC	MAB	M	NE	21	23	4	535450	5647027	U	S-2	--	M	4 - 5	NR	8	W	--
2117	CA251	OBC	MAB	M	NE	21	23	4	535440	5646906	U	S-2	--	T	4 - 5	NR	12	W	--
2118	CA252	OBC	MAB	M	SE	21	23	4	535447	5646817	U	S-2	--	L	4 - 5	NR	10	W	--
2119	CA253	OBC	MAB	M	SE	21	23	4	535492	5646231	U	S-3	--	L	3	NR	11	W	--
2120	CA254	OBC	MAB	M	NW	15	23	4	535539	5645960	U	S-2	--	M	3	NR	8	W	--
2121	CA255	OBC	MAB	M	NW	15	23	4	535607	5645583	U	S-2	--	M	3	NR	8	--	--
2123	CA256	SZBC	ROL	M	NW	15	23	4	535655	5645358	U	--	--	--	4 - 5	NR	6	W	--
2124	CA257	RBC	HMS	M	SE	15	23	4	535743	5644892	U	S-3	--	L	5	NR	7	W	--
2125	CA258	OHG	KTM	M	SE	15	23	4	535767	5644789	U	S-2	--	D	2	NR	13	I	--
2126	CA259	OBC	MAB	M	NW	10	23	4	535854	5644337	U	S-2	--	M	4 - 5	NR	9	W	--
2127	CA260	OBC	MAB	M	NW	10	23	4	535880	5644214	U	S-2	--	L	4 - 5	NR	9	W	--
2128	CA261	RBC	HMSst	M	NW	10	23	4	535935	5643842	U	S-4	2	C	3	NR	6	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2133	CA262	SZBC	CCL	M	SW	10	23	4	535962	5643690	U	S-2	--	U	3	NR	6	W	
2134	CA263	OBC	MAB	M	SW	10	23	4	536033	5643389	U	S-2	--	M	3	NR	10	W	--
2135	CA264	SZBC	ROL	M	NW	3	23	4	536077	5643143	U	S-2	--	--	4 - 5	NR	9	W	--
2136	CA265	OHR	HMS	M	NW	3	23	4	536112	5642880	U	S-1	--	L	--	NR	11	W	--
2137	CA266	OBC	FMT	M	NW	3	23	4	536210	5642269	U	S-2	--	M	3	NR	11	W	
2138	CA267	OBC	FMT	M	NW	3	23	4	536243	5642162	U	S-2	--	U	3	NR	9	W	
2139	CA268	OBC	FMT	M	SW	3	23	4	536326	5642046	U	S-2	--	M	4 - 5	NR	6	W	
2140	CA269	OHG	KTM	M	SW	3	23	4	536315	5641777	L	S-2	--	D	--	NR	10	I	--
2141	CA270	RBC	HMS	M	SW	3	23	4	536323	5641258	U	S-2	--	M	4 - 5	NR	7	W	--
2142	CA271	OBC	CHN	GL	NW	34	22	4	536357	5640990	U	S-2	--	U	4 - 5	IP	11	W	
2143	CA272	RBC	CHNzr	GL	NE	34	22	4	536800	5640665	U	S-2	--	L	3	IP	10	W	
2144	CA273	OBC	CHN	GL	NE	34	22	4	536904	5640595	U	S-1	--	M	4 - 5	IP	10	W	
2145	CA274	OBC	CHN	GL	NE	34	22	4	537057	5640485	U	S-2	--	L	4 - 5	IP	6	W	
2146	CA275	RBC	HMS	M	NE	34	22	4	537497	5640172	U	S-2	--	--	4 - 5	NR	6	W	A few large boulders at the surface.
2147	CA276	OBC	FMT	M	SW	35	22	4	537727	5640006	U	S-2	--	M	4 - 5	NR	7	W	
2148	CA277	OBC	RB	M	SW	35	22	4	538191	5639642	I	S-3	--	M	8	NR	0	W	--
2149	CA278	OR	ZUN	M	NE	26	22	4	538423	5639532	T	S-3	--	M	4 - 5	NR	0	W	--
2150	CA279	OR	ZUN	M	NE	26	22	4	538867	5639558	T	S-3	--	U	6	NR	6	R	--
2151	CA280	OR	ZUN	GF	NW	25	22	4	539578	5639377	L	S-2	--	E	2	NR	6	MW	--
2158	CA281	GLR	ZUNsa	GL	NW	17	22	3	543777	5635840	L	S-2	--	E	2	NR	7	I	
2159	CA282	OBC	MAB	M	SW	20	22	3	543496	5636066	L	S-2	--	T	3	NR	7	W	--
2160	CA283	OBC	MAB	M	SW	20	22	3	543400	5636142	L	S-2	--	T	3	NR	5	W	--
2161	CA284	OBC	MAB	M	NE	19	22	3	543192	5636309	L	S-2	--	T	3	NR	7	W	--
2162	CA285	OBC	MAB	M	NE	19	22	2	542918	5636535	H	S-2	--	M	5	NR	6	W	--
2163	CA286	OBC	MAB	M	NE	19	22	2	542587	5636868	H	S-2	--	C	3	NR	7	W	--
2164	CA287	OBC	CHN	GL	NE	19	22	2	542215	5637293	L	S-2	--	--	2	IP	11	W	
2165	CA288	OBC	CHN	GL	NE	19	22	2	542163	5637383	L	S-2	--	E	3	IP	12	W	
2166	CA289	OBC	CHN	GL	NE	19	22	2	541876	5637671	U	S-2	--	M	4 - 5	IP	13	W	
2167	CA290	OBC	CHN	GL	NE	19	22	2	541799	5637753	U	S-2	--	M	3	IP	9	W	
2168	CA291	OBC	CHN	GL	SW	30	22	3	541699	5637873	U	S-2	--	U	3	IP	8	W	
2169	CA292	OBC	CHN	GL	SW	30	22	2	541474	5638127	U	S-2	--	M	3	NR	12	W	
2170	CA293	OBC	CHN	GL	SW	30	22	2	541202	5638439	U	S-2	--	L	4 - 5	NR	13	W	
2171	CA294	OBC	CHN	GL	SW	30	22	2	541097	5638550	U	S-2	--	U	4 - 5	NR	9	W	
2172	CA295	OBC	BVL	GF	SW	30	22	2	540901	5638775	U	S-2	--	U	3	NR	10	W	
179	IW001	OBLC	--		SE	16	41	9	484390	5819449	H	--	10	M	5	HL	11	--	--
182	IW002	OBLC	--		SE	16	41	9	484392	5819325	H	--	15	M	5	HL	18	--	--
183	IW003	--	--		NE	9	41	9	484314	5818947	--	S-2	--	U	5	NR	11	--	--
184	IW004	--	--		NE	9	41	9	484322	5818698	H	S-3	3	M	4 - 5	IP	14	--	Poor sod cover

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
186	IW005	--	--		NE	9	41	9	484331	5818524	H	S-2	3	L	4 - 5	IP	22	--	--
187	IW006	--	--		SE	9	41	9	484343	5818201	--	S-3	8	M	5	IP	16	--	--
189	IW007	--	--		SE	9	41	9	484347	5818096	--	S-2	--	M	4 - 5	Cu	33	--	RoW visibly stonier
190	IW008	--	--		SE	9	41	9	484380	5817829	H	S-2	--	U	5	Cu	9	--	--
191	IW009	--	--		SE	9	41	9	484384	5817547	--	S-2	--	M	5	Cu	16	--	
193	IW010	--	--		NW	3	41	9	484610	5817307	--	S-3	12	C	5	IP	11	--	
194	IW011	--	--		NW	3	41	9	484794	5817151	--	S-3	14	L	5	IP	15	--	
197	IW012	--	--		NW	3	41	9	484849	5817096	--	--	2	L	3	IP	14	--	
207	IW013	--	--		NW	3	41	9	485023	5816944	--	S-4	--	M	4 - 5	IP	11	--	
209	IW014	--	--		NW	3	41	9	485160	5816845	--	S-4	--	U	4 - 5	IP	16	--	
212	IW015	--	--		NW	3	41	9	485185	5816701	--	S-2	--	L	3	IP	16	--	
199	IW016	--	--		SW	3	41	9	485190	5816562	U	S-2	--	M	2	IP	10	--	
201	IW017	--	--		SW	3	41	9	485200	5816482	--	S-2	3	M	2 - 5	IP	16	--	
203	IW018	--	--		SW	3	41	9	485180	5816258	--	--	30	M	6	IP	25	--	
213	IW019	--	--		SW	3	41	9	485194	5816072	F	S-1	4	M	3	IP	18	--	
215	IW020	--	--		SW	3	41	9	485200	5815877	U	S-1	--	--	3	IP	13	--	Valley
2105	IW021	CADBC	KURca	M	NW	34	40	9	485189	5815606	H	S-2	17	C	5	HL	10	MW	Stopped by stone @ 170
2131	IW022	OBLC	ROS	GF/M	SW	34	40	9	485132	5814916	--	--	2	--	4 - 5	NR	9	W	
2130	IW023	GLBLC	ROSgl		SW	34	40	9	485134	5814399	H	S-2	4	--	5	IP	15	I	
2132	IW024	GLEBLC	IGL		NW	27	40	9	485135	5813858	H	--	3	C	4 - 5	Wo	31	--	
440	IW025	OBLC	--		NW	27	40	9	485136	5813522	U	S-4	7	M	4 - 5	Wo	14	W	Stony, exposed gravel
2152	IW026	OBLC	ROS	GF/M	SW	27	40	9	485134	5812916	H	S-2	17	M	6	Wo	24	--	
2153	IW027	CABLC	EORca	M	SW	27	40	9	485136	5812599	H	S-2	--	C	5	NR	6	W	
216	IW028	--	--		NW	22	40	9	485140	5812486	H	--	16	M	5	Bu	13	--	
217	IW029	--	--		NW	22	40	9	485126	5812491	H	--	22	--	6	NR	20	--	Disturbed RoW has 20cm of admixed topsoil and subsoil (Bm + Ah)
219	IW030	--	--		NW	22	40	9	485136	5812409	--	--	7	M	4	NR	13	--	
2154	IW032	CABLC	EOR	M	NW	22	40	9	485137	5812083	H	S-2	--	M	6	NR	10	W	
221	IW033	--	--		NW	22	40	9	485136	5812010	--	S-2	--	T	3 - 6	NR	27	--	
222	IW034	--	--		NW	22	40	9	485142	5811869	--	--	--	L	3 - 6	Wo	21	--	
2155	IW035	HULG	ZGW		NW	22	40	9	485134	5811769	H	--	--	T	5	Wo	22	--	
2156	IW036	GLBLC	ACEgl		SW	22	40	9	485139	5811316	U	--	--	L	3	Wo	22	I	Canada thistle prominent
2157	IW037	OBLC	EOR	M	SW	22	40	9	485141	5811043	H	S-2	14	U	5	NR	17	W	
224	IW038	--	--		NW	15	40	9	485144	5810932	--	--	13	L	5	IP	23	--	
225	IW039	--	--		NW	15	40	9	485133	5810866	--	--	--	M	3 - 5	IP	16	--	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
195	IW040	--	--		SW	15	40	9	484931	5809483	--	S-2	15	M	5	IP	13	--	
196	IW041	--	--		SW	15	40	9	484982	5809702	--	--	--	L	4 - 5	IP	37	--	
198	IW042	--	--		SW	15	40	9	484980	5809919	--	--	25	M	6	Wo	12	--	
202	IW043	--	--		NW	15	40	9	485045	5810273	--	S-2	17	M	6	IP	17	--	
204	IW044	--	--		NW	15	40	9	485063	5810477	H	S-2	4	U	3	IP	11	--	
205	IW045	--	--		NW	10	40	9	484917	5809276	H	--	10	M	5	HL	19	--	
206	IW046	--	--		NW	10	40	9	484920	5809149	H	--	13	M	5	HL	10	--	
208	IW047	--	--		NW	10	40	9	484918	5808895	H	--	--	D	5	IP	20	--	
210	IW048	--	--		NW	10	40	9	484918	5808810	H	--	4	U	5	IP	17	--	
211	IW049	--	--		NW	10	40	9	484940	5808535	U	--	1	D	3	HL	31	--	
404	IW050	--	--		SW	10	40	9	484943	5808364	--	--	--	M	3 - 6	IP	30	--	
405	IW051	--	--		SW	10	40	9	484911	5808260	U	--	3	U	3	IP	8	--	Some admixing
407	IW052	--	--		SW	10	40	9	484914	5808094	--	--	--	--	3	IP	15	--	
408	IW053	--	--		SW	10	40	9	484953	5807931	H	--	--	U	6	IP	15	--	
409	IW054	--	--		NW	3	40	9	484943	5807628	U	--	--	M	3	IP	14	--	
410	IW055	--	--		NW	3	40	9	484949	5807492	H	--	15	U	5	HL	8	--	
411	IW056	--	--		NW	3	40	9	484956	5807222	H	--	3	M	3	IP	22	--	
412	IW057	--	--		NW	3	40	9	484979	5806997	H	--	--	U	5	IP	15	--	
414	IW058	--	--		SW	3	40	9	484982	5806856	H	--	5	M	5	IP	12	--	
415	IW059	--	--		SW	3	40	9	484973	5806731	--	--	3	L	4 - 5	IP	12	--	
226	IW060	--	--		NE	32	37	7	502214	5786567	F	--	31	M	7 - 8	NR	7	--	
228	IW061	--	--		NE	32	37	7	502278	5786567	F	--	13	M	5	NR	9	--	
229	IW062	--	--		NE	32	37	7	502404	5786530	F	S-0	12	M	5	NR	6	--	
1723	KD001	--	--		SE	31	37	7	500947	5785948	H	S-0	--	U	3 - 6	NR	17	W	--
2175	KD002	SZDBC	FST	M	SE	31	37	7	500834	5785617	F	S-0	10	M	5	NR	17	--	
1748	KD003	--	--		SE	21	37	7	501198	5785074	H	S-2	--	--	3 - 6	NR	12	W	--
1749	KD004	--	--		NW	29	37	7	501310	5784995	F	S-0	--	L	4 - 6	NR	8	--	--
1781	KD005	--	--		NW	29	37	7	501418	5784903	F	S-0	--	L	4 - 6	NR	14	--	--
2177	KD006	DBSZ	VTRfi		NW	29	37	7	501535	5784839	I	S-0	16	M	6	NR	16	--	--
2178	KD007	DBSS	CUR	GL	NW	29	37	7	501810	5784526	F	S-0	7	M	4	NR	8	W	Alluvial fan
1782	KD008	--	--		SE	29	37	7	502195	5784167	F	S-0	3	L	3	NR	12	--	--
1783	KD009	--	--		SE	29	37	7	502287	5784072	F	S-0	--	L	3	NR	9	--	--
2207	KD010	DBSO	--		SE	29	37	7	502372	5783987	F	S-0	4	L	3	NR	12	--	--
1784	KD011	--	--		SE	29	37	7	502771	5783602	H	S-0	--	M	3 - 4	NR	17	--	--
2209	KD012	SZDBC	OVE	M	SE	29	37	7	502868	5783520	--	S-0	7	M	4	HL	13	--	--
1785	KD013	--	--		NW	21	37	7	503461	5782960	U	S-0	--	--	3 - 4	NR	15	--	--
2211	KD014	ODBC	PRO	GL/M	NW	21	37	7	503563	5782849	U	--	5	L	4	NR	17	W	Auger refused at 140 cm
1786	KD015	--	--		NE	21	37	7	503801	5782628	--	S-0	--	M	3 - 4	NR	18	--	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2212	KD016	DBSS	HKR	M	NE	21	37	7	503889	5782520	H	S-0	6	L	4	NR	13	MW	--
1787	KD017	--	--		NE	21	37	7	504317	5782102	--	--	30	U	7	NR	20	--	--
1788	KD018	--	--		SE	21	37	7	504393	5782092	H	S-0	16	L	6	NR	22	--	--
1789	KD019	--	--		SE	21	37	7	504496	5781933	H	--	45	M	7	HL	25	--	--
2449	KD020	DBSZ	HKR	M	SW	12	37	7	508116	5779003	H	S-0	3	U	3	NR	12	W	--
2893	KD021	ODBC	HND	M	NE	1	37	7	508603	5778567	U	S-2	6	U	4	NR	10	W	--
1790	KD022	--	--		NE	1	37	7	509194	5778110	--	--	2	U	3	NR	16	--	--
1798	KD023	--	--		NE	1	37	7	508893	5778354	--	--	--	D	2 - 3	NR	14	--	--
1813	KD024	--	--		NE	1	37	7	508804	5778427	--	S-0	4	T	4	NR	30	--	--
1829	KD025	--	--		NE	1	37	7	508710	5778502	H	S-2	15	U	6	NR	12	--	--
1830	KD026	--	--		NE	1	37	7	508232	5778909	--	S-2	6	M	3 - 4	NR	15	--	--
2443	KD027	CADBC	NUT	M	NE	11	32	7	507503	5779505	H	S-2	5	U	4	NR	15	W	Stony at 130 cm
2368	KD028	ODBC	METco	GF	NW	15	37	7	504941	5781522	H	S-1	12	U	5	NR	12	R	--
1831	KD029	--	--		NW	15	37	7	505034	5781449	H	S-0	27	M	6	NR	18	--	--
1832	KD030	--	--		NW	15	37	7	505161	5781343	H	S-0	--	--	3 - 6	NR	26	--	--
1833	KD031	--	--		NW	29	37	7	505352	5781185	H	--	--	T	3 - 6	NR	29	--	--
1835	KD032	--	--		NW	15	37	7	505475	5781086	H	S-0	2	L	3 - 6	NR	24	--	--
1836	KD033	--	--		SE	15	37	7	505566	5781028	H	--	8	U	4	NR	28	--	--
2410	KD034	ODBC	KURst	M	SE	15	37	7	505680	5780953	H	S-2	12	M	5	NR	21	W	Stony at 57 cm
1837	KD035	--	--		SE	15	37	7	505788	5780856	H	S-1	35	M	7	NR	13	--	--
1838	KD036	--	--		SE	15	37	7	506030	5780684	--	S-2	--	C	3 - 4	NR	11	--	--
2413	KD037	CADBC	HND	M	NE	37	7	7	506424	5780507	H	S-1	2	U	3	NR	14	W	Stony at 170 cm
2434	KD038	DBSS	LHDst		NW	11	37	7	506996	5779905	H	S-0	2	T	3	NR	9	--	Stony at 85 cm
2370	KD039	OHG	FMNzz	M	NE	1	37	7	50937	5777991	U	S-1	2	D	3	Cu	13	I	
1839	KD040	--	--		NW	6	37	6	509468	5777930	--	--	4	U	3	Cu	13	--	--
1840	KD041	--	--		NW	6	37	6	509555	5777861	--	--	5	M	4	Cu	15	--	--
2388	KD042	GLCABC	NUTgl	M	NW	6	37	6	50963	5777786	U	S-1	6	U	4	Cu	11	I	--
1841	KD043	--	--		SW	6	37	6	509742	5777700	U	S-0	2	U	3	Cu	14	--	--
2411	KD044	ODBC	HNDsc	M	SW	6	37	6	50987	5777598	U	S-1	4	L	3	Cu	14	W	--
1842	KD045	--	--		SW	6	37	6	510018	5777488	U	S-1	2	M	3	Cu	16	--	--
1843	KD046	--	--		SW	6	37	6	510108	5777421	U	--	--	L	3 - 4	Cu	15	--	--
1844	KD047	--	--		SW	6	37	6	510230	5777316	--	--	7	U	4	Cu	18	--	--
2414	KD048	ODBC	HND	M	SE	6	37	6	51032	5777241	U	S-1	6	U	4 - 6	NR	15	--	
1845	KD049	--	--		SE	6	37	6	510425	5777157	H	S-2	27	M	6	NR	20	--	--
1846	KD050	--	--		SE	6	37	6	510520	5777087	H	S-2	--	C	4 - 6	NR	15	--	--
1847	KD051	--	--		SE	6	37	6	510661	5776986	H	--	--	M	4 - 6	NR	20	--	--
2468	KD052	ODBC	HND	M	NW	28	36	6	51273	5775361	U	S-0	2	L	3	NR	17	--	Stony at 180 cm
1848	KD053	--	--		NW	28	37	6	512829	5775279	--	--	--	L	3 - 4	NR	18	--	--
1849	KD054	--	--		NW	28	37	6	512958	5775182	U	S-2	--	D	3 - 4	NR	19	--	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2470	KD055	ODBC	HNDst	M	NW	28	36	6	51309	5775083	H	S-1	4	M	3	Cu	13	W	--
175	LL001	ODBC	HND	M	NE	8	29	4	532654	5702604	U	S-1	2	M	3	Cu	14	W	
176	LL002	ODBC	HND	M	NE	8	29	4	532655	5702418	U	S-0	12	L	3	Cu	22	MW	
177	LL003	ODBC	HND	M	NE	8	29	4	532693	5702271	U	S-1	3	M	3	Cu	17	W	
178	LL004	ODBC	HND	M	NE	8	29	4	532693	5702151	--	S-1	1	D	2	Cu	12	MW	
180	LL005	ODBC	HNDsc	M	NE	8	29	4	532712	5702021	U	--	2	C	3	Cu	13	W	
181	LL006	ODBC	HNDsc	M	NE	8	29	4	532711	5701877	U	S-1	3	U	3	Cu	13	W	
185	LL007	ODBC	HND	M	SE	8	29	4	532716	5701741	U	S-2	8	L	--	NR	16	W	
188	LL008	RDBC	NUT	M	SE	8	29	4	532717	5701668	Ro	S-2	5	C	4 - 5	IP	13	W	
192	LL009	DHG	KTM	M	SE	8	29	4	532714	5701531	U	S-0	1	D	2	Wt	13	--	--
200	LL010	ODBC	HNDsc	M	SE	8	29	4	532709	5701466	U	S-1	2	M	3	NR	14	--	
214	LL011	OHG	KTM	M	SE	8	29	4	532713	5701426	U	--	1	D	2	NR	13	P	
218	LL012	RDBC	NUT	M	SE	8	29	4	532690	5701098	Ro	S-2	3	C	4 - 5	NR	13	W	
223	LL013	ODBC	HND	M	NE	5	29	4	532682	5700949	U	S-2	2	L	3	IP	12	W	
227	LL014	ODBC	HND	M	NE	5	29	4	532719	5700753	U	S-2	1	D	2	IP	14	MW	
354	LL015	ODBC	HND	M	NE	5	28	4	532744	5700622	U	S-1	3	M	3	IP	14	W	
355	LL016	RDBC	NUT	M	NE	5	28	4	532805	5700486	U	S-1	3	M	3	IP	12	W	All stakes knocked down by cattle.
356	LL017	ODBC	HNDsc	M	NE	5	29	4	532858	5700430	U	S-2	7	M	4 - 5	IP	12	--	
357	LL018	DBSO	BFD	M	NE	5	29	4	532878	5700286	U	S-2	5	L	--	NR	--	W	
359	LL019	ODBC	HND	M	SE	5	29	4	532909	5700187	--	S-2	20	M	6	NR	10	W	
360	LL020	ODBC	HND	M	SE	5	29	4	532912	5700050	Ro	S-2	4	C	3	NR	10	W	
362	LL021	OMG	KTM	M	SE	5	29	4	532923	5699996	U	S-1	1	D	2	NR	12	P	
367	LL022	ODBC	HND	M	SE	5	29	4	532913	5699859	--	S-3	3	U	3	NR	10	W	
368	LL023	ODBC	HND	M	SE	5	29	4	532918	5699697	Ro	--	2	--	3	NR	22	W	
371	LL024	ODBC	HNDsc	M	SE	5	29	4	532914	5699511	Ro	S-2	6	M	4 - 5	NR	8	W	
373	LL025	ODBC	HND	M	NE	32	28	4	532916	5699373	Ro	S-3	6	--	--	NR	19	W	
375	LL026	ODBC	SCD	GF	NE	32	28	4	532911	5699306	Ro	S-3	4	U	3	NR	18	W	
3	LL027	ODBC	SCD	GF	NE	32	28	4	532939	5699184	Ro	S-3	3	U	3	DL	8	R	Gravel pit
4	LL028	ODBC	SCD	GF	NE	32	28	4	532900	5699043	Ro	S-3	7	M	4 - 5	NR	11	W	--
6	LL029	DBSS	HKR	M	NE	32	28	4	532892	5698964	Ro	S-0	8	L	4 - 5	NR	22	MW	Swale between hills
58	LL030	ODBC	HNDsc	M	NE	32	28	4	532891	5698916	Ro	S-3	11	U	5	NR	10	W	
95	LL031	SZDB	FST	M	SE	32	28	4	532871	5698604	Ro	S-3	2	C	3	NR	13	W	
96	LL032	ODBC	HND	M	SE	32	28	4	532870	5698517	Ro	S-2	12	M	5	NR	12	--	
97	LL033	SZDBC	FST	M	SE	32	28	4	532837	5698381	U	S-2	6	M	4 - 5	Cu	18	--	
98	LL034	RDBC	NUT	M	SE	32	28	4	532849	5698234	U	S-2	7	U	4 - 5	Cu	13	--	
99	LL035	ODBC	HNDsc	M	SE	32	28	4	532837	5698108	U	--	4	L	3	Cu	14	--	
100	LL036	ODBC	HNDsc	M	SE	32	28	4	532837	5697907	U	S-2	4	M	3	Cu	15	--	
101	LL037	DBSS	HKR	M	NE	29	28	4	532831	5697790	U	S-1	1	D	2	NR	5	--	In large "blowout"

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
102	LL038	DBSS	HKR	M	NE	29	28	4	532822	5697631	U	S-1	1	L	2	NR	17	MW	--
103	LL039	DBSS	HKR	M	NE	29	28	4	532816	5697457	L	S-1	1	E	2	NR	5	MW	
104	LL040	SZDC	FST	M	NE	29	28	4	532822	5697385	U	S-2	1	D	2	NR	7	MW	
105	LL041	SZDBC	FST	M	NE	29	28	4	532871	5697222	U	S-1	3	U	3	NR	12	W	
106	LL042	DBSO	BFD	M	NE	29	28	4	532914	5697083	--	S-2	4	M	3	NR	7	W	
107	LL043	DBSS	HKR	M	SE	29	28	4	532928	5697047	U	S-2	3	L	3	NR	3	W	
380	LL044	ODBC	HND	M	SE	29	28	4	532945	5696987	U	S-2	1	L	3	NR	9	W	
383	LL045	RDBC	NUTsc	M	SE	29	28	4	533003	5696822	--	S-2	2	D	3	NR	7	MW	--
385	LL046	ODBC	HNDsc	M	SE	29	28	4	533029	5696475	U	S-2	1	L	3	NR	7	W	
387	LL047	OMG	KTM	M	SE	29	28	4	532990	5696340	U	S-1	1	D	2	NR	13	P	
389	LL048	ODBC	HND	M	SE	29	28	4	532985	5696241	--	S-2	12	U	5	NR	10	W	
391	LL049	ODBC	HND	M	NE	8	28	4	533030	5692910	U	S-2	6	U	4 - 5	Cu	13	W	
392	LL050	SZDBC	FST	M	NE	8	28	4	533009	5692817	U	S-2	1	L	--	Cu	15	I	
393	LL051	ODBC	HND	M	NE	8	28	4	533005	5692666	U	S-1	2	M	3	Cu	15	W	
394	LL052	SZDBC	FST	M	NE	8	28	4	533012	5692573	U	S-1	2	M	3	Cu	15	W	
395	LL053	ODBC	HND	M	NE	8	28	4	532989	5692338	U	S-1	3	--	3	Cu	16	W	
396	LL054	DBSO	HDY	M	NE	8	28	4	533005	5692220	U	S-1	4	L	3	Cu	16	--	
397	LL055	ODBC	HND	M	SE	8	28	4	533030	5692094	U	--	1	L	3	Cu	13	MW	
398	LL056	RDBC	NUT	M	SE	8	28	4	533095	5691921	U	S-1	2	L	3	Cu	13	MW	
399	LL057	SZDBC	FST	M	SE	8	28	4	533053	5691766	U	S-1	5	U	3	Cu	13	W	
400	LL058	OHG	KTM	M	SE	8	28	4	533030	5691831	--	--	3	D	3	Wt	15	P	
401	LL059	ODBC	HND	M	SE	8	28	4	533079	5691569	U	S-1	13	M	5	Cu	16	W	
402	LL060	RDBC	NUT	M	SE	8	28	4	533086	5691432	U	S-2	12	M	5	Cu	13	W	
403	LL061	RDBC	NUT	M	NE	5	28	4	533105	5691273	U	S-2	8	U	4 - 5	HL	10	W	
406	LL062	OHG	KTM	M	NE	5	28	4	533087	5691142	U	S-1	1	D	2	HL	15	P	
413	LL063	ODBC	HNDsc	M	NE	5	28	4	533097	5691103	U	S-2	2	T	3	HL	14	W	
418	LL064	ODBC	HNDsc	M	NE	5	28	4	533106	5690980	U	S-2	2	L	3	HL	13	MW	
421	LL065	OHG	ZGW	M	NE	5	28	4	533099	5690838	U	--	1	--	--	HL	12	P	
425	LL066	SZDBC	FST	M	NE	5	28	4	533103	5690415	U	S-2	3	M	3	HL	13	W	
428	LL067	SZDBC	FST	M	SE	5	28	4	533108	5690510	U	S-2	2	U	3	HL	12	W	About 50m North of railway. South (80m) of oyen meter station.
435	LL068	ODBC	HND	M	SE	5	28	4	533071	5690374	U	S-2	1	L	3	IP	16	MW	
441	LL069	SZDBC	FST	M	SE	5	28	4	533073	5690165	U	S-2	6	U	4 - 5	IP	15	W	
443	LL070	ODBC	HND	M	SE	5	28	4	533109	5690051	U	--	2	L	2	IP	14	MW	
669	LL071	ODBC	HND	M	SE	5	28	4	533085	5689875	U	--	2	U	2	IP	14	W	
671	LL072	DBSS	HKR	M	SE	5	28	4	533085	5689953	U	--	--	--	2	IP	10	MW	Abundant salts in Ccasa horizon
674	LL073	ODBC	DCY	GF/M	NE	32	27	4	533104	5689562	U	S-1	2	U	3	IP	16	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
677	LL074	ODBC	DCYsc	GF/M	NE	32	27	4	533096	5689461	U	S-0	2	E	3	IP	16	R	
682	LL075	ODBC	HNDsc	M	NE	32	27	4	533080	5689276	U	S-0	2	L	3	IP	18	R	Swale
688	LL076	OHG	KTM	M	NE	32	27	4	533103	5689067	U	S-0	1	D	3	IP	22	I	
689	LL077	ODBC	HNDsc	M	NE	32	27	4	533087	5688979	U	--	4	M	--	IP	10	W	
690	LL078	ODBC	HNDsc	M	NE	32	27	4	533075	5688924	U	S-1	6	L	4 - 5	NR	24	W	
691	LL079	ODBC	HNDer	M	SE	32	27	4	533089	568878	--	S-1	3	U	4 - 5	NR	6	W	
692	LL080	ODBC	HND	M	SE	32	27	4	533109	5688598	--	S-3	10	U	5	NR	8	W	
693	LL081	ODBC	HND	M	SE	32	27	4	533109	5688474	--	S-3	17	C	6	NR	8	W	
694	LL082	ODBC	HND	M	SE	32	27	4	533114	5688280	Ro	S-3	3	U	4 - 5	NR	5	W	
695	LL083	ODBC	HND	M	SE	32	27	4	533118	5688167	--	S-3	6	--	4 - 5	NR	8	W	
697	LL084	ODBC	HND	M	SE	32	27	4	533114	5688128	--	--	3	C	4 - 5	NR	9	W	
700	LL085	OB	MAB	M	NE	17	27	4	533200	5684853	--	S-3	12	U	5	Cu	10	W	
705	LL086	OB	MAB	M	NE	17	27	4	533205	5684743	--	S-2	6	M	4 - 5	Cu	10	W	
707	LL087	OB	MAB	M	NE	17	27	4	533215	5684635	U	S-2	5	U	4 - 5	Cu	9	W	
711	LL088	OB	MAB	M	NE	17	27	4	533209	5684473	U	S-2	5	U	3	Cu	10	--	
717	LL089	SZB	ROL	M	NE	17	27	4	533203	5684376	U	S-2	3	M	3	Cu	10	W	
720	LL091	OB	MAB	M	NE	17	27	4	533213	5684249	U	S-2	4	L	3	Cu	12	W	
724	LL091A	OBLC	MABsc	M	SE	17	27	4	533219	568470	U	S-2	2	L	3	Cu	13	W	
730	LL092	OB	MAB	M	SE	17	27	4	533216	5683966	U	S-1	3	--	3	Cu	12	W	
735	LL093	OB	BVLxt	GF/M	SE	17	27	4	533205	5683847	U	--	2	L	3	Cu	13	W	
738	LL094	OB	MAB	M	SE	17	27	4	533214	5683746	--	S-1	2	M	3	Cu	14	W	
743	LL095	GLB-OHG	BVLgl	GF	SE	17	27	4	533227	5683648	U	--	2	L	3	IP	10	W	
749	LL096	OB	BVLxt	GF/M	SE	17	27	4	533220	5683448	U	S-2	3	U	--	Cu	14	--	
1642	LL099	SZDBC	FST	M	SW	15	35	5	525128	5760602	U	S-2	4	U	3	Cu	12	W	
1643	LL100	ODBC	HND	M	SW	15	35	5	524944	5761174	U	--	6	--	4 - 5	NR	17	W	--
1644	LL101	RDBC	NUT	M	SW	15	35	5	524854	5761294	Ro	S-2	4	C	5	NR	12	W	
1645	LL102	ODBC	HND	M	SW	15	35	5	524815	5761377	Ro	S-2	10	M	5	NR	10	W	--
1646	LL103	ODBC	HND	M	SW	5	35	5	524655	5761665	Ro	S-2	5	U	5	NR	15	W	--
1647	LL104	ODBC	HND	M	SE	21	35	5	524064	5762581	U	S-1	1	E	2	IP	17	W	--
1648	LL105	ODBC	HND	M	SE	21	35	5	524040	5762652	U	--	--	--	4 - 5	Cu	13	W	--
1649	LL106	ODBC	HND	M	SE	21	35	5	523984	5762763	U	S-1	5	M	4 - 5	Cu	18	W	--
1650	LL107	ODBC	HND	M	SE	21	35	5	523914	5762912	U	S-2	5	M	3	Cu	17	W	
1651	LL108	ODBC	HND	M	SE	21	35	5	523855	5763047	U	S-2	5	L	3	Cu	16	MW	
1652	LL109	SZDBC	FST	M	SE	21	35	5	523774	5763179	U	S-2	4	L	3	Cu	12	W	Very hard B, poor crop.
1653	LL110	ODBC	CNN	GL	NE	21	35	5	523600	5763515	U	S-2	5	M	3	IP	16	W	
1654	LL111	OHG	ZGW-sa	GF	NE	21	35	5	523355	5763999	L	S-0	2	D	3	Wt	14	P	Valley/spillway
1655	LL112	ODBC	DCY	GF/M	NE	21	35	5	523407	5763887	U	S-1	--	U	3	IP	11	W	Small rise between to lower/wet areas.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1656	LL113	ODBC	HND	M	SE	21	35	5	524067	5762630	U	--	1	L	3	Cu	10	W	
1657	LL114	ODBC	HND	M	SE	32	35	5	522395	5766357	U	S-1	2	L	4 - 5	Cu	20	--	--
1658	LL115	ODBC	HND	M	SE	32	35	5	522387	5766272	U	S-1	5	U	4 - 5	Cu	15	W	--
1659	LL115A	ODBC	HND	M	SE	32	35	5	522435	5766079	U	S-3	2	C	5	Cu	10	--	Small stony/gravelly knoll.
1660	LL116	ODBC	HND	M	SE	32	35	5	522430	5766057	U	S-2	3	U	4 - 5	Cu	10	W	
1661	LL117	ODBC	HND	M	SE	32	35	5	522474	5765914	U	S-1	3	--	3	Cu	20	W	--
1662	LL118	ODBC	HND	M	SE	32	35	5	522499	5765830	U	S-1	4	M	3	Cu	13	W	--
1663	LL119	ODBC	HND	M	SW	33	35	5	522558	5765690	U	S-2	3	U	3	Cu	10	W	--
1664	LL120	ODBC	HNDsc	M	NW	28	35	5	522607	5765579	--	S-2	--	U	3	Cu	12	W	
1665	LL121	ODBC	HNDsc	M	NW	28	35	5	522640	5765452	U	S-1	3	E	3	Cu	15	W	--
1666	LL122	ODBC	HNDsc	M	NW	28	35	5	522713	5765290	U	--	2	L	3	Cu	16	W	Compacted lower Ap, dry.
1667	LL123	ODBC	HNDsc	M	NW	28	35	5	522793	5765164	U	S-1	3	M	3	Cu	20	W	Hard lower Ap.
1668	LL124	ODBC	HNDsc	M	NW	28	35	5	522838	5765083	I	S-1	3	M	3	Cu	16	W	
1669	LL125	ODBC	HNDsc	M	NW	28	35	5	522940	5764915	I	S-1	3	M	3	Cu	12	W	--
1670	LL125A	RDB	NUT	M	SE	5	36	5	522235	5767406	Ro	S-2	--	C	5	IP	10	W	
1671	LL126	RDB	NUT	M	SE	5	36	5	522239	5767343	Ro	S-2	7	L	5	IP	20	W	
1672	LL127	OHG	ZGW		SE	5	35	5	522202	5767570	Ro	--	2	D	3	NR	15	P	--
1673	LL128	ODBC	HND	M	SE	5	36	5	522174	5767743	Ro	S-2	--	M	4 - 5	HL	13	W	--
1674	LL129	ODBC	HND	M	SE	5	36	5	522129	5767931	--	S-2	15	M	5	HL	17	W	--
1675	LL130	ODBC	HND	M	SE	5	36	5	522143	5767934	Ro	S-2	12	M	5	HL	10	W	--
1676	LL131	OHG	ZGW	M	NE	5	35	5	522050	5768510	Ro	S-0	1	D	3	Wt	35	P	
1677	LL132	ODBC	HND	M	SE	8	36	5	521983	5768903	Ro	S-2	--	U	5	NR	11	W	--
1678	LL133	ODBC	HND	M	NE	8	36	5	521823	5769664	Ro	S-2	--	M	6	NR	10	W	--
1679	LL134	ODBC	HND	M	NE	8	36	5	521770	5769875	Ro	S-3	5	L	4 - 5	NR	10	W	Stony at 35 cm
1680	LL135	ODBC	HND	M	NE	8	36	5	521708	5770062	--	S-3	4	U	3	NR	6	W	
1681	LL136	ODBC	HND	M	NW	8	36	5	521623	5770229	U	S-3	5	M	4 - 5	IP	10	W	
1682	LL137	ODBC	HND	M	NW	8	36	5	521557	5770338	U	S-2	5	M	3	NR	10	--	
1683	LL138	ODBC	HND	M	NW	8	36	5	521504	5770408	Ro	S-3	9	U	4 - 5	NR	8	W	
1684	LL139	DBSS	HKR	M	SW	17	36	5	521131	5771318	--	S-3	5	L	3	NR	10	W	Lower area, TILL hills with very large bolders.
1685	LL140	SZDB	FST	M	NW	17	36	5	521092	5771427	--	--	10	L	5	IP	40	--	Considerable salts at depth.
1686	LL141	ODBC	HND	M	NW	17	36	5	521018	5771620	I	S-0	2	M	2	IP	13	W	
1687	LL142	DBSS	HKR	M	NW	17	36	5	520959	5771772	I	S-0	1	M	2	HL	12	W	
1688	LL143	ODBC	HND	M	NE	18	36	5	520582	5771971	Ro	S-2	3	M	4 - 5	NR	24	W	
1689	LL144	ODBC	HND	M	NE	18	36	5	520312	5772039	Ro	S-1	--	M	4 - 5	NR	10	W	
1690	LL145	ODBC	HND	M	NE	18	36	5	520680	5771715	I	S-0	3	M	3	IP	20	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1691	LL146	ODBC	DCY	GF/M	NE	18	36	5	520768	5721708	I	S-0	3	L	3	IP	27	W	
1692	LL146A	ODBC	DCY	GF/M	NE	22	34	5	525960	5754375	U	--	2	M	3	HL	18	R	
1693	LL147	ODBC	DCY	GF/M	NE	22	34	5	526034	5754204	U	S-0	2	L	3	HL	16	R	
1694	LL148	ODBC	DCY	GF/M	NE	32	34	5	526062	5754075	U	S-0	2	M	3	HL	15	R	
1695	LL149	ODBC	DCY	GF/M	NE	22	34	5	526108	5753935	U	S-1	2	E	3	HL	14	R	
1696	LL150	ODBC	DCY	GF/M	NE	22	34	5	526150	5753789	U	S-1	3	L	3	HL	20	R	
1697	LL151	ODBC	METsc	GF	NW	23	34	5	526220	5753612	L	S-1	2	E	2	NR	14	W	Water table at 80 cm
1698	LL152	OHG	THRsa	GL	SW	23	34	5	526250	5753526	L	S-0	1	E	2	NR	10	P	
1699	LL153	RHG	THRsa	GL	SW	23	34	5	526296	5753298	L	S-0	--	D	2	NR	8	P	
1700	LL154	ODBC	DCY	GF/M	SW	23	34	5	526319	5753168	--	S-1	--	--	4 - 5	NR	18	R	
1701	LL155	ODBC	SCD	GF	SW	23	34	5	526347	5753088	U	S-3	--	C	4 - 5	NR	10	W	
1702	LL156	ODBC	DCY	GF/M	SW	23	34	5	526358	5752985	U	S-2	4	M	3	Cu	17	R	
1703	LL157	ODBC	WWT	GF	SW	23	34	5	526391	5752877	U	S-2	3	L	3	Cu	14	R	
1704	LL158	ODBC	WWT	GF	NW	14	34	5	526408	5752680	--	--	6	--	4 - 5	NR	14	R	
1705	LL159	SARG	THRsa	GL	NW	14	34	5	526428	5752595	L	S-1	1	D	2	NR	10	P	
1706	LL160	DBSS	HKR	M	NW	14	34	5	526457	5752499	U	S-2	3	L	3	NR	10	W	--
1708	LL161	ODBC	DCY	GF/M	NW	14	34	5	526468	5752387	U	S-2	7	U	4 - 5	NR	16	R	
1707	LL162	DBSS	HKR	M	NW	14	34	5	526485	5752287	U	S-2	--	U	4 - 5	NR	10	W	
1709	LL163	ODBC	DCYsc	GF/M	SW	14	34	5	526558	5752096	U	S-3	6	M	4 - 5	IP	12	W	
1710	LL164	ODBC	DCYsc	GF/M	SW	14	34	5	526521	5752191	U	S-2	5	M	3	IP	12	W	
1711	LL165	ODBC	HND	M	SW	14	34	5	526593	5751997	U	S-2	5	C	4 - 5	IP	10	W	
1712	LL166	SZDB	FST	M	SW	14	35	5	526634	5751885	U	S-2	2	M	4 - 5	IP	18	W	
1713	LL167	SZDB	FST	M	SW	14	34	5	526673	5751770	U	S-2	5	U	4 - 5	IP	12	--	
1714	LL168	ODBC	HND	M	SW	14	34	5	526739	5751604	U	S-2	5	M	4 - 5	IP	12	W	
1715	LL169	ODBC	HND	M	SW	14	34	5	526789	5751467	U	S-1	2	L	4 - 5	IP	15	W	
1716	LL170	ODBC	HND	M	SW	14	34	5	526838	5751354	U	S-0	--	L	3	IP	17	MW	
1717	LL171	ODBC	HND	M	NW	11	34	5	526902	5751155	U	S-2	3	U	3	NR	11	W	
1718	LL172	SZDB	FST	M	NW	11	34	5	526934	5751057	L	S-0	1	E	2	NR	13	W	--
1719	LL173	ODBC	CNNxs	GL	NW	11	34	5	526970	5750974	--	S-2	1	--	2	NR	13	W	Lower plain.
1720	LL174	DBSS	CUR	GL	NW	11	34	5	526991	5750866	--	--	1	--	--	NR	13	--	
1721	LL175	DBSS	CUR	GL	NW	11	34	5	527007	5750766	L	S-0	--	L	2	NR	10	--	
1722	LL176	DBSS	CUR	GL	NW	11	34	5	527011	5750698	L	S-0	--	E	3	Cu	10	MW	
1881	LW001	RBC	VST	E	SE	21	21	4	564084	5627313	I	S-1	--	C	7 - 8	NR	8	R	Some slumping on slope.
1882	LW002	RBC	VST	E	SE	21	21	4	563960	5627368	--	--	--	C	4 - 5	NR	9	R	--
1883	LW003	RBC	VST	E	SW	21	21	4	563844	5627432	U	--	--	--	3	NR	9	R	Good colour change.
1884	LW004	RBC	VST	E	SW	21	21	4	563750	5627546	U	S-0	2	M	3	NR	8	R	Dures, wind erosion risk.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1885	LW005	RBC	VST	E	SW	21	21	4	563602	5627537	H	S-0	--	M	--	NR	8	R	--
1886	LW006	RBC	VST	E	SE	20	21	4	563434	5627549	--	S-0	--	--	3	NR	7	R	--
1888	LW007	RBC	VST	E	SE	20	21	4	563260	5627577	U	--	2	L	3	NR	7	R	
1889	LW008	RBC	VST	E	SE	20	21	4	563126	5627586	H	S-0	--	U	--	NR	8	R	Dunes, avoid if possible.
1890	LW009	RBC	VST	E	SE	20	21	4	562989	5627592	--	S-0	--	C	4 - 5	NR	5	--	--
1891	LW010	OBC	CVDyc	GF	SE	20	21	4	562864	5627602	--	S-0	4	M	4 - 5	NR	12	R	Just east of Hwy 41
1905	LW011	RBC	VST	E	SW	20	21	1	562528	5627631	U	S-0	2	U	2	NR	25	R	
1906	LW012	RBC	VST	E	SW	20	21	1	562069	5627641	U	S-0	1	E	2	NR	24	R	
1907	LW013	OBC	CVD	GF	SE	19	21	1	561808	5627658	U	S-0	1	E	2	IP	15	R	
1908	LW014	OBC	CVD	GF	SE	19	21	1	561682	5627654	U	S-0	--	E	2	IP	19	R	
1909	LW015	RBC	VST	E	SE	19	21	1	561535	5627653	L	S-0	--	E	2	IP	24	R	
1910	LW016	RBC	VST	E	SE	19	21	1	561403	5627651	U	S-0	2	L	2	IP	24	R	
1911	LW017	OBC	CVD	GF	SE	19	21	1	561254	5627600	U	S-0	--	E	2	IP	28	R	
1912	LW018	OBC	CVD	GF	SW	19	21	1	561047	5627553	U	S-0	--	E	2	IP	17	R	
1913	LW019	OBC	CVD	GF	SW	19	21	1	560953	5627560	U	S-0	1	E	2	IP	19	R	
1914	LW020	OBC	CVD	GF	SW	19	21	1	560798	5627569	U	S-0	--	E	2	IP	17	R	
1915	LW021	RBC	BVLzr	GF	SW	19	21	1	560648	5627596	U	S-0	--	U	2	Cu	15	R	
1916	LW022	RBC	BVLzr	GF	SW	19	21	1	560557	5627610	U	S-0	--	C	2	Cu	12	W	
1917	LW023	OBC	BVL	GF	SW	19	21	1	560466	5627629	U	S-0	--	L	2	Cu	13	R	--
1918	LW024	OBC	BVLsc	GF	SE	24	21	2	560368	5627640	U	S-0	2	U	2	Cu	24	W	
1920	LW025	OBC	BVL	GF	SE	24	21	2	560251	5627719	U	S-0	--	M	2	Cu	22	W	--
1921	LW026	OBL	BVL	GF	SE	24	21	2	560041	5627690	U	S-0	--	L	2	Cu	28	W	Good colour change.
1922	LW027	OBC	BVL	GF	NE	24	21	2	559936	5627753	U	S-0	2	L	2	Cu	29	W	
1923	LW028	OBC	BVL	GF	NE	24	21	2	559758	5627748	U	S-0	2	M	3	Cu	31	W	
1924	LW029	OBC	BVL	GF	NE	24	21	2	559611	5627747	U	S-0	--	E	2	Cu	21	W	
1925	LW030	OBC	BVL	GF	NW	24	21	2	559562	5627749	U	S-0	--	M	2	Cu	29	W	
1926	LW031	OBC	BVL	GF	NW	24	21	2	559436	5627751	U	S-0	1	E	2	Cu	37	W	
1927	LW032	OBC	CVD	GF	NW	24	21	2	559305	5627748	U	S-0	--	E	2	Cu	21	R	
1928	LW033	OBC	CVD	GF	NW	24	21	2	559200	5627753	U	S-0	--	U	2	Cu	28	R	
1929	LW034	OBC	CVD	GF	NW	24	21	2	559091	5627754	U	S-0	1	C	2	Cu	30	R	
1930	LW035	OBL	BVL	GF	SE	23	21	2	558392	5627624	U	S-0	--	U	2	Cu	17	W	
1931	LW036	OBL	BVL	GF	SE	23	21	2	558274	5627623	U	S-0	--	D	2	Cu	25	W	
1932	LW037	OBC	CVD	GF	SE	23	21	2	558154	5627624	U	S-0	1	U	2	Cu	32	W	
1933	LW038	OBC	CVD	GF	SE	23	21	2	558009	5627625	U	S-0	--	C	2	Cu	21	R	
1954	LW039	OBC	BVL	GF	SW	23	21	2	557656	5627627	U	S-0	--	L	3	Cu	33	W	
1955	LW040	RBC	VST	E	SW	23	21	2	557521	5627627	U	S-0	--	C	4 - 5	Cu	27	W	Good colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1956	LW041	OBC	BVL	GF	SW	23	21	2	557381	5627616	U	S-0	2	L	2	Cu	22	W	
1957	LW042	OBC	BVL	GF	SW	23	21	2	557264	5627627	U	S-0	--	U	2	Cu	32	W	
1958	LW043	OBC	BVL	GF	NE	22	21	2	557098	5627658	U	S-0	0	E	2	Cu	20	W	
1959	LW044	OBC	BVL	GF	NE	22	21	2	557003	5627643	U	S-0	--	M	2	Cu	27	W	
1960	LW045	OBC	BVL	GF	NE	22	21	2	556891	5627646	U	S-0	--	M	3	Cu	23	W	
1961	LW046	RBC	VST	E	NE	22	21	2	556783	5627648	U	S-0	--	U	2	Cu	10	W	Poor growth
1962	LW047	OBC	BVL	GF	NE	22	21	2	556498	5627643	U	S-0	--	L	2	Cu	20	W	
1963	LW048	OBC	BVL	GF	NW	22	21	2	556262	5627645	U	S-0	--	L	2	Cu	12	W	
1964	LW049	OBC	BVL	GF	NW	22	21	2	556125	5627646	U	S-0	--	L	2	Cu	17	W	
1965	LW050	OBC	BVL	GF	NW	22	21	2	556001	5627649	U	S-0	--	M	3	Cu	17	W	--
1966	LW051	OBC	BVL	GF	NW	22	21	2	555741	5627642	U	S-0	--	M	2	Cu	19	W	--
1967	LW052	OBC	BVL	GF	NW	22	21	2	555577	5627641	U	S-0	--	M	2	Cu	18	W	
1968	LW053	OBC	BVL	GF	NE	21	21	2	555334	5627629	U	S-0	--	L	3	Cu	14	W	
1969	LW054	OBC	BVL	GF	NE	21	21	2	555170	5627638	U	S-0	1	D	3	Cu	19	W	
1970	LW055	RBC	BVLzr	GF	NE	21	21	2	554986	5627627	U	S-0	--	C	3	Cu	9	W	
1971	LW056	OBC	BVL	GF	NE	21	21	2	554673	5627626	U	S-0	--	M	3	Cu	22	W	
1972	LW057	OBC	BVL	GF	NW	21	21	2	554383	5627623	U	S-0	--	U	2	Cu	31	W	
1973	LW058	OBC	BVL	GF	NW	21	21	2	554266	5627627	U	S-0	3	U	3	Cu	19	W	
1974	LW059	OBC	BVL	GF	NE	20	21	2	553451	5628070	U	S-0	--	M	2	Cu	22	W	
1975	LW060	RBC	BVLzr	GF	NE	20	21	2	553543	5627984	U	S-0	--	M	2	Cu	17	W	
1976	LW061	OBC	BVL	GF	NE	20	21	2	553355	5628147	U	S-0	1	L	2	Cu	11	W	
1977	LW062	RBC	BVLzr	GF	NE	20	21	2	553237	5628241	U	--	--	U	2	Cu	14	W	
1978	LW063	OBC	BVL	GF	SW	29	21	2	552778	5628660	U	S-0	--	M	3	Cu	17	W	
1979	LW064	OBC	CHN	GL	SW	29	21	2	552651	5628757	U	S-0	--	--	3	Cu	14	W	--
1980	LW065	CABC	CHN	GL	SW	29	21	2	552516	5628850	U	S-0	2	M	3	Cu	17	W	
1981	LW066	OBC	CHN	GL	NW	30	21	2	551560	5629702	U	S-0	--	M	3	Cu	14	W	
1982	LW067	OBC	CHN	GL	NW	30	21	2	551675	5629565	U	S-0	--	M	3	Cu	13	W	
1983	LW068	OBC	CHN	GL	NW	30	21	2	551853	5629423	U	S-0	--	E	2	Cu	22	W	
1984	LW069	RBC	CHNzr	GL	NW	30	21	2	551970	5629329	U	S-0	--	U	3	Cu	22	W	
1990	LW070	SZBC	ROL	M	NW	30	21	2	551380	5629851	U	S-0	--	M	3	NR	14	W	
1991	LW071	OBC	MAB	M	SW	31	21	2	551003	5630157	U	S-1	--	M	3	NR	14	W	
1992	LW072	OBC	MAB	M	SW	31	21	2	550919	5630228	U	S-0	--	L	2	NR	12	W	--
1993	LW073	OBC	CHNsc	GL	SW	31	21	2	550825	5630288	U	S-0	1	L	2	NR	14	W	
1994	LW074	SZBC	TIK	M	SE	36	21	3	550541	5630504	U	S-0	--	--	--	NR	10	W	--
1996	LW075	BSZ	PTA	GL	SE	36	21	3	550343	5630660	U	S-0	0	L	3	NR	8	W	
1997	LW076	OBC	CHNyt	GL	SE	36	21	3	550023	5630890	U	S-1	0	E	2	NR	6	W	
1998	LW077	RBC	CHNytzr	GL	NW	36	21	3	549822	5631049	U	S-1	--	L	4 - 5	NR	10	W	Edge of Lacustrine, Till upslope to East.
1999	LW078	OBC	CHNsc	GL	NW	36	21	3	549700	5631136	U	S-0	2	L	3	NR	16	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2000	LW079	GLBSZ	PTAgl	GL	NW	36	21	3	549348	5631397	L	S-0	0	D	1	NR	5	I	
2001	LW080	GLBSZ	PTAgl	GL	NW	36	21	3	549248	5631468	L	S-0	--	E	1	NR	5	I	
2002	LW081	OBC	CHN	GL	SE	2	22	3	549119	5631555	U	S-0	--	L	--	NR	7	W	
2003	LW082	BSZ	PTAer	GL	SE	2	22	3	548929	5631718	U	S-0	--	T	2	NR	3	MW	--
2004	LW083	BSZ	PTAer	GL	SE	2	22	3	548806	5631800	L	S-0	--	E	1	NR	0	MW	Map unit continues 50m NW , and East almost to next detailed site.
2005	LW084	SZBC	CHZ	GL	SE	2	22	3	548709	5631835	U	S-0	2	U	3	NR	5	MW	
2006	LW085	OBC	CHNsc	GL	SE	2	22	3	548469	5632058	U	S-0	--	E	2	NR	11	W	
2007	LW086	SZBC	CHZ	GL	SW	2	22	3	548231	5632227	U	S-0	--	L	3	NR	11	W	
2008	LW087	SZBC	CHZ	GL	SW	2	22	3	548128	5632307	I	S-0	3	L	--	NR	8	W	
2009	LW088	SZBC	CHZ	GL	NW	2	22	3	547934	5632463	U	S-0	--	L	2	NR	6	W	Slopes south to dry lake bed.
2013	LW089	SZBC	CHZ	GL	NW	2	22	3	547901	5632486	U	S-0	--	L	2	NR	2	W	
2014	LW090	OBC	CHN	GL	NW	2	22	3	547793	5632563	U	S-0	--	U	2	NR	9	W	--
2015	LW091	RBC	CHNzr	GL	NW	2	22	3	547551	5632731	Ro	S-0	--	U	4 - 5	NR	16	W	
2016	LW092	RBC	CHNzr	GL	NW	2	22	3	547452	5632809	Ro	S-0	--	C	5	NR	9	R	
2017	LW093	OBC	CHNsc	GL	NE	2	22	3	547168	5633027	U	S-0	--	M	3	NR	9	R	
2018	LW094	OBC	CHNsc	GL	NE	3	22	3	547051	5633115	U	S-0	1	L	2	NR	11	W	
2019	LW095	OBC	CHNsc	GL	SE	10	22	3	546578	5633467	U	S-0	--	E	2	NR	14	W	
2020	LW096	OBC	CHNsc	GL	SE	10	22	3	546471	5633536	U	S-0	--	T	4 - 5	NR	14	W	Large stones higher on slope to west.
2021	LW097	RBC	HMSsc	M	SE	10	22	3	546380	5633620	Ro	S-3	2	C	5	NR	5	W	
2022	LW098	OBC	CHN	GL	SW	10	22	3	546133	5633787	U	S-1	--	L	3	NR	13	W	100m East of Hwy.
2023	LW099	OBC	BVL	GF	SW	10	22	3	545800	5633977	U	S-0	0	E	2	NR	11	W	
2024	LW100	OBC	CHN	GL	NE	9	22	3	545476	5634259	L	S-0	--	E	1	NR	14	W	--
2025	LW101	OBC	CHN	GL	NE	9	22	3	545382	5634356	L	S-0	0	E	1	NR	15	W	
2027	LW103	OBC	MAB	M	NE	28	23	4	535406	5649044	U	S-2	2	C	4 - 5	NR	10	W	Too stony to auger.
2028	LW104	OBC	MAB	M	NE	28	23	4	535412	5648825	U	S-1	4	M	3	NR	13	W	--
2029	LW105	OBC	MAB	M	NE	28	23	4	535416	5648541	U	S-2	3	T	4 - 5	NR	19	W	--
2030	LW106	OBC	MAB	M	SE	28	23	4	535421	5648430	U	S-1	2	L	3	NR	14	W	
2031	LW107	OBC	MAB	M	SE	29	23	4	535434	5648038	U	S-3	1	E	3	NR	11	W	Many large surface stones.
2032	LW108	OBC	MAB	M	SE	28	23	4	535422	5647844	U	S-1	2	M	3	NR	17	W	
2033	LW109	GLBC	MABgl	M	NE	21	23	4	535427	5647608	U	S-0	0	D	--	NR	9	I	Dry slough. Poor colour change.
2034	LW110	OBC	MAB	M	NE	21	23	4	535439	5647375	U	S-1	3	L	3	NR	13	W	
2035	LW111	OBC	MAB	M	NE	21	23	4	535437	5647146	U	S-3	2	M	3	NR	11	W	
2036	LW112	OBC	MAB	M	SE	21	23	4	535448	5646679	U	S-2	3	U	3	NR	7	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2037	LW113	OBC	MAB	M	SE	21	23	4	535454	5646522	U	S-2	2	C	3	NR	7	W	Tops of boulders exposed.
2038	LW114	OBC	MAB	M	SE	21	23	4	535467	5646379	U	S-2	2	T	--	NR	13	W	
2039	LW115	OBC	MABer	M	SE	21	23	4	535512	5646108	U	S-2	3	U	3	NR	4	W	Good colour change.
2040	LW116	SZBC	ROL	M	NW	15	23	4	535562	5645807	U	S-1	0	E	2	NR	11	W	
2041	LW117	OBC	MAB	M	NW	15	23	4	535582	5645693	U	S-1	2	M	3	NR	7	W	Good colour change.
2042	LW118	OBC	MAB	M	NW	15	23	4	535620	5645467	U	S-2	3	M	3	NR	9	W	--
2043	LW119	OBC	MAB	M	SW	15	23	4	535680	5645192	U	S-1	5	M	4 - 5	NR	9	W	Sideslope. Thistle on proposed RoW.
2044	LW120	OBC	MABxs	M	SW	15	23	4	535716	5645025	H	S-2	12	C	5	NR	10	W	
2045	LW121	RBC	HMS	M	SW	15	23	4	535788	5644700	H	S-3	3	--	5	NR	6	W	
2046	LW122	OHG	KTM	M	SW	15	23	4	535805	5644598	H	S-1	0	D	5	NR	15	I	
2047	LW123	OBC	MAB	M	NW	10	23	4	535832	5644469	H	S-2	2	C	5	NR	10	W	
2048	LW124	OBC	MAB	M	NW	10	23	4	535905	5644088	H	S-1	7	L	5	NR	8	W	Good colour change. Sideslope.
2049	LW125	OHG	KTMsa	M	NW	10	23	4	535911	5643967	H	S-0	0	D	5	NR	11	W	Dry saline slough.
2053	LW126	OBC	MAB	M	sw	10	23	4	535980	5643552	U	S-1	2	--	2	NR	8	W	--
2054	LW127	OBC	MAB	M	SW	10	23	4	536044	5643210	U	S-1	2	M	2	NR	12	W	
2055	LW128	OBC	MAB	M	SW	10	23	4	536092	5643009	U	S-1	2	M	2	NR	7	W	
2056	LW129	OBC	MAB	M	SW	10	23	4	536135	5642744	U	S-0	0	E	2	NR	9	W	
2057	LW130	OBC	CHN	GL	NW	3	23	4	536159	5642618	U	S-0	2	L	2	NR	10	W	
2058	LW131	OBC	CHN	GL	NW	3	23	4	536172	5642503	U	S-1	1	L	2	NR	14	W	
2059	LW132	OBC	FMT	M	NW	3	23	4	536189	5642391	U	S-2	4	C	3	NR	11	W	
2060	LW133	OBC	FMT	M	SW	3	23	4	536400	5641862	U	S-2	2	L	3	NR	6	W	Boulders on surface.
2061	LW134	OBC	MAB	M	SW	3	23	4	536285	5641633	U	S-2	2	U	2	NR	4	W	
2062	LW135	OBC	MAB	M	SW	3	23	4	536300	5641495	U	S-1	2	M	2	NR	6	W	
2063	LW136	OBC	MAB	M	SW	3	23	4	536308	5641381	U	S-1	2	L	3	NR	11	W	
2064	LW137	RBC	CHNzr	GL	NW	34	22	4	536339	5641117	U	S-1	2	M	2	IP	11	W	Stones piles nearby.
2065	LW138	OBC	CHN	GL	NW	34	22	3	536471	5640899	U	S-0	1	E	3	IP	14	W	
2066	LW139	CABC	CHN	GL	NW	34	22	3	536575	5640830	U	S-0	4	M	3	IP	11	W	
2067	LW140	OBC	CHN	GL	NW	34	22	3	536687	5640753	U	--	2	T	3	IP	16	W	
2068	LW141	OBC	CHN	GL	SE	34	22	4	537163	5640392	U	S-0	3	M	3	NR	15	--	
2069	LW142	OBC	CHNyt	GL	SE	34	22	3	537283	5640321	U	S-1	3	L	3	NR	14	W	
2070	LW143	OBC	CHNyt	GL	SE	34	22	3	537389	5640247	U	S-0	3	M	3	NR	9	W	
2071	LW144	RBC	HMS	M	SW	35	22	3	537613	5640084	--	S-1	3	M	3	NR	10	W	--
2072	LW145	OBC	FMTer	M	SW	35	22	3	537830	5639930	U	S-1	2	M	2	NR	3	W	--
2073	LW146	OBC	FMT	M	SW	35	22	3	537962	5639841	U	S-1	1	E	2	NR	8	W	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2074	LW147	RBC	HMS	M	SW	35	22	3	538077	5639749	H	S-3	3	C	5	NR	13	W	Top of coulee. Cca stony after 150cm
2075	LW148	SZBC	ROL	M	NE	26	22	3	538589	5639515	I	S-2	18	L	6	NR	12	R	
2076	LW149	OHR	ZUN	GF	NE	26	22	3	538754	5639504	T	S-2	0	E	2	NR	10	W	
2077	LW150	OBC	MAB	M	NE	26	22	3	539058	5639529	I	S-2	11	M	2	NR	14	W	
2078	LW151	OHR	ZUN	GF	NW	25	22	3	539197	5639513	L	S-0	0	E	1	NR	11	MW	Floodplain
2079	LW152	OHR	ZUN	GF	NW	25	22	3	539339	5639474	L	S-0	0	E	1	NR	14	MW	The west bank is actively eroding; very sandy. Top of bank 3m above water level.
2085	LW153	GLR	ZUNsa	GL	SW	20	22	3	543683	5635909	L	S-0	4	E	1	NR	6	I	Saline lake bed.
2086	LW154	OR	ZUNsa	GL	SW	20	22	3	543591	5635982	L	S-0	0	E	1	NR	8	I	
2087	LW155	OBC	MAB	M	NE	19	22	3	543291	5636226	L	S-0	0	E	--	NR	14	W	
2088	LW156	OBC	MAB	M	NE	19	22	3	543094	5636381	U	S-1	2	M	3	NR	8	W	
2089	LW157	RBC	HMS	M	E	19	22	3	543001	5636456	U	S-2	5	M	3	NR	8	W	--
2090	LW158	RBC	HMS	M	NE	19	22	3	542820	5636620	H	S-2	6	L	6	NR	15	W	--
2091	LW159	OBC	MAB	M	NE	19	22	3	542702	5636774	H	S-3	40	L	2	NR	11	W	
2092	LW160	OBC	CFD	GL/M	NE	19	22	3	542490	5636965	L	S-2	0	E	2	NR	17	W	--
2093	LW161	OBC	CHN	GL	SW	30	22	3	542386	5637079	L	S-1	1	E	2	NR	15	W	Plateau
2094	LW162a	OBC	CHN	GL	SE	30	22	3	542307	5637178	L	S-1	0	E	2	NR	20	W	--
2095	LW162b	OBC	CHN	GL	NE	19	22	3	541948	5637589	--	S-0	0	--	2	IP	7	W	
2096	LW163a	OBC	CHN	GL	SE	30	22	3	542034	5637494	L	S-0	0	E	2	IP	12	W	
2097	LW163b	OBC	CHN	GL	SW	30	22	3	541567	5638022	U	S-0	1	C	2	NR	14	W	
2098	LW164	OBC	CHN	GL	SW	30	22	3	541378	5638232	U	S-0	2	M	2	NR	14	W	
2099	LW165	OBC	CHN	GL	SW	30	22	3	541275	5638348	--	S-0	2	U	2	NR	14	W	
2100	LW166	OBC	CHN	GL	SW	30	22	3	540992	5638665	U	S-0	1	D	3	NR	25	W	
2101	LW167	OBC	BVL	GF	NE	25	22	4	540802	5638882	U	S-0	3	M	3	NR	12	R	
2102	LW168	OBC	BVL	GF	NW	25	22	4	540611	5638947	Ri	S-1	14	U	3	NR	12	R	
2821	PM001	OBLC	EOR	M	SW	28	42	9	483094	5832467	Ro	S-0	3	U	3	Cu	12	W	Stony at 120 cm
416	PM002	--	--		SW	28	42	9	483073	5832363	--	--	--	--	3	Cu	12	--	
2822	PM003	OBLC	EORxs	M	SW	28	42	9	483045	5832211	Ro	--	4	M	3	Cu	15	W	
417	PM004	--	--		SW	28	42	9	483008	5832071	--	--	--	--	3	Cu	12	--	
419	PM005	--	--		NW	21	42	9	482999	5831892	--	--	--	--	3	HL	10	--	
420	PM006	--	--		NW	21	42	9	482987	5831726	--	--	--	--	4 - 6	Bu	12	--	
2823	PM007	OBLC	EOR	M	NW	21	42	9	482944	5831507	L	--	2	E	3	Cu	12	W	
422	PM008	--	--		NW	21	42	9	482921	5831365	--	--	--	--	3	Bu	5	--	
2824	PM009	OR	ZUN		SW	21	42	9	482939	5831083	Ro	--	2	U	3	Bu	10	R	
423	PM010	--	--		NW	8	42	9	481940	5828466	--	--	--	--	2 - 4	Cu	10	--	
424	PM011	--	--		NW	8	42	9	481943	5828228	H	--	--	--	3 - 5	Cu	37	--	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
426	PM012	--	--		NW	8	42	9	481951	5828041	H	--	--	M	3 - 5	Cu	17	--	
427	PM013	--	--		SW	8	42	9	481964	5827835	H	--	--	--	3 - 5	Cu	28	--	
429	PM014	--	--		SW	8	42	9	481989	5827612	H	--	--	L	3 - 5	Cu	15	--	Gleysol
430	PM015	--	--		SW	8	42	9	481999	5827407	H	--	--	L	3 - 5	Cu	36	--	--
431	PM016	--	--		SW	8	42	9	482014	5827203	--	--	--	--	3 - 5	Wt	--	--	Slough
432	PM017	--	--		NW	5	42	9	481793	5826916	H	--	--	M	3 - 5	IP	37	--	--
433	PM018	--	--		NW	5	42	9	481843	5826700	H	--	--	--	3 - 5	IP	15	--	--
434	PM019	--	--		NW	5	42	9	481897	5826527	H	--	--	M	3 - 5	NR	30	--	--
2825	PM020	OBLC	ROS	GF/M	SW	5	42	9	482063	5826114	H	S-0	--	L	3 - 5	NR	40	W	
436	PM021	--	--		SW	5	42	9	481977	5826241	H	--	--	M	3 - 5	NR	12	--	--
437	PM022	--	--		SE	5	42	9	482152	5825916	H	--	--	L	3 - 5	IP	20	--	--
2826	PM023	GLCABLC	TOAgl	GL	SE	5	42	9	482290	5825768	L	S-0	2	D	3	IP	20	P	--
438	PM024	--	--		SE	5	42	9	482382	5825645	H	--	--	C	3	IP	10	--	--
2827	PM025	OHG	ZGW	GL	NE	32	41	9	482470	5825458	H	--	5	--	3	IP	20	--	--
442	PM026	--	--		NE	32	41	9	482545	5825333	H	--	--	U	3 - 5	IP	10	--	--
444	PM027	--	--		NE	32	41	9	482630	5825199	H	--	--	C	3 - 5	IP	8	--	--
445	PM028	--	--		NE	32	41	9	482696	5825083	H	--	--	M	3 - 5	IP	10	--	--
2828	PM029	CABLC	DORerca		NE	32	41	9	482772	5824998	H	S-2	2	C	3 - 5	IP	8	MW	Stony at 140 cm
446	PM030	--	--		SW	33	41	9	483011	5824662	H	--	--	M	3 - 4	HL	10	--	--
2829	PM031	OBLC	CPLxtfi		SW	33	41	9	483127	5824586	H	--	8	C	4	HL	10	R	
447	PM033	--	--		SW	33	41	9	483138	5824410	H	--	--	L	3 - 4	HL	10	--	--
448	PM034	--	--		SW	33	41	9	483181	5824223	H	--	--	M	3 - 4	HL	10	--	--
2830	PM035	OBLC	EORer	M	SW	33	41	9	438333	5824034	H	S-2	4	U	3	HL	10	W	
449	PM040	--	--		SE	14	38	8	497598	5789989	--	--	--	L	3 - 4	Cu	10	--	--
2831	PM041	ODBC	HNDsc	M	SE	14	38	8	497522	5790123	Ro	S-2	5	M	3	Cu	11	W	
450	PM042	--	--		SE	14	38	8	497443	5790220	--	--	--	M	3 - 4	Cu	15	--	--
451	PM043	--	--		SE	14	38	8	497389	5790303	--	--	--	M	3 - 4	Cu	30	--	--
2832	PM044	ODBC	DCYsc	GF/M	SE	14	38	8	497332	5790386	Ro	S-2	3	M	3	Cu	10	W	
452	PM045	--	--		SE	14	38	8	497269	5790462	--	--	--	M	3 - 4	Cu	10	--	--
2834	PM046	ODBC	HNDsc	M	NE	11	38	8	497760	5789774	Ro	S-2	5	L	4	Cu	13	W	--
453	PM047	--	--		NE	11	38	8	497820	5789691	Ro	--	--	M	3 - 4	Cu	13	--	--
454	PM048	--	--		NE	11	38	8	497884	5789610	Ro	--	--	L	3 - 4	Cu	13	--	--
455	PM049	--	--		NE	11	38	8	497950	5789514	Ro	--	--	C	3 - 4	Cu	12	--	--
456	PM050	--	--		NW	12	38	8	498147	5789223	Ro	--	--	E	3	HL	15	--	--
2835	PM051	DBSS	HKR	M	NW	12	38	8	498217	5789126	U	S-2	2	L	3	HL	10	MW	
457	PM052	--	--		SW	12	38	8	498286	5789025	U	--	--	M	3	HL	10	--	
458	PM053	--	--		SW	12	38	8	498355	5788928	Ro	--	--	M	3	HL	10	--	
459	PM054	OHG	--		SW	12	38	8	498444	5788799	Ro	--	--	T	2 - 3	HL	26	--	
2836	PM055	DBSS	HKR	M	SW	12	38	8	498506	5788718	Ro	S-2	5	M	4	HL	14	W	Stony at 90 cm

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
460	PM056	--	--		SW	12	38	8	498574	5788619	--	--	--	M	4	HL	12	--	
461	PM057	--	--		SW	12	38	8	498650	5788511	Ro	--	--	D	4	IP	30	--	
462	PM058	--	--		SW	12	38	8	498718	5788414	Ro	--	--	U	4	IP	8	--	
463	PM059	--	--		SW	12	38	8	498788	5788315	--	--	--	M	4	IP	12	--	
464	PM060	--	--		SE	19	32	4	530621	5733673	--	--	--	--	--	IP	0	--	Old road bed
1040	PM061	--	--		SE	19	32	4	530617	5733847	I	S-2	4	--	--	IP	20	W	Old road bed
465	PM062	ODBC	--		NE	19	32	4	530590	5734478	Ro	--	--	M	--	HL	13	--	--
1041	PM063	--	--		NE	19	32	4	530589	5734633	Ro	--	2	D	--	HL	15	W	Swale
1045	PM064	--	--		NE	18	32	4	530674	5733039	Ro	--	2	C	--	HL	10	W	
466	PM065	--	--		SE	18	32	4	530824	5732389	Ro	--	--	M	--	Cu	12	--	
1046	PM066	--	--		SE	18	32	4	530858	5732197	Ro	--	2	C	--	Cu	10	MW	
467	PM067	--	--		NE	7	32	4	530887	5731670	Ro	--	--	M	--	Cu	12	--	
1048	PM068	--	--		NE	7	32	4	530935	5731435	Ro	S-0	--	--	--	NR	10	VP	Swale
1051	PM069	--	--		SE	7	32	4	531034	5730234	Ro	S-2	3	L	--	Cu	10	W	Stony Ck
468	PM070	--	--		SE	7	32	4	531037	5730331	Ro	S-2	--	L	--	Cu	12	--	
668	PM072	--	--		SE	7	32	4	531017	5730737	Ro	S-2	--	M	--	Cu	13	--	
670	PM073	--	--		SE	7	32	4	531010	5730874	Ro	S-2	--	C	--	Cu	8	--	
358	PM074	GLBSS	WESxt	GL	NE	1	38	8	498946	5788094	Ro	--	--	M	4 - 5	NR	18	I	
361	PM075	OHG	FLTxs	GL	NE	1	38	8	499010	5787997	F	--	2	T	2	NR	14	--	
672	PM076	--	--		NE	1	38	8	499085	5787891	--	--	--	D	2	NR	5	--	
673	PM077	--	--		NE	1	38	8	499156	5787794	Ro	--	--	M	2	NR	3	--	
675	PM078	--	--		NE	1	38	8	499301	5787592	L	--	--	D	2	NR	3	--	
363	PM079	BLSS	HKR	M	NE	1	38	8	499380	5787492	Ri	--	3	M	3	NR	12	--	
364	PM080	RHG	THRxt	GL/M	NE	31	37	7	500812	5786562	S	--	15	L	5	NR	38	W	
676	PM081	--	--		NE	31	37	7	501190	5786566	S	--	--	L	4-6	NR	10	--	
365	PM082	OBLC	HNDsc	M	NW	32	37	7	501329	5786563	S	S-2	12	M	4-6	NR	12	W	Swale
678	PM083	--	--		NW	32	37	7	501741	5786565	S	S-4	--	C	4-6	NR	5	--	
679	PM084	--	--		NW	32	37	7	501943	5786558	S	S-2	--	M	4-6	NR	36	--	
680	PM085	--	--		NE	32	37	7	502177	5786568	--	--	--	--	4-6	NR	10	--	Old slumping
366	PM086	HULG	FMNscaa	M	SE	16	41	9	484390	5819569	H	S-2	2	D	3	HL	27	P	
369	PM087	OHR	NUTcr	M	SE	16	41	9	484353	5819139	--	S-2	10	M	3 - 5	HL	11	--	
370	PM088	OBLC	EOR		NE	9	41	9	484320	5818815	--	S-2	2	C	3	IP	17	W	Sloep % (site) <2%. soil corr area is 7.
372	PM089	OBLC	ACE		SE	9	41	9	484342	5818354	H	S-2	2	L	4	HL	24	W	Stony at depth
374	PM090	GLEBLC	KTYsc		SE	9	41	9	484363	5817964	U	S-2	2	T	3	Cu	21	I	2nd degree carbonates throughout profile. good contrast T/S
376	PM091	CABLC	EORsc	M	SE	9	41	9	484383	5817678	H	S-3	6	L	5	Cu	17	MW	Stony at 185 cm
377	PM092	EBLC	ACE	GL/M	SE	9	41	9	484441	5817472	H	S-2	9	L	5	HL	35	MW	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
378	PM093	OBLC	EORscst		NW	3	41	9	484681	5817226	H	S-3	2	C	3	IP	10	W	Stony at depth
379	PM094	GLBLC	CPLglfi		NW	3	41	9	485082	5816914	H	--	--	U	4	IP	13	I	Stony at depth
381	PM095	OBLC	IRMsc		NW	3	41	9	485189	5816658	H	--	2	L	3	IP	18	--	
382	PM096	OBLC	IRMco	GF	SW	3	41	9	485189	5816150	F	S-2	6	M	3	IP	30	W	
384	PM097	GLRBLC	ROSglzr	GF/M	NW	34	40	9	485189	5815755	H	--	4	M	4 - 5	HL	20	I	
683	PM100	--	--		NW	34	40	9	485150	5815491	--	--	--	D	--	Wt	--	--	Wetland
684	PM101	--	--		NW	34	40	9	485139	5815357	--	--	--	M	4	IP	21	--	--
685	PM102	--	--		NW	34	40	9	485124	5815202	--	--	--	M	4	IP	30	--	topsoil is >30
686	PM104	--	--		NW	34	40	9	485121	5815023	S	--	35	--	7	IP	3	--	--
687	PM105	--	--		SW	34	40	9	485131	5814785	Ri	S-2	--	C	4 - 5	NR	8	--	Large surface stones
696	PM106	--	--		SW	34	40	9	485136	5814650	Ri	--	--	M	4 - 5	NR	10	--	--
698	PM107	--	--		SW	34	40	9	485126	5814526	Ri	--	--	U	5	DL	30	--	
699	PM108	--	--		SW	34	40	9	485122	5814274	--	--	--	M	5	IP	6	--	
701	PM109	--	--		NW	27	40	9	485131	5814127	H	--	--	D	4	IP	23	--	--
702	PM110	--	--		NW	27	40	9	485129	5813986	H	--	--	M	4	DL	9	--	Disturbed land
703	PM111	--	--		NW	27	40	9	485136	5813651	--	S-4	--	U	4	NR	10	--	Disturbed land
704	PM112	--	--		NW	27	40	9	485124	5813385	I	--	--	L	4	DL	30	--	Disturbed land
706	PM113	--	--		SW	27	40	9	485123	5813249	H	--	--	U	4	DL	28	--	Disturbed land
708	PM114	--	--		SW	27	40	9	485128	5813054	H	--	--	L	6	DL	30	--	Disturbed land
709	PM115	--	--		SW	27	40	9	485135	5812754	H	--	--	M	6	DL	12	--	Disturbed land
710	PM116	--	--		SW	22	40	9	485141	5811652	H	--	--	--	3 - 6	NR	18	--	
712	PM117	--	--		SW	22	40	9	485144	5811484	H	--	--	C	3 - 6	Wo	17	--	
713	PM118	--	--		SW	22	40	9	485154	5811183	H	--	--	--	3 - 6	NR	10	--	
386	PM119	OBLC	EORxs	M	SW	15	40	9	484926	5809384	H	S-2	4	M	4 - 5	IP	11	W	
388	PM120	GLBLC	ACEgl	GL/M	SW	15	40	9	484980	5809854	H	--	5	L	6	Wo	46	I	
390	PM121	GLBLC	EORgl	M	NW	15	40	9	485025	5810156	H	S-2	21	L	6	IP	17	I	
1055	PM122	OBLC	EOR		NW	15	40	9	485062	5810567	--	S-2	11	U	5	IP	11	W	
1057	PM123	OBLC	EORerca		NW	10	40	9	484912	5808970	H	S-2	5	C	5	IP	10	--	
1061	PM124	OBLC	BLL		NW	10	40	9	484916	5808699	H	--	2	C	5	IP	10	W	
1062	PM125	GLBLC	ROSco	GF/M	SW	10	40	9	484934	5808101	--	--	2	--	3	IP	10	I	
1063	PM126	OBLC	ROSst	GF/M	SW	10	40	9	484946	5807729	U	S-2	2	M	3	IP	24	--	
1064	PM127	OBLC	ACE	GL/M	NW	3	40	9	484960	5807310	H	S-0	--	L	4	HL	--	--	
1077	PM128	GLBLC	ACEgl	GL/M	NW	3	40	9	484968	5806942	H	--	5	M	4	HL	34	I	
1078	PM130	CUHR	CNNxt	GL/M	NE	32	37	7	502362	5786566	F	S-1	12	M	4	NR	20	--	
1079	PM131	DBSZ	VTR	GL	NE	32	37	7	502500	5786447	F	--	8	--	4	NR	3	MW	
1080	PM132	DBSS	VTRco	GL	NE	32	37	7	502577	5786353	F	--	9	M	4	NR	16	MW	
1081	PM133	DBSS	VTR	GL	NE	32	37	7	502269	5786577	F	S-0	15	M	4	NR	15	MW	
1083	PM140	CABLC	EORca	M	SW	3	40	9	484989	5806144	H	S-2	8	M	4	IP	14	I	Stony at 140 cm

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
714	PM141	--	--		SW	3	40	9	484979	5806263	--	--	--	L	4 - 5	IP	13	--	
715	PM142	--	--		SW	3	40	9	484972	5806383	--	--	--	D	4 - 5	IP	17	--	
1084	PM143	ODBC	IRM	GF	SW	3	40	9	484981	5806522	H	S-2	10	L	5	IP	26	W	
716	PM144	--	--		NW	34	39	9	484981	5805954	H	--	--	M	4	Cu	12	--	
1085	PM145	OHG	ZGW	M	NW	34	39	9	484995	5805804	--	S-3	5	L	3	Cu	10	P	
718	PM146	--	--		NW	34	39	9	485004	5805678	H	--	--	U	3 - 5	Cu	11	--	
719	PM147	--	--		NW	34	39	9	485018	5805531	H	--	--	M	3 - 5	Cu	15	--	
1086	PM148	GLBLC	EORgl	M	NW	34	39	9	485014	5805380	H	S-1	2	D	3 - 5	Cu	80	I	
1090	PM149	OHG	FLT	GL	SW	34	39	9	485034	5804656	H	S-1	3	D	3	Cu	41	P	
721	PM150	--	--		SW	34	39	9	485030	5804803	H	S-3	--	M	3 - 5	Cu	15	--	
1107	PM151	CABLC	EORcr	M	SW	34	39	9	485026	5804920	H	S-3	7	U	4	Cu	10	MW	
722	PM152	--	--		SW	34	39	9	485016	5805061	H	--	--	M	3 - 5	Cu	15	--	
723	PM153	--	--		SW	34	39	9	485015	5805155	H	--	--	T	3 - 5	Cu	10	--	
725	PM154	--	--		SW	34	39	9	485009	5805263	H	--	--	M	3 - 5	Cu	12	--	
726	PM155	--	--		NW	27	39	9	485037	5804403	H	--	--	M	3 - 5	HL	12	--	
1108	PM156	OBLC	EOR	M	NW	27	39	9	485031	5804252	H	S-1	8	M	4	IP	14	W	Stony at 160 cm
727	PM157	--	--		NW	27	39	9	485024	5804132	H	--	--	U	3 - 5	IP	13	--	
728	PM158	--	--		NW	27	39	9	485011	5804016	H	--	--	C	3 - 5	IP	8	--	
729	PM159	--	--		NW	27	39	9	485008	5803901	H	--	--	T	3 - 5	IP	19	--	
1109	PM160	OBLC	EOR	M	NW	27	39	9	485007	5803802	H	S-2	10	M	5	IP	10	W	Stony at 155 cm
732	PM161	--	--		SW	27	39	9	484989	5803634	H	--	--	M	3	Cu	30	--	
731	PM162	--	--		SW	27	39	9	484980	5803507	H	--	--	M	3	Cu	12	--	
734	PM164	--	--		SW	27	39	9	484968	5803396	H	--	--	M	3	Cu	25	--	
1110	PM165	OBLC	EORst	M	SW	27	39	9	484952	5803294	H	S-2	3	L	3	--	30	W	Stony at 153 cm
736	PM166	--	--		SW	27	39	9	484942	5803171	H	--	--	T	3	Cu	17	--	
737	PM167	--	--		SW	27	39	9	484934	5803053	H	--	--	U	3	Cu	10	--	
2819	PM168	OBLC	EORsc		SW	27	39	9	484918	5802941	H	S-2	--	M	4	Cu	10	MW	
1111	PM169	GLBLC	ACEgl	GL/M	NW	22	39	9	484904	5802536	H	S-0	--	D	4 - 5	IP	40	I	Swale
739	PM170	--	--		NW	22	39	9	484902	5802759	H	--	--	M	4 - 5	IP	15	--	
740	PM171	--	--		NW	22	39	9	484915	5802639	H	--	--	U	4 - 5	IP	8	--	
741	PM172	--	--		NW	22	39	9	484916	5802395	H	--	--	T	4 - 5	IP	11	--	
742	PM173	--	--		NW	22	39	9	484919	5802283	H	--	--	M	4 - 5	HL	12	--	
744	PM174	--	--		NW	22	39	9	484921	5802164	H	--	--	C	4 - 5	HL	12	--	
1112	PM175	CABLC	EORcr	M	NW	22	39	9	484919	5802070	H	S-2	8	M	4	HL	10	MW	Stony at 140 cm
745	PM176	--	--		SW	22	39	9	484915	5801927	H	--	--	M	4 - 5	HL	20	--	
746	PM177	--	--		SW	22	39	9	484918	5801377	H	--	--	M	4 - 5	Cu	10	--	
1130	PM178	GLBLC	EOR	M	SW	22	39	9	484911	5801500	H	S-2	6	L	4 - 5	Cu	20	I	
747	PM179	--	--		SW	22	39	9	484914	5801604	H	--	--	M	4 - 5	Cu	14	--	
748	PM180	--	--		SW	22	39	9	484919	5801703	H	--	--	C	4 - 5	Cu	10	--	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
750	PM181	--	--		SW	22	39	9	484921	5801791	H	--	--	D	4 - 5	Cu	24	--	
1131	PM182	OBLC	EOR	M	NW	15	39	9	484902	5801185	H	S-1	7	U	4	Bu	10	W	
751	PM183	--	--		NW	15	39	9	484898	5801054	H	--	--	U	4 - 5	Bu	14	--	
755	PM184	--	--		NW	15	39	9	484894	5800906	H	--	--	D	3 - 4	Cu	--	--	
752	PM185	--	--		NW	15	39	9	484969	5800790	H	--	--	M	3 - 4	Cu	10	--	
1132	PM186	OBLC	EOR	M	NW	15	39	9	485051	5800703	H	S-3	2	U	3	Cu	9	W	
753	PM187	--	--		NW	15	39	9	485151	5800605	H	--	--	U	3 - 4	Cu	12	--	
754	PM188	--	--		NW	15	39	9	485244	5800514	H	--	--	D	3 - 4	Cu	12	--	
756	PM189	--	--		SE	15	39	9	485359	5800413	H	--	--	D	2 - 4	IP	15	--	
757	PM190	--	--		SE	15	39	9	485491	5800308	H	--	--	C	2 - 4	IP	10	--	
1133	PM191	OBLC	EOR	M	SE	15	39	9	485558	5800233	H	S-2	6	L	4	IP	25	W	Stony at 140 cm
758	PM192	--	--		SE	15	39	9	485653	5800144	H	--	--	U	2 - 4	IP	13	--	
1134	PM193	OBLC	EOR	M	SE	15	39	9	485732	5800076	H	S-2	1	M	2	IP	10	W	
759	PM194	--	--		SE	15	39	9	485865	5799949	H	--	--	M	3 - 4	HL	13	--	
1135	PM195	OHG	EORgl	M	SE	15	39	9	485973	5799850	H	S-2	8	M	4	HL	12	I	
1136	PM196	CABLC	EORca	M	NW	11	39	9	486489	5799499	H	S-1	5	M	4	NR	11	MW	Stony at 195 cm
761	PM197	--	--		NW	11	39	9	486616	5799409	H	--	--	M	4	NR	8	--	
760	PM198	--	--		NW	11	39	9	486738	5799331	H	--	--	M	4	NR	11	--	
1137	PM199	OBLC	ROSsc	GF/M	NE	11	39	9	486898	5799216	H	S-1	9	L	4	NR	16	W	
1138	PM200	OBLC	EORer	M	NE	11	39	9	487611	5799068	H	S-1	14	U	5	NR	9	MW	
763	PM201	--	--		NE	11	39	9	487462	5799047	H	--	--	--	4 - 5	Wo	26	--	
764	PM202	--	--		NE	11	39	9	487293	5799042	H	--	--	--	4 - 5	Bu	10	--	
765	PM203	--	--		NE	11	39	9	487057	5798995	H	--	--	M	4 - 5	Bu	30	--	
766	PM204	--	--		NE	11	39	9	486949	5799117	H	--	--	C	4 - 5	Wo	5	--	
767	PM205	--	--		NW	11	39	9	486382	5799563	H	--	--	L	3	Bu	17	--	
768	PM206	--	--		SW	14	39	9	486207	5799668	H	--	--	L	4	NR	13	--	
769	PM210	--	--		NW	12	39	9	487770	5799049	H	S-3	--	M	3 - 5	Cu	12	--	
770	PM211	--	--		NW	12	39	9	487911	5799056	H	--	--	D	3 - 5	Cu	14	--	
772	PM212	--	--		NW	12	39	9	488097	5799085	H	--	--	C	3 - 5	Cu	10	--	
1139	PM213	HULG	ZGW		NW	12	39	9	488208	5799108	H	S-2	10	L	5	Cu	30	P	
773	PM214	--	--		NW	12	39	9	488371	5799024	H	S-3	--	--	3 - 5	Cu	10	--	
1140	PM215	OBLC	EOR	M	NW	12	39	9	488453	5798961	H	S-2	4	L	3	Cu	26	W	
774	PM216	--	--		SE	12	39	9	488564	5798879	H	S-2	--	M	3 - 4	HL	10	--	
775	PM217	--	--		SE	12	39	9	488694	5798785	H	S-1	--	U	3 - 4	NR	12	--	
1141	PM218	BLSS	KLM		SE	12	39	9	488870	5798607	H	S-0	4	M	3	NR	27	--	
776	PM219	--	--		SE	12	39	9	488955	5798530	F	--	--	D	1	NR	0	--	
777	PM220	--	--		SE	12	39	9	489085	5798451	H	--	--	C	2 - 4	NR	12	--	
1240	PM221	SZG	FMNsa		SE	12	39	9	489211	5798378	I	S-2	3	T	3	NR	5	P	
778	PM222	--	--		SE	12	39	9	489297	5798315	H	--	--	C	2 - 4	NR	10	--	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
779	PM223	SZBLC	--		SW	7	39	8	489441	5798273	H	--	--	L	2 - 4	Bu	30	--	
780	PM224	--	--		SW	7	39	8	489549	5798218	H	--	--	M	4	NR	11	--	
2011	PM225	OBLC	EOR	M	SW	7	39	8	489649	5798169	H	S-1	--	M	4	NR	13	W	
781	PM226	--	--		SW	7	39	8	489736	5798098	H	--	--	M	4	NR	11	--	
783	PM227	--	--		SW	7	39	8	489886	5798043	H	--	--	M	4	NR	7	--	
784	PM228	--	--		SE	7	39	8	490039	5798017	U	--	--	E	4	NR	13	--	
785	PM229	--	--		NE	6	39	8	490180	5797972	U	S-2	--	M	3	IP	9	--	
786	PM230	--	--		NE	6	39	8	490341	5797965	U	--	--	M	3	IP	9	--	
788	PM231	--	--		NE	6	39	8	490452	5797968	S	--	--	M	6 - 7	NR	22	--	
2012	PM232	SZG	ZGW		NE	6	39	8	490563	5797968	I	--	4	T	2	NR	3	--	
787	PM233	--	--		NE	6	39	8	490690	5797957	L	S-0	--	D	2 - 3	Wt	5	--	Muck
2026	PM234	OG	ZGW		NE	6	39	8	490920	5797958	L	--	2	D	2 - 3	NR	2	P	--
2050	PM235	BLSS	KLM	M	NW	5	39	8	491002	5797954	I	--	8	M	4 - 6	NR	7	W	--
789	PM236	RBLC	--		NW	5	38	8	491130	5797972	Ro	--	--	C	3	Cu	10	--	
790	PM237	--	--		SW	8	39	8	491301	5798035	--	--	--	M	3	HL	12	--	
791	PM238	--	--		SW	8	39	8	491439	5798035	U	--	--	L	3	HL	13	--	
792	PM239	--	--		NW	5	39	8	491643	5797935	H	--	--	U	3	Cu	10	--	
1212	PM240	OBLC	EORsc	M	NW	5	39	8	491761	5797859	U	--	3	--	3	Cu	10	W	
793	PM241	--	--		NE	5	39	8	491906	5797764	H	--	--	D	3	Cu	10	--	
794	PM242	--	--		NE	5	39	8	492031	5797719	U	--	--	M	3	Cu	10	--	
2051	PM243	EBLC	EORsczz	M	NE	5	39	8	492142	5797597	U	--	2	L	3	Cu	20	W	--
795	PM244	--	--		NE	5	39	8	492231	5797496	H	--	--	M	3	Cu	26	--	
2052	PM245	RHG	ZGW		NE	5	39	8	492301	5797373	H	--	2	L	3	Cu	17	P	
796	PM246	--	--		NE	5	39	8	492376	5797259	H	--	--	L	3	Cu	30	--	
797	PM247	--	--		SE	5	39	8	492477	5797102	H	--	--	C	3	HL	12	--	
2080	PM248	OBLC	IRMst	GF	SE	5	39	8	492592	5796970	H	--	3	M	3	--	26	W	Stony at 155 cm
798	PM249	--	--		SW	4	39	8	492682	5796816	H	--	--	M	3	Cu	12	--	
799	PM250	--	--		SW	4	39	8	492771	5796692	H	--	--	U	3	Cu	10	--	
800	PM251	--	--		SW	4	39	8	492867	5796575	U	--	--	U	3	Cu	13	--	
2081	PM252	OBLC	EOR	M	SW	4	39	8	492956	5796458	U	S-3	4	M	3	Cu	12	--	Stony at 160 cm
801	PM253	--	--		NE	32	38	8	493088	5796333	S	--	--	M	6	HL	20	--	
2082	PM254	CADBC	IRMst	GF	NE	32	38	8	493164	5796227	S	--	20	M	6	IP	10	R	Stony at 120 cm
2083	PM255	RDBC	METzrst	GF	NW	33	38	8	493245	5796059	--	S-2	2	C	3 - 5	NR	17	MW	
2084	PM256	SZDBC	FST	M	NW	33	38	8	493320	5795953	S	S-2	10	M	5	NR	2	--	
802	PM257	DBSO	--		NW	33	38	8	493385	5795866	F	--	--	M	4 - 6	HL	4	--	
803	PM258	GLDBSS	HKRgl		NW	33	38	8	493462	5795756	I	--	--	T	3	HL	0	--	
2103	PM259	DBSS	CURgl	GL	NW	33	38	8	493540	5795646	F	S-0	8	L	3	HL	1	I	--
2129	PM260	SZDBC	PROst	GL/M	NW	33	38	8	493619	5795540	F	S-0	10	M	5	HL	26	W	
2122	PM261	ODBC	BELsc	GF	SW	33	38	8	493696	5795430	I	--	6	U	6	HL	18	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2107	PM262	ODBC	KUR	M	SW	33	38	8	493779	5795318	Ro	--	5	M	3	HL	18	W	
804	PM263	--	--		SE	33	38	8	493855	5795209	Ro	--	--	M	3 - 4	HL	17	--	
805	PM264	--	--		SE	33	38	8	493935	5795099	Ro	--	--	M	3 - 4	HL	13	--	
806	PM265	--	--		SE	33	38	8	494015	5794987	Ro	--	--	M	3 - 4	HL	10	--	
807	PM266	--	--		SE	33	38	8	494092	5794882	Ro	--	--	M	3 - 4	HL	12	--	
808	PM267	--	--		SE	33	38	8	494169	5794775	Ro	--	--	M	3 - 4	HL	11	--	
2106	PM268	EDBC	LFE	M	NE	28	38	8	494243	5794572	Ro	S-2	--	L	3 - 4	HL	10	W	Stony at 160 cm
809	PM269	--	--		NE	28	38	8	494320	5794569	Ro	--	--	U	3 - 4	HL	10	--	
810	PM270	--	--		NE	28	38	8	494400	5794456	Ro	--	--	L	3 - 4	HL	15	--	
811	PM271	--	--		NE	28	38	8	494488	5794335	--	--	--	L	3 - 4	HL	18	--	
812	PM272	--	--		NE	28	38	8	494562	5794234	Ro	--	--	M	3 - 4	HL	12	--	
813	PM273	--	--		NE	28	38	8	494633	5794133	Ro	S-2	--	--	3 - 4	HL	12	--	
2104	PM274	ODBC	KUR	M	NE	28	38	8	494730	5794001	Ro	S-2	6	M	4	HL	11	W	--
2173	PM300	DBSO	BFD	M	NE	31	37	7	501030	5786180	I	S-2	5	M	3	NR	5	W	Stony at 102 cm
1850	PM301	--	--		NE	31	37	7	500985	5786057	H	S-0	--	M	3 - 6	NR	13	--	
2174	PM302	GLDBSS	HKRgl	M	NE	31	37	7	500912	5785836	I	S-0	11	M	5	NR	14	W	
1851	PM303	DBSS	HKR		NE	31	37	7	500873	5785730	I	--	--	M	3 - 6	NR	20	W	
1852	PM304	DBSS	HKR		SE	31	37	7	500801	5785524	I	--	--	C	3 - 6	NR	28	--	
1853	PM305	--	--		SE	31	37	7	500862	5785414	S	--	--	M	6	NR	30	--	
1854	PM306	--	--		SE	31	37	7	500939	5785300	I	--	--	M	3 - 6	Wo	15	--	Swale
1858	PM307	DBSO	--		SE	31	37	7	500997	5785245	I	--	--	M	3 - 6	NR	25	--	Swale
2176	PM308	ODBC	MET	GF	SE	31	37	7	501118	5785177	I	S-4	3	M	3 - 6	NR	7	--	
1861	PM309	DBSS	HKR		NW	29	37	7	501622	5784664	I	--	--	L	4 - 6	NR	7	--	
1864	PM310	DBSS	HKR		NW	29	37	7	501726	5784588	F	--	--	M	4 - 6	NR	14	--	
1867	PM311	--	--		NW	29	37	7	501914	5784422	F	--	--	M	3	NR	20	--	--
1870	PM312	SZDBC	--		NE	29	37	7	502014	5784331	F	--	--	M	3	NR	10	--	--
2179	PM313	DBSO	AWDyt	GL	NE	29	37	7	502106	5784247	F	S-0	2	L	3	NR	22	W	
1872	PM314	DBSS	--		SE	29	37	7	502468	5783905	H	--	--	M	3	NR	7	--	--
1873	PM315	--	--		SE	29	37	7	502591	5783796	H	--	--	D	3 - 4	NR	30	--	--
2208	PM316	ODBC	HND	M	SE	29	37	7	502679	5783702	H	S-2	2	C	3	NR	8	W	
1894	PM317	--	--		NW	21	37	7	503044	5783340	H	S-2	--	U	3 - 4	NR	10	--	--
1897	PM318	--	--		NW	21	37	7	503149	5783231	H	--	--	M	3 - 4	NR	7	--	--
1898	PM319	--	--		NW	21	37	7	503265	5783134	U	--	--	D	3 - 4	NR	18	--	--
2210	PM320	ODBC	HND	M	NW	21	37	7	503356	5783049	H	S-1	4	L	3	NR	14	W	
1899	PM321	--	--		NW	21	37	7	503709	5782700	H	--	--	U	3 - 4	NR	10	--	--
1900	PM322	--	--		SE	21	37	7	503973	5782434	H	--	--	U	3 - 4	NR	13	--	--
1901	PM323	--	--		SE	21	37	7	504083	5782339	S	--	--	M	6	NR	10	--	--
2213	PM324	SZDBC	OVEys	M	SE	21	37	7	504192	5782232	S	S-2	15	M	6	NR	14	W	--
2452	PM325	OG	THRxt	GL/M	SW	12	37	7	508343	5778794	H	S-0	10	L	5	NR	7	I	--

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2367	PM326	OHG	ZGW	M	NE	1	37	7	508880	5778357	I	--	2	--	2 - 3	NR	20	P	--
1902	PM327	--	--		NE	1	37	7	509115	5778175	S	--	--	M	6	NR	10	W	--
1903	PM328	--	--		NE	1	37	7	508986	5778279	L	--	--	D	3	NR	3	--	--
1904	PM329	--	--		NE	1	37	7	508514	5778652	H	--	--	M	4	NR	10	--	--
1919	PM330	--	--		SE	12	37	7	508421	5778729	--	--	--	U	4	NR	5	--	--
1934	PM331	--	--		SW	12	37	7	508228	5778909	H	--	--	M	4	NR	11	--	--
1935	PM332	--	--		SW	12	37	7	508006	5779107	H	--	--	M	3 - 4	NR	12	--	--
1936	PM333	--	--		SW	12	37	7	507878	5779208	--	--	--	U	3 - 4	NR	14	--	--
1937	PM334	DBSS	--		NE	11	37	7	507626	5779413	U	--	--	L	4	NR	15	--	--
1938	PM335	--	--		NE	11	37	7	507363	5779615	--	--	--	--	6 - 7	Bu	5	--	--
2435	PM336	RDBC	NUTys	M	NE	11	37	7	507251	5779711	I	S-2	8	L	5	NR	12	MW	
1939	PM337	--	--		NE	11	37	7	507107	5779818	Ro	--	--	D	3	NR	10	--	--
2258	PM338	GLDBSO	BFDgl	M	NW	15	37	7	504605	5781840	S	--	24	M	6	NR	12	MW	Seepage slumps on slope
1940	PM339	--	--		NW	15	37	7	504734	5781691	--	--	--	--	6 - 7	Wo	8	--	Steep sided gully
1941	PM340	--	--		NW	15	37	7	504820	5781613	--	--	--	--	6 - 7	NR	27	--	
2369	PM341	CUHR	METzr	GF	NW	15	37	7	505263	5781253	--	--	2	L	3 - 6	NR	17	--	--
2412	PM342	ODBC	HND		SE	15	37	7	505903	5780769	F	S-0	6	M	4	NR	9	W	--
1942	PM343	ODBC	--		SE	15	37	7	506144	5780582	H	--	--	U	3 - 4	NR	10	--	--
1943	PM344	--	--		SW	14	37	7	506543	5780263	--	--	--	--	3	HL	10	--	--
1944	PM345	--	--		SW	14	37	7	506445	5780341	H	--	--	L	3 - 4	NR	20	--	--
2433	PM346	SZDBC	OVEst	M	NW	11	37	7	506754	5780096	H	S-4	2	C	3	NR	7	W	--
1945	PM347	--	--		NW	11	37	7	506887	5779996	H	--	--	M	3 - 4	NR	10	--	--
1946	PM348	--	--		NE	31	36	6	510893	5776849	H	--	--	M	4 - 5	IP	10	--	--
2432	PM349	ODBC	HND	M	NE	31	36	6	510965	5776750	--	S-3	5	M	4	IP	12	--	
2436	PM350	ODBC	KUR	M	NW	32	36	6	511164	5776588	H	S-2	3	U	3	IP	11	--	Stopped by stone at 160
1947	PM351	--	--		NW	32	36	6	511299	5776468	--	--	--	T	4 - 5	IP	30	--	--
1948	PM352	--	--		NE	32	36	6	511398	5776382	H	--	--	C	4 - 5	IP	10	--	--
1949	PM353	--	--		NW	32	36	6	511536	5776311	H	--	--	M	4	--	10	--	--
1950	PM354	EDBC	LFEst		NW	32	36	6	511647	5776210	H	S-2	7	M	4	NR	40	W	Stony past 80 cm
1951	PM355	ODBC	--		SE	32	36	6	511807	5776077	H	--	--	M	4	NR	10	--	--
2453	PM356	ODBC	KUR	M	SE	32	36	6	512597	5775473	H	S-3	3	U	3	Cu	10	W	
1952	PM357	--	--		SE	32	36	6	512505	5775552	H	--	--	M	3	Cu	12	--	--
1985	PM358	--	--		SE	32	36	6	512398	5775641	H	--	--	U	3	Cu	18	--	--
1986	PM359	--	--		SE	32	36	6	512291	5775729	H	--	--	L	3	Cu	12	--	--
1987	PM360	--	--		SE	32	36	6	512180	5775808	H	S-4	--	M	3	Cu	12	--	--
2444	PM361	EBLC	PROzz	GL/M	SE	32	36	6	512085	5775871	H	S-0	--	D	3 - 4	NR	24	W	
1988	PM362	--	--		SE	32	36	6	511963	5775951	H	--	--	M	4	NR	25	--	--
1989	PM363	--	--		NW	28	36	6	513207	5775001	H	--	--	M	3	Cu	16	--	Swale

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1995	PM364	--	--		NW	28	36	6	513325	5774908	Ro	--	--	U	3	Cu	15	--	--
2010	PM365	--	--		NW	28	36	6	513441	5774813	U	--	--	L	3	Cu	12	--	--
2471	SB001	OBC	MAB	M	NW	29	29	4	531969	5707438	U	S-2	--	M	3	IP	13	W	--
2472	SB002	OBC	--		NW	29	29	4	531978	5707319	U	--	--	L	3	IP	10	W	--
2473	SB003	OBC	MAB	M	NW	29	29	4	531957	5707180	--	S-2	--	L	--	IP	15	W	
2474	SB004	OBC	MAB	M	NW	29	29	4	531981	5707046	U	S-2	--	L	3	IP	12	W	
2475	SB005	OBC	MAB	M	NW	29	29	4	531989	5706900	U	S-2	--	L	3	IP	14	--	
2476	SB006	OBC	MABsc	M	NW	29	29	4	531963	5706732	U	S-2	--	L	3	IP	11	W	--
2477	SB007	OHG	KTM	M	SW	29	29	4	531959	5706611	L	--	--	D	1	Wt	16	P	
2478	SB008	OBC	MAB	M	SW	29	29	4	531956	5706483	U	S-2	--	M	3	IP	9	MW	
2479	SB009	OBC	MAB	M	SW	29	29	4	531983	5706359	U	S-2	--	T	3	IP	20	W	
2480	SB010	OBC	MAB	M	SW	29	29	4	532016	5706278	U	S-2	--	M	3	IP	14	W	
2481	SB011	BSS	HUK	M	SW	29	29	4	532054	5706132	L	S-1	--	D	2	IP	7	MW	
2482	SB012	BSS	HUK	M	SW	29	29	4	532077	5705982	U	S-2	--	--	3	IP	23	MW	
2483	SB013	OBC	MAB	M	NW	20	29	4	532120	5705842	--	S-2	--	M	3	Cu	13	--	
2484	SB014	OBC	MAB	M	NW	20	29	4	532124	5705751	Ro	S-2	--	M	4 - 5	Cu	13	W	
2485	SB015	RDBC	HMSsc	M	NW	20	29	4	532146	5705670	U	S-3	--	U	--	Cu	12	W	--
2895	SB015A	SZBC	ROL	M	NW	20	29	4	532153	5705514	U	S-3	--	M	--	Cu	14	MW	
2486	SB016	OBC	MAB	M	NW	20	29	4	532170	5705381	U	S-3	--	M	3	Cu	9	W	
2487	SB017	SZBC	ROL	M	NW	20	29	4	532177	5705263	Ro	S-2	--	M	3	Ot	13	W	
2488	SB018	OBC	MAB	M	NW	20	29	4	532186	5705121	U	S-2	--	M	3	Ot	12	W	
2489	SB019	OBC	MAB	M	SW	20	29	4	532223	5704954	U	S-3	--	M	3	Cu	12	W	
2490	SB020	BSS	HUK	M	SW	20	29	4	532277	5704760	U	S-3	--	M	3	Cu	11	MW	
2491	SB021	OHG	KTM	M	SW	20	29	4	532348	5704641	L	--	--	D	1	Wt	10	P	
2492	SB022	OBC	MAB	M	SE	20	29	4	532414	5704540	U	S-3	--	U	4 - 5	Cu	11	W	
2493	SB023	OBC	MABsc	M	SE	20	29	4	532505	5704389	U	S-2	--	L	4 - 5	Ot	10	MW	
2495	SB024	OBC	MAB	M	NE	17	29	4	532602	5704164	U	S-2	--	L	3	IP	10	MW	
2496	SB025	GLSZBC	ROLgl	M	NE	17	29	4	532630	5703980	U	S-2	--	T	--	IP	9	I	
2497	SB026	SZBC	ROL	M	NE	17	29	4	532624	5703786	U	--	--	M	--	IP	11	MW	
2498	SB027	OBC	MAB	M	NE	17	29	4	532647	5703587	U	S-2	--	L	3	IP	14	W	
2499	SB028	SZBC	ROL	M	SE	17	29	4	532637	5703456	--	S-3	--	M	3	Cu	10	MW	
2500	SB029	OBC	MAB	M	SE	17	29	4	532697	5703138	U	S-2	--	M	3	--	9	MW	
2501	SB030	ODBC	HND	M	NE	20	28	4	532995	5696142	U	S-2	--	M	3	Cu	11	W	
2502	SB031	RHG	KTM	M	NE	20	39	4	532987	5696010	U	S-2	--	D	3	Cu	14	I	
2503	SB032	SZDBC	FST	M	NE	20	28	4	532950	5695802	U	S-2	--	L	3	Cu	23	MW	30% admixing in TS
2504	SB033	ODBC	HND	M	NE	20	28	4	532975	5695637	U	--	--	--	--	Cu	13	W	
2505	SB034	ODBC	HNDsc	M	NE	20	28	4	532932	5695415	U	S-2	--	L	3	Cu	9	MW	8m south of slough 70m wide.
2506	SB035	ODBC	HND	M	SE	20	20	4	533022	5695175	U	S-2	--	U	--	IP	7	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2507	SB036	SZDBC	FST	M	SE	20	20	4	533094	5694871	U	S-2	--	T	3	IP	11	MW	
2508	SB037	SZDBC	FST	M	NE	17	29	4	533120	5694497	Ro	S-3	--	U	4 - 5	Cu	12	W	
2509	SB038	SZDBC	FST	M	NE	17	29	4	533114	5694103	Ro	S-2	--	U	4 - 5	Cu	10	MW	
2510	SB039	SZDBC	FST	M	NE	17	29	4	533119	5693941	Ro	--	--	L	4 - 5	Cu	11	MW	
2511	SB040	ODBC	HND	M	SE	17	20	4	533135	5693643	Ro	S-2	--	L	4 - 5	Cu	8	W	
2512	SB041	ODBC	HNDsc	M	SE	17	20	4	533083	5693424	Ro	S-2	--	--	4 - 5	Cu	8	W	
2513	SB042	ODBC	HNDsc	M	SE	17	28	4	533054	5693081	Ro	S-2	--	M	4 - 5	Cu	21	MW	
2518	SB043	ODBC	HND	M	NE	29	27	4	533114	5688015	Ro	S-2	--	L	4 - 5	IP	12	W	
2519	SB044	ODBC	HND	M	NE	29	27	4	533116	5687642	Ro	S-2	--	L	4 - 5	IP	13	W	
2520	SB045	ODBC	HND	M	NE	29	27	6	533109	5687342	Ro	S-3	--	U	4 - 5	IP	7	W	Too stony past 120cm.
2521	SB046	ODBC	HND	M	SE	29	27	4	533129	5687100	U	S-2	--	L	--	IP	11	W	
2522	SB047	ODBC	HND	M	SE	29	27	4	533110	5686832	U	S-2	--	--	3	IP	11	W	
2523	SB048	ODBC	HND	M	SE	29	27	4	533107	5686655	U	S-2	--	L	3	IP	8	W	Too stony past 118cm. Site is 20m N of slough 10m wide.
2524	SB049	ODBC	HND	M	NE	20	27	4	533115	5686413	U	S-2	--	--	3	Cu	14	W	--
2525	SB050	ODBC	HND	M	NE	20	27	4	533114	5686158	Ro	S-3	--	M	4 - 5	Cu	9	W	
2526	SB051	ODBC	HND	M	NE	20	27	4	533129	5686012	U	S-3	--	--	3	Cu	8	W	
2527	SB052	RBDC	NUT	M	NE	20	27	4	533120	5685712	Ro	S-3	--	U	4 - 5	Cu	6	W	Poor vegetation growth
2528	SB053	ODBC	HND	M	SE	20	27	4	533121	5685603	U	S-2	--	M	3	Cu	13	W	
2529	SB054	RDB	NUT	M	SE	20	27	4	533158	5685382	U	--	--	L	--	Cu	30	W	
2530	SB055	ODBC	PUN	GF	SE	20	27	4	533189	5685209	U	S-4	--	C	3	Ot	13	R	
2531	SB056	ODBC	HND	M	SE	20	27	4	533181	5685058	U	S-3	--	U	3	Cu	11	R	
2534	SB057	OBC	BVLxt	GF/M	NE	8	27	4	533222	5683128	U	S-2	--	T	3	NR	11	W	
2535	SB058	OBC	MABsc	M	NE	8	27	4	533156	5682851	U	S-2	--	U	--	IP	12	W	
2536	SB059	OBC	MAB	M	NE	8	27	4	533143	5682616	U	S-2	--	M	3	IP	11	W	
2537	SB060	GLBC	MABgl	M	NE	8	27	4	533135	5682486	U	S-1	--	D	3	IP	7	I	
2538	SB061	OBC	MAB	M	SE	8	27	4	533139	5682311	U	S-2	--	L	3	HL	11	W	
2539	SB062	RBC	HMS	M	SE	8	27	4	533134	5681786	U	S-2	--	--	3	Cu	12	W	--
2540	SB063	RBC	HMS	M	SE	8	27	4	533096	5681684	U	S-2	--	U	3	Cu	12	W	
2541	SB064	RBC	HMS	M	NE	5	27	4	533132	5681589	U	S-2	--	M	3	HL	9	R	
2542	SB065	OBC	MAB	M	NE	5	27	4	533105	5681548	U	S-2	--	M	3	HL	12	--	
2543	SB066	RBC	HMS	M	NE	5	27	4	533106	5681488	U	S-2	--	M	3	HL	13	W	
2544	SB067	OBC	MABxs	M	SE	5	27	4	533173	5680814	U	S-3	--	U	3	Ot	14	W	
2545	SB068	RBC	HMS	M	SE	5	27	4	533192	5680689	U	S-3	--	U	3	Ot	13	W	
2546	SB069	OBC	MAB	M	SE	5	27	4	533228	5680571	U	S-3	--	U	--	Cu	13	MW	
2547	SB070	OBC	BVL	GF	SE	5	27	4	533269	5680309	U	S-3	--	U	3	Cu	11	W	
2548	SB071	OBC	MAB	M	SE	5	27	4	533630	5659209	U	S-2	--	U	3	Ot	13	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2549	SB072	OBC	MAByg	M	NE	32	26	4	533346	5679805	Ro	--	--	M	4 - 5	Cu	11	I	
2550	SB073	OBC	MAB	M	NE	32	26	4	533342	5679718	Ro	S-2	--	M	4 - 5	Cu	10	W	
2551	SB074	OBC	MAB	M	NE	32	27	4	533386	5679568	Ro	S-2	--	M	4 - 5	Cu	15	W	
2552	SB075	OHG	KTM	M	NE	32	27	4	533426	5679250	Ro	S-1	--	D	4 - 5	Cu	13	I	
2553	SB076	OHG	KTM	M	SE	32	27	4	533414	5679141	L	--	--	D	4 - 5	Wt	12	I	
2554	SB077	OBC	MAB	M	SE	32	26	4	533415	5679008	Ro	S-2	--	U	4 - 5	Cu	12	W	
2555	SB078	OHG	KTM	M	SE	32	26	4	533436	5678898	Ro	--	--	D	4 - 5	Cu	16	I	
2556	SB079	OBC	MAB	M	SE	32	26	4	533438	5678788	Ro	S-2	--	L	4 - 5	Cu	13	W	
2557	SB080	OBC	MAB	M	NE	29	26	4	533449	5678325	Ro	S-2	--	M	4 - 5	Ot	16	W	
2558	SB081	OBC	MAB	M	NE	29	26	4	533446	5678188	Ro	S-3	--	U	4 - 5	Cu	12	W	
2559	SB082	OBC	MAB	M	NE	29	26	4	533460	5678077	Ro	S-2	--	M	4 - 5	Ot	14	W	
2560	SB083	OBC	MAB	M	SE	29	26	4	533455	5677533	Ro	S-2	--	M	4 - 5	Ot	16	W	
2561	SB084	OBC	MAB	M	SE	29	26	4	533475	5677282	Ro	S-2	--	M	4 - 5	Cu	12	W	
2562	SB085	RBC	HMS	M	SE	29	26	4	533473	5677163	Ro	S-2	--	L	4 - 5	Ot	13	W	--
2563	SB086	RBC	HMS	M	SE	29	26	4	533474	5676993	Ro	S-2	--	M	4 - 5	Ot	11	W	
2564	SB087	OBC	MAB	M	NE	20	26	4	533486	5676595	Ro	S-2	--	M	4 - 5	Cu	13	MW	
2565	SB088	RBC	HMS	M	NE	20	26	4	533503	5676479	Ro	S-2	--	U	4 - 5	Cu	13	W	
2566	SB089	OBC	MAB	M	NE	20	26	4	533526	5676423	Ro	S-2	--	M	4 - 5	Cu	12	MW	
2567	SB090	RBC	HMS	M	SE	20	26	4	533423	5675529	U	S-2	--	L	3	Cu	13	W	
2568	SB091	OBC	MAB	M	SE	20	26	4	533394	5675368	U	--	--	--	--	Cu	13	W	Too stony to auger past 130cm.
2569	SB092	OBC	MAB	M	SE	20	28	4	533371	5675240	U	S-2	--	U	3	Cu	14	W	
2570	SB093	OBC	MAB	M	NE	17	26	4	533339	5675098	U	S-3	--	M	3	Ot	12	W	
2571	SB094	OBC	MAB	M	NE	17	26	4	533349	5674958	U	S-2	--	L	3	Cu	21	W	
2572	SB095	OBC	MAB	M	NE	17	26	4	533357	5674541	U	S-2	--	M	3	Cu	16	W	
2573	SB096	OBC	MAB	M	NE	17	26	4	533368	5674431	U	S-2	--	M	3	Cu	13	W	
2574	SB097	OBC	MAB	M	SE	17	26	4	533382	5674314	U	S-2	--	L	3	Cu	12	W	
2575	SB098	RBC	HMSsc	M	SE	17	26	4	533391	5674161	U	S-2	--	L	3	Cu	16	W	
2576	SB099	OBC	MAB	M	SE	17	26	4	533400	5674041	U	S-3	--	L	3	Cu	9	MW	
2577	SB100	OBC	MAB	M	NE	8	26	4	533414	5673323	--	S-2	--	L	3	NR	16	W	
2578	SB101	OBC	MAB	M	NE	8	26	4	533435	5672824	U	S-2	--	M	3	NR	13	W	
2579	SB102	RBC	HMS	M	SE	8	27	4	533460	5672687	U	--	--	C	3	NR	16	W	
2580	SB103	BSS	HUK	M	SE	8	26	5	533455	5672585	U	S-2	--	L	3	NR	13	W	Site is in drainage area.
2581	SB104	OBC	MAB	M	SE	8	26	4	533507	5672132	U	S-2	--	L	3	IP	12	W	
2582	SB105	OHG	KTM	M	NE	5	26	4	533522	5671890	U	--	--	D	3	Wt	--	--	
2583	SB106	OBC	PUN	GF	NE	5	26	4	533529	5671735	U	S-2	--	M	3	HL	15	R	
2584	SB107	RBC	PUNzr	GF	NE	5	26	4	533523	5671642	U	S-2	--	C	3	HL	12	R	
2585	SB108	OBC	MAB	M	SE	5	26	4	533516	5671116	U	S-2	--	M	3	Ot	12	R	
2586	SB109	RBC	HMS	M	SE	5	26	4	533508	5670933	U	S-3	--	U	3	Ot	16	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2587	SB110	OBC	MAB	M	NE	32	25	4	533386	5670181	U	S-2	--	M	3	Cu	13	W	
2588	SB111	RBC	HMSsc	M	NE	32	25	4	533381	5670093	U	S-2	--	U	3	Cu	11	W	
2589	SB112	OBC	MAB	M	NE	32	25	4	533374	5670021	U	S-1	--	D	--	Ot	32	MW	
2590	SB113	OBC	MAB	M	SE	32	25	4	533365	5668818	U	S-3	--	L	3	Cu	16	W	
2591	SB114	OBC	MAB	M	NE	29	25	4	533357	5668814	U	S-2	--	U	3	IP	14	W	
2592	SB115	OBC	MAB	M	NE	29	25	4	533371	5668472	U	S-2	--	L	3	NR	13	W	
2593	SB116	OBC	MAB	M	NE	29	25	4	533348	5668394	U	S-2	--	L	3	IP	19	R	
2594	SB117	OBC	MAB	M	SE	29	25	4	533331	5667811	U	S-2	--	M	3	NR	9	W	
2595	SB118	OBC	MAB	M	SE	29	25	4	533318	5667640	U	S-2	--	L	3	NR	15	I	
2596	SB119	OBC	MAB	M	NE	20	25	4	533291	5666934	U	S-4	--	M	3	Cu	16	W	
2597	SB120	RBC	HMS	M	NE	20	25	4	533300	5666806	U	S-4	--	C	3	Cu	13	W	
2598	SB121	OBC	MAB	M	NE	20	25	4	533244	5666260	Ro	S-2	--	M	4 - 5	Cu	18	W	
2599	SB122	RBC	HMS	M	SE	20	25	4	533230	5666176	Ro	S-2	--	C	5	Cu	13	MW	
2600	SB123	RBC	HMS	M	SE	20	25	4	533256	5665959	Ro	S-2	--	C	5	Cu	14	MW	
2601	SB124	OBC	MAB	M	SE	20	25	4	533256	5665863	Ro	S-2	--	M	4 - 5	Cu	11	W	
2602	SB125	OBC	MAB	M	NE	17	25	4	533237	5665378	U	S-3	--	M	3	IP	16	W	
2603	SB126	OBC	MAB	M	NE	17	25	4	533230	5665231	U	S-2	--	L	3	IP	13	W	
2604	SB127	OBC	MAB	M	NE	17	25	4	533221	5665092	U	S-3	--	M	3	IP	14	W	
2605	SB128	RBC	HMS	M	SE	17	25	4	533396	5664562	U	S-2	--	M	3	Cu	11	W	
2606	SB129	OBC	MAB	M	SE	17	25	4	533400	5664460	U	S-2	--	M	3	Cu	12	W	
2607	SB130	OBC	MAB	M	SE	17	25	4	533382	5664218	U	S-2	--	M	3	Cu	19	W	
2608	SB131	OBC	MAB	M	NE	8	25	4	533554	5663454	U	S-2	--	T	3	IP	9	W	
2609	SB132	OBC	MAB	M	NE	8	25	4	533561	5663337	--	S-2	--	L	3	NR	12	W	
2610	SB133	OBC	MAB	M	NE	8	25	4	533580	5663241	U	S-2	--	U	3	NR	11	W	
2611	SB134	OBC	MAB	M	NE	5	25	4	533648	5662168	U	S-2	--	M	3	NR	15	--	
2612	SB135	OBC	MAB	M	NE	5	25	4	533652	5662047	U	S-2	--	U	--	NR	11	W	
2613	SB136	OBC	MABsa	M	NE	5	25	4	533643	5661947	U	S-2	--	L	3	NR	13	W	
2614	SB137	OBC	MAB	M	SE	5	25	4	533725	5660906	U	S-3	--	L	3	NR	13	W	
2615	SB138	OBC	MAB	M	SE	5	25	4	533731	5660773	U	S-2	--	L	3	NR	12	W	
2616	SB139	OBC	MAB	M	SE	5	25	4	533772	5660619	U	S-2	--	L	3	NR	10	W	
2617	SB140	OBC	MAB	M	NE	32	24	4	533788	5660069	U	S-2	--	U	--	NR	13	W	
2618	SB141	OBC	MAB	M	NE	32	24	4	533781	5659913	U	S-2	--	M	3	NR	16	W	
2619	SB142	OBC	MAB	M	NE	32	24	4	533786	5659791	U	S-2	--	M	3	NR	13	W	
2620	SB143	OBC	MAB	M	SE	32	24	4	533804	5659287	U	S-2	--	M	3	NR	9	W	
2621	SB144	OBC	MAB	M	SE	32	24	4	533806	5659129	U	S-2	--	M	3	NR	13	W	
2622	SB145	OBC	MAB	M	SE	32	24	4	533807	5659011	U	S-2	--	U	--	NR	16	W	
2623	SB146	OBC	MAB	M	NE	29	24	4	533828	5658835	--	S-2	--	U	3	NR	12	W	
2624	SB147	SZBC	ROL	M	NW	28	24	4	533915	5658324	U	S-3	--	L	3	HL	12	R	
2625	SB148	OBC	MAB	M	NW	28	24	4	533929	5658224	U	S-3	--	L	3	HL	13	--	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2626	SB149	OBC	MAB	M	NW	28	24	4	533930	5658117	U	S-3	--	M	3	HL	11	W	
2627	SB150	OHG	KTM	M	SW	28	24	4	534143	5657643	L	S-1	--	E	3	Wt	10	I	Edge of large slough
2628	SB151	OBC	MAB	M	SW	28	24	4	534141	5657527	U	S-2	--	M	3	HL	9	W	
2629	SB152	OBC	MAB	M	SW	28	24	4	534180	5657386	U	S-2	--	L	3	HL	9	W	
2630	SB153	OBC	MAB	M	NW	21	24	4	534192	5657302	U	S-2	--	M	3	NR	12	W	
2631	SB154	OBC	MAB	M	NW	21	24	4	534228	5657164	U	S-2	--	M	--	NR	12	W	
2632	SB155	OBC	MAB	M	NW	21	24	4	534258	5657004	U	S-1	--	L	3	NR	17	W	
2633	SB156	OBC	MAB	M	SW	21	24	4	534404	5656484	U	S-2	--	M	3	NR	11	W	
2634	SB157	OBC	MAB	M	SW	21	24	4	534422	5656347	U	S-3	--	U	3	NR	11	R	
2635	SB158	OBC	MAB	M	SW	21	24	4	534443	5656208	U	S-3	--	M	3	NR	12	W	
2636	SB159	OBC	MAB	M	NW	16	24	4	534626	5655213	U	S-2	--	L	3	NR	9	W	
2637	SB160	OBC	MAB	M	NW	16	24	4	534650	5655105	U	S-2	--	M	3	NR	12	W	
2638	SB161	OBC	MAB	M	NW	16	24	4	534670	5654992	U	S-2	--	C	3	NR	11	--	Too stony past 110cm.
2639	SB162	OBC	MAB	M	SE	16	24	4	534702	5654521	U	S-2	--	M	3	Cu	13	W	
2640	SB163	OBC	MAB	M	SE	16	24	4	534755	5654391	--	S-2	--	M	3	Cu	14	W	
2641	SB164	OBC	MAB	M	SE	16	24	4	534810	5654187	U	S-2	--	L	3	Cu	13	W	
2642	SB165	OBC	MAB	M	NE	9	24	4	534839	5654079	U	S-2	--	L	3	IP	13	W	
2643	SB166	OBC	MAB	M	NE	9	24	4	534853	5653933	U	S-3	--	M	3	IP	12	W	
2644	SB167	OBC	MAB	M	NE	9	24	4	534872	5653739	U	S-3	--	M	3	NR	12	W	
2645	SB168	OBC	MAB	M	SE	9	24	4	534950	5653265	U	S-2	--	M	3	NR	12	W	
2646	SB169	OBC	MAB	M	SE	9	24	4	534983	5653146	U	S-3	--	M	3	NR	12	W	
2647	SB170	OBC	MAB	M	SE	9	24	4	535007	5652940	U	S-2	--	L	3	NR	13	W	
2648	SB171	OBC	BVL	GF	NE	17	22	3	543981	5635676	H	S-2	--	L	5	NR	12	R	
2649	SB172	OBC	BVL	GF	NE	17	22	3	544224	5635469	Ro	S-1	--	L	--	NR	9	R	
2650	SB173	OBC	BVL	GF	SW	16	22	3	544428	5635323	L	S-2	--	C	6	NR	11	R	
2651	SB174	OBC	BVL	GF	SW	16	22	3	544521	5635271	Ro	S-2	--	M	7 - 8	NR	10	R	
2652	SB175	OBC	BVL	GF	SW	16	22	3	544647	5635183	Ro	S-2	--	M	6	NR	9	R	
2653	SB176	CABC	BVLcr	GF	SE	16	22	3	544740	5635028	Ro	S-2	--	L	6	NR	12	R	
2654	SB177	OBC	BVL	GF	NE	9	22	3	545140	5634610	U	--	--	M	4 - 5	NR	9	R	
1724	SB200	OBC	MAB	M	SW	8	31	4	531484	5721002	U	S-1	5	L	3	Cu	14	W	
1725	SB201	OBC	MAB	M	SW	8	31	4	531516	5720949	U	S-1	5	L	3	Ot	18	W	
1726	SB202	OG	KTM	M	SW	8	31	4	531547	5720835	U	S-0	1	D	--	Cu	7	--	
1727	SB203	OBC	MAB	M	SW	20	31	4	531553	5723854	U	S-1	3	L	3	Cu	18	W	
1728	SB204	OBC	MAB	M	SW	20	31	4	531540	5723965	U	S-1	3	U	3	Cu	16	W	
1729	SB205	OBC	MAB	M	SW	20	31	4	531541	5724072	U	S-1	3	U	3	Cu	13	W	
1730	SB206	OBC	MAB	M	SW	20	31	4	531530	5724473	U	S-2	3	L	3	Cu	22	W	
1731	SB207	OBC	MAB	M	SW	29	31	4	531430	5725812	U	S-2	2	M	3	Cu	15	W	
1732	SB208	OG	KTM	M	SW	29	31	4	531418	5725924	U	S-1	--	D	3	Cu	16	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1733	SB209	OBC	MAB	M	SW	29	31	4	531428	5726039	U	S-2	2	M	3	Cu	17	W	
1734	SB210	OBC	MAB	M	NW	29	31	4	531416	5726594	U	S-2	2	U	3	Cu	13	W	
1735	SB211	GLBC	MABgl	M	NW	29	31	4	531355	5726716	U	S-2	2	D	3	Cu	14	I	
1736	SB212	OBC	MAB	M	NW	29	31	4	531327	5726813	U	S-1	2	C	3	Cu	13	W	
1738	SB213	OBC	MAB	M	NW	8	31	4	531444	5721443	U	S-2	2	L	3	Cu	14	W	
1739	SB214	OBC	MAB	M	NW	8	31	4	531447	5721520	U	S-2	3	M	3	Cu	17	W	
1740	SB215	OG	KTMsa	M	NW	8	31	4	531423	5721585	U	S-0	--	D	--	Wt	12	I	
1741	SB216	RBC	HMS	M	SW	17	31	4	531479	5722386	Ro	--	5	U	4 - 5	Cu	12	W	
1742	SB217	OBC	MAB	M	SW	17	31	4	531471	5722589	U	--	3	D	--	Cu	24	MW	
1743	SB218	OBC	MAB	M	SW	17	31	4	531459	5722736	U	S-2	3	M	3	Cu	16	W	
1744	SB219	GLBC	MABgl	M	NW	17	31	4	531456	5722972	U	S-0	--	D	--	IP	14	I	
1745	SB220	GLSZBC	CCLgl	M	NW	17	31	4	531470	5723101	U	S-0	2	D	3	IP	10	I	Edge of depression
1746	SB221	OBC	MAB	M	NW	17	31	4	531504	5723495	U	S-1	2	M	3	IP	8	W	
1747	SB222	OBC	MAB	M	NW	17	31	4	531523	5723594	U	S-0	2	D	3	IP	12	W	
1750	SB223	OBC	MAB	M	NW	20	31	4	531482	5725161	U	S-2	2	M	3	Ot	16	W	
1751	SB224	OBC	MAB	M	NW	20	31	4	531517	5724903	U	S-1	2	M	3	Ot	18	W	--
1752	SB225	SZBC	CCL	M	NW	20	31	4	531517	5724631	U	S-1	3	L	3	Ot	15	W	
1753	SB226a	ODBC	HND	M	NE	6	32	4	531018	5729465	U	S-1	3	L	3	HL	13	--	
1754	SB226b	ODBC	DCY	GF/M	NE	6	32	4	531024	5729657	U	S-2	5	U	3	HL	16	W	
1755	SB227	ODBC	HND	M	NE	6	32	4	531027	5729905	U	S-2	2	C	3	Cu	10	W	
1756	SB228	ODBC	HND	M	SE	30	32	4	530545	5735065	Ro	S-1	5	L	4 - 5	NR	21	W	
1757	SB229	RDBC	NUT	M	SE	30	32	4	530540	5735209	Ro	S-3	--	C	4 - 5	NR	21	W	
1758	SB230	ODBC	HND	M	SE	30	32	4	530543	5735373	Ro	--	5	--	4 - 5	NR	13	W	
1759	SB231	ODBC	WWT	GF	SE	30	32	4	530533	5735505	Ro	S-2	8	C	4 - 5	NR	13	R	
1760	SB232	ODBC	HND	M	SE	30	32	4	530559	5735645	Ro	S-1	6	U	4 - 5	NR	18	W	
1761	SB233	ODBC	HND	M	SE	30	31	4	530564	5735719	Ro	S-1	6	--	4 - 5	NR	26	W	
1762	SB234a	ODBC	HND	M	NE	30	31	4	530603	5736389	Ro	S-1	3	L	4 - 5	NR	21	W	
1763	SB234b	OHG	ZGW	M	NE	30	32	4	530598	5736585	Ro	S-0	--	D	4 - 5	Wt	30	P	Edge of WETLAND 50m x 30m
1764	SB235	ODBC	HND	M	SE	31	32	4	530587	5736876	U	S-1	4	U	3	NR	10	MW	
1765	SB236	ODBC	HND	M	SE	31	32	4	530569	5737121	U	S-1	3	U	3	NR	14	W	
1766	SB237	DBSS	HKR	M	SE	31	32	4	530553	5737242	U	S-1	3	M	3	NR	9	W	
1767	SB238	ODBC	HND	M	NE	31	32	4	530494	5737853	Ro	S-1	--	L	4 - 5	NR	30	W	
1768	SB239	EDBC	LFEgl	M	NE	31	32	4	530506	5737731	Ro	S-0	--	L	4 - 5	NR	39	I	
1769	SB240	EDBC	LFE	M	NE	31	32	4	530518	5737615	U	S-1	1	E	4 - 5	NR	17	MW	
1770	SB241	ODBC	HND	M	SE	6	33	4	530456	5738959	Ro	--	6	M	4 - 5	IP	19	W	Foxtail barley
1771	SB242	ODBC	HND	M	SE	6	33	4	530454	5739035	Ro	S-0	5	M	4 - 5	IP	12	W	
1772	SB243	ODBC	HND	M	SE	6	33	4	530459	5739181	Ro	S-1	--	U	4 - 5	NR	17	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1773	SB244	ODBC	HND	M	NE	6	33	4	530457	5739541	U	S-2	3	M	3	NR	13	W	
1774	SB245	OHG	ZGW	M	NE	6	33	4	530411	5739741	L	S-0	--	D	3	Wt	25	--	WETLAND 30 x 80
1775	SB246	ODBC	HND	M	SW	7	33	4	530308	5740333	Ro	S-2	5	M	4 - 5	Cu	28	W	
1776	SB247	ODBC	HND	M	SW	7	33	4	530288	5740435	Ro	S-2	5	L	4 - 5	Cu	13	W	
1777	SB248	ODBC	HND	M	SW	7	33	4	530229	5740627	U	S-2	3	C	3	Cu	18	W	
1778	SB249	SZDBC	FST	M	NW	7	33	4	530021	5741197	U	S-2	5	M	3	Cu	12	W	
1779	SB250	ODBC	HND	M	NW	7	33	4	529983	5741320	U	S-2	3	L	3	Cu	19	W	
1780	SB251	ODBC	HND	M	NW	7	33	4	529950	5741443	U	S-2	2	L	3	Cu	16	W	
1791	SB252	SZDBC	FST	M	SW	18	33	4	529841	5741919	U	S-3	2	M	3	Cu	16	W	
1792	SB253	ODBC	HND	M	SW	18	33	4	529824	5742029	U	S-2	2	M	3	Cu	13	W	
1793	SB254	ODBC	HND	M	SW	18	33	4	529811	5742154	U	S-2	3	M	3	Cu	13	W	
1794	SB256	CADBC	NUT	M	NW	18	33	4	529747	5742402	--	S-2	3	L	3	Ot	16	W	
1795	SB257	ODBC	HND	M	NW	18	33	4	529737	5742522	U	S-2	3	U	3	Ot	9	W	
1796	SB258	OHG	ZGW	M	NW	18	33	4	529733	5742707	U	S-0	2	D	3	Wt	21	I	
1797	SB259	ODBC	HND	M	SW	19	33	4	529621	5743218	U	S-2	2	U	3	NR	14	W	
1799	SB260	RDBC	NUT	M	SE	24	33	5	529468	5743393	U	S-1	2	M	3	Cu	9	--	--
1800	SB261	ODBC	DCY	GF/M	SE	24	33	5	529407	5743471	U	S-3	2	M	3	Cu	14	W	
1801	SB262	ODBC	DCY	GF/M	SE	24	33	5	529366	5743527	U	S-3	--	M	3	Cu	27	R	
1802	SB263	ODBC	HND	M	SE	24	33	5	529304	5743627	U	S-2	2	U	3	Cu	14	W	
1803	SB264	DBSS	HKR	M	SE	25	33	5	528726	5744957	--	S-1	1	D	3	Ot	11	I	
1804	SB265	ODBC	DCY	GF/M	SE	25	33	5	528751	5744892	U	S-1	2	M	3	Cu	13	W	
1805	SB266	DBSS	HKR	M	SE	25	33	5	528693	5745083	U	S-1	--	D	3	Cu	15	MW	
1806	SB267	CABC	NUT	M	SW	25	33	5	528659	5745219	U	S-1	2	M	3	NR	18	W	
1807	SB268	DBSS	HKR	M	SW	25	33	5	528607	5745394	U	S-2	3	U	3	IP	2	W	
1808	SB269	ODBC	MET	GF	NW	25	33	5	528423	5745831	Ro	S-0	--	T	4 - 5	NR	19	W	
1809	SB271	ODBC	HND	M	SW	36	33	5	528186	5746648	U	S-2	2	M	3	Cu	17	W	
1810	SB272	ODBC	HND	M	SW	30	33	5	528164	5746737	U	S-2	2	M	3	Cu	16	W	
1811	SB273	ODBC	HND	M	SW	36	33	5	528149	5746796	U	S-2	--	U	3	Cu	14	W	
1812	SB274	ODBC	HND	M	SW	36	33	5	528086	5746895	U	S-2	2	L	3	Cu	16	W	
1814	SB275	ODBC	HND	M	SW	36	33	5	528036	5747013	--	S-2	2	D	3	Cu	17	W	Beside large wetland
1815	SB276	RG	ZGW	M	NW	36	33	5	528073	5747197	U	S-0	1	D	3	Wt	24	P	Large wetland 100 x 50
1816	SB277	ODBC	HND	M	NW	36	33	5	527999	5747636	U	S-2	3	U	3	Cu	21	W	
1817	SB278	ODBC	HND	M	NW	36	33	5	527921	5747803	U	S-1	--	M	3	IP	18	W	
1818	SB279	DBSS	HKR	M	SE	2	34	5	527807	5748013	U	S-2	2	M	3	NR	8	W	
1819	SB280	ODBC	HND	M	SE	2	34	5	527691	5748260	--	S-3	5	U	3	NR	11	W	Steep hill going down to lake
1820	SB281a	SZDBC	FST	M	SE	2	34	5	527606	5748400	Ro	S-2	8	L	4 - 5	NR	14	--	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1821	SB281b	ODBC	HND	M	SE	2	34	5	527558	5748469	Ro	S-1	8	U	4 - 5	NR	16	W	
1822	SB282	SZDBC	FST	M	NE	2	34	5	527388	5748990	U	S-3	5	M	3	NR	5	W	
1823	SB283	ODBC	DCY	GF/M	NE	2	34	5	527312	5749178	Ro	S-1	5	L	4 - 5	NR	14	W	
1824	SB284	GLDBC	DCYgl	GF/M	NE	2	34	5	527295	5749280	U	S-1	1	D	3	NR	16	I	
1825	SB285	ODBC	DCY	GF/M	SE	11	34	5	527139	5750139	U	S-1	3	L	3	Cu	26	R	
1826	SB286	ODBC	DCY	GF/M	SE	11	34	5	527140	5750245	U	S-1	3	--	3	Cu	12	W	
1827	SB287	ODBC	WWT	GF	SE	11	34	5	527091	5750364	U	S-2	3	U	3	Cu	14	R	
1828	SB288	DBSS	CUR	GL	NE	11	34	5	527048	5750652	U	--	--	E	--	Cu	9	MW	
2259	TS001	RBC	VST	E	SW	20	21	1	562735	5627561	U	S-0	--	--	2	NR	21	R	Good colour change.
2260	TS002	RBC	VST	E	SW	20	21	1	562628	5627598	U	S-0	--	--	2	NR	24	R	Poor colour change.
2261	TS003	RBC	VST	E	SW	20	21	1	562370	5627646	U	S-0	--	--	2	NR	28	R	Good colour change.
2262	TS004	RBC	VST	E	SW	20	21	1	562212	5627645	U	--	--	--	2	NR	29	R	Good colour change.
2263	TS005	OBC	CVD	GF	SW	24	21	2	558983	5627753	U	S-0	--	--	2	Cu	27	R	
2264	TS006	OBC	CVD	GF	SE	23	21	2	558561	5627606	U	S-0	--	--	2	HL	28	R	
2265	TS007	OBC	CVD	GF	SE	23	21	2	558720	5627755	U	S-0	--	--	2	HL	24	R	
2266	TS008	OBC	CVD	GF	SW	23	21	2	557918	5627624	U	S-0	--	--	2	Cu	28	R	
2267	TS009	OBC	CVD	GF	SW	23	21	2	557804	5627626	U	S-0	1	E	2	Cu	20	R	
2268	TS010	OBC	CVD	GF	SE	22	21	2	556674	5627637	U	S-0	2	M	2	Cu	29	R	
2269	TS011	RBC	BVLzr	GF	SE	22	21	2	556334	5627641	U	S-0	2	U	2	Cu	28	R	
2270	TS012	OBC	BVL	GF	NW	22	21	2	555883	5627638	U	S-0	1	--	2	Cu	15	R	
2271	TS013	CABC	BVLca	GF	NE	21	21	2	555448	5627632	U	S-0	2	U	3	Cu	12	W	
2272	TS014	OBC	BVL	GF	NE	21	21	2	554787	5627625	U	S-0	2	L	3	HL	14	W	50 60m wide patch of hay in between culti ation. Good colour change.
2273	TS015	OBC	BVL	GF	NE	21	21	2	554534	5627627	U	S-0	--	--	3	Cu	28	W	
2274	TS016	OBC	BVL	GF	NW	21	21	2	554178	5627625	U	S-0	--	--	2	Cu	28	W	
2275	TS017	OBC	BVL	GF	NW	21	21	2	553944	5627672	U	S-0	--	--	2	Cu	10	W	
2276	TS018	OBC	BVL	GF	NE	20	21	2	553822	5627740	U	S-0	3	U	3	Cu	17	W	
2277	TS019	OBC	BVL	GF	NE	20	21	2	553653	5627887	U	S-0	--	--	3	Cu	14	W	
2278	TS020	OBC	BVL	GF	NE	20	21	2	553128	5628344	U	S-0	--	--	3	Cu	15	W	
2279	TS021	OBC	BVL	GF	SW	29	21	2	553008	5628443	U	S-0	--	--	2	Cu	14	W	
2280	TS022	OBC	BVL	GF	SW	29	21	2	552886	5628554	U	S-0	2	M	2	Cu	15	W	
2281	TS023	OBC	CHN	GL	SW	29	21	2	552264	5629082	U	--	--	--	2	Cu	14	MW	
2282	TS024	OBC	CHN	GL	NE	30	21	2	552196	5629134	U	S-0	--	--	2	HL	8	MW	
2283	TS025	OBC	CHN	GL	NE	30	21	2	552088	5629219	U	S-0	4	M	4 - 5	HL	15	MW	
2284	TS026	OBC	MAB	M	NW	30	21	2	551258	5629960	--	S-0	3	M	3	NR	18	MW	Good colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2285	TS027	CABC	TVS	M	SW	31	21	2	551100	5630081	Ro	S-2	--	--	4 - 5	NR	14	W	Poor colour change.
2286	TS028	CABC	EXP	M	SW	31	21	2	550699	5630381	Ro	S-0	--	--	2	NR	15	W	Poor colour change.
2287	TS029	CABC	EXP	M	SE	36	21	2	550470	5630558	U	S-0	--	--	2	NR	12	W	Poor colour change.
2288	TS030	CABC	EXP	M	SE	36	21	2	550128	5630777	U	S-0	--	--	2	NR	14	--	Good colour change.
2289	TS031	OBC	CFD	GL/M	NW	36	21	2	549922	5630920	U	S-0	--	--	2	NR	7	W	Good colour change. Surface stones further uphill.
2290	TS032	OBC	CHNsc	GL	NW	36	21	2	549591	5631228	--	S-0	--	L	1	NR	12	W	
2291	TS033	SZBC	CHZ	GL	NW	36	21	2	549568	5631305	--	S-0	--	--	2	NR	5	W	
2292	TS034	OBC	CHN ytsc	GL	SE	2	22	3	549033	5631033	U	--	1	M	2	NR	7	W	
2293	TS035	OBC	CHNsc	GL	SE	2	22	3	548573	5631981	Ro	S-0	--	--	1	NR	5	W	
2294	TS036	OBC	CHNsc	GL	SW	2	22	3	548370	5632128	Ro	S-0	1	E	2	NR	5	W	
2295	TS037	SZBC	CHZ	GL	NW	2	22	3	548012	5632417	Ro	S-0	--	--	2	NR	7	W	
2296	TS038	OBC	CHN	GL	NW	2	22	3	547693	5632634	U	S-0	2	M	2	NR	6	W	
2297	TS039	OBC	CHNscxt	GL/M	NE	3	22	3	547290	5632936	U	S-0	2	M	2	NR	7	W	
2298	TS040	OBC	CHN	GL	NE	3	22	3	546872	5633255	U	S-0	--	--	2	NR	6	W	
2299	TS041	OBC	MABsc	M	NE	3	22	3	546379	5633621	U	S-0	1	C	2	NR	5	W	Good colour change.
2300	TS042	RBC	HMSsc	M	SW	10	22	3	546264	5633704	U	--	--	--	3	NR	3	W	
2301	TS043	OBC	BVL	GF	SW	10	22	3	545922	5633921	Ro	S-0	--	--	2	NR	4	W	
2302	TS044	OBC	BVL	GF	NW	10	22	3	545659	5634065	Ro	S-0	--	--	2	NR	4	R	
2303	TS045	OBC	BVL	GF	NW	10	22	3	545568	5634154	U	S-0	--	--	2	NR	6	R	
2304	TS046	OBC	CHN	GL	NW	10	22	3	545257	5634487	U	S-0	--	--	2	NR	5	R	
2305	TS047	OBC	CVD-yc	GF	SE	14	21	4	568421	5625877	U	S-0	1	M	2	NR	7	W	
2306	TS048	OBC	CVD	GF	SE	14	21	4	568301	5625938	U	S-0	--	--	2	NR	6	R	
2307	TS049	OBC	CVD	GF	SW	14	21	4	568232	5625972	--	S-0	--	--	2	NR	6	R	
2308	TS050	OBC	BVL	GF	SW	36	20	1	568666	5621138	U	S-0	1	M	2	NR	8	R	
2309	TS051	OBC	CVD	GF	SW	36	20	1	568679	5620606	U	--	--	--	2	NR	7	R	
2310	TS052	OBC	CVD	GF	SW	36	20	1	568701	5620486	U	S-0	1	--	2	NR	6	R	
2311	TS053	OBC	CVD	GF	NW	25	20	1	568677	5620315	U	S-0	1	M	2	NR	7	R	
2312	TS054	OBC	CFD	GL/M	NW	5	20	1	568683	5619907	U	S-0	1	L	2	NR	6	R	
2313	TS055	OBC	CVD-yc	GF	SW	25	20	1	568662	5621447	U	S-0	0	L	1	NR	21	R	
2314	TS056	OBC	CVD	GF	SW	25	20	1	568714	5618896	U	S-0	1	--	2	NR	7	R	
2315	TS057	OBC	CHN	GL	SW	24	20	1	568696	5618783	U	S-0	1	--	2	Cu	20	--	
2316	TS058	OBC	CVD	GF	SW	24	20	1	568707	5618160	U	S-0	3	M	3	Cu	15	W	
2317	TS059	OBC	CVD	GF	NW	24	20	1	568698	5617937	Ro	S-0	--	--	1	Cu	14	R	
2318	TS060	OBC	CFD	GL/M	SW	25	20	1	568706	5617634	Ro	S-0	1	--	1	Cu	11	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2319	TS061	OBC	CVD-yc	GF	SW	25	20	1	568717	5617365	Ro	S-0	1	C	2	Cu	12	W	
2320	TS062	OBC	CHN	GL	NW	13	20	1	568716	5617238	Ro	S-0	--	--	--	Cu	19	W	
2321	TS063	OBC	CHN	GL	NW	13	20	1	568743	5616836	Ro	S-0	1	--	2	Cu	15	W	
2322	TS064	OBC	CFD	GL/M	NW	13	20	1	568744	5616556	Ro	S-0	1	U	2	Cu	14	W	
2323	TS065	OBC	CHN	GL	SW	13	20	1	568747	5616276	L	S-0	--	--	1	Cu	14	W	
2324	TS066	OBC	CHN	GL	SW	13	20	1	568749	5616043	Ro	S-0	2	--	2	Cu	14	W	
2325	TS067	OBC	CHN	GL	SW	13	20	1	568783	5615758	L	S-0	1	U	1	Cu	13	--	
2326	TS068	OBC	CHN	GL	NW	12	20	1	568794	5615540	L	S-0	1	--	1	Cu	7	W	
2327	TS069	OBC	CHN	GL	NW	12	20	1	569183	5614996	L	S-0	1	E	1	Cu	12	W	
2328	TS070	OBC	CHN	GL	NE	12	20	1	569561	5614910	L	S-0	--	E	1	Cu	12	W	
2329	TS071	OBC	CHN	GL	NE	12	20	1	569808	5614914	Ro	S-0	--	--	2	Cu	13	W	
2330	TS072	OBC	CHN	GL	NE	12	20	1	570289	5614859	L	S-0	1	E	1	Cu	12	W	
2331	TS073	OBC	CVD	GF	NE	12	20	1	570417	5614850	L	S-0	--	--	1	Cu	12	R	
2332	TS074	OBC	RIR	GF/GL	NE	12	20	1	570624	5614838	L	S-0	1	--	1	Cu	14	--	Poor colour change.
2333	TS075	OBC	CHN	GL	NW	12	29	--	570735	5614836	U	S-0	--	--	2	Cu	15	W	
2334	TS076	OBC	RIR	GF/GL	NW	12	29	--	571310	5614802	U	S-0	1	M	2	Cu	20	R	Poor colour change.
2335	TS077	OBC	CHN	GL	NW	8	29	--	572310	5614876	Ro	S-0	2	U	2	Cu	18	W	
2337	TS078	OBC	BVLyc	GF	NE	12	29	--	571863	5614845	Ro	S-0	1	M	2	Cu	16	R	
2338	TS079	OBC	BVLyc	GF	NW	8	29	--	571724	5614785	U	S-0	2	--	2	Cu	12	W	
2339	TS080	OBC	CVD	GF	NW	36	20	1	568662	5621447	U	S-0	1	M	2	NR	10	R	
2340	TS081	OBC	BVL	GF	SE	2	20	1	568321	5622137	Ro	S-0	1	U	2	NR	8	R	
2341	TS082	OR	ATP	E	SE	2	20	1	568505	5622281	Ro	S-0	1	--	2	NR	3	R	
2342	TS083	OBC	CVD	GF	SE	2	20	1	568513	5622395	Ro	--	1	--	--	NR	5	R	
2343	TS084	OBC	CHN	GL	NE	2	20	1	568510	5623009	U	S-0	2	M	2	NR	3	W	
2344	TS085	OBC	CVD	GF	NE	2	20	1	568487	5623171	U	S-0	1	L	2	NR	14	R	
2345	TS086	OBC	CVD	GF	NE	2	20	1	568435	5623311	U	S-0	1	M	2	NR	18	R	
2346	TS087	OBC	BVL	GF	SE	11	20	1	568319	5623688	U	S-0	2	M	2	NR	9	R	
2348	TS088	OBC	CVD	GF	SE	11	20	1	568196	5623950	U	S-0	1	U	2	NR	12	R	
2349	TS089	OBC	CVD	GF	SE	11	20	1	568123	5624138	U	S-0	2	U	2	NR	9	R	
2350	TS090	OBC	CVD	GF	SE	11	20	1	567926	5624583	U	S-0	1	M	2	NR	16	R	
2351	TS091	OBC	CVD	GF	SE	11	20	1	567855	5624737	--	--	2	C	2	NR	14	R	
2352	TS092	OBC	CVD	GF	SE	11	20	1	567813	5624819	U	--	2	C	2	NR	14	R	
2353	TS093	OBC	CVD	GF	SW	14	20	1	567593	5625340	Ro	S-0	1	M	2	NR	24	W	
2354	TS094	RBC	VST	E	SW	14	20	1	567379	5625829	Ro	S-0	1	--	1	NR	2	R	Poor colour change. Highly ERODED area.
2355	TS095	OBC	BVL	GF	SW	14	21	1	567334	5625934	Ro	S-0	1	--	1	NR	6	R	
2356	TS096	OBC	BVL	GF	NW	14	21	1	567292	5626033	Ro	S-0	1	--	2	NR	5	R	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2357	TS097	OBC	BVL	GF	NE	14	21	1	567007	5626676	--	S-0	1	U	2	NR	25	W	
2358	TS098	OBC	BVL	GF	NE	22	20	1	566800	5626889	--	S-0	4	C	3	NR	14	R	
2359	TS099	OBC	BVL	GF	NE	22	20	1	566626	5627169	Ro	S-0	1	M	2	NR	9	R	
2360	TS100	OBC	BVL	GF	NE	22	20	1	566497	5627205	U	S-0	2	C	2	NR	13	W	
2361	TS101	OBC	BVL	GF	SW	22	20	1	565865	5627145	I	S-0	1	M	2	NR	12	--	
2362	TS102	OBC	BVL	GF	SW	22	20	1	565779	5626985	I	S-0	1	U	2	NR	6	R	
2363	TS103	RBC	VST	E	SW	22	21	1	565514	5626975	--	S-0	5	U	--	NR	4	R	
2364	TS104	OBC	RB	M	SW	22	21	1	565414	5626960	--	S-0	10	C	5	NR	8	R	Hit rock at 125cm unable to auger any further. OK colour change. Coulee of S. Sask River.
2365	TS105	OBC	MABer	M	SE	21	20	1	565296	5627123	T	S-3	20	L	6	NR	3	MW	Down in Coulee of S. Sask River.
1496	TS106	BSS	HUK	M	SW	8	31	4	531465	5721209	U	S-1	2	D	2	Cu	13	W	Good colour change.
1497	TS107	OBC	MAB	M	SW	8	31	4	531468	5721127	--	S-2	2	M	2	Cu	12	W	
1498	TS108	OBC	MAB	M	SW	8	31	4	531537	5720649	U	S-1	3	M	3	Cu	25	W	Too stony past 156. Good colour change.
1499	TS109	SZBC	CCL	M	SW	20	31	4	531594	5724283	Ro	S-1	1	M	2	Cu	11	W	
1500	TS110	OG	KTM	M	SW	20	31	4	531530	5724364	Ro	S-2	2	L	2	Cu	10	I	
1501	TS111	OBC	MAB	M	SW	29	31	4	531439	5725368	Ro	S-1	1	L	2	Cu	15	W	Good colour change.
1502	TS112	OBC	MAB	M	SW	29	31	4	531441	5725474	Ro	S-1	1	--	2	Cu	15	W	Good colour change.
1503	TS113	OBC	MAB	M	SW	29	31	4	531443	5325556	U	S-1	1	M	2	Cu	13	W	Good colour change.
1504	TS114	OBC	MAB	M	NW	29	31	4	531421	5726205	U	--	1	L	2	Cu	14	W	Ok colour change.
1505	TS115	OBC	MAB	M	NW	29	31	4	531417	5726326	U	S-1	1	U	2	Cu	12	W	
1506	TS116	OBC	MAB	M	NW	29	31	4	531406	5726473	U	S-0	2	M	2	Cu	16	W	Good colour change.
1510	TS117	OBC	MAB	M	NW	8	31	4	531402	5721919	--	S-2	1	U	2	Cu	12	W	Good colour change.
1511	TS118	OBC	MAB	M	NW	8	31	4	531405	5721848	U	S-1	8	C	4 - 5	Cu	11	W	Good colour change.
1512	TS119	BSS	HUK	M	NW	8	31	4	531418	5721722	U	S-3	3	M	3	Cu	12	W	
1513	TS120	RBC	HMS	M	SW	17	31	4	531388	5722170	U	S-0	10	U	5	NR	3	W	
1514	TS121	RG	THRsa	GL	SW	17	31	4	531419	5722255	U	S-0	1	T	2	Wt	2	R	
1515	TS122	OBC	MAB	M	SW	17	31	4	531430	5722277	U	S-1	5	L	4 - 5	Cu	14	W	Ok colour change.
1516	TS123	OBC	MAB	M	NW	17	31	4	531481	5723239	U	S-2	3	C	3	NR	21	W	
1517	TS124	OBC	MABer	M	NW	17	31	4	531510	5723388	U	S-0	1	D	2	NR	2	W	
1518	TS125	SZBC	CCL	M	NW	20	31	4	531483	5725232	Ro	S-1	1	M	2	Cu	17	MW	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1519	TS126	SZBC	CCL	M	NW	20	31	4	531482	5725041	Ro	S-2	1	M	2	Cu	18	MW	
1520	TS127	OBC	MABsc	M	NW	20	31	4	531508	5324762	Ro	S-2	3	M	3	Cu	18	MW	
1521	TS128	OHG	ZGW	GL	NE	6	32	4	531007	5729446	I	S-0	3	T	3	Wt	30	P	
1522	TS129	ODBC	DCY	GF/M	NE	6	32	4	531043	5729545	U	S-0	4	U	3	HL	16	R	
1523	TS130	ODBC	HNDxs	M	NE	6	32	4	531020	5729823	U	S-1	4	C	3	Cu	8	MW	
1524	TS131	ODBC	HND	M	NE	30	32	4	530550	5735867	U	S-0	9	M	5	NR	12	MW	Good colour change.
1525	TS132	ODBC	DCY	GF/M	NE	30	32	4	530552	5735999	U	S-0	8	U	4 - 5	NR	14	MW	
1526	TS133	EDBC	LFE	M	NE	30	32	4	530560	5736109	U	S-0	6	M	4 - 5	NR	28	W	Good colour change.
1527	TS134	ODBC	HND	M	NE	30	32	4	530575	5730252	U	S-1	4	L	3	NR	12	MW	Good colour change.
1528	TS135	ODBC	HNDxs	M	SE	31	32	4	530596	5736751	U	S-0	9	U	4 - 5	NR	19	MW	Good colour change.
1529	TS136	DBSS	HKR	M	SE	31	32	4	530578	5736996	U	S-0	1	U	2	NR	9	MW	
1530	TS137	DBSS	HKR	M	SE	31	32	4	530542	5737365	--	S-1	12	C	5	NR	8	W	
1531	TS138	EDBC	LFE	M	NE	31	32	4	530441	5738223	U	S-0	1	D	2	NR	12	W	
1532	TS139	ODBC	DCY	GF/M	NE	31	32	4	530471	5738094	U	S-0	3	M	--	NR	9	MW	TILL at 185cm, auger no further. Good colour change.
1533	TS140	EBLC	LFE	M	NE	31	32	4	530483	5737972	U	S-0	4	M	3	NR	9	--	
1534	TS141	RG	THR	GL	SE	6	33	4	530446	5738862	U	S-0	1	L	2	NR	12	P	Good colour change.
1535	TS142	SZDBC	FST	M	SE	6	33	4	530478	5739294	U	S-1	5	C	4 - 5	NR	12	W	Good colour change.
1536	TS143	RDBC	NUT	M	S	6	33	4	530485	5739386	U	S-0	10	L	5	NR	6	--	Good colour change. 15m North of slough
1537	TS144	SZDBC	FST	M	SE	6	33	4	530427	5739657	U	S-0	1	L	2	NR	8	W	Good colour change.
1538	TS145	ODBC	HND	M	SE	7	33	4	530378	5739961	U	--	2	--	--	Cu	17	MW	Good colour change.
1539	TS146	ODBC	HND	M	SE	7	33	4	530360	5740063	U	S-1	3	M	3	Cu	20	W	Good colour change.
1540	TS147	ODBC	HND	M	SE	7	33	4	530325	5740276	U	S-2	1	U	2	Cu	21	W	Good colour change.
1541	TS148	ODBC	HND	M	SW	7	33	4	530256	5740541	U	S-1	8	M	4 - 5	Cu	12	W	Good colour change.
1542	TS149	GLDBC	HNDgl	M	SW	7	33	4	530175	5740751	Ro	S-1	1	D	2	Cu	9	P	
1543	TS150	ODBC	HND	M	SW	7	33	4	530127	5740902	U	S-2	4	U	3	Cu	13	W	
1544	TS151	ODBC	HND	M	SW	7	33	4	530079	5741043	U	S-1	4	U	3	Cu	15	W	
1548	TS152	ODBC	HND	M	SW	18	33	4	529914	5741572	--	S-2	1	M	2	Cu	12	W	Poor colour change. Too stony to auger past 145cm.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1549	TS153	CADBC	NUT	M	SW	18	33	4	529892	5741689	U	S-1	2	U	2	Cu	10	W	Good colour change.
1550	TS154	CADBC	NUT	M	SW	18	33	4	529864	5741822	--	S-1	4	M	3	Cu	9	W	Good colour change.
1551	TS155	ODBC	HND	M	NW	18	33	4	529620	5743004	U	S-3	2	M	2	NR	10	W	Good colour change.
1552	TS156	ODBC	HND	M	NW	18	33	4	529647	5242894	U	S-2	1	C	2	Cu	7	W	Good colour change.
1553	TS157	ODBC	HND	M	NW	18	33	4	529691	5742818	U	S-2	2	M	3	Cu	10	W	Good colour change. Too stony to auger past 130cm.
1554	TS158	ODBC	HND	M	SE	24	33	5	529180	5743810	U	S-2	1	M	--	NR	12	W	Good colour change. Lots of rocks/stones at surface and A + B
1555	TS159	ODBC	HND	M	NE	24	33	5	529097	5743917	--	S-2	4	U	3	NR	8	W	Good colour change.
1556	TS160	ODBC	DCY	GF/M	NE	24	33	5	529030	5744049	U	S-2	2	M	2	NR	17	MW	
1557	TS161	ODBC	DCY	GF/M	NE	24	33	5	528949	5744200	U	S-2	4	L	3	Cu	15	MW	
1558	TS162	ODBC	HND	M	NE	24	33	5	528875	5744325	U	S-1	2	M	3	Cu	7	W	OK colour change.
1559	TS163	ODBC	DCY	GF/M	NE	24	33	4	528854	5744489	U	S-1	4	M	3	Cu	11	MW	
1560	TS164	ODBC	HND	M	SW	25	33	5	528574	5745550	U	S-3	3	M	3	NR	9	W	
1561	TS165	ODBC	DCY	GF/M	NW	25	33	5	528508	5245675	U	S-1	3	U	3	NR	9	MW	
1562	TS166	SZDBC	FST	M	NW	25	33	5	528377	5745920	U	S-1	15	C	6	NR	8	W	Poor colour change.
1563	TS167	RDBC	NUT	M	NW	25	33	5	528315	5746153	U	S-0	10	C	5	NR	4	W	
1564	TS168	ODBC	HND	M	NW	25	33	5	528234	5746467	L	S-0	1	E	1	Cu	14	W	Poor colour change.
2371	TS169	ODBC	HND	M	NW	36	33	5	528058	5747338	Ro	S-2	1	M	2	Cu	9	W	Too stony to auger past 135cm. Good colour change.
2372	TS170	ODBC	HND	M	NW	36	33	5	528044	5747513	Ro	S-2	1	U	--	Cu	14	W	Good colour change.
2373	TS171	ODBC	HND	M	NW	36	33	5	528002	5747642	L	S-2	0	E	1	Cu	11	W	Good colour change.
2374	TS172	SZDBC	FST	M	SE	2	34	5	527723	5748181	L	S-1	0	E	2	NR	8	W	Too stony to auger past 87cm. Good colour change.
2375	TS173	SZDBC	FST	M	NE	2	34	5	527378	5748831	U	S-2	3	M	3	Cu	6	W	Good colour change. Well packed road into culti ation.
2376	TS174	CADBC	DCY	GF/M	NE	2	34	5	527294	5749490	Ro	S-1	1	E	--	Cu	9	W	
2377	TS175	ODBC	DCY	GF/M	NE	2	34	5	527361	5749342	Ro	S-2	2	M	2	Cu	12	MW	Good colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2378	TS176	ODBC	DCY	GF/M	SE	11	34	5	527214	5749740	U	S-1	4	M	3	Cu	9	MW	Good colour change.
2379	TS177	ODBC	HND	M	SE	11	34	5	527192	5749910	U	S-0	2	L	2	Cu	16	W	Great colour change.
2380	TS178	ODBC	HND	M	SE	11	34	5	527165	5750061	U	S-0	2	M	2	Cu	11	W	Good colour change.
2381	TS179	DBSS	CUR	GL	NE	11	34	5	527067	5750532	L	S-0	1	E	1	Cu	8	W	
2382	TS180	ODBC	HND	M	NE	3	35	5	525212	5759163	U	S-0	3	U	3	NR	20	W	Good colour change.
2383	TS181	ODBC	HND	M	NE	3	35	5	525249	5759019	--	S-0	4	M	3	NR	12	W	Too stony to auger past 145cm.
2384	TS182	ODBC	HND	M	NE	3	35	5	525238	5758932	--	S-1	6	M	4 - 5	NR	9	W	
2385	TS183	ODBC	HND	M	NE	3	35	5	525281	5758781	U	--	6	U	4 - 5	NR	8	W	Good colour change.
2386	TS184	SZDBC	FST	M	NE	3	35	5	525298	5758621	U	S-0	6	M	4 - 5	NR	16	W	
2387	TS185	ODBC	HND	M	NE	3	35	5	525328	5758468	U	S-0	5	M	4 - 5	NR	11	W	Good colour change.
2389	TS186	RG	ZGW	GF	NW	23	36	6	516060	5773024	L	S-1	1	L	2	NR	13	P	Good colour change. South of waterbody (GL b/e landscape)
2390	TS187	OBLC	MET	GF	NW	23	36	6	516193	5773002	L	S-0	1	M	2	HL	24	R	Good colour change.
2391	TS188	ODBC	MET	GF	NW	23	36	6	516298	5772962	U	S-0	3	C	3	HL	24	R	Good colour change.
2392	TS189	OR	ZUN	M	NW	23	36	6	516391	5772917	S	S-4	20	U	--	NR	8	R	
2393	TS190	CADBC	DCY	GF/M	NW	23	36	6	516622	5772850	L	S-1	1	E	1	Cu	11	W	Good colour change.
2394	TS191	ODBC	DCY	GF/M	NW	23	36	6	516797	5772854	U	S-0	4	M	3	NR	13	W	
2395	TS192	ODBC	DCY	GF/M	NE	23	36	6	516964	5772847	U	S-0	4	M	3	Cu	23	MW	Good colour change.
2396	TS193	DBSS	HKR	M	NE	23	36	6	517110	5772852	U	S-1	4	M	3	Cu	19	MW	Good colour change.
2397	TS194	ODBC	HND	M	NE	23	36	6	517263	5772814	H	S-0	3	M	3	Cu	19	W	Good colour change.
2398	TS195	ODBC	HND	M	NE	23	36	6	517429	5772655	H	S-0	2	M	2	Cu	17	W	Good colour change.
2399	TS196	ODBC	HND	M	NE	23	36	6	517580	5772667	U	S-2	1	L	2	Cu	17	W	Good colour change.
2400	TS197	ODBC	SCD	GF	NW	22	36	6	514843	5773715	L	S-0	1	E	1	NR	17	R	
2401	TS198	ODBC	SCD	GF	NW	22	36	6	515035	5773651	L	S-3	1	--	--	HL	16	R	Good colour change.
2402	TS199	ODBC	SCD	GF	NE	22	36	6	515213	5773594	U	S-0	3	--	--	NR	15	R	
2403	TS200	ODBC	SCD	GF	NE	22	36	6	515310	5773506	U	S-0	8	M	--	NR	30	R	
2404	TS201	ODBC	SCD	GF	NE	22	36	6	515759	5773172	L	S-0	1	M	2	NR	28	R	Poor colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2405	TS202	ODBC	SCD	GF	NE	22	36	6	515701	5773175	H	S-0	3	U	3	NR	27	W	Good colour change.
2406	TS203	ODBC	SCD	GF	NE	22	36	6	515588	5773132	H	S-0	2	U	2	NR	17	--	Too stony to auger past 135cm. Poor colour change.
2407	TS204	ODBC	SCD	GF	NE	22	36	6	515499	5773186	I	S-0	5	M	3	NR	25	W	Good colour change. Small lake to the North
2408	TS205	ODBC	HND	M	NE	28	36	6	513689	5774604	U	S-0	3	M	3	IP	15	W	Excellent colour change.
2409	TS206	ODBC	HND	M	NW	28	36	6	513553	5774720	H	S-2	4	C	3	IP	12	W	Poor colour change.
2415	TS207	BSS	HUK	M	SW	32	29	4	531941	5707557	U	S-0	1	C	2	NR	9	W	Poor colour change.
2416	TS208	BSS	HUK	M	SW	32	29	4	531949	5307713	U	S-0	4	U	3	NR	7	W	Blowouts in area. Poor colour change.
2417	TS209	SZBC	CCL	M	SW	32	29	4	531962	5707872	U	S-0	5	U	3	NR	8	W	
2418	TS210	SZBC	CCL	M	SW	32	29	4	531943	5708012	--	S-2	3	C	3	NR	14	W	Too stony to auger past 110cm. Poor colour change.
2419	TS211	OBC	MAB	M	SW	32	29	4	531930	5708143	U	S-0	6	D	4 - 5	NR	12	W	
2420	TS212	SZBC	CCL	M	SW	32	29	4	531936	5708240	U	--	4	--	--	NR	9	W	
2421	TS213	SZBC	CCL	M	NW	32	29	4	531957	5708335	--	S-1	6	U	4 - 5	NR	9	--	
2422	TS214	BSO	HDY	M	NW	32	29	4	531955	5708458	H	S-0	1	C	2	NR	8	W	Poor colour change.
2423	TS215	SZBC	CCL	M	NW	32	29	4	531959	5708622	U	S-2	4	--	3	NR	10	W	
2424	TS216	SZBC	CCL	M	NW	32	29	4	531943	5708757	H	S-2	3	L	--	NR	12	W	
2425	TS217	OBC	MAB	M	NW	32	29	4	531945	5708866	H	S-1	3	L	3	NR	10	W	Poor colour change. Too stony past 110cm.
2426	TS218	SZBC	CCL	M	NW	32	29	4	531931	5709005	H	S-2	2	M	2	NR	10	W	
2427	TS219	BSS	HUK	M	SW	17	30	4	531691	5713913	U	S-4	10	M	5	NR	8	W	
2428	TS220	BSS	HUK	M	SW	17	30	4	531705	5714049	U	S-1	5	L	4 - 5	NR	4	W	Poor colour change.
2429	TS221	BSS	HUK	M	SW	17	30	4	531724	5713733	H	S-2	1	C	3	NR	6	W	Too stony to auger past 118cm. Poor colour change.
2430	TS222	BSS	HUK	M	SW	17	30	4	531740	5713648	H	S-0	3	U	3	NR	12	--	Poor colour change.
2431	TS223	SZBC	CCL	M	SW	17	30	4	531759	5713546	H	S-0	4	U	3	NR	12	W	
2437	TS224	BSS	HUK	M	NW	5	31	4	531599	5720319	U	S-3	6	L	4 - 5	NR	5	W	Poor colour change.
2438	TS225	OBC	ANO	GF/M	NW	5	31	4	531602	5720234	U	S-2	5	L	3	HL	9	W	Stony past 54 cm
2439	TS226	BSS	HUK	M	NW	5	31	4	531590	5720091	H	S-4	4	M	3	HL	7	W	Poor colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2440	TS227	SZBC	CCL	M	NW	5	31	4	531599	5719935	H	S-3	2	U	3	HL	7	W	
2441	TS228	OBC	PUN	GF	NW	5	31	4	531650	5719833	H	S-3	4	U	3	HL	7	W	Good colour change.
2442	TS229	SZBC	CCL	M	NW	5	31	4	531655	5719705	H	S-3	2	M	--	HL	7	W	
2445	TS230	OR	ZUN	M	NE	25	22	3	540139	5639081	Ri	S-4	30	L	7 - 8	NR	2	W	
2446	TS231	BSS	HUK	M	SW	5	31	4	531660	5719550	U	S-4	2	C	2	HL	7	W	Poor colour change.
2447	TS232	BSS	HUK	M	SW	5	31	4	531675	5719429	--	S-4	1	M	2	HL	8	W	
2448	TS233	SZBC	CCL	M	SW	5	31	4	531676	5719341	U	S-3	1	M	2	HL	7	W	
2180	WP001	OBC	CVD	GF	SE	14	21	1	568477	5625842	U	S-1	1	M	2	NR	10	R	
2181	WP002	OBC	CVDyc	GF	SE	14	21	1	568193	5626024	U	S-1	2	L	3	NR	12	R	
2182	WP003	RBC	VST	E	SW	36	20	1	568681	5621232	U	S-1	1	L	2	NR	13	--	Poor colour change.
2183	WP004	OBC	CVD	GF	SW	36	20	1	568672	5621012	U	--	1	--	--	NR	7	R	
2184	WP005	RBC	VSTscxc	E	SW	36	20	1	568672	5620728	U	S-1	2	L	3	NR	22	R	
2185	WP006	OBC	CVD	GF	NW	25	20	1	568698	5620182	U	S-1	1	U	2	NR	10	R	
2186	WP007	OBC	CVD	GF	NW	25	21	1	568687	5620051	U	S-1	1	D	2	--	30	W	
2187	WP008	RBC	VST	E	NW	25	20	1	568686	5619683	--	S-2	3	M	3	NR	12	R	--
2188	WP009	OBC	CVD	GF	NW	25	20	1	568680	5619799	--	S-2	2	U	2	NR	7	R	--
2189	WP010	OBC	CVD	GF	SW	25	20	1	565690	5619494	U	S-1	1	M	2	IP	7	R	Poor colour change. Eroded topsoil. Seeded grass
2190	WP011	RBC	CHN	GL	SW	25	20	1	560688	5619569	U	S-1	3	M	--	IP	10	MW	
2191	WP012	OBC	CVD	GF	SW	25	20	1	568694	5619377	U	S-1	1	M	2	IP	12	R	
2192	WP013	OBC	BVL	GF	SW	25	20	1	568697	5619252	U	S-1	1	D	2	IP	10	MW	
2193	WP014	OBC	CVD	GF	NW	24	20	1	568702	5618565	U	S-1	1	U	2	Cu	13	R	
2194	WP015	OBC	CVD	GF	NW	24	20	1	568703	5618449	U	S-1	1	L	2	Cu	12	R	
2195	WP016	RBC	CHN	GL	NW	24	20	1	568701	5618285	U	S-1	1	D	2	Cu	0	I	Area is in large depression.
2196	WP017	OBC	CVD	GF	NW	24	20	1	568710	5618056	U	--	1	D	2	Cu	12	R	
2197	WP018	OBC	CFD	GL/M	SW	24	20	1	568706	5617753	--	S-1	1	L	2	Cu	15	W	
2198	WP019	OBC	CFD	GL/M	SW	24	20	1	568709	5617509	U	S-1	1	--	2	Cu	14	W	
2199	WP020	RBC	CHNzr	GL	SW	24	20	1	568712	5617288	U	--	2	L	2	Cu	9	W	
2200	WP021	OBC	CHN	GL	NW	13	20	1	568746	5616965	--	S-1	1	L	2	Cu	9	W	
2201	WP022	OBC	CVD	GF	NW	13	20	1	568746	5616714	--	S-1	2	M	3	Cu	12	R	
2202	WP023	OBC	CHN	GL	NW	13	20	1	568746	5616425	U	S-1	2	M	3	Cu	13	W	
2203	WP024	OBC	CVDyc	GF	SW	13	20	1	568743	5616158	--	S-1	1	M	2	--	14	W	
2204	WP025	OBC	CHN	GL	SW	13	20	1	568777	5615886	--	S-1	2	M	2	Cu	12	W	
2205	WP026	OBC	CHN	GL	SW	13	20	1	568787	5615646	--	S-1	1	L	2	Cu	14	W	
2206	WP027	OBC	CHN	GL	NW	12	20	1	568814	5615372	U	S-1	3	L	3	Cu	15	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2214	WP028	OBC	RIR	GF/GL	NW	12	20	1	568922	5615228	--	S-1	1	U	2	Cu	9	R	
2215	WP029	OBC	RIR	GF/GL	NW	12	20	1	569254	5614963	U	S-1	1	M	2	Cu	11	R	
2216	WP030	OBC	RIR	GF/GL	NW	12	20	1	569051	5615064	U	S-1	1	U	2	Cu	13	R	
2217	WP031	OBC	CHN	GL	NE	12	20	1	569700	5614908	U	--	1	--	--	Cu	12	W	
2218	WP032	OBC	CHN	GL	NE	12	20	1	569943	5614899	U	S-1	1	L	2	Cu	14	W	
2219	WP033	OBC	CHN	GL	NE	12	20	1	570112	5614879	--	S-1	1	M	2	Cu	13	W	
2220	WP034	OBC	CHN	GL	NW	8	20	1	570934	5614827	U	S-1	1	M	2	Cu	18	W	
2221	WP035	OBC	RIR	GF/GL	NW	8	20	1	571074	5614811	U	S-1	1	M	2	Cu	17	R	
2222	WP036	OBC	RIR	GF/GL	NE	8	20	1	571187	5614806	--	S-1	1	L	2	Cu	18	R	
2223	WP037	OBC	RIRzr	GF/GL	NW	9	20	1	572466	5614850	--	S-1	1	M	2	Cu	10	R	
2224	WP038	OBC	RIRzr	GF/GL	SW	9	20	1	572647	5614792	U	S-1	1	E	2	Cu	12	R	
2225	WP039	OBC	CHN	GL	NE	8	20	1	572152	5614879	--	S-1	1	E	2	Cu	15	W	
2226	WP040	RBC	BVLzr	GF	NE	8	20	1	572011	5614860	U	--	1	--	2	Cu	18	R	
2227	WP041	OBC	RIR	GF/GL	NW	8	20	1	571549	5614784	U	S-1	1	E	2	Cu	12	R	
2228	WP042	OBC	RIR	GF/GL	NW	8	20	1	571427	5614822	--	S-1	1	E	2	Cu	14	R	
2229	WP043	RBC	CFDsc	GL/M	NE	35	20	1	568528	5621599	--	S-1	2	L	3	NR	7	MW	
2230	WP044	OBC	CVD	GF	NE	35	20	1	568526	5621719	U	S-1	2	C	3	NR	7	R	
2231	WP045	OBC	CVDsc	GF	NE	35	20	1	568526	5621809	--	S-1	2	U	3	NR	7	R	
2232	WP046	OBC	CVD	GF	NE	35	20	1	568528	5621960	U	S-1	2	L	3	NR	7	R	
2233	WP047	OBC	CHN	GL	SE	2	21	1	568518	5622470	U	S-1	1	L	2	NR	7	W	
2234	WP048	OBC	CVD	GF	SE	2	21	1	568535	5622583	U	S-1	2	M	3	NR	9	R	
2235	WP049	OBC	CVD	GF	SE	2	21	1	568529	5622737	U	S-1	2	M	2	NR	8	R	
2236	WP050	OBC	BVL	GF	NE	2	21	1	568528	5622858	--	S-1	2	U	2	NR	11	R	
2237	WP051	OBC	CVDyc	GF	NE	2	21	1	568429	5623436	--	S-1	3	M	3	NR	11	R	
2238	WP052	OBC	CVD	GF	NE	2	21	1	568395	5623539	--	S-1	2	M	2	NR	11	R	
2239	WP053	OBC	CVD	GF	SE	11	21	1	568286	5623820	U	S-1	1	D	2	NR	13	R	
2240	WP054	OBC	CVD	GF	SE	11	21	1	568060	5624282	--	S-2	2	M	3	NR	12	R	
2241	WP055	OBC	CVD	GF	SE	11	21	1	567992	5624403	U	S-1	3	C	3	NR	8	R	
2242	WP056	OBC	CVD	GF	NE	11	21	1	567936	5624485	--	S-2	2	M	3	NR	11	R	
2243	WP057	OBC	CVD	GF	NW	11	21	1	567765	5624953	--	S-1	2	U	2	NR	12	W	
2244	WP058	OBC	CVD	GF	NW	11	21	1	567705	5625093	U	S-1	3	M	3	NR	11	R	
2245	WP059	OBC	CVD	GF	SE	14	21	1	567531	5625453	--	S-2	1	E	2	NR	6	R	
2246	WP060	OBC	CVD	GF	SE	14	21	1	--	--	--	S-1	2	U	2	NR	9	R	
2247	WP061	OBC	BVL	GF	SW	14	21	1	567430	5625712	U	S-1	2	T	2	NR	9	R	
2248	WP062	OBC	CVD	GF	NW	14	20	1	567250	5626122	--	--	2	M	2	NR	9	R	
2249	WP063	OBC	BVL	GF	NW	14	21	1	567180	5626270	U	S-1	2	M	3	NR	7	R	
2250	WP064	OBC	BVL	GF	NW	14	20	1	567125	5626407	--	S-1	2	M	--	NR	8	R	
2251	WP065	OBC	BVL	GF	NW	14	21	1	567051	5626556	U	S-1	2	--	--	NR	18	W	
2252	WP066	OBC	BVL	GF	SE	22	21	1	566899	5626782	--	S-1	3	M	3	NR	9	W	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2253	WP067	RBC	VST	E	SE	22	21	1	566731	5627069	U	--	2	--	--	NR	10	R	
2254	WP068	OBC	BVL	GF	SE	22	21	1	566332	5627241	--	S-1	2	C	2	NR	8	W	
2255	WP069	OBC	BVL	GF	SW	22	20	1	566154	5627195	--	S-1	2	M	2	NR	9	W	
2256	WP070	OBC	BVL	GF	SW	22	21	1	565977	5627163	--	S-1	2	U	2	NR	8	W	
2257	WP071	OBC	BVL	GF	SW	22	21	1	565642	5626980	Ri	S-1	3	C	3	NR	9	W	
1371	WP090	RDBC	NUT	M	SE	10	35	5	525137	5759777	U	S-2	4	M	3	Cu	18	MW	
1372	WP091	ODBC	NUT	M	SE	10	35	5	525154	5759611	--	S-1	3	L	3	Cu	21	MW	
1373	WP092	ODBC	HND	M	SE	10	35	5	525161	5719509	U	S-1	2	U	3	Cu	15	MW	
1374	WP093	ODBC	HND	M	SE	10	25	5	525168	5759385	U	S-1	2	U	2	Cu	12	MW	Good colour change
1375	WP094	RDBC	NUT	M	SE	10	25	5	525107	5759222	U	S-2	4	M	3	Cu	11	MW	Good colour change
1376	WP095	ODBC	HND	M	SE	10	35	5	525137	5759993	U	S-2	2	U	3	Cu	19	MW	Good colour change
1377	WP096	RDBC	NUT	M	NE	10	35	5	--	--	U	S-2	2	L	3	Cu	19	--	Good colour change
1378	WP097	RDBC	NUT	M	NE	10	35	5	525107	5760258	U	S-2	2	M	3	Cu	11	MW	Good colour change
1379	WP098	RDBC	NUT	M	NE	10	35	5	525116	5760381	U	S-2	2	M	3	Cu	11	MW	Good colour change
1380	WP099	ODBC	HND	M	NE	10	35	5	525144	5760509	U	S-2	8	L	4 - 5	Cu	18	MW	Good colour change
1381	WP100	CADBC	NUT	M	NE	10	35	5	525128	5760755	U	S-3	2	--	3	Cu	11	MW	Poor colour change, Good structure change
1382	WP101	ODBC	HND	M	SE	15	35	5	525003	5760905	U	S-2	3	U	3	HL	11	MW	Poor colour change
1383	WP102	ODBC	HND	M	SE	15	35	5	524970	5761094	--	S-1	2	L	3	HL	14	MW	
1384	WP103	RDBC	NUT	M	NW	18	35	5	524588	5761742	H	S-2	6	U	4 - 5	IP	9	MW	
1385	WP104	ODBC	MET	GF	NW	15	35	5	524514	5761834	--	S-2	6	M	4 - 5	IP	9	W	Poor colour change.
1386	WP105	ODBC	DCY	GF/M	NW	15	35	5	524474	5761956	H	S-2	3	L	3	IP	16	W	Good colour change.
1387	WP106	ODBC	MET	GF	NW	15	35	5	524337	5762111	--	S-2	7	U	4 - 5	IP	14	W	Good colour change.
1388	WP107	RDBC	METzz	GF	NW	15	35	5	524228	5762243	H	S-1	1	E	1	IP	15	W	Good colour change.
1389	WP108	ODBC	MET	GF	NW	15	35	5	524163	5762365	H	S-2	1	C	2	IP	9	W	Poor colour change.
1390	WP109	ODBC	MET	GF	NW	15	35	--	524104	5762537	--	S-1	1	L	2	IP	12	W	Good colour change.
1391	WP110	SZDBC	FST	M	NW	21	35	5	523785	5763301	U	S-2	2	M	2	IP	9	MW	
1392	WP111	ODBC	HND	M	NW	21	35	5	523675	5763393	U	S-1	2	L	2	HL	14	MW	
1393	WP112	GLDBC	HNDglsc	M	NW	21	35	5	523547	5763612	U	S-2	1	E	2	IP	18	P	

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1394	WP113	ODBC	HND	M	N	32	35	5	522531	5766570	--	S-1	2	L	3	Cu	13	MW	Good colour change.
1395	WP114	ODBC	HND	M	N	32	35	5	522296	5767048	H	--	2	C	3	Cu	13	MW	Good colour change.
1396	WP115	RDBC	NUT	M	N	32	35	5	522303	5766923	H	S-1	1	D	2	Cu	9	MW	Good colour change.
1422	WP116	ODBC	HND	M	NW	32	35	5	522428	5766837	U	S-1	3	M	3	Cu	13	MW	
1423	WP117	ODBC	HND	M	NW	32	35	5	522400	5766526	U	S-1	1	L	--	Cu	12	--	
1424	WP118	ODBC	HND	M	NW	32	35	5	522337	5766636	U	S-1	2	C	3	Cu	14	MW	
1397	WP119	DBSS	HKR	M	NW	28	35	5	522950	5764871	U	S-1	1	L	2	Cu	9	MW	Good colour change.
1398	WP120	ODBC	HNDsc	M	SW	28	35	5	523004	5764739	U	S-1	2	L	3	Cu	9	MW	Good colour change. Edge of dry slough
1399	WP121	ODBC	HNDsc	M	SW	28	35	5	523066	5764620	U	S-1	2	M	3	Cu	11	MW	Good colour change.
1400	WP122	GLDBC	ZGW	M	SW	28	35	5	523109	5764495	U	S-1	1	D	2	Wt	15	P	Good colour change. Site in Slough representative of other sloughs in 1/4
1401	WP123	ODBC	HND	M	SW	28	35	5	523205	5764402	U	S-1	2	M	2	Cu	9	MW	Good colour change.
1402	WP124	RDBC	NUT	M	SW	28	35	5	523286	5764306	U	S-1	1	C	2	Cu	10	W	
1403	WP125	ODBC	ZGW-sa	M	SW	28	35	5	523327	5764054	U	S-1	1	D	2	Cu	10	P	
1404	WP126	ODBC	HND	M	NE	5	36	5	522149	5765099	H	S-2	3	U	3	HL	9	MW	
1405	WP126A	ODBC	HNDyp	M	NE	5	36	5	522085	5768232	H	S-2	3	M	3	HL	13	MW	Hit impermeable layer at 145cm. Tried 3 spots, possible shallow bedrock or gravel. Good colour change.
1406	WP127	RDBC	NUT	M	NE	5	36	5	522028	5768398	H	S-2	6	M	4 - 5	HL	8	MW	Good colour change.
1407	WP128	RDBC	NUT	M	NE	5	36	5	522006	5768531	H	--	11	--	5	IP	8	MW	Good colour change. Very steep hill.
1408	WP129	ODBC	HNDyp	M	NE	5	36	5	522033	5768707	H	S-2	2	C	3	IP	8	W	Hit impermeable layer at 110cm possible bedrock. Good colour change.
1409	WP130	ODBC	HNDyp	M	SE	3	36	5	521953	5769057	H	S-2	2	L	3	IP	8	MW	Good colour change. Hit impermeable layer at 165cm possible bedrock

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1410	WP131	ODBC	HND	M	SE	8	36	5	521916	5769204	H	S-2	2	M	3	IP	9	W	Poor colour change.
1411	WP132	ODBC	HND	M	SE	8	36	5	521885	5769332	--	S-2	3	M	3	IP	12	W	Poor colour change.
1412	WP133	ODBC	HND	M	SE	8	36	5	521878	5769406	--	S-2	2	U	3	IP	14	W	Good colour change.
1413	WP134	ODBC	HND	M	SE	8	36	5	521862	5769528	H	S-2	7	M	4 - 5	IP	13	MW	
1414	WP135	ODBC	HND	M	SW	17	36	5	521433	5770586	H	S-2	3	M	3	IP	14	MW	
1415	WP136	ODBC	HND	M	SW	17	36	5	521385	5770705	U	S-1	3	M	3	IP	13	MW	
1416	WP137	ODBC	HND	M	SW	17	36	5	521338	5770827	--	S-1	3	M	3	IP	13	W	
1417	WP138	ODBC	HND	M	SW	17	36	5	521279	5770948	H	S-2	6	M	4 - 5	IP	14	MW	
1418	WP139	GLDBC	HNDgl	M	SW	17	36	5	521229	5771102	H	S-1	2	D	3	IP	17	I	
1419	WP140	ODBC	HND	M	NE	18	36	5	520161	5772084	H	S-2	3	M	3	IP	12	MW	
1420	WP141	RDBC	NUT	M	NE	18	36	5	520059	5772099	H	S-2	2	T	3	IP	8	MW	Area damaged by cattle. Good colour change.
1421	WP142	ODBC	DCY	GF/M	SW	27	34	5	525933	5754456	U	S-2	1	U	2	IP	13	W	Good colour change.
1425	WP143	GLDBC	METgl	GF	SW	27	34	5	525904	5754582	U	S-1	1	D	2	IP	13	I	Good colour change.
1426	WP144	ODBC	DCY	GF/M	SW	27	34	5	525846	5754695	U	S-1	1	E	2	IP	14	W	
1427	WP145	GLEDBC	LFE	M	SW	27	34	5	525801	5754812	--	S-1	1	D	2	IP	--	I	
1428	WP146	GLDBC	DCY	GF/M	SW	27	34	5	525778	5754930	U	S-1	1	D	2	IP	8	I	Poor colour change.
1429	WP147	ODBC	MET	GF	SW	27	34	5	525716	5755071	--	S-1	1	C	2	IP	12	W	Good colour change.
1430	WP148	ODBC	MET	GF	NW	27	35	4	525621	5755240	U	--	2	--	--	IP	16	MW	
1431	WP149	ODBC	MET	GF	NW	27	34	5	525617	5755351	--	S-2	2	M	2	IP	14	W	Good colour change.
1432	WP150	ODBC	MET	GF	NW	27	34	5	525582	5755451	--	S-2	4	M	3	IP	9	W	Good colour change.
1433	WP151	ODBC	MET	GF	NW	27	34	5	525547	5785540	U	S-2	3	U	--	IP	12	W	
1434	WP152	DBSZ	HKR	M	NW	27	34	5	525539	5755640	U	S-2	2	L	2	IP	7	MW	
1435	WP153	DBSZ	HKR	M	NW	27	34	5	525492	5755776	U	S-2	3	M	3	IP	7	I	
1436	WP154	DBSZ	HKR	M	SW	34	34	5	525430	5756073	--	--	--	--	--	IP	9	--	
1437	WP155	DBSZ	VTR	GL	SW	34	34	5	525396	5756230	L	S-1	1	E	2	IP	10	MW	Good colour change.
1438	WP156	DBSZ	VTR	GL	SW	34	34	5	525278	5756337	L	S-2	1	E	2	IP	11	MW	Some sand lenses in Ck Horizon
1439	WP157	DBSZ	VTR	GL	SW	34	34	5	525318	5756527	L	S-1	1	E	2	IP	12	MW	
1440	WP158	DBSZ	VTR	GL	SW	34	34	5	525316	5756665	--	S-1	1	E	2	IP	9	I	
1441	WP159	OHG	ZGW	GF	SW	34	34	5	525334	5776830	L	S-1	1	E	2	IP	9	I	
1442	WP160	ODBC	MET	GF	NW	34	34	5	525316	5756992	L	S-1	1	E	2	IP	7	I	Good colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
1443	WP161	ODBC	DCYsc	GF/M	NW	34	34	5	525338	5757092	L	S-1	1	E	2	IP	10	MW	
2655	WP162	ODBC	DCYsc	GF/M	NW	34	34	5	525332	5757364	U	S-2	2	L	2	IP	12	W	
2656	WP163	ODBC	DCYsc	GF/M	NW	34	34	5	525324	5757243	U	S-1	1	E	--	IP	11	W	
2657	WP164	ODBC	HND	M	NW	34	34	5	525377	5757142	U	S-1	1	E	2	IP	9	MW	
2658	WP165	ODBC	HND	M	NW	34	34	5	525320	5757543	--	S-1	--	E	2	IP	10	MW	
2659	WP166	ODBC	HND	M	SW	3	35	5	525244	5757707	U	S-1	1	E	2	IP	15	MW	
2660	WP167	ODBC	MET	GF	SE	3	35	5	525253	5757828	U	S-2	2	M	2	HL	15	W	
2661	WP168	ODBC	MET	GF	SW	3	35	5	525248	5757950	--	S-3	5	M	3	HL	14	W	
2662	WP169	ODBC	MET	GF	SW	3	35	5	525321	5758080	H	S-3	5	M	4 - 5	HL	12	W	Good colour change.
2663	WP170	ODBC	MET	GF	SW	3	35	5	525322	5758230	--	S-1	3	L	3	IP	16	W	Good colour change.
2664	WP171	ODBC	MET	GF	SW	3	35	5	525316	5758309	I	S-1	7	M	4 - 5	IP	14	W	Poor colour change.
2665	WP174	ODBC	HND	M	NW	18	36	5	519903	5772110	U	S-2	2	M	2	HL	8	MW	Good colour change.
2666	WP175	ODBC	HND	M	NW	16	36	5	520020	5772108	U	S-2	2	M	2	HL	13	MW	Poor colour change.
2667	WP176	ODBC	HND	M	SW	19	36	5	519775	5772164	U	S-1	3	M	3	HL	12	W	Good colour change.
2668	WP177	ODBC	HND	M	SW	19	36	5	519564	5772221	U	S-1	2	M	3	HL	12	MW	Poor colour change.
2669	WP178	ODBC	HND	M	SW	19	35	5	519458	5772271	U	S-1	2	L	3	HL	10	W	Good colour change.
2670	WP179	ODBC	HND	M	SW	19	36	5	519283	5772796	H	S-2	5	L	3	IP	10	MW	Good colour change.
2671	WP180	ODBC	HND	M	SE	24	36	6	519164	5772352	U	S-2	2	C	3	Cu	14	W	--
2672	WP181	ODBC	HND	M	SE	24	36	6	519028	5772382	U	S-1	1	C	2	Cu	12	MW	Good colour change.
2673	WP182	ODBC	HND	M	SE	24	36	6	518839	5772432	U	S-2	3	M	3	Cu	18	W	Good colour change.
2674	WP183	ODBC	HNDst	M	SE	24	36	6	518775	5772403	H	S-2	4	M	3	Cu	18	W	Stony at 75 cm
2675	WP184	ODBC	HNDst	M	SE	24	36	6	518659	5772426	U	S-2	2	M	3	Cu	13	W	Very stony subsoil
2676	WP185	ODBC	HND	M	SE	24	36	6	518554	5772455	U	S-2	3	M	3	Cu	10	W	Good colour change.
2677	WP186	ODBC	HND	M	SW	24	36	6	518351	5772518	U	S-2	1	D	2	IP	10	W	Good colour change.
2678	WP187	ODBC	HND	M	SW	24	36	6	518212	5772539	U	S-2	1	C	2	IP	9	W	Good colour change.
2690	WP187a	ODBC	HND	M	SW	24	36	6	518074	5772561	U	S-2	4	L	3	IP	12	W	Good colour change.
2679	WP188	ODBC	HND	M	SW	24	36	6	517923	5772584	U	S-2	2	C	2	Bu	9	MW	Good colour change.
2680	WP189	ODBC	HND	M	SW	24	36	6	517803	5772607	U	S-2	2	L	3	IP	12	R	Good colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2681	WP190	ODBC	HND	M	--	--	--	--	517666	5772649	U	S-1	2	T	3	HL	13	MW	Good colour change.
2682	WP191	ODBC	SCD	GF	SW	27	36	6	514712	5773817	U	S-2	3	M	3	IP	16	W	
2683	WP192	ODBC	SCD	GF	SW	27	36	6	514614	5773905	U	S-1	3	C	3	NR	11	W	Good colour change.
2684	WP193	ODBC	SCD	GF	SW	27	36	6	514473	5773999	U	S-1	2	C	3	NR	11	W	
2685	WP194	ODBC	HND	M	SE	28	36	6	514231	5774191	U	S-1	2	M	3	NR	12	MW	Good colour change.
2686	WP195	ODBC	HND	M	SE	25	36	6	514304	5774115	U	S-1	4	M	3	NR	13	MW	Good colour change.
2687	WP196	ODBC	HND	M	SE	28	36	6	514111	5774269	U	S-2	3	U	3	NR	9	W	Good colour change.
2688	WP197	ODBC	HND	M	SE	28	36	6	513978	5774393	U	S-1	2	M	3	NR	11	MW	Good colour change.
2689	WP198	ODBC	HND	M	SE	28	36	6	513911	5774438	U	S-1	2	L	3	NR	10	MW	
2691	WP199	OBC	ANO	GF/M	SW	5	30	4	531923	5709247	U	--	3	--	--	NR	7	MW	
2692	WP200	OBC	ANO	GF/M	SW	5	30	4	531919	5709340	U	S-1	1	D	2	NR	12	W	
2693	WP201	OBC	MAB	M	SW	5	30	4	531918	5709440	U	S-1	1	D	2	NR	13	W	Good colour change.
2694	WP202	OBC	MAB	M	SW	5	30	4	531918	5709539	U	S-1	2	M	2	NR	10	MW	Poor colour change.
2695	WP203	OBC	MAB	M	SW	5	30	4	531916	5709638	U	S-1	2	M	3	NR	10	W	
2696	WP204	SZBC	CCL	M	SW	5	30	4	531888	5709764	U	S-1	2	U	3	NR	7	MW	
2697	WP205	OBC	MAB	M	NW	5	30	4	531892	5709913	U	S-1	1	D	2	NR	15	W	Poor colour change.
2698	WP206	OBC	MAB	M	NW	5	30	4	531878	5710003	U	S-1	1	D	2	NR	14	MW	Good colour change. Low area 75m long
2699	WP207	OBC	MAB	M	NW	5	30	4	531882	5710158	--	S-1	2	U	3	NR	10	W	Good colour change.
2700	WP208	OBC	MAB	M	NW	5	30	4	531875	5710259	U	S-1	2	L	3	NR	11	MW	Poor colour change.
2701	WP209	OBC	MAB	M	NW	5	30	4	531883	5710364	--	S-1	1	C	2	NR	7	MW	Good colour change.
2702	WP210	OBC	MAB	M	NW	5	30	4	531883	5710481	U	S-1	2	M	3	NR	14	MW	Good colour change.
2703	WP211	OBC	MAB	M	SW	8	30	4	531885	5710727	U	S-1	1	D	2	NR	8	MW	Good colour change.
2704	WP212	OBC	ANOsc	GF/M	SW	8	30	4	531882	5710822	U	S-1	2	C	3	NR	10	W	
2705	WP213	OBC	MAB	M	SW	8	30	4	531880	5710960	U	S-1	4	M	--	NR	13	MW	Poor colour change.
2706	WP214	RBC	HMSsa	M	SW	8	30	4	531885	5711104	U	S-1	1	D	2	NR	10	MW	Low area. Good colour change.
2707	WP215	OBC	MAB	M	SW	8	30	4	531872	5711271	U	S-1	3	M	3	NR	8	W	Poor colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2708	WP216	OBC	MAB	M	SW	8	30	4	531862	5711402	U	S-1	2	C	3	NR	7	W	Good colour change.
2709	WP217	BSS	HUK	M	SW	8	30	4	531894	5711567	I	--	8	--	--	NR	8	MW	
2710	WP218	OG	ZGWsa	GF	NW	8	30	4	531858	5711709	L	--	1	D	2	NR	8	I	Creek channel. Possible ground water discharge area. Good colour change.
2711	WP219	OBC	ANO	GF/M	NW	8	30	4	531860	5711867	I	S-1	7	M	4 - 5	NR	5	MW	
2712	WP220	OBC	ANO	GF/M	NW	8	30	4	531857	5711963	I	S-1	5	U	4 - 5	NR	10	W	
2713	WP221	OBC	MAB	M	NW	8	30	4	531858	5712087	U	S-2	1	C	--	NR	9	MW	--
2714	WP222	OBC	MAB	M	NW	8	30	4	531872	5712226	U	S-1	1	C	2	NR	11	R	--
2715	WP223	OBC	MAB	M	NW	8	30	4	531865	5712343	U	S-1	2	U	--	NR	11	W	--
2716	WP224	OBC	MAB	M	SW	17	30	4	531870	5712510	U	S-1	2	M	3	NR	12	W	--
2717	WP225	OBC	MAB	M	SW	17	30	4	531841	5712711	U	S-1	2	U	3	NR	9	W	--
2718	WP226	OBC	MAB	M	SW	17	30	4	531819	5712838	U	S-1	2	U	3	NR	10	W	--
2719	WP227	OBC	MAB	M	SW	17	30	4	531821	5712956	U	S-1	2	--	--	NR	10	MW	--
2720	WP228	OBC	MAB	M	SW	17	30	4	531811	5713128	U	S-1	1	U	2	NR	10	MW	--
2721	WP229	SZBC	CCL	M	SW	17	30	4	531782	5713234	U	S-1	1	E	2	NR	10	MW	
2723	WP230	OBC	MAB	M	SW	17	30	4	531679	5714264	--	--	--	--	--	NR	13	--	Bottom of coulee
2722	WP231	OBC	MAB	M	NW	17	30	4	531787	5713417	U	S-1	2	U	2	NR	11	W	Edge of coulee
2724	WP232	SZBC	CCL	M	NW	17	30	4	531705	5714331	--	--	--	--	--	NR	10	--	
2725	WP234	OBC	MAB	M	NW	32	30	4	531723	5718782	U	S-2	1	U	2	Cu	11	MW	
2726	WP235	BSS	HUK	M	NW	32	30	4	531634	5718629	U	S-2	2	M	2	Cu	13	MW	Good colour change.
2727	WP236	OBC	MAB	M	NW	32	30	4	531683	5718509	U	S-1	1	--	--	Cu	16	MW	Good colour change.
2728	WP237	SZBC	CCL	M	NW	32	30	4	531676	5718379	U	S-2	1	E	2	Cu	10	MW	
2729	WP238	OBC	MAB	M	NW	32	30	4	531682	5718273	U	S-2	2	U	2	Cu	14	MW	Good colour change.
2730	WP239	SZBC	CCL	M	NW	32	30	4	531669	5718101	U	S-2	2	L	2	Cu	14	MW	
2731	WP240	OBC	MAB	M	SW	32	30	4	531629	5717976	U	S-3	2	L	3	Cu	15	MW	Poor colour change. Edge of a depression
2732	WP241	OBC	PUN	GF	SW	32	30	4	531669	5717836	U	S-2	2	--	3	NR	13	W	Auger refusal at 40cm. Good colour change.
2733	WP242	OBC	PUN	GF	SW	32	30	4	531675	5717702	U	S-2	4	U	3	NR	8	W	Poor colour change.
2734	WP243	OBC	PUN	GF	SW	32	30	4	531674	5717557	U	S-2	3	M	3	Cu	10	R	Poor colour change.
2735	WP244	RBC	HMS	M	SW	32	30	4	531651	5717437	U	S-2	1	E	2	Cu	15	--	
2736	WP245	RBC	HMS	M	SW	32	30	4	531672	5717311	U	S-1	1	E	2	Cu	5	MW	Severely eroded topsoil

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2737	WP246	BSS	HUK	M	NW	29	30	4	531655	5717196	U	S-1	1	D	2	NR	6	I	
2738	WP247	BSO	HDY	M	NW	29	30	4	531638	5717043	U	S-1	1	D	2	NR	8	I	Poor colour change.
2739	WP248	BSS	HUK	M	NW	29	30	4	531653	5716903	U	S-1	1	D	2	NR	8	I	Good colour change.
2740	WP249	OBC	MAB	M	NW	29	30	4	531638	5716733	U	S-1	3	C	3	NR	8	W	Poor colour change.
2741	WP250	GLBC	MABgl	M	NW	29	30	4	531642	5716656	U	S-1	1	D	--	NR	14	I	Good colour change.
2742	WP251	OBC	MAB	M	NW	29	30	4	531644	5716548	--	S-1	1	C	2	NR	10	MW	Poor colour change.
2743	WP252	OG	DHP	GL	SW	20	30	4	531667	5714669	I	S-2	3	L	3	NR	3	P	
2744	WP253	OG	DHP	GL	SW	20	30	4	531671	5714542	L	S-1	1	E	--	NR	6	P	10 from creek.
2745	WP254	SZDBC	FST	M	SW	20	30	4	531689	5714441	L	S-1	1	E	2	NR	5	P	
2746	WP255	OBC	MAB	M	SW	20	30	4	531673	5714839	U	S-3	2	U	3	NR	5	W	Large surface rocks
2747	WP256	BSS	HUK	M	NW	20	30	4	531663	5714975	U	S-2	2	M	3	NR	7	MW	
2748	WP257	BSS	HUK	M	NW	20	30	4	531644	5715082	U	S-2	2	C	--	NR	4	MW	Good colour change.
2749	WP258	BSS	HUK	M	NW	20	30	4	531650	5715209	U	S-1	1	C	2	NR	10	MW	Good colour change.
2750	WP259	BSO	HDY	M	NW	20	30	4	531639	5715366	U	S-1	2	U	3	NR	9	W	Poor colour change.
2751	WP260	BSS	HUK	M	NW	20	30	4	531653	5715480	U	S-1	3	U	3	NR	7	MW	
2752	WP261	BSS	HUK	M	NW	20	30	4	531652	5715625	U	S-1	1	D	2	NR	16	MW	Good colour change.
2753	WP262	BSS	HUK	M	SW	29	30	4	531661	5715777	U	S-1	1	D	2	NR	6	MW	
2754	WP263	BSS	HUK	M	SW	29	30	4	531650	5715879	U	S-2	3	--	--	NR	3	I	
2755	WP264	BSS	HUK	M	SW	29	30	4	531666	5716012	U	S-2	2	M	--	NR	9	MW	Large rocks abundant in area surrounding dig site.
2756	WP265	OBC	BVL	GF	NE	31	31	4	531014	5728497	U	S-1	1	C	2	NR	8	--	
2757	WP266	OBC	MAB	M	NE	31	31	4	531014	5728377	U	S-1	1	D	--	NR	10	I	--
2758	WP267	BSS	HUK	M	NE	31	31	4	531016	5728259	L	--	1	D	2	NR	4	I	
2759	WP268	BSS	HUK	M	NE	31	31	4	531013	5728139	U	S-1	1	D	2	NR	3	I	Good colour change.
2760	WP269	BSS	HUK	M	NE	31	31	4	531011	5728019	L	S-1	1	D	--	NR	3	I	Good colour change.
2761	WP270	BSS	HUK	M	NE	31	31	4	531016	5727895	U	S-1	2	U	3	NR	8	MW	Good colour change. Good structure Bnt.
2762	WP271	OBC	MAB	M	SE	31	31	4	531018	5727703	U	S-1	2	M	2	NR	12	W	Poor colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2763	WP272	BSS	HUK	M	SE	31	31	4	531034	5727636	U	S-1	2	M	2	NR	10	MW	Poor colour change. Good structure change.
2764	WP273	OBC	MAB	M	SE	31	31	4	531066	5727480	U	S-1	3	M	3	NR	12	W	Poor colour change.
2765	WP274	OBC	MAB	M	SE	31	31	4	531132	5727367	--	S-1	3	U	3	NR	12	W	Poor colour change.
2766	WP275	SZBC	CCL	M	SE	31	31	4	531188	5727266	U	S-1	2	L	3	NR	10	MW	--
2767	WP276	OBC	MAB	M	SE	32	31	4	531308	5726998	U	S-2	2	M	2	Cu	17	W	
2768	WP277	OBC	MAB	M	SE	6	32	4	531013	5728752	U	S-1	2	L	--	NR	12	W	Poor colour change.
2769	WP278	OBC	MAB	M	SE	6	32	4	531015	5728893	--	S-1	2	U	2	NR	17	W	Good colour change.
2770	WP279	SZBL	ROL	M	SE	6	32	4	531018	5729003	U	S-1	1	C	2	NR	14	MW	
2771	WP280	OBC	MAB	M	SE	6	32	4	531019	5729192	U	S-1	1	C	2	NR	14	W	Good colour change.
2772	WP281	SZBC	ROL	M	SE	6	32	4	531024	5729262	U	S-1	3	T	3	NR	14	MW	
2773	WP282	BSS	HUK	M	SE	6	32	4	530956	5728648	U	S-1	1	D	2	NR	3	I	Good structure change. Good colour change.
2774	WP300	OBC	MAB	M	NE	4	24	4	535058	5652122	U	S-1	2	T	3	NR	10	MW	
2775	WP301	OBC	MAB	M	NE	4	24	4	535078	5652267	--	S-2	1	D	2	NR	7	W	Poor colour change.
2776	WP302	OBC	MAB	M	NE	4	24	4	535042	5651915	U	S-1	3	L	3	NR	5	MW	
2777	WP303	CABC	TVS	M	NE	4	24	4	535022	5651754	U	S-2	2	T	3	NR	10	W	Poor colour change. Auger refusal at 160cm.
2778	WP304	OBC	MABst	M	NE	4	24	4	535007	5651587	U	S-3	3	U	3	NR	4	MW	Large amount of large surface stones.
2779	WP305	OBC	MABst	M	SE	4	24	4	535013	5651426	U	S-4	3	U	3	NR	7	W	
2780	WP306	RBC	HMS	M	SE	4	24	4	534999	5651328	U	S-2	--	D	2	NR	16	--	Auger refused at 120 cm
2781	WP307	OBC	MAB	M	SE	4	24	4	535003	5651176	U	S-2	2	L	3	NR	10	W	
2782	WP308	OBC	MAB	M	SE	4	24	4	535006	5651078	U	S-2	1	--	--	NR	8	W	
2783	WP309	OBC	MAB	M	SE	4	24	4	534999	5650949	U	--	2	M	--	NR	5	W	
2784	WP310	OBC	MAB	M	NE	4	24	4	535062	5652399	U	S-2	2	M	3	NR	8	W	Poor colour change.
2785	WP311	OBC	MAB	M	SE	4	24	4	535007	5650841	U	S-1	1	D	2	NR	14	W	Good colour change.
2786	WP312	RBC	HMS	M	NE	33	23	4	534998	5650697	U	S-2	1	C	2	NR	9	W	
2787	WP313	OBC	MAB	M	NE	33	23	4	535092	5650591	U	S-1	3	U	3	NR	7	W	Good colour change.
2788	WP314	OBC	MAB	M	NW	33	23	4	535215	5650407	--	S-1	1	D	2	NR	10	W	Good colour change.

Table 7B-1 Sample Site Locations for Alberta and Saskatchewan (cont'd)

SiteID	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position(Site)	Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
2789	WP315	CABC	TVS	M	NE	33	23	4	535220	5650322	U	S-1	1	D	2	NR	9	I	Poor colour change.
2790	WP316	OBC	MAB	M	NE	33	23	4	535246	5650217	U	S-1	7	L	4 - 5	NR	7	MW	Poor colour change.
2791	WP317	OBC	MAB	M	NE	33	23	4	535277	5650091	U	S-3	3	U	3	NR	7	W	Good colour change.
2792	WP318	OBC	MAB	M	SW	33	23	4	535275	5649963	U	S-1	1	E	2	NR	8	W	Poor colour change.
2793	WP319	OBC	MABst	M	SW	33	23	4	535318	5649840	--	S-4	3	U	3	NR	5	W	
2794	WP320	OBC	MABst	M	SW	38	23	4	535331	5649716	U	S-4	2	M	3	NR	7	--	
2795	WP321	OBC	MABst	M	SE	33	23	4	535353	5649576	U	S-3	2	M	--	NR	10	W	
2796	WP322	OBC	MAB	M	SE	33	23	4	535368	5649448	U	S-2	2	U	3	NR	10	W	Good colour change.
2797	WP323	OBC	MAB	M	SE	33	23	4	535394	5649342	U	S-4	3	M	3	NR	6	W	
2798	WP400	RBC	ZUN	GF	NE	25	22	3	539959	5639176	I	S-2	6	M	4 - 5	NR	11	W	Poor colour change. Auger refusal at 130cm.
2799	WP401	OR	ZUN	GF	NE	25	22	3	540193	5639021	I	S-2	7	M	4 - 5	NR	3	W	
2800	WP402	BSS	HUK	M	SE	5	31	4	531652	5718890	U	S-1	2	M	--	HL	9	MW	Good colour change.
2801	WP403	SZBC	CCL	M	SW	5	31	4	531692	5719030	U	S-3	2	C	2	HL	5	MW	
2802	WP404	SZBC	CCL	M	SW	5	31	4	531712	5719169	U	S-3	2	M	3	HL	6	MW	

Appendix 7C Manitoba Soil Sample Information

Table 7C-1 Manitoba Soil Sample Information

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS001		--		Level	2	0		C	RIV/1	23					
KS002	SCY	CHER-BL-GL	GL	Mid	2	1	I	C	SCYsc/2	18	55		C	C	C
KS003		--			2	1		C	SCYsc/2	17					
KS004		--		Level				C	SCYsc/2	18					
KS005	SCYsc	CHER-BL-GL	GL	Mid	2	0	I	C	SCYsc/2	18	26	EC >4dS/m below 90cm	C	C	C
KS006		--		Level	2	1		C	SCYsc/2	20					
KS007		--		Level	2	0		C	SCYsc/2	20					
KS008	SCY	CHER-BL-GL	GL	Level	2	0	I	C	SCYsc/2	24	48		SiC	C-HC	SiC
KS009		--		Level	1	1		C	SCYsc/2	18					
KS010		--		Depression	2	1		C	OBO/1	17					
KS011	OBO	GLEY-HG-R	GL	Lower	1	1	I	C	OBO/1	16			C-HC	HC	C
KS012		--		Mid	2	0		C	OBO/1	14					
KS013		--		Lower	2	1		C	OBO/1	20					
KS014	OBO	GLEY-HG-R	GL	Lower	1	0	P	C	OBO/1	20			HC	HC	HC/SiC
KS015		--		Level	1	0		C	RIV/1	17					
KS016		--		Level	1	0		C	RIV/1	20					
KS017	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	18		gypsum 120-150	HC	HC	HC
KS018		--		Level	1	1		C	RIV/1	18					
KS019		--		Level				C	RIV/1	28					
KS020	RIV	CHER-BL-GLR	GL	Level	1		I	C	RIV/1	20			HC	HC	HC
KS021		--		Level	1	0		C	RIV/1	18					
KS022		--						C	OBO/1	23					
KS023	OBO	CHER-BL-GLR	GL	Level	1	0	I	C	OBO/1	19			HC	HC	HC
KS024		--						C	OBO/1	27					
KS025		--		Level	2	0		C	SCY/1	22					
KS026	SCY	CHER-BL-GL	GL	Level	1	0	I	C	SCY/1	17	24		HC	HC	HC/SiC
KS027		--		Level	1	0		C	SCY/1	18					
KS028		--			1	0		C	SCY/1	21					
KS029	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	23			HC	HC	HC
KS030		--		Level		0		C	RIV/1	19					
KS031	SCY	CHER-BL-GL	GL	Mid	2	1	I	C	SCY/1	32	55		HC	SC	C
KS032		--		Level		0		C	SCY/1	19					
KS033		--		Level		0		C	OBO/1	20					
KS034	OBOd	GLEY-HG-R	GL	Depression	1	0	I	C	OBO/1	20			HC	HC	HC
KS035		--		Level	1	0		C	OBO/1	15					
KS036		--		Level	1	0		C	SCY/1	18					
KS037	RIV	CHER-BL-GLR	GL			0	I	C	RIV/1	20			HC	HC	HC
KS038		--						C	RIV/1	18					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS039	RIV	CHER-BL-GLR	GL	Level		0	I	C	RIV/1	24		gypsum 105-200	HC	HC	HC
KS040		--						C	MRS/1	19					
KS041		--						C	MRS/1	17					
KS042		--						C	MRS/1	19					
KS043	MRS	CHER-BL-GLSZ	GL	Level	1	0	I	C	MRS/1	18	32		HC	HC	HC
KS044		--						C	SCY/1	18					
KS045		--						C	SCY/1	20					
KS046	RIV	CHER-BL-GLR	GL	Level		0		C	SCY/1	18			HC	HC	HC
KS047		--						C	SCY/1	16					
KS048		--						C	SCY/1	18					
KS049	OBOd	GLEY-HG-R	GL	Mid	2	0	I	C	OBOd/2	22			HC	HC	HC
KS050		--						C	RIV/1	19					
KS051		--						C	RIV/1	19					
KS052	RIV	CHER-BL-GLR	GL	Upper	2	0	I	C	RIV/1	22			HC	HC	HC
KS053		--						C	RIV/1	21					
KS054		--						C	RIV/1	18					
KS055	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	18			HC	HC	HC
KS056		--						C	RIV/1	16					
KS057		--						C	OBOd/1	12					
KS058	OBO	GLEY-HG-R	GL	Level	1	1	P	C	OBOd/1	22			HC	HC	SiC/HC
KS059		--						C	OBOd/1	19					
KS060		--						C	OBOd/1	23					
KS061	OBO	GLEY-HG-R	GL	Level	1	0		C	OBOd/1	18			HC	HC	HC
KS062		--						C	OBOd/1	20					
KS063		--						C	OBOd/1	15					
KS064		--						C	RIV/1	22					
KS065	SCY	CHER-BL-GL	GL	Level		0	I	C	SCY/1	20	45		HC	HC	HC
KS066		--						C	SCY/1	24					
KS067		--						C	SCY/1	23					
KS068		--						C	SCY/1	24					
KS069	SCY	CHER-BL-GL	GL	Level	1	0	I	C	SCY/1	19	36		HC	HC	HC
KS070		--						C	SCY/1	20					
KS071		--						C	SCY/1	24					
KS072	RIV	CHER-BL-GLR	GL	Level	1	1	I	C	SCY/1	18			HC	HC	HC
KS073		--						C	RIV/1	17					
KS074		--						C	OBOd/1	25					
KS075	OBOd	GLEY-HG-R	GL	Level	1	0	I	C	OBOd/1	24			HC	HC	HC/SiC

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS076		--						C	OBOd/1	18					
KS077		--						C	SCYsc/1	19					
KS078	SCYsc	CHER-BL-GL	GL	Level	1	1		C	SCYsc/1	20	33	EC >4dS/m below 170cm	HC	HC	HC
KS079		--						C	SCYsc/1	15					
KS080		--						C	RIV/1	13					
KS081	RIV	CHER-BL-GLR	GL	Level	1	1	I	C	RIV/1	60		thick Ah horizon	HC	HC	HC
KS082		--						C	RIV/1	18					
KS083		--						C	RIV/1	20					
KS084	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	13		thin Ap horizon	HC	HC	HC
KS085		--						C	RIV/1	24					
KS086		--						C	RIV/1	15					
KS087	RIV	VERT-HV-GL	GL	Level	1	0	I	C	RIV/1	18	110		HC	HC	HC
KS088		--						C	RIV/1	20					
KS089	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	20			HC	HC	HC
KS090		--						C	RIV/1	30					
KS091		--						C	RIV/1	21					
KS092		--						C	RIV/1	22					
KS093	RIV	VERT-HV-GL	GL	Level	1	0	I	C	RIV/1	18	40	no evidence of slickensides due to auger sampling	HC	HC	HC
KS094		--						C	RIV/1	20					
KS095		--						C	RIV/1	17					
KS096	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	20			HC	HC	HC
KS097		--						C	RIV/1	22					
KS098		--						C	RIV/1	20					
KS099	RIV	VERT-HV-GL	GL	Level	1	0	I	C	RIV/1	21	38	no evidence of slickensides due to auger sampling	HC	HC	HC
KS100		--						C	RIV/1	15					
KS101		--						C	RIV/1	18					
KS102	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	20			HC	HC	HC
KS103		--						C	RIV/1	17					
KS104		--						C	RIV/1	17					
KS105	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIV/1	17		auger refusal (rock?) 150cm	HC	HC	HC
KS106		--						C	RIV/1	22					
KS107		--						C	RIV/1	30					
KS108	RIV	VERT-HV-GL	GL	Level		0	I	C	RIV/1	17	37		HC	HC	HC
KS109		--						C	RIV/1	20					
KS110		--						C	RIV/1	16					
KS111	RIV	VERT-HV-GL	GL	Level	1	0	I	C	RIV/1	16	36		HC	HC	HC
KS112		--						C	RIV/1	20					
KS113		--						C	RIV/1	24					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS114	RIV	VERT-HV-GL	GL	Level	1	0	I	C	RIV/1	17	50		C	HC	HC
KS115		--						C	RIV/1	19					
KS116		--						C	RIV/1	25					
KS117	SCY	CHER-BL-GL	GL	Mid	2	0	I	C	SCY/1	19	28		HC	HC	HC/SC
KS118		--						C	SCY/1	18					
KS119		--						C	SCY/1	21					
KS120	SCY	CHER-BL-GL	GL	Mid	2	0	I	C	SCY/1	21	31		HC	HC	HC/C
KS121		--						C	SCY/1	18					
KS122		--						C	SCY/1	16					
KS123	MYT	VERT-HV-O	GL	Level	1	0	I	C	MYT/1	17	120	possible disturbance 0-120cm	C	C	C
KS124		--						C	MYT/1	20					
KS125		--						C	MYT/1	16					
KS126	RGD	CHER-BL-GL	GL-GF/GL	Upper	2	0	I	C	RGD/2	19	38		CL	CL	C
KS127		--						C	RGD/2	22					
KS128		--						C	RGD/2	25					
KS129	EEK	CHER-BL-GLCA	GL-GF/GL	Mid	2	0	I	C	EEK/2	26	34		FSL	FSL	L/C
KS130		--						C	EEK/2	18					
KS131		--						C	EEK/2	27					
KS132	ASSyc	CHER-BL-GLR	GL	Mid	2	0		C	ASSyc/2	20		coarse frags. 165cm	LFS	LFS	LS/SC
KS133		--						C	WWCyc/3	27					
KS134	WWCyc	CHER-BL-GL	GL	Crest	3	0	I	P	WWCyc/3	26	47		FS	LFS	LFS/FSL
KS135		--						P	WWCyc/1	22					
KS136		--						C	WWCyc/1	24					
KS137	WWCyc	CHER-BL-GL	GL	Level	1	0	I	C	WWCyc/1	24	42		VFS	FS	FS/HC
KS138		--						C	WWCyc/1	22					
KS139	WWC	CHER-BL-GL	GL	Mid	2	0	I	P	WWC/2	28	62		FSL	LFS	LFS
KS140		--						WD	WWC/2	50					
KS141		--						C	WWC/2	48					
KS142	ASSyc*	CHER-BL-GLR	GL	Mid		0	I	C	ASSyc/2	24		*transition b/t WWC&ASS	FS	FS	C/SL
KS143		--						C	ASSyc/2	30					
KS144		--						C	ASSyc/2	35					
KS145	ASSyc	CHER-BL-GLR	GL	Mid	2	0	I	C	ASSyc/2	31			LFS	LFS	LFS/C
KS146		--						C	ASSyc/2	35					
KS147	ASSyc	CHER-BL-GLR	GL	Level	2	0	I	C	ASSyc/2	20			LFS	FSL	LFS/C
KS148		--						C	ASSyc/2	32					
KS149		--						C	ASSyc/2	30					
KS150	LLTyc	GLEY-HG-R	GL	Depression		0	P	C	ASSyc/2	22			SL	SL	SL/C

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS151		--						C	LLTyc/2	25					
KS152		--						C	ASSyc/2	28					
KS153		--						C	ASSyc/2	25					
KS154	WWC	CHER-BL-GL	GL	Mid	1	0	I	C	WWC/1	27	60		LFS	LFS	LFS
KS155		--						C	WWC/1	32					
KS156	RBK	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	C	RBK/2	22			LFS	LFS	LFS/C
KS157		--						C	RBK/2	30					
KS158		--						C	ASSyc/2	25					
KS159	ASSyc	CHER-BL-GLR	GL	Upper	2	0	I	C	ASSyc/2	23			LFS	LFS	LFS/SiC
KS160		--						C	LLTyc/2	65					
KS161		--						C	ASS/2	30					
KS162	RLD	CHER-BL-GLR	GL-GF	Mid	1	0	I	C	ASS/2	25			FSL	SL	SL
KS163		--						C	ASS/2	25					
KS164		--						C	ASS/2	25					
KS165	ASS	CHER-BL-GLR	GL	Mid	2	0	I	C	ASS/2	20			LFS	FS	FS
KS166		--						C	ASS/2	25					
KS167		--						WD	WWC/2	20					
KS168	WWC	CHER-BL-GL	GL	Mid	2	0	I	C	WWC/2	21	90		LFS	FS	FS
KS169		--						C	WWC/2	20					
KS170		--						C	WWC/2	20					
KS171	WWC*	CHER-BL-O	GL	Mid	2		I	C	WWC/2	27	90	*WWC but not gleyed	LFS	LFS	FS
KS172		--						C	WWC/2	36					
KS173		--						C	WWC/2	26					
KS174	RLD	CHER-BL-GLR	GL-GF	Level	1	0	I	C	RLD/1	40			FSL	FSL	FSL
KS175		--						C	WWC/1	28					
KS176		--						C	WWC/1	16					
KS177	WWCyc	CHER-BL-GL	GL	Level	1	0	I	C	WWC/1	12	40		LFS	LFS	LFS/C
KS178		--						C	ASSyc/2	16					
KS179		--						C	ASSyc/2	28					
KS180		--						C	ASSyc/2	13					
KS181	ASSyc	CHER-BL-GLR	GL	Lower	2	0	I	C	ASSyc/2	16		close to poorly drained LLT	LFS	LFS	LFS/C
KS182		--						W	LLTyc/2	18					
KS183		--						W	WWCyc/2	24					
KS184		--						C	WWCyc/2	35					
KS185		--						C	ASSyc/1	21					
KS186	ASSyc	CHER-BL-GLR	GL	Level	1	0	I	C	ASSyc/1	6			LFS	LFS	LFS/C
KS187		--						C	WWC/2	23					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS188		--						C	WWC/2	25					
KS189	WWC	CHER-BL-GL	GL	Level		0	I	C	WWC/2	20	60		LFS	LFS	LFS
KS190		--						C	WWC/2	12					
KS191		--						C	WWC/2	55		overblown, close (5m) to trees/yard			
KS192	WWC	CHER-BL-GL	GL	Mid	2	0	I	C	WWC/2	30	62		FS	LFS	LFS
KS193		--						C	WWC/2	18		overblown			
KS194		--						C	SUEyc/3	23		overblown, f.sand surface			
KS195	SUEyc	CHER-BL-GLR	GL	Lower	3	0	I	C	OWKdyc/2	44			VFSL	VFSL	LFS/SiCL
KS196		--						C	RLDyc/1	15					
KS197		--						C	RLDyc/1	18					
KS198	RLDyc	CHER-BL-GLR	GL-GF	Level	1	0	I	C	RLDyc/1	26			VFS	VFS	FS/SiC
KS199		--						C	RLDyc/3	24					
KS200		--						C	RLDyc/3	26					
KS201	RLDyc	CHER-BL-GLR	GL-GF	Lower	3	0	I	C	RLDyc/3	24			LVFS	LVFS	LFS/C
KS202		--						C	RLDyc/3	22					
KS203		--						C	RLDyc/3	22					
KS204	WWC	CHER-BL-GL	GL	Level	3		I	C	WWC/3	30	55		VFS	VFS	FS
KS205		--						C	WWC/3	22		overblown			
KS206		--						C	KOT/2	20		overblown			
KS207	KOT	CHER-BL-GL	GL-GF				I	C	KOT/2	25	50		VFS	FS	FS/LFS
KS208		--						C	KOTyc/2	24					
KS209		--						C	KOTyc/2	22					
KS210	KOTyc	CHER-BL-GL	GL-GF	Level	2	0	I	C	KOTyc/2	18	26		VFS	VFS	FS/C
KS211		--						C	KOTyc/2	23					
KS212		--						C	KOTyc/2	20					
KS213	WWC*	CHER-BL-GL	GL	Level	2	0	I	C	WWC/2	22	62	*WWC but f.sand surface	LVFS	LVFS	VFS
KS214		--						C	WWC/2	22					
KS215	ASS	CHER-BL-GLR	GL	Level	1	0	I	P	ASS/1	20		feedlot area	LFS	LFS	FS
KS216		--						P	RLD/3	20					
KS217		--						P	RLD/3	21					
KS218	RGD	CHER-BL-GLR	GL-GF/GL	Mid	3	0	I	P	RLD/3	30			FSL	FSL	LFS
KS219		--						P	RLD/3	21					
KS220		--						WD	RLD/3	30					
KS221	RLD	CHER-BL-GLR	GL-GF	Mid	3	0	I	WD	RLD/3	21			VFSL	VFSL	LVFS
KS222		--						WD	RLD/3	19					
KS223		--						WD	RLD/3	15					
KS224	WWC	CHER-BL-GL	GL	Mid	3	0	I	C	KOT/3	40	75		VFS	LVFS	FS

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS225		--						C	KOT/3	13		close to tree row			
KS226		--						C	KOT/3	35		overblown, close to tree row			
KS227		--						C	KOT/3	30		overblown			
KS228	GDHyc	CHER-BL-GLR	GL-GF	Mid	3	0	I	C	GDHyc/3	33		no seepage noted	L	L	VFSL/C
KS229		--						C	GDHyc/3	15					
KS230		--						C	KOTyc/3	15					
KS231	KOTzc	CHER-BL-GL	GL-GF	Mid	3	0	I	C	RLDyc/3	23	50		LVFS	LVFS	LFS/C
KS232		--						C	RLDyc/3	25					
KS233	RLDyc	CHER-BL-GLR	GL-GF			0	I	C	RLDyc/3	38		close to surface drain, disturbed A	FSL	VFSL	LVFS/C
KS234		--						C	RLDyc/3	24		overblown Ap 0-30cm			
KS235	BNFyc	GLEY-HG-R	GL-GF	Depression	3	0	P	C	BNFdyc/3	23		strong-extreme CaCO3 throughout	VFSL	VFSL	LFS/C
KS236		--						C	BNFdyc/3	55					
KS237	RLDyc	CHER-BL-GLR	GL-GF	Level	2	0		C	RLDyc/2	20			LFS	LFS	LVFS/C
KS238		--						C	RLDyc/2	30					
KS239		--						C	RLDyc/2	35					
KS240		--						C	RLDyc/2	25					
KS241	GDHyc	CHER-BL-GLR	GL-GF	Mid	3	0	I	C	GDHyc/3	33		overblown Ap	LFS	L	L/C
KS242		--						C	KOT/1	22					
KS243		--						C	KOT/1	26					
KS244		--						C	KOT/1	24					
KS245	KOT	CHER-BL-GL	GL-GF	Mid	1	0	I	C	KOT/1	30	>60	pit to 60 cm only	FSL	LFS	
KS246		--						C	KOT/1	24					
KS247		--						C	KOT/1	22					
KS248		--						C	KOT/1	22					
KS249	EEK	CHER-BL-GLCA	GL-GF/GL	Mid	3		I	C	EEK/3	18	30	EEK but CA.BL, transition b/t GL+GF	VFSL	VFSL	VFSL/C
KS250		--						C	RLD/3	18					
KS251	RLD	CHER-BL-GLR	GL-GF	Mid	3	0	I	C	RLD/3	24			FSL	FSL	FSL
KS252		--						C	RLD/3	23					
KS253		--						C	RLDyc/2	25					
KS254	RLDyc	CHER-BL-GLCA	GL-GF	Mid	2	0	I	C	RLDyc/2	12	32		FS	FSL	FSL/C
KS255		--						C	RLDyc/2	28					
KS256		--						C	RLD/2	35					
KS257	RLD	CHER-BL-GLR	GL-GF	Level	1	0	I	C	RLD/2	18		clay loam veneer 120-170cm	FSL	VFSL	FSL/CL
KS258		--						C	RLD/2	25					
KS259		--						C	RLD/2	15					
KS260	OBO	GLEY-HG-R	GL	Lower	2	0	P	C	OBO/2	32			C	C	C
KS261		--						W	OBO/2	29					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS262		--						W	GYV/2	22					
KS263	EDK	GLEY-HG-R	GL-GF/GL	Lower	2	0	I	C	EDK/2	20		overblown Ap	SL	C	C
KS264		--						C	KOTyc/1	18					
KS265	KOTyc*	CHER-BL-GLCA	GL-GF	Lower	1	0	I	W	OWKyc/1	30	55	*KOT but CA.BL, close to yard	FSL	FSL	FSL/C
KS266		--						DL	KOTyc/2	21					
KS267		--						C	KOTyc/2	52					
KS268	KOTyc	CHER-BL-GL	GL-GF	Mid	3	0	I	C	KOTyc/2	21	43		LFS	LFS	LFS/C
KS269		--						C	KOTyc/2	25					
KS270		--						C	KOTyc/2	24					
KS271	ASSyc	CHER-BL-GLR	GL		1	0	I	C	KOTyc/2	20			FS	FS	FS/C
KS272		--						WD	ASSyc/1	15					
KS273		--						C	GYV/3	38					
KS274	GYV	CHER-BL-GLR	GL-GF/GL	Mid	3	0		C	GYV/3	37			L	L	C
KS275		--						C	GYV/3	22					
KS276	GYV	CHER-BL-GLR	GL-GF/GL	Upper	3	0	I	C	GYV/3	16			CL	CL	C
KS277		--						C	DHO/2	17					
KS278		--						C	NWN/1	25					
KS279	RGD	CHER-BL-GL	GL-GF/GL	Upper	1	0	I	C	RGD/1	21	40		CL	C	C
KS280		--						C	GYV/3	22					
KS281		--						C	GYV/3	21					
KS282	GYV	CHER-BL-GLR	GL-GF/GL	Mid	3	0	I	C	GYV/3	20			VFSL	VFSL	L/C
KS283		--						C	GYV/3	22					
KS284	GYV	CHER-BL-GLR	GL-GF/GL	Mid	3	0		C	LSL/4	32			VFSL	VFSL	SiCL/C
KS285		--						DC	WWB/3	16					
KS286	RGD	CHER-BL-GL	GL-GF/GL	Lower	3	0	I	C	RGD/3	28	42	close to DNH but gleyed	CL	VFSL	LVFS/C
KS287		--						C	RGD/3	25					
KS288		--						C	RGD/2-3	29					
KS289		--						C	RGD/2-3	33					
KS290	KOTyc	CHER-BL-GL	GL-GF	Level	2	0	I	C	RGD/2-3	36	70		SL	SL	SL/C
KS291		--						C	RGD/2-3	29					
KS292		--						C	RGD/2-3	32					
KS293	RGD	CHER-BL-GL	GL-GF/GL	Mid	3	0	I	C	RGD/2-3	39	51		FSL	L	C
KS294		--						C	EEK/3	20					
KS295		--						C	EEK/3	50					
KS296	DHO*	CHER-BL-GLR	GL	Upper	3	0	I	C	DHO/3	18		*DHO but clay loam surface	CL	C	C
KS297		--						C	DHO/3	30					
KS298		--						C	DHO/3	28					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS299	RGD	CHER-BL-GL	GL-GF/GL	Mid	1	0	I	C	RGD/1	27	40		CL	SCL	SL/CL
KS300		--						C	RGD/1	35					
KS301		--						C	PMEsc/2-3	30					
KS302	PME	CHER-BL-GL	GL	Mid	3	0	I	C	PMEsc/2-3	19	50		C	C	C
KS303		--						C	PMEsc/2-3	25					
KS304		--						C	PMEsc/2-3	15					
KS305		--						C	PMEsc/2-3	20					
KS306	PME	CHER-BL-GL	GL	Level	2	0	I	C	PMEsc/2-3	23	37		C	C	C
KS307		--						C	PMEsc/2-3	30					
KS308		--						C	PMEsc/2-3	25					
KS309	PMEsc	CHER-BL-GL	GL	Mid	2	0	I	C	PMEsc/2-3	27	40	EC>4ds/m below 170cm	C	C	C
KS310		--						C	PMEsc/2-3	16		overblown Ap			
KS311		--						C	PMEsc/2-3	18					
KS312	WIK	CHER-BL-O	GL	Level	2	0	MW	C	WIK/2	23	62		C	C	C
KS313		--						C	WIK/2	24					
KS314		--						C	WIK/2	26		Ap subangular blocky structure			
KS315	PME	CHER-BL-GL	GL	Lower	2	0	I	C	PME/2	19	35		CL	CL	C
KS316		--						C	PME/2	14		Bm below A			
KS317		--						C	DNH/2	24					
KS318	DNH	CHER-BL-O	GL-GF/GL		2	0	MW	C	DNH/2	32	50	anomaly	L	VFSL	FSL/C
KS319		--						C	RGD/2	24					
KS320		--						C	RGD/2	21					
KS321	RGD	CHER-BL-GL	GL-GF/GL	Lower	2		I	C	RGD/2	36	52		L	VFSL	L/C
KS322		--						C	RGD/2	21					
KS323		--						WD	RGD/2	29					
KS324	RGD	CHER-BL-GL	GL-GF/GL	Level	2	0	I	WD	RGD/2	36	85		L	C	C
KS325	EDK*	GLEY-HG-O	GL-GF/GL	Lower	2	0	P	W	EDK/2-3	15	35	*EDK but orthic,shallow inspection	L	CL	
KS326		--						W	EDK/2-3	15					
KS327	EDK*	GLEY-HG-O	GL-GF/GL	Lower	3	0	P	W	EDK/2-3	20	55	* EDK but orthic	CL	C	C
KS328		--						C	RGD/2	25					
KS329		--						C	DNH/2	21					
KS330	DNH	CHER-BL-O	GL-GF/GL	Mid	2		W	C	CTZ/3	36	90	overblown Ap	SL-L	FSL	C
KS331		--						C	CTZ/3	55		overblown, Ap/Ah>55cm			
KS332		--						DC	RFDyc/3	22					
KS333		--						C	RFDyc/3	28					
KS334	EEK	CHER-BL-GL	GL-GF/GL	Mid	3	0	I	C	DNH/2	38	95		L	LS	C
KS335		--						C	RGD/2	30					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS336		--						C	RGD/2	21					
KS337	RGD	CHER-BL-GL	GL-GF/GL	Level	2	0	I	C	RGD/2	24	55	gypsum 190-200cm	CL	C	C
KS338		--						C	RGD/2	31					
KS339		--						C	RGD/2	27					
KS340	RSG	CHER-BL-O	GL-GF/GL	Level	2	0	MW	C	RSG/2	29	48		FSL	LS	LS/C
KS341		--						C	RSG/2	20					
KS342	RGDsc	CHER-BL-GL	GL-GF/GL	Mid	3	0	I	C	RGDsc/2	40	52	EC>4dS/m below 100cm	L	L	C
KS343		--						C	RGDsc/2	12					
KS344		--						C	RGDsc/2	32					
KS345	RGD	CHER-BL-GL	GL-GF/GL	Mid	2	0	I	C	RGDsc/2	26	36		L	C	C
KS346		--						C	OBO/2	15					
KS347		--						C	RSGyc/2	35					
KS348	RSGyc	CHER-BL-O	GL-GF/GL	Mid	2	0	MW	C	RSGyc/2	54	70	overblown	LS	FSL	FS/C
KS349		--						C	RSGyc/2	35					
KS350		--						C	SCY/2	19					
KS351	SCY	CHER-BL-GL	GL		2	0	I	C	SCY/2	18	45	vertic features	C	C	HC
KS352		--						C	DHO/2	19					
KS353		--						C	DHO/2	19					
KS354	DHO	CHER-BL-GLR	GL	Mid	2	0	I	C	DHO/2	19			C	C	HC
KS355		--						C	RGD/2	23					
KS356		--						C	RGD/2	19					
KS357	PME	CHER-BL-GL	GL	Level	2	0	I	C	PME/2	21	34		C	C	HC
KS358		--						C	RGD/2	54					
KS359		--						C	RGD/2	19					
KS360	RGD	CHER-BL-GL	GL-GF/GL	Level	2	0	I	C	RGD/2	16	50	Bm looks like eluvial A	CL	L	HC-C
KS361		--						C	SCY/1	15					
KS362		--						C	SCY/1	26					
KS363	SCY	CHER-BL-GLV	GL	Mid	1	0	I	C	SCY/1	19	39		C	C	CSi
KS364		--						C	DNH/1	32					
KS365		--						C	DNH/1	31					
KS366	RGD	CHER-BL-GL	GL-GF/GL	Level	1	0	I	C	DNH/1	16	30		CL	C	C
KS367		--						C	SCY/1	21					
KS368		--						C	SCY/1	26					
KS369	SCY	CHER-BL-GLV	GL	Depression	1	0	I	C	SCY/1	19	43		C	C	SiC
KS370		--						C	SCY/1	30					
KS371		--						C	SCY/1	65					
KS372	RGD	CHER-BL-GL	GL-GF/GL	Level	1	0	I	C	RGD/1	50	80	thick A horizon	CL	L	SiC/HC
KS373		--						C	RGD/1	20					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS374		--						C	RGD/1	32					
KS375	SCY*	CHER-BL-GLR	GL	Mid	1	0	I	C	SCY/1	38		*SCY but clay loam Ap, buried Ah	CL	C	C/HC
KS376		--						C	SCY/1	23					
KS377		--						C	SCY/1	25					
KS378		--						C	RSGyc/1	25					
KS379	JST	CHER-BL-GLCA	GL-GF				I	C	RSGyc/1	16	35		LFS	SL-LS	SL/HC
KS380		--						C	RGD/1	29					
KS381	RGD	CHER-BL-GL	GL-GF/GL	Level	1	0	I	C	RGD/1	12	60	salts in Ckg2	L	L	HC
KS382		--						C	RGD/1	23					
KS383		--						C	GYV/1	25					
KS384		--						C	GYV/1	32					
KS385	GYV	CHER-BL-GLR	GL-GF/GL	Level	1	0	I	C	GYV/1	20			CL	CL	C
KS386		--						C	GYV/1	16					
KS387		--						C	GYV/2	18					
KS388	GYV	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	C	GYV/2	18		minor amount gypsum 190-200cm	CL	L	C
KS389		--						C	GYV/2	25					
KS390		--						C	RIV/1	18					
KS391	RIV	CHER-BL-GLR	GL	Level	1	0	MW	C	RIV/1	20		close to yard/field entrance	C	C	C
KS392		--						C	RIV/1	18					
KS393		--						C	SCY/2	34					
KS394	SCY	CHER-BL-GL	GL	Upper	2	0	I	C	SCY/2	16	35	minor amount gypsum 190-200cm	C-HC	C-HC	HC
KS395		--						C	SCY/2	16					
KS396		--						C	SCY/2	35					
KS397		--						C	SCY/2	24					
KS398	SCY	CHER-BL-GLR	GL	Mid	2	0	I	C	SCY/2	25	30	adjacent to former headland	HC	HC	HC
KS399		--						C	SCY/2	28					
KS400		--						C	SCY/2	35					
KS401	DNH	CHER-BL-O	GL-GF/GL	Upper	2	0	MW	C	DNH/2	35	50		SiCL	SCL	C
KS402		--						C	DNH/2	27					
KS403		--						C	DNH/2	18					
KS404	DNH*	CHER-BL-CA	GL-GF/GL	Mid	2	0	MW	C	DNH/2	30	36	*DNH but CA.BL	L	FSL	LFS/C
KS405		--						C	DNH/2	28					
KS406		--						C	GYV/2	24					
KS407	DNH*	CHER-BL-CA	GL-GF/GL	Level	1	0	MW	C	DNHca/1	20	39	DNH but CA.BL, close to trees (20m)	L	SL	C
KS408		--						C	DNHca/1	19					
KS409		--						C	RGD/1	34					
KS410	RGD	CHER-BL-GL	GL-GF/GL	Mid	2	0	I	C	RGD/2	22	35	close to SCY but clay loam solum	C	FSL	C

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS411		--						C	RIV/2	16					
KS412		--						C	RIV/2	16					
KS413	RIV	CHER-BL-GLR	GL	Level	2	0	I	C	RIV/2	15			C	C	C
KS414		--						C	RIV/2	18					
KS415		--						C	RIV/2	37					
KS416	RIV	CHER-BL-GLR	GL	Level	2	0	I	C	RIV/2	38		close to dugout (20m); dugout water level 4-5 ft below ground	C	C	HC
KS417		--						C	GYV/1-2	18					
KS418		--						C	GYV/1-2	23					
KS419	EEK*	CHER-BL-GLCA	GL-GF/GL	Level	1	0	I	C	GYV/1-2	25	39	*EEK but GLCA.BL	SL	SL	SL/C
KS420		--						C	GYV/1-2	29					
KS421		--						C	RSG/2	29					
KS422	RSGo	CHER-BL-R	GL-GF/GL	Mid	2	0	MW	C	RSG/2	58		RSG but rego, overblown/coarse surface	LFS	FSL	LFS
KS423		--						C	RSG/2	46		salinity in Ahk			
KS424		--						C	RSG/2	15		eroded			
KS425	GYV	CHER-BL-GLR	GL-GF/GL	Upper	1		I	C	GYV/1	18		overblown Ap 0-5cm	CL	C	C/HC
KS426	OBO	GLEY-HG-R	GL		3	0	P	DC	OBOd/2	22		grass swale, LFH 12-0cm	C	C	C
KS427		--						C	SCYsc/2	23					
KS428	SCYsc	CHER-BL-GLCA	GL	Level	2	0	I	C	SCYsc/2	23	35	SCY but CA.BL, EC>4dS/m below 35cm	C	C	C
KS429		--						C	SCYsc/2	15					
KS430		--						C	SCYsc/2	28					
KS431	RIV	CHER-BL-GLR	GL	Level	1	0	I	C	RIVsc/1	40		salt crystals 130-200cm	C	C	C
KS432		--						C	RIVsc/1	27					
KS433		--						C	RIVsc/1	21					
KS434	RIVsc	CHER-BL-R	GL		1	0	I	C	RIVsc/1	28		EC>4dS/m below 150cm	C	C	C
KS435		--						C	SCY/1	23					
KS436		--						C	SCY/1	32					
KS437	SCY	CHER-BL-GL	GL	Level	1	0	I	C	SCY/1	13	45		C	C	C
KS438		--						C	SCYsc/2	18					
KS439		--						C	SCYsc/2	18					
KS440	SCY	CHER-BL-GL	GL	Mid	2	0	I	C	SCYsc/2	22	40		C	C	C
KS441		--						C	SCYsc/2	18					
KS442		--						C	SCYsc/2	18					
KS443	SCY	CHER-BL-GL	GL	Level	1	0	I	C	SCYsc/2	30	60		C	C	C
KS444		--						C	SCYsc/2	24					
KS445		--						C	SCYsc/2	23					
KS446	SCYsc	CHER-BL-GLCA	GL	Mid	2	0	I	C	SCYsc/2	21	40	SCY but GLCA.BL, EC>4dS/m below 75cm	CL	L	C
KS447		--						C	RGD/2	13					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS448	PGK	REGO-HR-GLCU	GL-GF/GL		4	0	I	C	PGK/2	40		recent fluvial to 90cm	CL	CL	CL
KS449		--						C	GYVsc/2	22					
KS450		--						C	GYVsc/2	19					
KS451	GYVsc	CHER-BL-GLR	GL-GF/GL	Lower	2	0	I	DC	GYVsc/2	17		close to drainage ditch (20m)	C	CL	C
KS452		--						C	PGKsc/1	15					
KS453	PGKsc	REGO-HR-GLCU	GL-GF/GL	Level	1	0	I	C	PGKsc/1	18	40	variable horizonation	C	C	C
KS454		--						C	RIVsa/1	18					
KS514	HND	CHER-BL-GLR	GL	Level	1	0		C	HHF/2	26			CL	FSL	FSL
KS515		--						C	HHF/2	23					
KS516		--						P	HHF/2	18					
KS517	NWN	CHER-BL-GLR	GL-GF/GL	Lower	2	0	I	C	NWN/2	20			C	SiC	SiCL/FSL
KS518		--						C	NWN/2	22					
KS519		--						C	NWN/2	25					
KS520	KOTys	CHER-BL-GL	GL-GF	Level	2	0	I	C	KOT/2	24	39	50 sth of small (~1 m), abrupt rise	FSL	FSL	VFSL/LVFS
KS521		--						C	KOT/2	26					
KS522		--						C	NBG/2	25					
KS523	NBGyl	CHER-BL-GL	GL-GF/GL	Level	1	0	I	C	NBG/2	24	42		FSL	FSL	FS/CL
KS524		--						C	NBG/2	85					
KS525		--						C	NBG/2	28					
KS526	NBG	CHER-BL-GLR	GL-GF/GL	Lower	2	0	I	C	NBG/2	28		relatively wet portion of field	FSL	FSL	FS
KS527		--						C	RLD/2	55		relatively wet portion of field			
KS528		--						C	RLD/2	28					
KS529	NBG	CHER-BL-GLR	GL-GF/GL	Mid	2	0		C	NBG/2	55			FSL	FSL	FS
KS530		--						C	NBG/2	45					
KS531		--						C	HHF/2	18					
KS532	HHF	CHER-BL-O	GL-GF	Level	2	0	MW	C	HHF/2	20	42		LFS	LFS	FS
KS533		--						C	HHF/2	40					
KS534		--						C	RLD/2	39		overblown, close to yard			
KS535	RLDxs	CHER-BL-GLR	GL-GF	Level	2	0	I	C	RLD/2	25			LFS	LFS	FS
KS536		--						C	RLD/2	45					
KS537		--						C	HHF/1	35					
KS538	HHFys	CHER-BL-O	GL-GF	Level	1	0	MW	C	HHF/1	18	30		FSL	FSL	FS
KS539		--						DL	KOT/1	23		yard site, lawn grass, disturbed			
KS540	KOT	CHER-BL-GL	GL-GF	Level	1	0	I	DL	KOT/1	44	83	yard site, lawn grass, disturbed	LFS	LFS	LFS
KS541		--						C	RLD/1	28					
KS542		--						C	GYV/2	32					
KS543	GYV	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	C	GYV/2	60		thick A horizon, anomaly	L	C	C

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS544		--						C	RFD/2	55					
KS545		--						DC	CTZ/2	30		salts in Ah			
KS546		--						C	RSG/2	21					
KS547	RLD*	REGO-HR-GL	GL-GF	Level	2	0	I	C	RLD/2	10		*RLD but Regosol; Ap former B horizon	FS	FS	FS
KS548		--						C	RLD/2	18		petrified wood buried in profile			
KS549		--						C	NBG/1	23					
KS550	NBG-KOT	CHER-BL-GL	GL-GF/GL	Level	1	0	I	C	NBG/1	26	40		FSL	FSL	FS
KS551		--						C	HHF/1	26					
KS552		--						C	RLD/1	19					
KS553	RLD*	REGO-HR-GL	GL-GF	Level	1	0	I	C	RLD/1	20		*RLD but Regosol, f.sand throughout	FS	FS	FS
KS554		--						C	RSG/1	45					
KS555		--						C	HHF/1	20		north of swale (10m)			
KS556	RLD	CHER-BL-GLR	GL-GF	Level	2	0	I	C	RLD/2	22		f.sand throughout	FS	FS	FS
KS557		--						C	NBG/2	25					
KS558		--						C	RLD/2	65					
KS559	RLDys	CHER-BL-GLR	GL-GF	Level	2	0	I	C	RLD/2	23			LFS	FSL	LFS
KS560		--						C	RLD/2	40					
KS561		--						C	RLD/2	32					
KS562	NBG	CHER-BL-GLR	GL-GF/GL			0	I	C	NBG/1-2	23			VFSL	VFSL	LVFS
KS563		--						C	NBG/1-2	23					
KS564		--						C	NBG/1-2	19					
KS565	NBG	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	C	NBG/1-2	19		seepage somewhere below 83cm	L	CL	LVFS
KS566		--						C	NBG/1-2	20					
KS567		--						C	NBG/1-2	20					
KS568	NBG	CHER-BL-GLR	GL-GF/GL	Level	1	0	I	C	NBG/1-2	55			FSL	FSL	FS
KS569		--						C	NBG/1-2	26					
KS570		--						H	NBG/1-2	15		alfalfa stand			
KS571	RLD-NBG	CHER-BL-GLR	GL-GF	Level	1	0	I	C	NBG/1-2	20		coarse surface for NBG, coarse subsurface for RLD	FSL	FSL	FS
KS572		--						C	RLD/1	15					
KS573		--						C	RLD/1	29					
KS574	NBG	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	DC	CTZ/2	23		south of swale (25m) with few cm water	L	L	LFS
KS575		--						C	NBG/1	22					
KS576		--						C	NBG/1	18					
KS577	RLDyl	CHER-BL-GLR	GL-GF	Level	1	0	I	C	RLD/1	23			FSL	FSL	FSL/SCL
KS578		--						C	RLD/1	24					
KS579		--						C	RLD/1	46					
KS580	NBG	CHER-BL-GLR	GL-GF/GL			0	I	DC	RLD/1	40		immed. adjacent to small grassed swale	L	L	LFS

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS581		--						C	NBG/1	23					
KS582		--						C	NBG/1	28					
KS583	RLDys	CHER-BL-GLR	GL-GF	Level	2	0	I	C	RLD/2	22			FSL	FSL	FSL/LFS
KS584		--						C	RLD/2	20					
KS585		--						C	RLD/2	28					
KS586	NBG	CHER-BL-GLR	GL-GF/GL			0	I	C	NBG/2	33		close to BNF map unit	L	L	FS
KS587		--						C	KOT/2	22					
KS588		--						C	KOT/2	28					
KS589	KOT	CHER-BL-GL	GL-GF	Level	1	0	I	C	KOT/2	13	22	west of tree row (20m)	FSL	FSL	FS
KS590		--						C	KOT/2	23					
KS591		--						C	RLD/2	17					
KS592	RLD	CHER-BL-GLR	GL-GF	Upper	2	0	I	C	RLD/2	33			FSL	LFS	LFS
KS593		--						C	RLD/2	27					
KS594		--						C	RLD/2	20					
KS595	HHF	CHER-BL-O	GL-GF	Level	2	0	MW	C	HHF/2	14	25	f.sand at 67cm	FSL	FSL	FS
KS596		--						C	HHF/2	23					
KS597		--						C	RLD/2	19					
KS598		--						NR	BMG/2	40					
KS599	WIKys	CHER-BL-O	GL	Crest		0		DC	CTZ/3	26	65	sand at 120cm	C	C	C/SL
KS600		--						DC	HND/2	19					
KS601		--						C	HND/2	22					
KS602		--						C	HND/2	39					
KS603	DHOys	CHER-BL-GLR	GL	Level	2	0	I	C	DHOys/2	33			C	C	C/LFS
KS604		--						C	DHO/1-2	20					
KS605		--						C	DHO/1-2	28					
KS606	DHO	CHER-BL-GLR	GL	Level	1	0	I	C	DHO/1-2	20			HC	HC	CL/C
KS607		--						C	DHO/1-2	22		saline, poor crop			
KS608		--						DC	CTZ/3	17					
KS609	BMG	REGO-HR-GLCU	GL	Upper	3	0	I	DC	BMG/2-3	45		grassed area b/t creek & cult. field	C	C	C/FS
KS610		--						C	BMG/2-3	24					
KS611		--						C	BMG/2-3	18					
KS612	DHO	CHER-BL-GLR	GL	Level	1	0	I	C	DHO/1	20			C	C	C
KS613		--						C	DHO/1	18					
KS614		--						C	BMG/2	25		GLCU.HR			
KS615	BMG	REGO-HR-GLCU	GL	Mid	2	0	I	C	BMG/2	30		layering throughout profile	C	C	C
KS616		--						C	PME/2	42		debris on surface, old yard site(?)			
KS617		--						C	PME/2	26					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS618	PME	CHER-BL-GL	GL	Upper	2	0	I	C	PME/2	30	68		C	C	C/SCL
KS619		--						C	PME/2	25					
KS620		--						C	DHOsc/1	28					
KS621	DHO	CHER-BL-GLR	GL	Level	1	0	I	C	DHOsc/1	30			C	C	C
KS622		--						C	DHOsc/1	26					
KS623		--						C	DHOscys/2	25					
KS624	DHOys	CHER-BL-GLR	GL	Mid	2	0	I	C	DHOscys/2	35			C	C	C/FS
KS625		--						C	DHOscys/2	24					
KS626		--						C	DHOscys/2	26					
KS627	DGS	CHER-BL-GLR	GL	Mid	2	0	I	C	DHOscys/2	22		f.sandy loam at 80cm, sand at 120cm	C	C	LFS
KS628		--						C	DGS/2	13		eroded			
KS629		--						DC	CTZ/3	45		close to riparian/swale			
KS630	RLD	CHER-BL-GLR	GL-GF	Crest	3	0	I	C	RLD/3	45			FSL	FS	FS
KS631		--						C	RLD/3	50					
KS632		--						C	HHFo/3	60					
KS633	HHF	CHER-BL-O	GL-GF	Upper	3	1	MW	C	HHFo/3	68	75	overblown, thick A horizon	LFS	FSL	FS
KS634		--						P	RLDo/3	38					
KS635		--						P	RLD/3	19					
KS636	HHF	CHER-BL-O	GL-GF	Crest	3	0	MW	H	HHF/3	25	45		FSL	FSL	FS
KS637		--						H	KOT/2	35					
KS638		--						C	KOT/2	30					
KS639	KOT	CHER-BL-GL	GL-GF	Level	2	0	I	C	KOT/2	22	48		LFS	LFS	FS
KS640		--						C	KOT/2	16		eroded W2			
KS641		--						P	KOT/2	34		fenced site			
KS642	CTZ*	GLEY-HG-R	F	Depression	3	0	P	P	NBG/2	33		CTZ* but no cumulic features; sand 54cm	FSL	L	FS
KS643		--						C	RLD/2	14		eroded W2			
KS644		--						C	RLD/2	18		eroded W1			
KS645	RLD	CHER-BL-GLR	GL-GF	Mid	2	0	MW	C	RLD/2	33		f.sand 56cm	FSL	FSL	FS
KS646		--						C	RLD/2	55					
KS647		--						DL	RLD/2	65		along tree row			
KS648		--						H	RLD/2	32		near feedlot			
KS649		--						H	NBG/1	16					
KS650	NBG	CHER-BL-GLR	GL-GF/GL	Level	1	0	I	H	NBG/1	30		auger refusal (rock?) at 170cm	SiCL	SiL	LFS
KS651		--						C	CTZ/3	20		wet area			
KS652		--						C	RLDsa/2	23					
KS653	NBGsa	CHER-BL-GLR	GL-GF/GL	Lower	2	0	I	C	NBGsa/2	20		salt crust on surface, no growth	L	FSL	LFS/FS
KS654		--						W	NBGsa/2	19		salt crust on surface, close to depression			
KS655		--						C	DGSsa/2	15		salts in A horizon			

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS656	CTZsays	REGO-HR-GL	F	Lower	3	0	P	DC	CTZsays/3	42		weak gleysol, gypsum at bottom of Ckg	CL	C	C/LFS
KS657		--						C	DHOsa/2	19		salts in A horizon			
KS658		--						C	DHOsa/2	18		no evidence of salinity			
KS659	PME	CHER-BL-GL	GL	Level	2	0	I	C	PME/2	17	25		C	C	C
KS660		--						C	DHOsa/2	20		pump station PS15			
KS661		--						C	DHOsa/2	15		pump station PS15, saline			
KS662		--						C	PME/2	23		pump station PS15			
KS663		--						C	PME/2	24		pump station PS15			
KS664		--						C	PME/2	23		pump station PS15			
KS665		--						C	DGS/1	19					
KS666	DGS	CHER-BL-GLR	GL	Lower	1	0	I	C	DGS/1	35		f.sand 50cm	C	CL	CL/FS
KS667		--						C	DGS/1	27					
KS668		--						C	DGS/2	31					
KS669	DGSsc	CHER-BL-GLR	GL	Mid	2	0	I	C	DGS/2	12		loamy f.sand 90cm	C	C	LFS
KS670		--						C	DGS/2	18					
KS671		--						C	CTZsa/3	25					
KS672	DHOsays	CHER-BL-GLR	GL	Lower	2	0	I	DC	CTZsa/3	30		shale near surface, f.sand 110cm	C	C	C/FS
KS673		--						DC	RLD/2	17					
KS674		--						C	DGSsc/2	20		salts in A horizon			
KS675	DGS	CHER-BL-GLR	GL	Level	2	0	I	C	DGSsc/2	40		loamy f.sand 90cm	C	C	C/LFS
KS676		--						C	DGSsc/2	22					
KS677	DGSsc	CHER-BL-GLR	GL	Crest	2	0	I	C	DGSsc/2	21			C	C	FSL
KS678	DHOsays	CHER-BL-GLR	GL	Mid	2	0	I	H	DHOsays/2	30			C	SC	LFS
KS679		--						H	DHOsays/2	28					
KS680	DHOsc	CHER-BL-GLR	GL	Level	1	0	I	C	DHOsa/2	32		coarse gysum throughout	C	C	C
KS681	DHOsa	CHER-BL-GLR	GL	Level	2	0	I	C	DHOsa/2	35		gypsum in AC&C, inspection to 120cm	C	C	C
KS682		--						C	DHOsa/2	29					
KS683	DHOsays	CHER-BL-GLR	GL		2	0	I	C	DHOsays/2	19			C	C	C/FS
KS684	DHOsc	CHER-BL-GLR	GL		2	0	I	C	DHOsays/2	45		inspection to 140cm	C	C	C
KS685		--						C	DHOsays/2	22					
KS686	DGSsa	CHER-BL-GLR	GL	Mid	2	0	I	C	DGSsa/2-3	26			C	C	CL/LFS
KS687		--						C	DGSsa/2-3	21					
KS688	DGSsa	CHER-BL-GLR	GL	Lower	2	0	I	C	DGSsa/2-3	32		inspection to 120cm, loamy f.sand 80cm	SC	SC	LFS
KS689		--						C	DGSsa/2-3	25					
KS690	DGS	CHER-BL-GLR	GL	Mid	3	0	I	C	NWNsa/3	20		porcelin fragment on surface	C	C	C/FS
KS691		--						C	NWNsa/3	27					
KS692	NWNsa	CHER-BL-GLR	GL-GF/GL	Lower	3	0	I	C	NWNsa/3	21			CL	SCL	LFS
KS693	DHOsays	CHER-BL-GLR	GL	Level	1	0	P	H	DHOsays/1	45		west of drainage ditch (20m), saline Ah below Ap	C	C	CL/FS

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
KS694		--						H	CTZsa/3	33					
KS695		--						C	CTZsa/3	16					
KS696	NBG	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	C	NBG/2	30		adjacent to drainage ditch	FSL	FSL	LFS
KS697		--						C	NBG/2	22					
KS698		--						C	RLD/1	21					
KS699	RLD	CHER-BL-GLR	GL-GF	Level	1	0	I	C	RLD/1	21		very wet to surface	FSL	FSL	FSL
KS700		--						C	RLD/1	15					
KS701		--						C	RLD/1	19					
KS702	RLD	CHER-BL-GLR	GL-GF	Lower	2	0	I	C	RLD/2	21		f.sand 83cm	LFS	LFS	FS
KS703		--						C	RLD/2	24					
PS13-1		--						C		22		PS13, adjacent to depression, AC below Ap			
PS13-2		--				1		C		30		PS13, adjacent to depression, TS>30cm			
PS13-3		--						C		30		PS13			
PS13-4		--						C		19		PS13			
PS13-5		--						C		18		PS13			
PS13-6		--						C		18		PS13			
PS13-7		--						C		30		PS13,TS>30cm			
PS13-8		--						C		26		PS13, Ck below Apk			
PS13-9		--						C		28		PS13			
PS13-10		--						C		25		PS13			
PS13-11		--						C		25		PS13, Bm below Ap			
WR01	RIV	CHER-BL-GLR	GL	Level		0	I	C	RIVsa/1	45			SiC	SiC	C/C-HC
WR02	RIV	CHER-BL-GLR	GL	Level		0	I	C	RIV/1	18			C-HC	C-HC	C-HC
WR03	GYV	CHER-BL-GLR	GL-GF/GL				I	C	GDHyc/2	28			CL	SCL	C
WR04	DHO	CHER-BL-GLR	GL	Level	2	0	I	C	DHO/2	42			C	C	C
WR05	EBG	CHER-BL-O	GL-GF/GL		2		W	C	HHFyc/2	32	70		CL	SL	S
WR06	RFDzc	REGO-HR-CU	GL-GF	Level	2	0	MW	C	RFDzc/2	30			VFSL	VFSL	VFSL
WR07	NBGzc	CHER-BL-GLR	GL-GF/GL		2	0	I	C	HHF/2	22			LFS	VFSL	LVFS
WR08	CTZ	CHER-BL-R	F			0	W	C	CTZ/2-3	140			L	L	SL-SCL
WR09	DHO	CHER-BL-GLR	GL	Level	2	0	MW	C	DHO/2	12			C	C	C
WR10		--						C	RIVsc/1	42					
WR11		--						C	RIVsc/1	40					
WR12		--						C	EBGscyc/1	31					
WR13	EBGscyc	CHER-BL-O	GL-GF/GL	Level	1	0	I	C	EBGscyc/1	31	55		CL	CL	LFS/C
WR14		--						C	RIVsc/1	38					
WR15		--						C	RIVsc/1	27					
WR16	RIVsc	CHER-BL-GLR	GL	Level	2	0	I	H	RIVsc/1	32			C	C	C
WR17		--						C	RGD/2	18					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
WR18		--						C	RGD/2	25					
WR19	RGD	CHER-BL-GL	GL-GF/GL	Level	2	0	I	C	DNH/2	25	70		C	VFSL	SiCL/C
WR20		--						C	DNH/2	30					
WR21		--						C	RGD/2	32					
WR22		--						C	RIV/1	19					
WR23		--						C	GYV/2	23					
WR24	GYV	CHER-BL-GLR	GL-GF/GL	Level	2	0	I	C	GYV/2	40			FSL	FSL	L/C
WR25		--						C	GYV/2	70					
WR26		--						C	GYV/2	20					
WR27	PMEsasz	CHER-BL-GLSZ	GL	Mid	2	0	I	C	PMEscsz/2	20	38		CL	C	C
WR28		--						C	GDHyc/2	30					
WR29		--						C	RLD/2	19					
WR30	KOT	CHER-BL-GLCA	GL-GF	Level	2	0	I	C	KOTca/2	20	65		FSL	FSL	FSL/L
WR31		--						C	KOTca/2	25					
WR32		--						C	RLDyc/2	17					
WR34		--						DC	BMG/2	20					
WR35		--						DC	BMG/2	20					
WR36	DNH	CHER-BL-R	GL-GF/GL	Level	2	0	MW	C	DNH/2	55			CL	C	C/SCL
WR37		--						C	DNH/2	30					
WR38		--						C	DNH/2	25					
WR39		--						C	RLDyc/2	22					
WR40	RLDyc	CHER-BL-GLR	GL-GF	Level	2	0	I	C	RLDyc/2	23			FSL	FSL	FSL/C
WR41		--						C	RFDyc/2	24					
WR42		--						C	RFDyc/2	24					
WR43		--						C	HHFyc/2	23					
WR44		--						C	HHFyc/2	30					
WR45	DNH*	CHER-BL-R	GL-GF/GL	Mid	2	0	MW	C	HHFyc/2	35			FSL	FSL	FSL/C
WR46		--						C	HHFyc/2	27					
WR47		--						C	HHFyc/2	30					
WR48	HHFyc	CHER-BL-O	GL-GF	Upper	3	0	W	C	HHFyc/2	30	60		FSL	FSL	FSL/C
WR49		--						C	HHFyc/2	19					
WR50		--						WD	CTZ/2-3	15					
WR51		--						C	HHFyc/2	23					
WR52		--						C	GDHyc/2	23					
WR53	NBGyc	CHER-BL-R	GL-GF/GL			0	W	C	NBGyc/2	25			CL	CL	LS/C
WR54		--						C	RLD/2	21					
WR55	HHFyl	CHER-BL-R	GL-GF	Mid	2	0	W	C	HHFyl/2	30			LVFS	LFS	LFS/VFSL
WR56		--						C	HHFyl/2	30					

Table 7C-1 Manitoba Soil Sample Information (cont'd)

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)	B Horizon Depth	Comments	TS	US	LS
WR57		--						C	HHFyl/2	27					
WR58		--						C	HHFyl/2	27					
WR59		--						C	HHFyl/2	25					
WR60	RSGzcl	CHER-BL-R	GL-GF/GL	Mid	3	0	MW	C	RSGzl/3	38			L	L	LVFS/FSL
WR61		--						C	NBG/2	23					

Appendix 7D Alberta Soil Chemistry

Table 7D-1 Alberta Soil Chemistry

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
9857	LL3	Bm	HND	17-40	6.3	0.32	29	0.7	1.8	1.0	0.6
9858		BC		40-70	6.3	0.22	29	0.6	1.2	0.7	0.6
9859		Cca		70-200	8.0	1.45	53	7.8	3.4	4.2	4.0
9860	LL6	Bm	HNDsc	13-30	7.6	0.38	42	0.7	2.4	1.4	0.5
9861		Cca		30-200	8.1	6.89	56	31.7	23.5	52.7	5.1
9862	LL10	Bm	HNDsc	14-26	7.7	0.60	45	0.4	2.6	1.5	0.3
9863		Cca		26-200	8.1	6.88	52	14.2	27.2	65.8	2.1
9864	LL12	Cca	NUT	13-180	8.2	2.19	56	5.6	6.7	14.8	1.7
9865	LL14	Bm	HND	14-32	6.6	0.63	34	1.4	2.1	2.7	0.9
9866		Cca		32-200	8.0	3.95	82	18.0	10.9	23.9	4.3
9867	LL17	Bm	HNDsc	12-40	7.0	0.37	45	1.3	1.2	1.7	1.0
9868		Cca		40-200	8.2	10.3	56	55.6	22.1	99.3	7.1
9869	LL22	Bm	HND	10-28	8.2	0.34	41	0.7	2.0	1.1	0.6
9870		Cca		28-200	8.5	0.96	58	5.1	1.7	2.8	3.4
9871	LL24	Bm	HNDsc	8-23	6.3	0.53	46	1.1	2.4	1.5	0.8
9872		Cca		23-200	8.0	5.47	52	22.8	21.7	35.5	4.3
9874	LL30	Bm	HNDsc	10-35	5.7	0.27	36	1.1	0.8	0.6	1.3
9875		Cca		35-200	7.7	5.22	44	19.5	26.9	31.1	3.6
9876	LL32	Btj	HND	12-45	6.4	0.30	32	1.0	1.3	0.8	0.9
9877		Ck		45-200	7.6	0.62	42	3.2	1.9	1.4	2.5
9878	LL36	Btj	HNDsc	15-28	8.0	0.36	41	1.3	2.0	1.1	1.0
9879		Cca		28-200	8.2	8.22	70	67.1	21.0	27.5	13.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
9880	LL37	Bnt	HKR	5-18	6.8	2.20	81	20.8	2.5	2.1	13.7
9881		Ccasa		18-200	8.3	12.5	75	95.5	21.8	66.1	14.4
9882	LL40	Btnj	FST	7-28	7.3	0.46	62	3.5	0.7	0.5	4.4
9883		Ccasa		28-200	8.1	6.70	57	36.0	24.5	31.6	6.8
9884	LL44	Btj	HND	9-36	6.0	0.22	41	0.4	1.3	0.5	0.4
9885		Ccas		36-200	7.6	3.15	55	4.6	29.6	12.8	1.0
9886	LL46	Btj	HNDsc	7-35	7.7	0.77	41	2.1	4.3	2.1	1.2
9887		Ccasa		35-200	8.5	12.1	78	137	20.6	20.1	30.3
9888	LL52	Btnj	FST	15-35	6.5	0.58	40	2.4	1.2	1.5	2.1
9889		Ccas		35-200	7.7	4.95	57	20.0	14.3	35.4	4.0
9890	LL54	Bnt	HDY	27-40	7.1	0.65	40	5.3	0.5	1.0	6.1
9891		Cca		40-200	8.3	2.82	66	22.1	2.6	5.8	10.8
9892	LL57	Btj	FST	13-35	6.9	0.69	63	3.1	1.2	2.5	2.3
9893		Ccasa		35-200	8.1	7.43	51	35.6	23.7	56.8	5.6
9894	LL60	Cca	NUT	15-30	7.8	0.50	46	0.4	3.0	1.5	0.3
9895		Ccas		30-200	7.8	3.53	46	4.6	26.3	20.2	1.0
9896	LL63	Btj	HNDsc	14-35	6.1	0.49	43	2.1	0.8	1.9	1.8
9897		Ccasa		35-200	8.1	7.60	59	24.5	22.7	82.5	3.4
9898	LL65	Bg	ZGW	12-35	5.9	0.54	58	1.2	1.9	1.4	0.9
9899		Cg		35-200	6.8	0.44	55	1.8	1.1	0.8	1.8
9900	LL68	Btj	HND	13-32	7.8	0.49	43	0.4	3.5	0.8	0.3
9901		Ccasa		32-200	7.9	4.57	50	14.9	25.3	24.0	3.0
9902	LL72	Bnt	HKR	10-20	7.0	1.22	38	9.2	2.2	1.7	6.6
9903		Ccasa		20-200	8.4	13.0	63	135	22.4	50.9	22.3

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
9904	LL74	Bm	DCYsc	16-30	7.0	1.37	33	1.8	6.8	3.1	0.8
9905		Cca		30-100	8.1	0.93	26	6.4	1.4	1.2	5.6
9906		IICk		100-200	9.0	1.29	32	11.5	0.4	0.5	17.5
9907	LL77	Bm	HNDsc	10-23	6.7	0.83	39	1.3	4.7	2.8	0.7
9908		Ccasa		23-200	8.1	7.98	49	41.8	21.5	55.9	6.7
9909	LL80	Btj	HND	8-30	6.2	0.41	42	0.6	2.1	1.3	0.4
9910		Cca		30-200	8.0	0.49	54	1.4	1.8	1.8	1.0
9911	LL83	Btj	HND	8-22	6.7	0.61	46	1.2	3.2	2.3	0.7
9912		Cca		22-200	8.3	0.84	53	4.8	1.5	1.8	3.7
9913	LL85	Bm	MAB	10-30	8.0	0.38	37	0.4	2.6	1.1	0.3
9914		Cca		30-200	8.6	0.54	33	1.4	0.8	3.2	1.0
9915	LL88	Bm	MAB	10-35	6.7	0.28	24	0.9	1.4	0.9	0.8
9916		Cca		35-200	8.1	1.22	49	6.0	2.3	3.8	3.5
9917	LL91	Btj	MAB	12-22	6.7	0.50	44	1.0	1.8	1.5	0.8
9918		Cca		22-200	7.9	5.06	56	11.5	24.9	46.9	1.9
9919	LL95	Bgj	BVLgl	10-30	8.3	1.32	46	1.4	1.4	8.0	0.6
9920		Cgca		30-200	8.4	0.96	43	3.2	1.6	4.3	1.8
10984	LL103	Bm	HND	15-44	7.6	0.42	35	0.3	3.1	0.6	0.2
10985		Cca		44-200	8.0	0.45	46	0.9	2.4	1.0	0.6
10986	LL110	Bm	CNN	18-34	6.2	0.24	31	0.8	1.1	0.5	0.9
10987		Cca		34-200	7.8	2.11	32	9.8	9.9	4.5	3.7
10988	LL120	Bm	HNDsc	12-35	5.9	0.29	40	0.9	1.3	0.8	0.9
10989		Ccasa		35-200	7.9	5.08	50	17.3	24.4	36.1	3.1

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10990	LL124	Btj	HNDsc	16-35	6.8	0.50	32	2.3	1.5	1.4	2.0
10991		Ccasa		35-200	8.0	6.36	49	41.3	22.4	23.1	8.7
10992	LL140	Bm	FST	13-40	6.4	0.28	40	0.7	1.2	0.8	0.7
10993		Cca		40-200	8.0	0.46	37	1.4	1.3	2.1	1.1
10994	LL152	Ahg	THRsa	0-10	8.5	23.5	72	318	15.6	31.4	65.6
10995		Bgsk		10-40	8.4	18.9	52	220	19.3	40.7	40.1
10996		Cgsk		40-200	8.6	19.1	99	225	18.8	28.8	46.0
10997	LL151 A	Bm	METsc	14-30	5.9	0.44	53	1.0	1.5	0.9	0.9
10998		Cca		30-180	8.7	1.63	50	14.4	0.8	0.9	15.8
10999	LL157	Bm	WWT	14-40	6.9	0.47	22	1.2	2.0	1.0	1.0
11000		BC/Cca		40-200	8.1	0.31	25	0.7	1.5	0.6	0.7
11001	LL160	Bnt	HKR	10-28	7.6	1.76	81	17.4	1.8	2.0	12.5
11002		Ccasa		28-200	7.4	7.12	102	45.5	22.3	23.9	9.5
11003	LL163	Bm	DCYsc	12-24	5.2	0.40	25	2.0	1.3	0.7	2.0
11004		IICcasa		24-200	8.2	9.90	57	86.8	20.3	29.2	17.4
11005	LL168	Bm	HND	12-28	6.7	0.61	50	0.7	4.4	1.2	0.4
11006		Ccas		28-200	8.0	4.19	45	16.0	25.0	17.4	3.5
11007	LL171	Bm	HND	11-20	7.4	0.41	48	0.7	2.9	1.0	0.5
11008		Ccas		20-200	8.0	4.38	43	11.2	24.0	29.0	2.2
11009	LL173	Bm	CNNxs	13-40	6.3	0.32	50	1.2	0.7	1.0	1.2
11010		Cca		40-200	6.8	0.42	27	1.9	0.6	0.5	2.5
10243	CA038	Bnt	HKR	0-35	6.6	1.98	71	18.9	1.7	1.3	15.5
10244		Csk1		35-72	8.1	11.3	93	99.7	21.4	34.1	18.9
10245		Csk2		72-200	8.2	10.4	131	108	21.5	24.4	22.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10246	CA041	Ap		0-7	6.0	0.45	39	1.1	1.4	1.2	1.0
10247		Btnj	FST	7-30	6.8	0.75	41	3.4	1.7	3.2	2.1
10248		Ck		30-58	7.8	4.19	43	15.2	23.9	24.1	3.1
10249		Ccasa		58-200	8.2	8.43	44	50.6	21.5	48.1	8.6
10250	CA044	Ap	EOR	0-11	7.4	1.21	39	2.1	7.9	3.1	0.9
10251		Bm		11-33	7.7	0.35	37	0.4	2.5	1.1	0.3
10252		BC+Ck		33-110	7.8	0.68	45	1.9	2.9	2.7	1.1
10253	CA048	Ah	HKR	0-5	6.0	0.43	79	2.9	0.8	0.5	3.7
10254		Bnt		5-45	6.1	0.67	75	6.2	1.7	0.6	5.8
10255		C1/C2		45-153	7.2	5.86	83	38.6	24.9	20.8	8.1
10256	CA051	Ap	HNDsc	0-17	5.2	0.54	46	1.4	1.7	0.7	1.3
10257		Bm		17-39	5.6	0.36	34	1.9	1.2	0.6	2.0
10258		Bc		31-81	8.3	1.74	49	14.8	1.1	3.4	9.8
10259		Cca		81-200	8.7	1.67	65	14.1	0.9	2.6	10.8
10260	CA055	Ap	PRO	0-13	7.3	0.61	41	0.5	5.0	1.4	0.3
10261		Bm		13-30	7.7	0.39	37	0.3	2.9	0.9	0.2
10262		Cca		30-125	8.2	0.43	35	1.1	1.9	1.6	0.8
10263	CA062	Ap	HKR	0-31	5.9	0.30	49	1.9	0.6	0.3	2.9
10264		Bnt		31-62	7.7	2.37	70	21.0	2.2	1.7	15.1
10265		Cksa		62-200	8.1	7.60	65	58.7	22.8	21.2	12.5
10266	CA064	Ah	HKR	0-15	5.3	0.22	59	1.4	0.1	0.2	3.8
10267		Bnt		15-50	7.3	1.26	46	11.4	0.7	0.8	13.1
10268		Csk		50-200	8.0	8.08	69	52.1	22.0	32.7	10.0
10269	CA065	Ap	MET	0-16	7.0	0.63	35	2.0	2.6	1.3	1.5
10270		Bm		16-32	7.3	0.48	30	1.7	2.2	1.0	1.4
10271		Bc		32-50	7.6	0.49	37	1.3	2.7	1.2	1.0

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10272		IICca		50-112	8.1	0.60	45	2.1	2.4	1.5	1.5
10273		Ck		112-200	8.2	0.90	25	4.4	2.2	1.7	3.2
10274	CA068	Ap	HND	0-12	7.4	0.68	37	0.3	4.5	1.8	0.2
10275		Bm		12-33	7.4	0.44	38	0.6	2.7	1.3	0.4
10276		Cca		33-60	7.7	1.69	47	2.2	12.4	6.4	0.7
10277		Cca/Cks		60-200	8.0	4.15	45	10.8	23.0	26.1	2.2
10278	CA075	Ap	ZGW	0-15	6.4	0.51	36	2.2	1.6	1.1	1.9
10279		Bgj		15-31	7.0	0.41	46	2.3	0.7	0.9	2.6
10280		Cgcas		31-150	8.0	4.36	58	24.9	17.8	14.6	6.2
10281	CA078	Ap	HNDsc	0-15	6.7	0.54	36	2.7	1.8	1.0	2.3
10282		Bm		15-38	6.8	0.33	39	2.5	0.9	0.4	3.2
10283		Ccas		38-70	7.7	3.20	50	26.6	4.9	4.3	12.4
10284		Ck/Csk		70-200	8.1	6.86	57	49.8	22.6	20.8	10.7
10285	CA082	Ap	HND	0-10	7.6	0.73	42	0.6	5.0	1.7	0.3
10286		Bm		10-28	7.7	0.35	54	0.4	2.0	0.9	0.3
10287		Cca		28-60	8.2	0.50	50	1.3	2.1	1.7	1.0
10288		Cks		60-200	7.9	4.65	54	13.8	25.1	32.3	2.6
10289	CA083	Ap	HNDsc	0-17	6.1	1.33	57	0.6	6.2	2.6	0.3
10290		Bm		17-34	7.0	0.77	40	0.3	3.7	2.4	0.2
10291		Bc		34-55	7.6	0.79	43	0.3	4.1	2.3	0.2
10292		Cca		55-148	7.9	3.51	49	4.3	26.3	16.2	0.9
10293		Csk		148-200	8.1	6.21	48	35.1	22.9	31.0	6.8
10294	CA085	Ah	HKR	0-7	6.5	0.98	75	7.6	1.1	0.9	7.6
10295		Bnt		7-35	8.0	2.86	72	29.3	2.8	2.3	18.3
10296		Csk1		35-70	8.0	7.33	60	70.5	23.0	15.2	16.1
10297		Cks		70-200	8.4	3.88	109	37.7	3.4	3.1	20.9
10298	CA087	Ap	HND	0-16	6.6	0.77	51	0.7	3.7	2.3	0.4

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10299		Bm		16-34	6.8	0.35	40	1.8	1.2	0.8	1.8
10300		Bc		34-68	7.2	0.58	34	3.8	1.4	1.1	3.3
10301		Cca1/Cca2		68-200	8.4	0.92	59	8.2	1.0	1.2	7.9
10302	CA091	Ap	ZGWsc	0-20	6.5	0.82	45	1.5	3.3	1.6	1.0
10303		Cg		20-50	8.2	1.20	36	10.6	2.0	1.1	8.4
10304		C2/C3		50-160	8.6	2.70	44	24.9	1.9	5.0	13.4
10305	CA093	Ah	NUTsc	0-6	7.5	0.70	54	0.4	4.3	1.7	0.2
10306		Cca1		6-60	8.1	0.51	41	1.4	2.0	1.6	1.0
10307		C2/C3		60-200	8.8	1.51	55	12.0	0.8	2.7	9.1
10308	CA096	Bnt	HKR	0-36	6.6	0.60	62	5.4	0.9	0.9	5.7
10309		Ck		36-66	7.8	2.39	73	18.5	2.0	6.9	8.8
10310		Csk		66-200	8.1	9.95	82	54.4	0.2	86.1	8.3
9940	CA101	Btnj	ROL	13-35	6.9	0.45	58	1.6	1.6	1.6	1.2
9941		Ck/Cksa		35-200	7.9	6.07	57	26.4	25.3	40.3	4.6
9943	CA107	Bnt	HKR	11-35	6.6	1.06	42	8.2	1.2	1.1	7.6
9944		Ck		35-130	8.1	2.66	45	18.9	4.8	6.6	8.0
9945	CA109	Btj	HND	9-22	6.0	0.41	48	0.9	2.0	1.3	0.7
9946		Ck/Cks		22-200	7.8	4.20	56	14.4	26.5	20.1	3.0
9947	CA110	Bm	FST	10-40	7.2	0.74	31	5.1	1.8	1.8	3.9
9948		Cca/Csk		40-100	8.2	8.12	57	48.0	22.8	44.1	8.3
9949	CA116	Bm	HNDyg	13-46	7.2	1.03	36	1.0	5.8	4.1	0.5
9950		C		16-93	7.9	0.53	45	0.7	2.2	2.3	0.5
9951		IICk		93-136	8.6	0.44	25	1.1	0.9	1.6	1.0
9953	CA128	Cca	HMSsc	13-52	8.1	0.50	48	1.0	2.4	2.2	0.7

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
9954		Ck/Cksa		52-200	8.1	5.62	54	16.3	24.5	46.2	2.7
9955	CA131	Bm	MAB	18-36	7.7	0.59	46	1.0	3.2	1.8	0.6
9956		Cca/Ck		36-100	8.4	1.81	60	8.6	3.1	8.0	3.7
9957	CA133	Bm	MABsc	12-31	7.9	2.21	40	1.8	17.5	10.0	0.5
9958		Cca/Csk		31-200	8.1	6.36	54	26.5	23.2	46.7	4.5
9959	CA135	Bm	MABsc	8-27	7.8	0.68	50	0.4	3.7	2.3	0.2
9960		Cca/Ck/Csk		27-200	8.2	6.20	48	22.9	21.5	54.1	3.7
9961	CA137	Bmk	TVS	8-26	8.0	1.34	45	0.8	8.1	6.6	0.3
9962		Cca/Ck/Csk		26-200	8.1	4.36	52	6.7	24.2	37.5	1.2
9963	CA139	Bm	MAB	11-28	7.2	0.77	50	0.5	4.7	2.5	0.3
9964		C1/C/C3		28-200	8.0	4.49	52	8.1	24.1	36.3	1.5
9965	CA141	Bm	MAB	20-50	6.6	0.65	47	0.4	3.4	2.1	0.2
9966		BC/Ck		50-100	7.3	0.60	48	0.8	3.0	2.2	0.5
9967	CA144	Cca	HMS	13-50	8.1	0.37	46	0.6	1.8	1.4	0.5
9968		C2/C3		50-200	8.0	4.44	49	5.9	23.9	39.4	1.1
9969	CA147	Bm	MAB	15-40	7.7	0.34	52	0.5	1.9	1.2	0.4
9970		Ck		40-124	8.4	0.55	51	3.0	0.9	1.6	2.6
9971	CA152	Bm	MABsc	15-35	6.2	0.36	49	1.8	1.0	0.8	1.9
9972		BC/Ck/Ckgj		35-200	7.9	7.19	55	52.5	21.8	29.2	10.4
9975	CA167	Bm	MABscgl	15-40	7.0	0.53	36	3.3	1.1	1.1	3.1
9976		BC/Ck/Cskgj		40-200	7.9	6.49	52	34.2	23.3	36.4	6.3
9977	CA169	Cca	HMSsc	25-62	7.9	1.43	50	2.0	7.8	6.7	0.7
9978		Ck/Csk		62-200	8.1	9.08	53	28.9	23.4	101	3.7

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
9980	CA178	Bm	MABsc	10-38	6.6	0.61	44	1.6	2.3	2.3	1.0
9981		BC		38-70	7.4	0.83	50	4.7	1.7	2.3	3.3
9982		Cca/Ck		70-200	8.5	2.02	58	13.9	2.3	5.7	7.0
9984	CA186	Bm	MAB	15-43	7.6	0.74	34	0.4	4.1	2.8	0.2
9985		Cca/Ck		43-200	8.3	0.68	40	1.2	1.4	3.6	0.8
9986	CA187	Bm	MAB	17-45	6.1	0.24	33	0.5	1.1	0.9	0.5
9987		BC		45-74	6.2	0.25	29	1.1	1.1	0.3	1.4
9988		C/Ck		74-200	7.3	0.85	39	0.8	4.0	3.8	0.4
9989	CA192	Bm/BC	MAB	11-40	6.6	0.23	33	0.4	1.2	0.8	0.4
9990		Cca		40-100	8.2	0.47	42	1.3	1.3	2.0	1.0
9992	CA197	Bm	MAB	11-29	7.1	0.40	42	0.6	2.1	1.6	0.4
9993		Cca/Ck		29-200	8.4	1.31	53	7.0	1.4	4.7	4.0
9994	CA200	Bm/BC	MAB	9-35	6.7	0.46	27	0.5	2.0	1.5	0.4
9995		Ck		35-200	8.2	1.32	49	6.5	2.0	5.1	3.5
9996	CA203	Bm	MAB	10-30	6.9	0.47	37	0.6	2.8	1.5	0.4
9997		Cca/Ck		30-125	8.0	2.09	45	5.4	9.1	10.1	1.7
9998	CA207	Bm	MAB	11-40	6.5	0.37	42	0.5	2.0	1.5	0.4
9999		BC		11-73	6.6	0.38	42	1.2	1.3	1.2	1.1
10000		Ck		70-130	7.6	0.56	42	1.8	1.7	1.9	1.3
10001	CA210	Bm	MAB	10-30	6.4	0.42	44	0.4	2.6	1.2	0.3
10002		Cca/Ck		30-185	8.0	3.55	46	6.4	20.3	25.8	1.3
10003	CA214	Btnj	MAB	10-27	6.6	0.57	43	0.5	3.2	2.3	0.3
10004		Cca/Ck		27-130	8.1	0.50	44	1.4	1.3	2.3	1.0

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10005	CA217	Bnt	HUK	10-40	7.6	1.22	38	10.9	1.1	1.3	10.0
10006		Cca/Ck		40-200	8.9	1.58	61	14.6	0.5	2.0	13.1
10009	CA226	Bm	MAB	12-30	6.6	0.42	34	0.5	2.1	1.5	0.3
10010		Cca		30-100	8.1	1.39	36	2.7	6.2	6.9	1.1
10011	CA228	Bm	MAB	9-33	6.8	0.48	38	0.3	3.1	1.6	0.2
10012		Cca/Ck		33-200	8.6	0.64	43	3.6	0.9	2.0	3.0
10014	CA234	Bm	MAB	9-35	6.6	0.35	44	0.3	1.8	1.3	0.2
10015		BC		35-80	7.0	0.32	33	0.6	1.4	1.2	0.5
10016		Ck/Cca		80-155	7.8	3.00	45	7.2	13.9	18.8	1.8
10311	CA235	Bnt	HUK	0-15	9.3	3.56	85	41.9	0.7	1.6	39.8
10312		Csk1		15-45	9.6	5.75	119	61.7	0.4	1.7	60.5
10313		Csk2		45-200	9.3	5.79	146	93.6	0.6	2.2	80.1
10314	CA237	Ah	ZUN	0-30	7.6	0.58	38	1.5	2.8	2.4	0.9
10315		Cca/Ck		30-200	8.4	2.55	34	22.7	2.1	9.4	9.5
10316	CA241	Ah/Bm	BVLsc	0-28	7.6	0.47	44	0.9	2.4	1.6	0.6
10317		Cca/Ck		28-200	8.2	6.70	47	37.9	21.4	61.4	5.9
10950	CA269	Ah	KTM	0-10	5.6	0.19	64	0.2	0.8	0.5	0.3
10951		Bg		10-45	5.6	0.13	36	0.3	0.4	0.2	0.5
10952		Cg		45-150	6.9	0.37	46	0.6	1.9	1.1	0.5
10028	SB003	Bm	MAB	15-43	7.1	0.49	41	0.4	3.0	1.4	0.3
10029		Ck		47-70	8.0	0.41	45	0.6	2.2	1.4	0.5
10030		Ccas		70-125	7.8	3.29	57	4.9	27.1	16.6	1.1
10031		Csk		125-200	8.0	6.20	60	30.2	24.4	46.2	5.1
10032	SB006	Bm	MAB-sc	11-37	7.0	0.80	46	0.7	5.2	2.4	0.4
10033		Ccasa		37-70	7.9	5.81	52	29.5	26.9	28.9	5.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10034		Csk		70-200	8.1	9.75	46	66.2	22.9	49.3	11.0
10035	SB009	Bm	MAB	20-35	7.9	0.77	61	3.0	2.9	2.2	1.9
10036		Ck		35-75	8.2	0.65	58	4.0	1.4	1.0	3.7
10037		Csk		75-150	7.9	4.36	59	21.1	24.3	17.6	4.6
10038	SB012	Bnt	HUK	23-38	8.0	1.03	55	9.9	1.1	1.0	9.7
10039		Cca		38-70	8.4	1.02	62	9.1	1.0	0.9	9.2
10040		Csk		70-140	8.0	6.29	58	35.9	24.3	24.9	7.2
10041	SB015A	Btnj	HMSsc	14-33	6.5	0.60	54	4.4	1.1	1.2	4.1
10042		Ck		33-65	8.0	0.64	56	4.6	1.2	1.2	4.1
10043		Cks		65-190	8.2	4.41	67	33.2	8.9	12.0	10.3
10044	SB018	Bm	MAB	12-22	6.5	0.43	52	1.0	2.4	1.2	0.7
10045		Ck1		22-75	8.2	0.58	60	2.9	1.7	1.3	2.3
10046		Ck2/Cca		75-200	7.8	4.48	62	18.2	24.5	19.2	3.9
10050	SB020	Bm	HUK	11-32	6.3	1.00	55	8.3	1.0	0.8	8.8
10051		Ck/Csk		32-200	8.1	8.35	61	44.5	22.2	43.9	7.7
10047	SB023	Bm	MABsc	10-35	7.7	0.57	55	1.4	2.4	1.7	1.0
10048		Ck		35-70	8.1	0.77	57	5.0	1.4	1.3	4.3
10049		Csk		70-200	7.9	5.56	67	30.5	23.2	21.5	6.4
10052	SB024	Btj	MAB	10-24	6.2	0.31	51	0.6	1.3	0.7	0.6
10053		Ck/Cks		34-200	7.6	3.73	52	10.7	21.8	18.8	2.4
10054	SB026	Btnj	ROL	11-40	6.0	0.37	32	3.1	0.6	0.5	4.3
10055		BC		40-67	6.8	2.47	32	20.0	1.5	4.6	11.5
10056		Csk		67-200	8.2	11.7	65	75.8	21.0	80.8	10.6
10057	SB028	Btnj	ROL	10-22	7.4	0.71	54	2.9	2.4	2.1	1.9
10058		Ck		22-51	8.3	0.53	48	3.9	0.8	0.8	4.3

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10059		Cca/Csk		51-200	8.1	6.66	64	41.7	21.6	33.4	7.9
10060	SB032	Btj	HND	23-33	7.7	0.61	46	0.5	4.1	1.2	0.3
10061		Ck/Cgk		33-200	8.0	0.78	49	0.7	4.1	2.6	0.4
10062	SB034	Btj	HNDsc	9-30	8.0	0.58	54	1.8	2.4	1.4	1.3
10063		Ck/Cskgj		30-200	8.0	5.66	63	34.7	22.4	18.0	7.7
10064	SB041	Btj	HNDsc	8-34	7.2	0.80	46	0.9	4.5	2.9	0.5
10065		Ck		34-200	8.4	0.79	58	6.6	0.8	0.6	7.9
10066	SB042	Bm	HNDsc	21-46	5.8	0.38	39	2.2	1.2	0.9	2.2
10067		C1/C2/Cskgj		46-200	7.8	2.40	53	17.3	4.5	5.0	7.9
10069	SB048	Bm	HND	8-27	8.0	0.59	40	0.5	3.3	1.9	0.3
10070		Cca		27-118	8.4	1.34	54	5.2	1.9	6.2	2.6
10071	SB050	Bm	HND	9-30	7.6	0.64	37	0.5	4.4	2.0	0.3
10072		Cca/Ck		67-2	8.5	0.47	48	3.0	0.9	1.3	2.9
10073	SB052	Cca/Ck	NUT	30-200	8.1	3.51	51	10.3	12.3	27.4	2.3
10074	SB054	Cca/Ck	NUT	50-200	8.5	1.85	26	11.4	1.2	1.5	9.7
10075	SB056	Bm	HND	11-36	7.6	0.41	26	0.5	2.6	1.0	0.4
10076		BC/C/Ck		75-200	8.4	0.31	26	0.4	1.6	0.6	0.4
10077	SB058	Bm	MABsc	12-25	7.7	0.43	46	0.3	2.9	1.4	0.2
10078		Cca/Csk		26-200	8.2	7.78	53	41.0	21.9	70.3	6.0
10079	SB060	Bmgj	MABgl	7-52	6.2	0.57	38	2.2	1.3	1.4	1.9
10080		Ckgj		52-120	7.9	1.21	63	5.2	3.0	3.8	2.8
10081	SB063	Cca/Ck	HMS	12-200	8.5	0.58	55	3.2	0.9	2.1	2.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10082	SB065	Cca/Ck	MAB	16-180	8.4	0.59	45	1.6	1.4	2.8	1.1
10083	SB067	Bm	MABxs	14-26	8.0	0.45	39	0.7	2.1	1.6	0.5
10084		Cca/Ck		26-200	8.3	0.62	36	1.8	1.7	2.6	1.2
10085	SB072	Bm	MAByg	11-38	7.7	0.60	29	0.6	2.6	1.7	0.4
10086		BC/Ccagj		38-140	8.3	1.51	45	5.2	2.4	6.4	2.5
10087		C2/C3		140-200	8.3	3.00	32	14.2	6.9	14.9	4.3
10088	SB077	Bm	MAB	12-21	7.4	0.54	44	0.5	2.8	2.5	0.3
10089		Cca/Ck/Csk		21-200	7.9	4.25	50	8.6	22.3	32.7	1.6
10090	SB081	Bm	MAB	12-28	6.7	0.54	42	0.7	2.6	2.0	0.5
10091		Cca/Ck		28-200	8.3	0.88	53	3.8	1.6	3.4	2.4
10092	SB086	Cca	HMS	11-50	8.3	0.62	44	0.8	1.7	3.3	0.5
10093		Ck/Csk		50-200	8.0	4.48	48	10.5	22.2	34.4	2.0
10094	SB087	Bm/BC	MAB	13-45	7.6	0.85	62	2.7	2.3	3.8	1.6
10095		Ck		45-175	8.4	2.06	53	12.7	2.5	7.1	5.8
10096	SB091	Bm	MAB	13-29	7.8	0.61	35	0.9	3.3	1.8	0.6
10097		C1/C2		29-200	8.1	0.78	36	0.8	3.6	2.7	0.4
10098	1SB094	Bm	MAB	21-46	7.4	0.67	50	0.4	3.4	2.0	0.3
10099		BC/C1/C2		46-200	8.4	0.60	47	1.5	1.5	3.4	0.9
10100	2SB094	Bm	MAB	16-27	6.6	0.44	32	0.4	2.0	1.6	0.3
10101		BC/C1/C2		27-60	8.1	0.72	47	4.2	1.2	2.1	3.3
10102	SB097	US	MAB	16-50	8.2	0.47	52	1.1	1.2	2.2	0.8
10103		C2/C3		50-200	8.1	5.78	53	20.2	21.7	46.6	3.5

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10104	SB100	Btnj	MAB	11-34	6.4	0.35	33	0.9	1.2	1.1	0.9
10105		C1/C2		34-200	7.5	4.39	50	24.4	6.5	29.4	5.8
10106	SB103	Btnj	HUK	13-26	7.1	1.12	59	9.3	1.4	0.7	9.1
10107		C1/C2		26-200	7.9	5.40	66	37.6	21.5	17.8	8.5
10108	SB104	Bm/BC	MAB	12-48	6.3	0.34	34	1.0	0.8	1.0	1.1
10109		C1		48-110	8.2	0.76	42	2.0	2.2	3.3	1.2
10110	SB106	Bm	PUN	15-36	7.5	0.46	33	0.5	2.2	1.5	0.3
10111		IIC		36-110	7.8	0.73	24	0.4	3.5	2.4	0.2
10112	SB109	(Cca)	HMS	16-50	8.2	0.45	47	1.0	1.3	2.1	0.8
10114	SB111	Cca	HMSsc	11-50	8.3	0.62	45	2.9	1.6	2.0	2.2
10115		Ck/Csk		50-200	8.1	6.73	53	30.6	24.3	50.3	5.0
10116	SB113	Bm	MAB	16-29	7.1	0.82	38	0.7	4.8	3.1	0.4
10117		Cca/Ck		29-200	8.5	1.22	48	7.9	1.3	3.5	5.1
10118	SB116	Bm	MAB	19-42	6.6	0.42	26	0.9	1.9	1.2	0.8
10119		BC/Ck		42-120	7.3	1.11	35	0.6	5.8	2.9	0.3
10120	SB118	Bm	MAB	15-42	6.0	0.23	36	0.3	0.8	0.6	0.3
10121		BC/Ckg		42-200	7.4	0.54	47	0.5	2.5	2.1	0.3
10122	SB119	Bm	MAB	16-40	7.2	0.33	34	0.4	1.4	1.1	0.4
10123		BC/Ck		40-200	8.3	2.08	51	13.0	2.2	5.9	6.5
10124	SB123	Cca	HMS	14-46	8.1	0.35	42	0.6	1.5	1.4	0.5
10125		Ck/Csk		46-200	8.0	4.81	48	12.3	23.2	39.5	2.2
10126	SB127	Bm/BC	MAB	14-50	6.8	0.32	35	0.6	1.3	1.4	0.5
10127		Cca		50-110	7.8	0.63	40	0.8	2.7	2.6	0.5

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10128	SB130	Bm/BC	MAB	19-52	7.5	0.43	45	0.7	1.7	1.9	0.5
10129		Cca/Cks		52-200	8.3	3.18	54	14.7	6.1	19.6	4.1
10130	SB136	Bm/BC	MABsa	13-55	6.3	6.15	52	25.5	22.2	50.7	4.2
10131		Csk		55-200	8.0	11.0	59	55.8	22.2	114	6.8
10132	SB138	Bm/BC	MAB	12-52	7.2	0.50	33	0.4	2.3	1.6	0.3
10133		Cca/Cks		52-200	7.9	2.88	41	2.4	18.9	18.5	0.5
10134	SB142	Bm	MAB	13-38	6.7	0.37	49	0.3	2.0	1.2	0.2
10135		Cca/Ck		38-140	8.4	0.47	43	0.8	1.2	2.2	0.6
10136	SB145	Bm	MAB	16-69	7.4	0.75	28	0.7	4.4	3.1	0.4
10137		Cca		97-200	8.5	0.59	46	3.3	0.8	2.2	2.7
10138	SB146	Btj	MAB	12-36	7.5	0.45	42	0.4	2.5	1.7	0.3
10139		Cca/Ck		36-135	8.3	0.43	46	1.2	1.0	1.9	1.0
10140	SB155	Btj/BC	MAB	17-50	7.2	0.53	42	0.4	2.5	2.3	0.3
10141		Cca/Ck		50-160	8.3	0.59	45	0.8	1.1	3.5	0.5
10142	SB158	Btj	MAB	12-34	7.1	0.61	46	0.5	3.6	2.2	0.3
10143		Cca/Ck		34-165	8.2	0.42	41	1.0	1.6	1.4	0.8
10144	SB161	Bm	MAB	11-36	7.4	0.57	39	0.6	3.0	2.1	0.3
10145		Cca/Ck		36-110	8.1	0.54	39	0.9	1.9	2.2	0.6
10148	SB164	Bm/BC	MAB	13-56	6.9	0.45	39	0.6	2.1	1.5	0.5
10149		C1/C2		56-200	8.1	0.88	44	3.1	2.2	3.6	1.8
10146	SB167	Bm	MAB	19-36	7.4	0.56	38	0.6	2.9	2.1	0.4
10147		Cca/Ck		36-125	8.2	0.57	39	0.9	1.7	2.5	0.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10150	SB170	Bm	MAB	13-37	6.3	0.29	34	0.5	1.2	0.8	0.5
10151		BCk		37-65	7.3	0.53	42	0.6	3.1	1.7	0.4
10152		Cca/Ck		65-170	7.8	0.71	41	1.2	3.9	2.0	0.7
10241	SB176	Bm	BVLcr	12-38	8.3	0.50	47	1.1	1.9	2.4	0.7
10242		Ck		66-200	8.6	1.17	35	6.6	1.4	4.2	3.9
11040	SB213	Btj	MAB	14-62	5.2	0.23	40	0.8	1.2	0.6	0.8
11041		BC		62-100+	6.0	0.38	33	2.7	0.5	0.4	4.1
11042	SB226	Btj	HND	13-57	7.0	0.62	47	1.8	2.7	1.7	1.2
11043		Cs	DCY	57-100	7.6	4.00	51	12.9	26.9	18.5	2.7
11044	SB231	Bm	WWT	13-39	7.1	0.23	38	0.3	1.9	0.5	0.3
11045		Cca/Ck		39-200	8.2	0.31	29	0.6	1.6	0.6	0.6
11046	SB235	Btj	HND	10-37	6.5	0.24	45	0.4	1.3	0.6	0.4
11047		Cca/Ccagj		37-185	8.2	0.56	53	3.0	0.8	1.2	2.9
11048	SB239	Bt	LFEgl	39-52	5.5	0.24	36	0.5	0.7	0.5	0.6
11049		BCgj/Cgj		52-200	5.4	0.50	43	0.4	2.0	1.2	0.3
11050	SB240	Bt	LFE	17-33	5.6	0.18	39	0.5	0.7	0.5	0.6
11051		BC/Cca		33-200	7.4	0.74	47	1.1	3.1	3.1	0.6
11052	SB244	Btj	HND	13-33	5.9	0.18	49	0.6	0.7	0.5	0.7
11053		BC/Cca		33-165	7.4	0.93	41	1.6	4.2	2.9	0.9
11054	SB249	Btnj	FST	12-29	7.8	0.62	72	4.0	1.3	1.6	3.3
11055		BC/Csk		29-200	7.9	6.04	71	29.4	23.9	35.4	5.4
11056	SB261	Bm	DCY	14-31	6.8	0.39	29	0.7	2.4	1.5	0.5
11057		BC/IICk		31-170	8.1	0.42	32	0.8	0.9	1.6	0.7

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
11058	SB266	Bntk	HKR	15-43	8.2	9.97	57	95.7	20.0	25.3	20.1
11059		Csca/ Cskg		43-200	8.5	12.3	59	145	19.6	32.1	28.6
11060	SB278	Btj	HND	18-35	5.9	0.51	47	1.0	1.8	1.7	0.7
11061		Ck/Ckgj		35-200	7.7	2.96	60	3.6	26.4	12.2	0.8
11062	SB287	Bm	WWT	14-56	6.3	0.39	33	0.5	2.3	1.1	0.4
11063		BC		56-200	8.1	0.33	29	0.4	1.1	1.1	0.4
10384	IW021	Ap	KVR	0-10	7.0	1.12	51	0.3	4.5	2.1	0.2
10385		Bm/Bmk		10-50	7.7	1.28	42	0.8	6.0	2.9	0.4
10386		Ck		50-170	8.1	1.49	42	4.1	3.8	7.5	1.7
10387	IW022	Ah	ROS	0-9	6.1	0.38	52	0.2	1.7	0.9	0.1
10388		Bm		9-45	6.4	0.59	41	0.8	3.0	1.8	0.5
10389		Ck		45-90	8.0	0.46	30	0.5	2.1	2.1	0.3
10390		IICk		90-175	8.4	0.51	43	2.1	0.8	2.5	1.6
10391	IW023	Ap	ROSgl	0-15	7.1	0.53	41	0.3	3.2	1.6	0.2
10392		Bm		15-33	6.6	0.28	32	0.4	1.7	0.8	0.4
10393		Ckgj/Ckg		33-200	8.2	0.41	40	0.2	1.7	1.8	0.2
10394	IW024	Ah/Ahc	ROSgl	0-31	5.8	0.47	33	0.2	2.5	1.5	0.1
10395		Bmgj		31-55	5.8	0.22	31	0.4	1.2	0.7	0.4
10396		Ck		55-90+	5.6	0.18	30	0.5	0.9	0.5	0.6
10397	IW026	Ah	ROSys	0-24	6.2	0.53	50	0.2	3.3	1.8	0.1
10398		Bm		24-38	7.1	0.49	45	0.2	3.6	1.5	0.1
10399		IICk		38-160	8.3	0.52	51	1.1	1.1	3.2	0.8
10400		IIICk		160-200	8.7	0.49	27	1.5	0.6	2.9	1.2
10401	IW027	Ah	EOR	0-6	6.7	0.67	66	0.3	4.0	1.9	0.2
10402		Bmk		6-17	7.6	0.47	47	0.1	3.4	1.3	0.1
10403		Ck		17-145	8.3	0.43	41	0.7	1.3	2.3	0.5

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10405	IW032	Bm	EOR	0-17	7.6	0.42	45	0.1	3.4	1.2	0.1
10406		Ck		17-145	8.4	0.42	47	1.2	0.9	2.3	0.9
10407	IW035	Ah/Aeg	COR	0-22	5.8	0.45	42	0.2	1.8	1.2	0.2
10408		Btg		22-60	5.2	0.27	42	0.5	0.9	0.5	0.6
10409		BCg		60-105	5.5	0.26	39	0.4	0.8	0.4	0.4
10410	IW036	Ah	ACEgl	0-22	5.5	0.38	59	0.1	1.3	1.9	0.1
10411		Btgj		22-42	7.6	0.43	50	0.2	1.4	3.0	0.2
10412		Ckgj/IICkgj		42-200	8.4	0.39	49	0.4	0.4	3.2	0.3
10413	IW037	Ah	EOR	0-17	7.2	0.67	54	0.3	4.6	2.2	0.2
10414		Bm		17-25	7.8	0.39	39	0.4	2.4	1.3	0.3
10415		Ck		25-200	8.2	0.53	40	1.4	1.5	2.7	1.0
10416	TS25	Apk	CHN	0-15	7.9	0.47	57	0.5	2.7	1.0	0.3
10417		Btj		15-75	7.9	0.36	62	0.6	2.1	0.8	0.5
10418		Cca		75-200	7.7	3.44	84	5.8	27.7	14.6	1.3
10419	TS26	Ah	MAB	0-18	7.0	0.55	45	0.4	3.0	1.8	0.3
10420		Btjnj		18-37	7.2	0.79	43	0.4	5.1	3.1	0.2
10421		Cca+IICca		37-200	8.4	2.02	45	10.0	3.0	11.3	3.7
10422	TS34	Btj	CHN ytsc	7-37	8.0	0.52	53	1.1	2.3	1.7	0.8
10423		Cca		44-135	8.1	7.06	55	44.7	23.1	33.2	8.4
10424		IICca		135-200	7.9	6.98	104	45.2	26.0	38.4	8.0
10425	TS36	Bm	CHNsc	5-33	7.3	0.91	54	1.4	5.1	3.6	0.7
10426		Cca		33-95	8.2	2.08	56	12.4	3.4	7.3	5.3
10427		IICsk		95-200	7.9	6.06	102	31.8	25.2	34.7	5.8
10428	TS38	Ah	CHNsc	0-6	7.1	0.55	48	0.3	2.7	1.8	0.2
10429		Bm		6-45	7.2	0.76	45	0.6	4.9	2.9	0.3

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10430		Cca		50-200	8.3	4.90	48	31.1	7.8	32.5	6.9
10431	TS39	Ah	CHNscxt	0-7	7.4	0.85	51	5.7	0.7	0.8	6.6
10432		Bm		7-110	9.4	6.82	95	73.2	0.6	1.3	76.3
10433		Cca		110-200	9.8	6.42	137	66.7	0.2	1.1	81.5
10434	TS41	Bm	MABsc	5-32	7.5	0.56	48	1.1	2.9	2.0	0.7
10435		Cca		32-200	8.1	6.81	46	31.6	25.5	55.9	4.9
11064	TS067	Ap	CHN	0-13	7.1	0.32	39	0.3	1.7	0.9	0.2
11065		Bm		13-45	7.8	0.33	40	0.4	2.1	0.9	0.3
11066		Cca		45-200	8.5	0.43	41	1.2	1.3	2.1	0.9
11067	TS077	Bm	CHN	18-64	7.4	0.49	38	2.1	1.4	1.0	1.9
11068		Cca		64-200	8.3	9.47	68	43.7	22.7	93.5	5.7
11069	TS087	Bmk	BVL	9-45	7.6	0.38	39	0.3	2.3	1.1	0.2
11070		Cca/ IICcasa		45-200	8.2	9.83	48	31.3	24.0	104	3.9
11071	TS097	Bm	BVL	25-50	7.6	0.36	45	0.5	2.3	1.1	0.4
11072		Cca1/ Cca2		50-200	8.2	2.51	41	10.1	5.5	17.3	3.0
11073	TS115	Btj	MAB	12-42	6.8	0.53	40	0.8	2.9	1.7	0.5
11074		Cca/Cgjs		42+	7.8	3.96	52	8.4	25.8	25.2	1.7
11075	TS122	Bm	MAB	14-90	7.5	4.25	41	32.9	6.0	13.5	10.6
11076		Cca/IICsk		90-200	8.4	8.36	55	62.6	18.8	43.6	11.2
11077	TS130	Btj	HND xs	8-40	6.3	0.32	39	0.5	1.3	1.5	0.4
11078		Cca/IICca		40-200	8.6	0.53	33	1.8	1.0	2.7	1.3
11079	TS131	Btj	HND	12-40	5.9	0.17	36	0.4	0.7	0.6	0.5
11080		BC/Cca1/Cca2		40-200	8.2	0.80	54	4.2	1.8	1.9	3.1

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
11081	TS134	Btj	HND	12-40	5.6	0.25	41	0.7	0.9	0.6	0.8
11082		BC/Cca1/Cca2		40-200	7.7	0.67	41	1.0	3.0	2.1	0.7
11083	TS135	Btj	HND-xs	19-39	7.2	0.67	43	0.4	3.8	2.5	0.2
11084		Cca/IICk		39-200	7.9	2.78	42	1.8	19.7	18.0	0.4
11085	TS140	Bt	LFE	9-33	6.0	0.18	38	0.4	1.0	0.6	0.5
11086		BC/Cca/Ck		33-200	8.4	0.50	43	2.1	1.0	1.8	1.8
11087	TS145	Btj	HND	17-39	6.2	0.35	32	0.8	1.2	0.7	0.8
11088		BC/Cca/Ckgj		39-200	7.4	0.54	46	0.6	2.7	1.4	0.4
11089	TS157	Bm	HND	10-24	7.4	0.38	41	0.5	2.2	1.1	0.4
11090		Ck/IICks		24-130	8.0	4.40	48	16.1	23.4	26.8	3.2
11091	TS168	Bm	HND	14-41	6.4	0.42	34	1.2	2.3	1.6	0.9
11092		Cca/Ckgj		41-200	7.7	3.41	47	6.5	25.5	18.4	1.4
11093	TS173	Btnj	FST	6-33	7.3	0.70	61	5.1	1.4	0.9	4.8
11094		Ck/IICsk		33-200	7.8	5.60	70	36.5	24.3	22.0	7.6
11095	TS176	Bm	DCY	9-49	6.0	0.27	35	0.8	1.1	0.6	0.9
11096		BC/C/IICca		49-200	7.8	5.13	51	23.0	22.8	28.0	4.6
11097	TS203	Bm	SCD	17-48	8.0	2.15	41	5.8	12.7	5.0	2.0
11098		Cca/IICca		48-134	8.2	1.25	27	5.0	4.0	4.0	2.5
11099	TS210	Bntj	CCL	14-33	6.8	1.08	52	5.8	3.0	3.1	3.3
11100		BC/Cca		33-110	8.4	1.59	84	13.1	1.7	1.5	10.4
11101	TS221	Bnt	HUK	6-33	7.1	0.99	55	7.9	1.1	0.7	8.5
11102		Cca		33-118	8.2	8.53	48	52.9	24.6	47.6	8.8
10436	LW 4	Ah	VST	0-8	6.6	0.36	42	0.1	1.7	0.8	0.1

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10437		C		8-200	8.3	0.35	37	0.6	1.8	1.1	0.5
10438	LW24	Ap	BVLsc	0-24	6.7	0.72	45	0.5	4.0	2.0	0.3
10439		Bm		24-70	7.4	0.50	38	2.1	1.8	1.3	1.7
10440		Cca/Ccagj		70-200	8.9	2.35	49	21.1	0.7	4.2	13.5
10441	LW34	Ap	CVD	0-30	6.7	0.54	39	0.3	2.6	1.3	0.2
10442		Bm		30-94	7.8	0.39	37	0.4	2.4	1.0	0.3
10443		C		94-200	8.1	0.34	37	0.5	2.1	0.9	0.4
10444	LW58	Ap	BVL	0-19	6.9	0.43	47	0.4	2.5	1.2	0.3
10445		Bm		19-50	7.5	0.36	47	0.4	2.1	1.1	0.3
10446		Cca		50-200	8.3	1.07	45	5.0	2.0	4.1	2.9
10447	LW67	Bm	CHN	13-25	8.1	0.40	54	0.6	1.7	1.6	0.5
10448		Cca		25-200	8.4	0.43	53	1.0	1.3	2.1	0.8
10449	LW73	Ah	CHNsc	0-14	7.3	0.45	48	0.4	2.5	1.8	0.3
10450		Bm		14-30	7.3	0.45	47	0.6	2.3	1.9	0.4
10451		BC/Cca/IICks		30-200	8.0	6.23	49	26.9	21.6	51.5	4.5
10452	LW75	Bnt	PTA	8-20	7.7	0.68	72	5.4	1.2	1.3	4.9
10453		Ccas		20-200	7.9	4.14	67	22.2	22.5	12.8	5.3
10454	LW76	Bm	CHNyt	6-23	7.5	0.39	46	0.5	2.6	1.5	0.4
10455		Cca		23-40	8.3	1.53	48	10.0	2.4	3.8	5.7
10456	LW78	Ah	CHNsc	0-16	6.8	0.28	50	0.7	1.2	0.9	0.7
10457		Bm		16-31	7.1	0.25	43	1.4	0.7	0.6	1.7
10458		BC		31-45	7.9	0.50	51	3.1	1.4	1.2	2.8
10459		Cca		45-200	8.4	3.01	49	21.1	4.2	11.2	7.6
10460	LW79	Bm	PTAgl	5-26	6.6	0.33	77	0.6	1.5	1.0	0.5
10461		Cskgj		26-200	7.6	0.38	91	0.7	1.8	1.1	0.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10462	LW84	Btnj	CHZ	5-32	8.2	0.57	70	5.2	1.1	0.6	5.7
10463		Csk		32-200	7.9	5.54	108	31.9	25.1	20.8	6.7
10464	LW87	Btnj	CHZ	8-29	8.2	0.69	67	5.2	1.7	0.8	4.6
10465		Csk		29-200	7.8	4.14	96	19.4	27.3	12.5	4.4
10466	LW94	Ah	CHNsc	0-11	6.8	0.24	49	0.1	1.4	0.7	0.0
10467		Bm		11-36	7.2	0.32	47	0.2	2.0	1.1	0.1
10468		Ccasa		36-200	8.2	9.00	51	36.9	24.6	79.9	5.1
10469	LW101	Ah	CHN	0-15	6.6	0.27	59	0.2	0.8	0.5	0.3
10470		Bm		15-34	6.8	0.32	48	0.2	1.5	0.7	0.2
10471		BC		34-135	7.3	0.41	49	0.2	2.1	1.1	0.2
10472		Cca		135-200	8.1	0.32	46	0.2	1.7	0.8	0.2
11011	LW123	Bm	MAB	10-21	7.5	0.42	49	0.3	3.1	1.0	0.2
11012		Cca1/Cca2		21-175+	7.7	3.44	43	2.2	27.8	24.0	0.4
11013	LW132	Btj	FMT	11-32	7.3	0.33	41	0.5	1.8	1.4	0.4
11014		Cca1/Cca2		32-200	8.6	0.70	37	4.3	0.7	2.5	3.4
11015	LW140	Bm	CHN	16-34	6.5	0.22	44	0.5	1.0	0.7	0.5
11016		BC/Cca		34-200	8.0	0.26	46	0.3	1.2	0.8	0.3
10505	PM020	A Ah	ROS	0-40	6.4	0.26	38	0.4	1.1	0.5	0.4
10506		B Bm		40-73	6.3	0.28	38	0.8	1.6	0.8	0.7
10507		C Ck		73-130	8.0	0.64	47	0.3	4.2	2.3	0.2
10508		D Cks1		130-180	7.9	3.27	41	1.3	32.2	17.0	0.3
10509		E Cks2		180-200	7.9	3.47	42	2.1	28.9	21.0	0.4
10510	PM041	A Ah	HNDsc	0-11	5.3	0.34	34	0.4	1.1	0.7	0.4
10511		B Bm		11-26	7.4	0.79	41	0.9	4.7	2.4	0.5
10512		C Cca		26-44	8.2	0.49	45	0.4	2.5	1.9	0.3

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10513		D Ck		44-120	8.5	5.76	55	41.0	5.9	23.4	10.7
10514		E Csk		120-200	8.3	9.20	48	69.1	0.0	47.3	14.2
10515	PM044	A Ah	DCYsc	0-10	4.5	1.12	32	0.6	5.6	2.8	0.3
10516		B Bm		10-21	5.7	0.57	27	0.8	2.6	1.5	0.6
10517		C Bck		21-56	6.6	0.97	29	1.7	3.1	5.0	0.8
10518		D Ck		56-120	8.1	3.78	48	16.5	16.9	19.6	3.9
10519		E Csk		120-200	8.0	5.24	47	21.1	25.9	31.5	3.9
10520	PM046	A Ah	DCYsc	0-13	5.0	0.55	58	1.2	2.2	1.4	0.9
10521		B Bm		13-46	7.1	0.45	48	1.7	1.1	2.1	1.3
10522		C Ck		46-75	8.0	4.38	46	11.5	26.9	29.2	2.2
10523		D Csk		75-200	8.3	9.05	51	67.5	22.0	61.1	10.5
10524	PM051	A Ap	HKR	0-10	5.7	0.51	38	1.6	1.3	1.4	1.4
10525		B Bnt		10-30	6.8	1.22	50	10.1	1.2	1.7	8.4
10526		C Csca		30-75	8.4	10.1	48	81.4	24.3	66.3	12.1
10527		D Csk		75-200	8.3	12.2	48	100	20.7	78.9	14.2
10528	PM055	Ah	HKR	0-14	6.6	0.83	38	1.3	4.2	2.3	0.7
10529		Bnt		14-28	8.2	1.98	37	18.7	4.1	1.9	10.8
10530		Cca/Ck		28-200	9.0	4.53	62	45.6	1.8	10.7	18.2
10531	PM061	A		0-20	7.9	0.61	41	2.3	3.0	1.4	1.5
10532		B		20-63	7.9	1.92	43	11.2	7.5	4.3	4.6
10533		Csak		6-200	8.5	14.1	57	147	24.2	48.1	24.5
10634	PM124 A	Ap	BLLsc	0-10	5.9	1.04	51	0.6	5.0	2.9	0.3
10635	B	Bm+BC		10-90	7.0	0.49	46	1.4	1.7	1.8	1.1
10636	C	Ccasa/Cksa		90-165	8.2	6.91	69	0.9	14.8	55.6	0.2
10637	D	Csk		165-200	8.1	8.98	67	44.7	23.8	85.1	6.1
10638	PM125 A	Ah	ROS	0-10	5.6	0.88	41	0.5	4.3	1.7	0.3

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10639	B	Bm		10-43	6.1	0.36	25	0.2	1.6	0.7	0.2
10640	C	Ck		43-100	8.0	0.36	25	0.1	2.4	0.7	0.1
10641	D	IICk/IICsk		100-200	8.1	0.49	48	0.2	2.1	1.9	0.1
10642	PM126 A	Ap/Ah	ROS	0-24	6.2	0.45	40	0.5	2.5	1.1	0.4
10643	B	Bm		24-56	7.9	0.47	27	0.6	3.2	1.2	0.4
10644	C	Cg		56-80	7.9	0.49	26	0.7	2.8	1.1	0.5
10645	D	Ckg		80-200	8.2	0.49	43	0.6	1.9	2.5	0.4
10646	PM127 A	Ap	ACE	0-12	5.3	0.54	64	0.3	2.9	1.2	0.2
10647	B	Bm		12-50	6.2	0.25	40	0.5	1.3	0.7	0.5
10648	C	Ck/IICk		50-140	8.2	0.37	37	0.8	1.4	1.5	0.6
10649	PM128 A	Ah	ACEgl	0-34	6.4	0.58	66	0.3	3.6	1.3	0.2
10650	B	Bgj		34-70	6.4	0.23	37	0.2	1.3	0.7	0.2
10651	C	Cgj		70-220	5.8	0.18	45	0.7	0.5	0.3	1.0
10652	PM130 A	Ah/Bm/Ahb	CNN	*	5.5	0.28	64	0.3	1.1	0.7	0.3
10653	B	Bnj		*	6.2	0.40	43	1.6	1.3	0.8	1.6
10654	C	Ck/Ck2/IICk		*	7.7	0.59	47	3.4	1.3	0.8	3.3
10655	PM131 A	Ah	VTR	0-3	5.9	2.43	74	12.9	5.4	3.6	6.1
10656	B	Bnt		*	7.9	1.97	63	21.7	2.7	1.4	15.3
10657	C	B/C		*	8.3	9.73	84	123	21.3	13.0	29.8
10658	PM132 A	Ah1/Ah2		*	5.3	0.43	61	2.3	0.9	0.6	2.8
10659	B	Bnt1/Bnt2		*	7.4	1.42	48	12.4	1.5	1.2	10.7
10660	C	Csk/IICsk		*	8.1	2.69	55	20.4	7.4	4.1	8.5
10661	PM133 A	Ah		*	6.2	0.85	47	7.7	0.5	0.2	13.4
10662	B	Bnt		*	7.2	1.47	65	14.9	0.9	0.4	18.3
10663	C	Csk/Csakgj		*	8.2	10.7	90	100	21.3	28.4	20.1
10664	PM140 A	Apk/Bmk	EORca	0-18	7.5	0.97	44	1.1	7.4	2.0	0.5

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10665	B	Ck		18-190	8.1	0.35	42	0.6	2.2	1.0	0.4
10666	PM143 A	Ah	IRM	0-26	6.0	0.29	44	0.3	1.6	0.7	0.3
10667	B	Bm/BC		26-100	6.5	0.26	25	0.5	1.3	0.6	0.5
10668	C	Ckgj		100-200	6.6	0.32	24	1.0	1.1	0.6	1.0
10669	PM145 A	Apk	ZGW	0-10	7.2	1.38	47	0.3	9.1	2.9	0.1
10670	B	Btjk		10-42	8.0	0.54	39	0.4	2.6	1.3	0.3
10671	C	Cksgj		42-200	8.0	3.76	42	3.7	22.6	31.3	0.7
10672	PM148 A	Ap/Ahgj	EORgl	0-50	5.6	0.54	50	0.4	2.8	1.3	0.3
10673	B	Ahgj		50-80	6.2	0.32	38	0.6	1.1	0.7	0.6
10674	C	Ckg		100-200	7.2	0.41	57	0.4	1.9	1.3	0.3
10675	PM149 A	Apk/Ahk	FLT	0-41	7.2	0.72	63	0.4	4.8	2.2	0.2
10676	B	Bgk		41-56	7.9	0.85	56	0.6	5.9	2.9	0.3
10677	C	Cgk		56-200	7.9	2.76	50	3.2	20.4	17.2	0.7
10678	PM151	Apk	EOR	0-10	6.9	0.75	47	0.2	4.3	1.5	0.1
10679		Bmk		10-30	7.6	0.62	37	0.4	4.5	1.5	0.2
10680		Cca/Ck		30-200	8.2	0.93	42	2.9	2.7	4.1	1.6
10681	PM156	Ah	EOR	0-14	5.8	0.21	59	0.4	1.1	0.6	0.4
10682		Bm		38	6.5	0.24	39	0.8	1.2	0.6	0.8
10683		Bck		60	7.0	0.23	40	0.6	1.0	0.7	0.7
10684		Cca/Ck		160	8.0	1.10	44	1.9	5.4	5.3	0.8
10685	PM160	Ah	EOR	0-10	5.8	0.26	51	0.4	1.3	0.7	0.4
10686		Bm/BC		10-40	6.6	0.24	44	0.4	1.4	0.7	0.4
10687		Cca/Ck		40-155	8.2	0.41	44	2.1	1.0	1.4	1.9
10712	PM165	Bm/BC	EOR	30-65	6.4	0.39	36	0.7	1.9	1.2	0.5
10713		Ckgj		65-85	7.9	3.58	45	6.9	20.4	25.8	1.4
10714		Ck		85-153	8.3	1.49	24	5.6	3.5	7.8	2.3

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10716	PM168	Bmk/BCk	EORsc	10-85	8.0	0.53	47	0.3	4.0	1.5	0.2
10717		Ccas		85-100	8.0	4.54	40	6.4	25.9	41.4	1.1
10718		Csk		100-200	8.0	4.93	44	10.6	24.5	45.2	1.8
10720	PM169	Bgjk	ACEgl	40-90	6.8	1.25	46	1.3	8.7	3.8	0.5
10721		Ckg		90-200	8.1	0.32	42	0.5	1.9	0.7	0.4
10723	PM175	Bmk	EOR	10-27	7.7	0.46	40	0.3	3.2	1.1	0.2
10724		Ck		27-140	8.2	0.41	42	1.4	1.1	1.8	1.2
10726	PM178	Bm	EORgl	20-50	6.5	0.23	44	0.5	1.0	0.7	0.5
10727		Ckgj/Ckg		50-200	8.2	0.67	47	1.9	1.9	3.1	1.2
10729	PM182	Bm	EOR	10-32	6.2	0.19	39	0.6	0.8	0.5	0.8
10730		Ck		32-200	8.4	0.66	42	3.8	0.8	2.3	3.0
10732	PM186	Bm	EOR	9-25	7.2	0.40	35	0.7	1.9	0.9	0.6
10733		Ck		25-200	8.3	0.53	39	1.7	1.3	2.5	1.2
10735	PM191	Ap/Ah	EOR	0-25	6.5	0.31	34	0.9	1.1	0.7	0.9
10736		Bm		25-60	8.2	0.52	39	2.2	1.4	2.1	1.6
10737		Ck		60-140	8.7	0.52	42	1.6	0.6	3.2	1.2
10739	PM193	Bm	EOR	10-26	7.4	0.49	41	0.3	3.2	1.4	0.2
10740		Ck1		26-90	8.4	0.40	38	1.1	1.0	2.3	0.9
10741		Ck2		90-130	8.6	0.48	25	1.7	0.7	2.6	1.3
10742		Ck3		130-200	8.6	0.57	37	3.5	0.6	2.0	3.0
10744	PM195	B	EORgl		7.1	0.36	37	0.6	2.1	1.3	0.4
10745		C			8.2	0.38	41	0.9	1.6	1.7	0.7
10746		D			8.4	0.45	33	2.1	0.8	2.0	1.8
10749	PM213	B	COR		7.2	0.87	59	5.5	0.8	1.9	4.7

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10750		C			8.2	2.37	71	13.3	4.2	10.9	4.8
10752	PM215	B	EOR		7.2	0.36	30	0.8	2.0	1.0	0.6
10753		C			7.9	2.95	45	5.0	24.6	12.8	1.2
10755	PM218	Ae	KLM	11-27	6.7	0.50	26	4.5	0.9	0.5	5.4
10756		Bnt		27-46	8.5	10.5	57	95.7	22.0	34.5	18.0
10757		Csak			8.4	8.26	50	63.3	20.7	24.1	13.4
10758		Ck			8.0	2.48	50	23.6	2.0	2.0	16.6
10760	PM221	Bm	FMN	5-19	8.8	3.04	63	34.1	3.3	1.3	22.5
10761		Bgsk		19-46	9.7	9.36	70	101	0.7	0.9	115.8
10762		Cskg1		46-80	9.9	9.14	116	109	<0.1	0.4	230.3
10763		Cskg2		80-200	9.9	5.53	183	69.1	0.5	0.3	105.3
10765	PM225	B	EOR		6.4	0.29	37	0.6	1.6	0.7	0.6
10766		C			7.8	0.41	36	0.6	2.8	1.1	0.4
10767		D			8.3	0.92	42	3.4	2.2	4.3	1.9
10769	PM232	B	ZGW		7.4	2.01	83	20.1	1.2	1.5	17.3
10770		C			7.3	16.5	60	174	18.8	48.5	30.0
10771		D			8.4	12.2	136	113	20.7	31.5	22.1
10772		E			8.4	12.8	82	134	9.3	31.7	29.7
10773		F			8.2	8.84	179	69.0	22.6	16.1	15.7
10775	PM234	B	ZGW		9.1	11.8	63	143	2.0	2.9	91.7
10776		C			9.0	12.2	57	149	2.4	4.3	81.9
10778	PM235	B	KLM		7.6	2.01	46	19.1	0.9	1.8	16.6
10779		C			8.2	13.3	94	121	23.8	67.4	18.0
10780		D			8.4	5.48	38	48.4	4.9	13.2	16.1
10781		E			8.1	9.53	106	84.4	21.3	36.8	15.7
10783	PM240	B	EORsc		7.1	0.99	39	1.1	3.7	4.2	0.6

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10784		C			8.1	0.60	39	1.1	2.2	2.9	0.7
10785		D			8.1	5.18	45	13.8	24.1	41.6	2.4
10786		E			8.0	5.58	45	21.8	24.6	38.5	3.9
10788	PM243	B	EORsc		7.2	0.55	36	0.8	3.6	1.2	0.5
10789		C			8.0	0.44	40	0.8	2.6	0.9	0.6
10790		D			7.8	3.84	38	11.8	27.1	12.2	2.7
10791		E			7.8	4.55	46	15.8	25.1	23.6	3.2
10793	PM245*	B	ZGW		8.6	0.86	54	1.2	0.5	7.1	0.6
10794		C			8.2	1.58	36	2.4	3.0	11.0	0.9
10796	PM248	B	IRM		6.8	0.32	26	0.4	1.3	0.7	0.4
10797		C			7.9	0.87	27	0.6	4.2	2.4	0.3
10798		D			8.2	0.69	31	0.4	2.9	2.4	0.2
10799		E			8.5	0.52	25	1.0	1.0	2.2	0.8
10801	PM252	B	EOR		7.1	0.58	40	0.5	3.4	1.8	0.3
10802		C			8.2	0.38	40	0.3	2.1	1.1	0.2
10803		D			8.1	0.93	32	2.7	2.6	3.4	1.5
10804		E			8.0	2.56	74	9.2	8.2	13.7	2.8
10810	PM256	B	FST		7.9	3.12	67	9.4	11.3	18.9	2.4
10811		C			7.8	6.19	63	15.9	28.0	57.7	2.4
10812		D			6.2	7.40	49	20.4	23.0	78.6	2.9
10818	PM260	B Bm	PRO	26-65	5.9	0.66	49	1.4	2.8	1.9	0.9
10819		C Btj		65-95	6.1	0.36	49	1.1	1.3	0.8	1.1
10820		D IICk		95-135+	7.8	0.46	52	1.9	1.6	1.0	1.7
10822	PM261	B	BEL		5.5	0.34	51	0.6	1.6	0.9	0.5
10823		C			5.7	0.37	47	0.9	1.5	1.0	0.8

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10824		D			6.6	0.24	52	0.6	1.2	0.5	0.6
10825		E			7.7	0.35	70	0.6	2.1	0.9	0.5
10827	PM262	Bm	KUR	18-60	6.6	0.25	45	0.5	1.4	0.9	0.4
10828		Ck		60-120	8.3	0.48	46	1.7	1.3	2.0	1.3
10830	PC268	B Bt	LFE	10-42	6.8	0.38	58	0.6	1.1	1.7	0.5
10831		C Ck		42-130	8.4	0.61	58	2.2	1.2	2.6	1.6
10832		D IICk		130-160	8.1	0.60	24	1.4	2.0	1.4	1.1
10834	PM274	Bm	KUR	11-45	6.8	0.29	34	0.5	1.6	1.0	0.5
10835		Ck		45-200	8.6	0.97	43	6.6	1.2	2.0	5.2
11017	PM300	Bnt	BFD	20-35	6.8	0.43	63	3.3	0.3	0.3	6.1
11018		BCks/ Csak		35-100	7.9	4.25	73	18.8	27.2	16.0	4.0
11022	PM316	Btj/BC	HND	8-30	6.4	0.29	42	0.9	1.4	0.8	0.9
11023		Csca/ Csk		30-200	7.8	1.79	42	3.9	8.5	8.6	1.3
11024	PM320	Bm	HND	14-26	5.9	0.20	39	0.9	0.7	0.4	1.2
11025		BC		26-58	6.1	0.18	34	0.9	0.7	0.3	1.2
11026		Csca/ Cskgj		58-150	8.1	0.38	41	2.0	1.0	1.1	1.9
11027	PM326	Bgk	ZGW	20-47	7.8	0.55	48	2.3	1.8	1.0	2.0
11028		Ckg/ Ckg2		47-200	7.2	0.77	49	4.0	2.6	1.8	2.7
11029	PM338	Bnt	BFD	22-53	7.3	1.54	60	9.4	1.7	5.9	4.8
11030		Csk/Cskg		53-200	8.1	8.28	77	28.8	22.3	91.3	3.8
11031	PM342	Btj	HND	9-60	6.3	0.41	41	0.9	2.4	1.0	0.7
11032		IICk		60-105	7.7	0.55	38	1.0	2.6	1.6	0.7
11033	PM356	Bm	KUR	10-30	6.5	0.72	38	0.6	3.6	1.9	0.4

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
11034		Ck1/Ck2		30-200	7.8	3.41	42	2.7	27.7	22.3	0.5
11035	PM361	Ae	PRO	24-40	5.6	0.26	50	0.3	0.8	0.4	0.3
11036		Btj		40-80	5.9	0.32	43	0.4	1.8	0.7	0.4
11037		IIC1/IICk2		80-200	8.0	0.28	43	0.5	1.6	0.8	0.5
10953	KD002	Btnj	FST	17-42	5.7	0.45	55	2.1	1.0	0.7	2.2
10954		Ckgj		85-160	8.3	0.88	39	7.0	1.0	0.8	7.5
10955		Ckg		160-200	8.7	0.98	99	8.7	0.4	0.3	14.3
10956	KD006	Bnt	VTR	16-45	7.2	0.80	50	6.9	0.8	0.4	8.8
10957		Csk		45-200	8.0	8.12	73	61.9	23.4	20.5	13.2
10960	KD010	Ae/AB	KRK	12-32	5.9	0.20	47	0.7	1.0	0.4	0.8
10961		Bt		32-52	6.4	0.33	42	0.9	1.6	0.7	0.8
10962		IICk		75+	7.4	0.70	42	1.1	3.4	1.7	0.7
10963	KD012	Bm	OVE	13-49	5.8	0.17	34	0.6	0.8	0.5	0.8
10964		Btjk		49-75	6.3	0.28	34	1.1	0.9	0.7	1.3
10965		Ck		75+	7.8	0.85	42	3.2	2.3	2.6	2.0
10966	KD014	Bm	PRO	17-58	6.6	0.26	43	0.8	1.1	0.9	0.8
10967		Ck/ IICkgj		58-130+	8.2	0.67	49	3.1	1.3	2.4	2.3
10968	KD020	Bnjtj		35-51	7.4	0.58	42	2.2	2.0	2.0	1.6
10969		Ck/ Csk		62-200	8.2	2.17	51	13.2	3.7	6.5	5.9
10970	KD021	Bm	HND	10-26	6.1	0.27	43	1.2	1.1	0.8	1.2
10971		BC		26-47	7.0	0.91	46	1.9	3.7	3.5	1.0
10972		Ck/ IICk		47-200	8.1	2.82	50	14.0	6.1	13.9	4.4
10975	KD037	Bm	HND	14-32	8.0	0.38	43	0.4	2.1	0.9	0.4

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
10976		Ck1/Ck2		32-145+	8.2	0.43	39	1.9	1.2	1.4	1.7
10980	KD044	Bnjtj	HNDsc	14-51	6.5	0.23	36	0.7	0.8	0.8	0.7
10981		BCk/ Csak/ Csk		51-200	7.9	5.21	50	15.6	24.4	42.2	2.7
10982	KD052	Bnjt	HND	17-58	5.4	0.18	42	0.7	0.7	0.5	0.9
10983		BC/ Cgj/ Cskgj		58-120+	6.5	0.58	35	2.7	1.9	1.1	2.2
11103	WP018	Bm	CFD	15-53	7.3	1.26	37	1.5	7.5	5.2	0.6
11104		Cca		53-200	8.0	6.48	64	23.1	22.5	66.5	3.5
11105	WP027	Bm	CHN	15-46	7.9	0.32	38	0.3	2.1	0.7	0.2
11106		Cca/ IICca		46-200	8.1	3.48	41	3.7	19.3	30.8	0.7
11107	WP045	Bm	CVDyc	7-40	7.3	0.54	41	0.4	3.2	2.2	0.2
11108		Cca/Ccasa		40-200	8.1	8.29	46	32.0	21.6	92.6	4.2
11109	WP068	Bm	BVL	8-31	7.4	0.47	47	0.7	2.8	2.2	0.4
11110		Cca		31-200	8.8	0.88	41	5.5	0.6	3.1	4.0
11111	WP112	Bg	HNDglsc	18-37	7.0	2.21	44	17.4	4.9	3.3	8.6
11112		Cg		37-200	8.6	10.8	88	114	20.3	17.5	26.2
11113	WP119	Bnt	HKR	9-35	7.5	4.84	66	26.6	21.2	21.3	5.8
11114		Cca/IICg		35-200	8.1	6.58	56	49.3	22.3	25.8	10.1
11115	WP125	Btj	ZGWsa	10-50	7.8	9.34	78	92.3	23.6	36.0	16.9
11116		Cg/Ckg		50-200	8.2	11.8	87	112	19.9	41.8	20.2
11117	WP139	Btgj	HNDgl	17-25	5.8	1.30	51	2.2	6.3	3.5	1.0
11118		C/IIC		25-200	7.0	0.85	50	1.9	5.3	2.1	1.0
11119	WP148	Bm	MET	16-31	5.7	0.17	53	0.3	0.6	0.1	0.5

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
11120		C/IIC		31-200	6.3	0.29	30	0.8	1.0	0.4	1.0
11121	WP152	Bnt	HKR	7-16	7.2	1.57	53	14.8	0.8	0.6	17.8
11122		Ck/Cksa		16-200	8.2	2.56	282	22.0	2.6	2.0	14.5
11123	WP156	Bnt	VTR	11-29	5.9	2.08	53	19.5	0.9	0.7	22.3
11124		BCs/Csk		29-200	8.4	9.29	146	85.6	19.9	13.0	21.1
11125	WP162	Bm	DCYsc	12-20	6.9	3.61	37	34.4	1.5	2.2	25.4
11126		Ck		20-200	9.3	1.83	132	17.1	0.4	0.3	30.7
11127	WP170	Bm	MET	16-31	5.8	0.39	36	0.5	1.4	0.9	0.5
11128		BC/Ck		31-200	7.7	0.52	32	2.8	1.2	1.1	2.5
11129	WP197	Bm	HND	11-21	5.6	0.18	47	0.5	0.7	0.4	0.7
11130		BC/Cca		31-200	8.0	0.84	48	3.8	2.0	3.0	2.4
11131	WP223	Bm	MAB	11-24	6.0	0.16	44	0.4	0.6	0.5	0.5
11132		BC/Ccas		24-200	8.1	3.08	44	17.1	6.9	14.1	5.3
11133	WP229	Btnj	CCL	15-29	6.0	0.30	40	2.9	0.2	0.4	5.4
11134		Csa		29-200	8.0	6.92	51	45.6	22.2	29.8	8.9
11135	WP235	Bnt	HUK	13-30	6.7	0.85	42	7.0	0.4	0.2	12.2
11136		Ccasa		30-200	8.2	6.85	77	55.7	17.1	18.1	13.3
11137	WP247	Bnt	HDY	20-45	6.5	5.41	100	42.3	6.2	12.2	13.9
11138		Csk		45-200	4.7	7.72	135	65.9	21.8	20.2	14.4
11139	WP251	Btj	MAB	10-30	6.0	0.44	44	0.6	2.0	1.5	0.5
11140		BC/Cca		30-155	8.2	0.45	63	1.5	1.6	1.6	1.2
11141	WP260	Bnt	HUK	17-30	6.5	0.86	79	7.7	0.6	0.5	10.9
11142		Ccasa		30-200	8.1	7.60	68	56.7	25.7	37.4	10.1

Table 7D-1 Alberta Soil Chemistry (cont'd)

LAB #	Site Description	Horizon	Soil Series	Depth (cm)	pH	E.C. (mS/cm)	SAT (%)	Saturated Paste Basis soluble ions Na mEq/L	Ca	Mg	SAR
11145	WP272	Bnt	HUK	16-27	5.8	0.93	40	9.1	0.8	0.3	12.1
11146		Ccasa		27-200	8.2	10.1	58	86.4	24.0	50.7	14.1
11149	WP280	Bm	MABsc	14-29	5.7	0.33	45	1.0	1.1	1.1	1.0
11150		Ck		29-200	7.4	1.19	44	9.1	2.1	1.2	7.0
11151	WP300	Btnj	MAB	10-25	6.5	0.56	52	0.5	3.6	2.1	0.3
11152		Cca		25-200	8.6	0.53	46	2.5	0.7	1.5	2.4
11153	WP322	Btj	MAB	10-26	6.6	0.34	40	0.3	2.2	1.1	0.2
11154		Cca		26-200	8.2	0.35	36	1.0	1.7	1.3	0.8

Appendix 7E Alberta Pump Station Inspection Sites

Table 7E-1 Alberta Pump Station Inspection Sites

Surveyor	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position (Site)	Landscape Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
PM	PS1-01	--	--	--	NE	28	38	8	494432	5794757			0			Cu	15		
PM	PS1-02	--	--	--	NE	28	38	8	494432	5794625			0			Cu	14		
PM	PS1-03	--	--	--	NE	28	38	8	494433	5794557			0			Cu	14		
PM	PS1-04	--	--	--	NE	28	38	8	494432	5794456			0			Cu	14		
PM	PS1-05	--	--	--	NE	28	38	8	494432	5794356			0			Cu	13		
PM	PS1-06	--	--	--	NE	28	38	8	494331	5794764			0			Cu	9		
PM	PS1-07	--	--	--	NE	28	38	8	494329	5794663			0			Cu	12		
PM	PS1-08	--	--	--	NE	28	38	8	494328	5794564			0			Cu	13		
PM	PS1-09	--	--	--	NE	28	38	8	494328	5794464			0			Cu	19		
PM	PS1-10	--	--	--	NE	28	8	8	494328	5794364			0			Cu	11		
PM	PS1-11	--	--	--	NE	28	38	8	494230	5794793			0			Cu	9		
PM	PS1-13	--	--	--	NE	28	38	8	494257	5794571			0			HL	12		
PM	PS1-14	--	--	--	NE	28	38	8	494269	5794469			0			HL	20		
PM	PS1-15	--	--	--	NE	28	38	8	494281	4794372			0			HL	12		
PM	PS1-16	--	--	--	NE	28	38	8	494129	5794765			0			HL	11		
PM	PS1-17	--	--	--	NE	28	38	8	494142	5794666			0			HL	10		
PM	PS1-18	--	--	--	NE	28	38	8	494157	5794566			0			HL	12		
PM	PS1-19	--	--	--	NE	28	38	8	494170	5794467			0			HL	13		
PM	PS1-20	--	--	--	NE	28	38	8	494180	5794365			0			HL	11		
PM	PS1-21	--	--	--	NE	28	38	8	494029	5794765			0			HL	10		
PM	PS1-22	--	--	--	NE	28	38	8	494041	5794666			0			HL	13		
PM	PS1-23	--	--	--	NE	28	38	8	494057	5794567			0			HL	30		
PM	PS1-24	--	--	--	NE	28	38	8	494068	5794469			0			HL	14		
PM	PS1-25	--	--	--	NE	28	38	8	494078	5794368			0			HL	12		
LL	PS2-01	ODBC	WWT	GF	SW	23	34	5	526301	5753086	U	S2	--	M	3-4	Cu	11	Rapid	Good colour change.
LL	PS2-02	ODBC	WWT	GF	SW	23	34	5	526347	5753088	U	S2	--	L	3-4	Cu	10	Rapid	Good colour change.
LL	PS2-03	ODBC	WWT	GF	SW	23	34	5	526398	5753092	U	S2	--	U	3-4	Cu	16	Rapid	Good colour change.
LL	PS2-04	ODBC	WWT	GF	SW	23	34	5	526451	5753087	U	S2	--	M	3-4	Cu	14	Rapid	Good colour change.
LL	PS2-05	ODBC	WWT	GF	SW	23	34	5	526499	5753090	U	S2	--	L	3-4	Cu	15	Rapid	Good colour change.
LL	PS2-06	ODBC	WWT	GF	SW	23	34	5	526501	5753042	U	S2	--	M	3-4	Cu	14	Rapid	Poor colour change.
LL	PS2-07	ODBC	WWT	GF	SW	23	34	5	526447	5753040	U	S2	--	M	3-4	Cu	11	Rapid	Good colour change.
LL	PS2-08	ODBC	WWT	GF	SW	23	34	5	526400	5753041	U	S2	--	M	3-4	Cu	12	Rapid	Good colour change.
LL	PS2-09	ODBC	WWT	GF	SW	23	34	5	526345	5753041	U	S2	--	U	3-4	Cu	15	Rapid	Good colour change.
LL	PS2-10	ODBC	WWT	GF	SW	23	34	5	526298	5753039	U	S2	--	U	3-4	Cu	16	Rapid	Good colour change.
LL	PS2-11	ODBC	WWT	GF	SW	23	34	5	526303	5752992	U	S2	--	L	3-4	Cu	15	Rapid	Good colour change.
LL	PS2-12	ODBC	WWT	GF	SW	23	34	5	526358	5752985	U	S2	--	M	3-4	Cu	17	Rapid	Good colour change.
LL	PS2-13	ODBC	WWT	GF	SW	23	34	5	526404	5752991	U	S2	--	T	3-4	Cu	15	Rapid	Good colour change.
LL	PS2-14	ODBC	WWT	GF	SW	23	34	5	526450	5752992	U	S2	--	M	3-4	Cu	15	Rapid	Poor colour change.
LL	PS2-15	ODBC	WWT	GF	SW	23	34	5	526500	5752995	U	S2	--	U	3-4	Cu	14	Rapid	Good colour change.
LL	PS2-16	ODBC	WWT	GF	SW	23	34	5	526507	5752941	U	S1	--	L	3	Cu	13	Rapid	Good colour change.

Table 7E-1 Alberta Pump Station Inspection Sites (cont'd)

Surveyor	Site #	Subgroup	Soil Series	Parent Material	QR	Sec	Twp	Rg	Easting	Northing	Surface Expression	Surf Stone	Slope %	Slope Position (Site)	Landscape Slope Class	Land Use	Topsoil Depth	Drainage	Site Note
LL	PS2-17	ODBC	WWT	GF	SW	23	34	5	526458	5752938	U	S1	--	U	3	Cu	17	Rapid	Good colour change.
LL	PS2-18	ODBC	WWT	GF	SW	23	34	5	526400	5752934	U	S2	--	M	3	Cu	15	Rapid	Poor colour change.
LL	PS2-19	ODBC	WWT	GF	SW	23	34	5	526349	5752940	U	S2	--	U	3	Cu	11	Rapid	Poor colour change.
LL	PS2-20	ODBC	WWT	GF	SW	23	34	5	526300	5752945	U	S2	--	M	3	Cu	18	Rapid	Good colour change.
LL	PS2-21	ODBC	WWT	GF	SW	23	34	5	526307	5752875	U	S1	--	U	3	Cu	15	Rapid	Good colour change.
LL	PS2-22	ODBC	WWT	GF	SW	23	34	5	526352	5752872	U	S1	--	L	3	Cu	13	Rapid	Good colour change.
LL	PS2-23	ODBC	WWT	GF	SW	23	34	5	526398	5752877	U	S2	--	M	3	Cu	15	Rapid	Good colour change.
LL	PS2-24	ODBC	WWT	GF	SW	23	34	5	526449	5752880	U	S2	--	M	3	Cu	13	Rapid	Good colour change.
LL	PS2-25	ODBC	WWT	GF	SW	23	34	5	526503	5752883	U	S2	--	L	3	Cu	13	Rapid	Good colour change.
WP	PS3-01	ODBC	WWT	GF	NE	29	28	4	532624	6976733	U	S-1	1	D	2	NR	15	Well	Good colour change.
WP	PS3-02	DBSS	HKR	M	NE	29	28	4	532736	5697681	U	S-1	1	D	2	NR	7	Moderately Well	Good colour change.
WP	PS3-03	SZDBC	FST	M	NE	29	28	4	532832	5697689	U	S-1	1	D	2	NR	7	Well	Poor colour change.
WP	PS3-04	SZBC	FST	M	NE	29	28	4	532932	5697692	U	S-1	1	D	2	NR	7	Well	Good colour change.
WP	PS3-05	SZBC	FST	M	NE	29	28	4	532936	5697792	U	S-1	2	U	3	NR	7	Moderately Well	Good colour change.
WP	PS3-06	DBSS	HKR	M	NE	29	28	4	532831	5697799	U	S-1	1	D	2	NR	8	Imperfect	Good colour change.
WP	PS3-07	SZBC	FST	M	NE	29	28	4	532729	5697792	U	S-1	2	L	2	NR	7	Moderately Well	
WP	PS3-08	SZBC	FST	M	NE	29	28	4	532630	5697794	U	S-1	2	M	3	NR	7	Well	Good colour change.
WP	PS3-09	ODBC	HND	M	SE	32	28	4	532617	5697970	U	S-1	2	L	2	Cu	8	Well	Ok colour change.
WP	PS3-10	ODBC	HND	M	SE	32	28	4	532717	5697972	U	S-2	2	U	2	Cu	10	Well	Good colour change.
WP	PS3-11	DBSO	BFD	M	SE	32	28	4	532822	5697986	U	S-2	2	U	2	Cu	9	Well	Poor colour change.
WP	PS3-12	DBSO	BFD	M	SE	32	28	4	532926	5697983	U	S-1	2	L	2	Cu	9	Well	Ok colour change.
WP	PS3-13	ODBC	HND	M	SE	32	28	4	532917	5697937	U	S-1	3	M	3	Cu	8	Well	Good colour change.
WP	PS3-14	SZBC	FST	M	SE	32	28	4	532816	5697931	U	S-1	3	C	3	Cu	7	Well	Good colour change.
WP	PS3-15	ODBC	HND	M	SE	32	28	4	532712	5697932	U	S-2	1	L	1	Cu	6	Well	Poor colour change.
WP	PS3-16	DBSO	BFD	M	SE	32	28	4	532608	5697955	U	S-2	2	T	2	Cu	7	Well	Ok colour change.
WP	PS4-01	OBC	CHNsc	GL	SE	10	22	3	546570	5673482	U	S-1	1	T	2	NR	7	Well	Poor colour change.
WP	PS4-02	OBC	CHNsc	GL	SE	10	22	3	546575	5633380	U	S-0	2	M	2	NR	7	Well	
WP	PS4-03	OBC	CHNsc	GL	SE	10	22	3	546575	5633200	U	S-0	2	M	2	NR	9	Well	
WP	PS4-04	OBC	CHNsc	GL	SE	10	22	3	546589	5633179	U	S-0	2	M	2	NR	8	Well	Poor colour change.
WP	PS4-05	OBC	CHNsc	GL	SE	10	22	5	546860	5633185	U	S-0	2	L	2	NR	8	Well	Poor colour change.
WP	PS4-06	OBC	CHNsc	GL	SE	10	23	3	546866	5633284	U	S-1	1	C	2	NR	10	Well	Good colour change.
WP	PS4-07	OBC	CHNsc	GL	SE	10	22	3	546546	5633391	U	S-1	1	C	2	NR	8	Well	Good colour change.
WP	PS4-08	OBC	CHNsc	GL	SE	10	22	3	546853	5633484	U	S-1	2	M	2	NR	7	Well	Poor colour change.
WP	PS4-09	OBC	CHNsc	GL	SE	10	22	3	546673	5633489	U	S-0	3	M	3	NR	6	Well	Poor colour change.
WP	PS4-10	OBC	CHNsc	GL	SE	10	22	3	546676	5633389	U	S-1	3	U	3	NR	6	Well	Good colour change.
WP	PS4-11	OBC	CHNsc	GL	SE	10	22	3	546678	5633290	U	S-0	4	M	3	NR	4	Well	Poor colour change.
WP	PS4-12	OBC	CHNsc	GL	SE	10	22	3	546671	5633197	U	S-0	3	U	3	NR	5	Well	Poor colour change.
WP	PS4-13	OBC	CHNsc	GL	SE	10	22	3	546771	5633196	U	S-0	3	M	3	NR	6	Well	Poor colour change.
WP	PS4-14	OBC	CHNsc	GL	SE	10	22	3	546775	5633298	U	S-0	2	M	3	NR	5	Well	Poor colour change.
WP	PS4-15	OBC	CHNsc	GL	SE	10	22	3	546776	5633395	U	S-0	2	U	3	NR	5	Well	Poor colour change.
WP	PS4-16	OBC	CHNsc	GL	SE	10	22	3	546797	5633491	U	S-0	2	U	3	NR	4	Well	Poor colour change.

Appendix 7F Soil Unit Descriptions Manitoba

Almasippi (ASS) and Almasippi overlying clay (ASSyc) Soil Units

Extent (kilometres/percentage)	ASS = 1.05km/1.05% ASSyc = 2.77km/2.77%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Very coarse glaciolacustrine
Texture: (topsoil/subsoil)	ASS: Fine sand to loamy fine sand ASSyc: Fine sand to loamy fine sand/Clay below 100 cm
Topography/Percent Slope	1-2/0-2%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	6-35 cm/Thicker at headlands, in close proximity to bush and lower slope positions
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark gray, very dark grayish brown (Poor)

PROFILE SITE #: KS159			**ASSyc, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-23	Black	Loamy fine sand	Subangular blocky	Friable
ACk	23-45	Very dark grayish brown	Loamy fine sand	Subangular blocky	Friable
Ccagj	45-65	Grayish brown	Loamy fine sand	Subangular blocky	Friable
Ckgj	65-105	Light yellowish brown	Loamy fine sand	Single grained	Very friable
IICkg	105-200	Olive to pale olive	Silty clay	Massive	Very firm

Comments:

- ASS soils are very coarse textured (fine sand to loamy fine sand) from the surface to trench bottom.
- ASSyc soils are similar to ASS, however have fine to very fine textured (silty clay, sandy clay, clay, heavy clay) sediments at some depth between 100 – 200 cm. These soils typically have perched water tables above the fine textured sediments.
- Seepage is common in these soils and generally occurred at depths ranging from 60 cm to 170 cm.
- Topsoil depths ranged from 6 cm to 35 cm, although within inspection sites were most commonly between 20 and 24 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Severe, particularly during the spring season following years of low-residue, specialty crop production (e.g. potatoes, beans).

- ASSyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- These soils are susceptible to trench instability during construction activities.
- ASS soils are similar to WWC soils, but do not possess a B horizon

Birkenhead (BKA) and Birkenhead overlying clay (BKAyc) Soil Units

Extent (kilometres/percentage)	BKA = 0.04km/0.04% BKAyc = 0.2km/0.2%
Soil Classification	Calcareous Black Chernozem
Parent Material	Very coarse glaciolacustrine and glaciofluvial
Texture: (topsoil/subsoil)	BKA: Loamy sand to gravel BKAyc: Loamy sand to gravel/Clay below 100 cm
Topography/Percent Slope	2-3/0.5-5%
Surface Stoniness	0
Drainage Class	Moderately well drained
Topsoil Depth/Relationship to Topography	19-42 cm
Land Use	Cultivated, Woodland
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Very dark gray/Brown (Good)
PROFILE SITE #: N/A	

Comments:

- BKA soils occur along former beach ridges and occur in close association with CTZ soils along the RoW.
- Seepage may be present in these soils during relatively wet periods.
- The wind erosion risk is Severe.
- BKAyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- These soils are susceptible to trench instability during construction activities.

Blumengart (BMG) Soil Unit

Extent (kilometres/percentage)	BMG = 0.91km/0.91%
Soil Classification	Gleyed Cumulic Humic Regosol
Parent Material	Fine recent glaciofluvial
Texture: (topsoil/subsoil)	Silty clay to clay
Topography/Percent Slope	2-3/0.6-5%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	18-42 cm
Land Use	Bush, Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Dark gray/ Gray to dark gray (Poor)
PROFILE SITE #: N/A	

Comments:

- BMG soils are fine textured (silty clay to clay) from the surface to trench bottom.
- Topsoil depths ranged from 18 cm to 42 cm.
- These fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine textured, level to nearly level soils units.
- BMG occur in floodplain landscapes, in association with PME and DHO.

Blumenfeld (BNF), and Blumenfeld drained, overlying clay (BNFdyc) Soil Units

Extent (kilometres/percentage)			BNF = 0.06km/0.06% BNFdyc = 0.2km/0.2%		
Soil Classification			Rego Humic Gleysol		
Parent Material			Medium glaciofluvial and glaciolacustrine		
Texture: (topsoil/subsoil)			BNF: Very fine sandy loam, loam, silt loam BNFdyc: Very fine sandy loam, loam, silt loam/Clay below 100 cm		
Topography/Percent Slope			3/3-5%		
Surface Stoniness			0		
Drainage Class			Poorly drained		
Topsoil Depth/Relationship to Topography			23-33 cm		
Land Use			Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray/Dark grayish brown, very dark gray (Poor)		
PROFILE SITE #: KS235			**BNFyc, Rego Humic Gleysol**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Apk	0-23	Black	Very fine sandy loam	Angular blocky	Friable
ACkg	23-37	Very dark gray	Very fine sandy loam	Angular blocky	Friable
Cca	37-60	Gray	Very fine sandy loam	Angular blocky	Friable
Ckg	60-150	Olive	Loamy fine sand	Single grained	Non-sticky
IICkg	150-200	-	Clay	Massive	Very firm

Comments:

- BNF soils are dominantly medium textured (very fine sandy loam, loam, silt loam). Strata below the solum commonly include variable textures including fine sandy loam, silty clay loam and clay loam.
- BNFyc soils are similar to BNF, but have fine textured (clay) at some depth below 100 cm.
- BNFdyc soils are similar to BNFyc, but have been modified by drainage improvements.
- Seepage is common in these soils.
- Topsoil depths ranged from 23 cm to 33 cm.
- The wind erosion risk is Low (Moderate if VFSL surface texture).
- BNF soils occur in level to depressional landscape positions in close association with GDH and RFD soils.

Chortitz (CTZ), Chortitz saline (CTZsa), and Chortitz saline, overlying sand (CTZsays) Soil Units

Extent (kilometres/percentage)			CTZ = 1.33km/1.33% CTZsa = 0.73km/0.73% CTZsays = 0.17km/0.17%		
Soil Classification			Gleyed Cumulic Regosol		
Parent Material			Medium recent fluvial		
Texture: (topsoil/subsoil)			CTZ, CTZsa: Silt loam, loam, clay loam, silty clay loam CTZsays: Silt loam, loam, clay loam, silty clay loam/Sand, fine sand, loamy fine sand below 100 cm		
Topography/Percent Slope			3/2-5%		
Surface Stoniness			0		
Drainage Class			Imperfectly drained		
Topsoil Depth/Relationship to Topography			15-140 cm		
Land Use			Drainage course, Native range, Improved pasture		
Sod Quality (good/poor)			Good		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray, dark gray/Dark gray, olive gray, light olive brown (Poor)		
PROFILE SITE #: KS656			**CTZ-says, Gleyed Humic Regosol**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ahsk	0-42	Very dark gray	Clay loam	Granular	Friable
ACkgj	42-65	Dark gray	Clay	Massive	Firm
Ckg	65-118	Gray	Clay	Massive	Firm
IICkg	118-200	Light olive brown	Loamy fine sand	Single grained	Non sticky

Comments:

- CTZ soils are dominantly medium textured (silt loam, loam, clay loam, silty clay loam) from the surface to trench bottom. Strata consisting of finer textured (clay to silty clay) or coarser textured (fine sand to sandy loam) materials are commonly present.
- CTZys soils are similar to CTZ, but have are coarse textured (sand, fine sand, loamy fine sand) at some depth below 100 cm.
- Seepage is common in these soils and generally occurred at depths ranging from 60 cm to 120 cm.
- CTZ soils have high water tables during the growing season.
- Topsoil depths ranged from 15 cm to 140 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Moderate.
- CTZsa soils are saline in the solum (i.e. A & B horizons) and below. They require alternative 3 lift soil handling where salinity profiles are above guideline criteria as outlined by Pettapiece and Dell (1996).

Dugas (DGS), Dugas saline A/B horizon (DGSsa), and Dugas saline C horizon (DGSsc) Soil Units

Extent (kilometres/percentage)	DGS = 1.16km/1.16% DGSsa = 0.74km/0.74% DGSsc = 0.46km/0.46%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Fine glaciolacustrine veneer overlying very coarse to moderately coarse glaciolacustrine
Texture: (topsoil/subsoil)	Silty clay, clay/Loamy fine sand to sand, very fine sand to fine sandy loam within 100 cm
Topography/Percent Slope	1 - 3/0-5%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	12-45 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Very dark grayish brown, dark gray (Poor)

PROFILE SITE #: KS627			**DGS, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-22	Very dark gray	Clay	Subangular blocky	-
ACgj	22-52	Dark gray	Clay	-	-
Ccagj	52-80	Light brownish gray	Clay loam	-	-
IICkgj	80-120	Light brownish gray	Fine sandy loam	-	-
IICkg	120-200	Yellowish brown	Loamy fine sand	-	-

Comments:

- DGS soils consist of a mantle of fine textured (clay, silty clay) materials overlying very coarse (loamy fine sand, fine sand, sand) to moderately coarse (very fine sand, loamy very fine sand, fine sandy loam) materials within 100 cm of the soil surface.
- DGSsa have salinity in the solum (i.e. A and/or B horizons), while DGSsc soils have saline C horizons.
- Seepage is common in these soils and generally occurred at depths ranging from 50 cm to 120 cm.
- Topsoil depths ranged from 12 cm to 45 cm, although within inspection sites were most commonly between 21 cm and 35 cm. Topsoil depth is generally greater in close proximity to headlands.

- These fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine textured, level to nearly level soils units.
- DGSsa and DGSsc soils require alternative 3 lift soil handling where salinity profiles are above guideline criteria as outlined by Pettapiece and Dell (1996).
- The underlying coarse textured soil is susceptible to trench instability during construction activities.
- DGS soils occur in close association with HND, but do not possess a B horizon.

Deadhorse (DHO), Deadhorse saline (DHOsa, DHOsc), Deadhorse saline, overlying sand (DHOsays, DHOscys), and Deadhorse overlying sand (DHOys) Soil Units

Extent (kilometres/percentage)	DHO = 2.4km/2.4% DHOsa = 0.56km/0.56% DHOsays = 0.91km/0.91% DHOsc = 0.36km/0.36% DHOscys = 0.85km/0.85% DHOys = 0.22km/0.22%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Fine glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	DHO: Silty clay to clay DHOys: Silty clay to clay/Sand below 100 cm
Topography/Percent Slope	1-3/0-5%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	12-42 cm
Land Use	Cultivated, Hayland, Native range
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark gray, gray (Poor)

PROFILE SITE #: WR004			**DHO, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-42	Black	Clay	Granular	Friable
ACk	42-55	Dark gray	Clay	Angular blocky	Firm
Ckgj 1	55-100	Grayish brown	Clay	Massive	Firm
Ckgj2	100-300	Brown	Clay	Massive	Firm
II Ckgj	300-450	Dark grayish brown	Clay (morainal)	Massive	Very firm

Comments:

- DHO soils are fine textured (silty clay to clay) from the surface to trench bottom.
- DHOys soils are similar to DHO, however have coarse textured (fine sand to loamy fine sand) sediments at some depth between 100 – 200 cm. The underlying sand is typically saturated at some depth.
- Topsoil depths ranged from 12 cm to 42 cm, although within inspection sites were most commonly between 18 and 35 cm. Topsoil depth is generally greater in close proximity to headlands.
- These fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.

- It is recommended that the roach is periodically breached maintain surface drainage in these fine textured, level to nearly level soils units.
- DHOsa and DHOsc soils require alternative 3 lift soil handling where salinity profiles are above guideline criteria as outlined by Pettapiece and Dell (1996).
- DHO soils are similar to PME, but do not possess a B horizon.

Denham (DNH) and Denham carbonated (DNHca) Soil Units

Extent (kilometres/percentage)	DNH = 2.46km/2.46% DNHca = 0.28km/0.28%
Soil Classification	Orthic Black Chernozem
Parent Material	Medium to moderately fine glaciolacustrine overlying fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Very fine sandy loam to clay loam/Silty clay, clay, heavy clay
Topography/Percent Slope	1-2/0-2 %
Surface Stoniness	0
Drainage Class	Moderately well drained
Topsoil Depth/Relationship to Topography	16-55 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Very dark grayish brown, dark brown (Good)

PROFILE SITE #: KS401			**DNH, Orthic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-35	Black	Silty clay loam	Granular	Friable
Bm	35-50	Dark brown	Sandy clay loam	Angular blocky	Friable
IICkgj 1	50-170	Brown	Clay	Massive	Firm
IICkgj 2	170-200	Brown	Clay	Massive	Firm

Comments:

- DNH soils are medium to moderately fine textured overlying fine textured within 100 cm of the soil surface.
- DNHca soils are similar to DNH, but have calcium carbonate within the solum (i.e. A and/or B horizons).
- Topsoil depths ranged from 16 cm to 55 cm, although within inspection sites were most commonly between 30 and 36 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low (Moderate if VFSL surface).
- DNH soils occur in close association with RGD and GYV soils, however are moderately well drained.

Edenburg (EBG), and Edenburg saline, overlying clay (EBGscyc) Soil Units

Extent (kilometres/percentage)	EBG = 0.2km/0.2% EBGscyc = 0.29km/0.29%
Soil Classification	Orthic Black Chernozem
Parent Material	Moderately fine glaciofluvial and glaciolacustrine overlying coarse glaciolacustrine
Texture: (topsoil/subsoil)	Clay loam, sandy clay loam, silty clay loam/Loamy fine sand, fine sand within 100 cm
Topography/Percent Slope	1-2/0-2 %
Surface Stoniness	0
Drainage Class	Well drained
Topsoil Depth/Relationship to Topography	15-32 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Very dark grayish brown, dark brown (Good)

PROFILE SITE #: WR005			**EBG, Orthic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-32	Black	Clay loam	Granular	Friable
Bm	32-70	Dark brown	Sandy loam	Angular blocky	Firm
IICkgj	70-210	Brown	Sand	Single grained	Loose
IICkg	210-450	Strong brown	Sand	Single grained	Non-sticky

Comments:

- EBG soils consist of moderately fine textured deposits overlying very coarse textured sediments within 90 cm of the soil surface.
- EBGyc soils are similar to EBG, but have fine textured (clay, silty clay) sediments at some depth below 100 cm.
- EBGsc are similar to EBG, but have soluble salts in the C horizon.
- Topsoil depths ranged from 15 cm to 32 cm.
- The wind erosion risk is Low.
- The underlying coarse textured soil is susceptible to trench instability during construction activities.
- The single EBCsc soil unit along the RoW does not require alternative handling according to criteria outlined by Pettapiece and Dell (1996).

Edkins (EDK) Soil Unit

Extent (kilometres/percentage)	EDK = 0.52km/0.52%
Soil Classification	Rego Humic Gleysol
Parent Material	Medium to moderately fine glaciolacustrine veneer overlying fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Loam, silt loam, clay loam, sandy clay loam, silty clay loam, very fine sandy loam/Silty clay, clay, heavy clay
Topography/Percent Slope	2-3/0.6-5 %
Surface Stoniness	0
Drainage Class	Poorly drained
Topsoil Depth/Relationship to Topography	15-20 cm
Land Use	Woodland, Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Very dark gray, black/Light gray, gray (Good)

PROFILE SITE #: KS263			**EDK, Rego Humic Gleysol**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-12	Black	Sandy loam	Angular blocky	Firm
Ah	12-20	Dark grayish brown	Loam	Angulary blocky	Firm
IICkg	20-200	Gray	Clay	Massive	Very firm

Comments:

- EDK soils are medium to moderately fine textured overlying fine textured within 100 cm of the soil surface.
- Seepage is common in these soils.
- Topsoil depths ranged from 15 cm to 20 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low (Moderate if VFSL surface).
- EDK soils occur in close association with RGD and GYV soils, however are poorly drained.

Elm Creek (EEK) Soil Unit

Extent (kilometres/percentage)	EEK = 0.82km/0.82%
Soil Classification	Gleyed Black Chernozem
Parent Material	Coarse to moderately coarse glaciofluvial and glaciolacustrine overlying fine glaciolacustrine
Texture: (topsoil/subsoil)	Fine sand, loamy fine sand to very fine sand, loamy very fine sand, fine sandy loam/Clay, silty clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	18-50 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray, dark gray/Grayish brown, dark grayish brown (Good)

PROFILE SITE #: KS129			**EEK, Gleyed Calcareous Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-26	Black	Fine sandy loam	Granular	Friable
Bmk	26-34	Dark grayish brown	Fine sandy loam	Angular blocky	Friable
Ccagj	34-50	Gray	Fine sandy loam	Angular blocky	Friable
Ckgj	50-60	Grayish brown	Loam	Massive	Friable
IICkgj 1	60-150	Light yellowish brown	Clay	Massive	Very firm
IICkgj 2	150-200	Light olive brown	Clay	Massive	Very firm

Comments:

- EEK soils are coarse to moderately coarse textured overlying fine textured within 100 cm.
- Seepage is common in these soils.
- Topsoil depths ranged from 18 cm to 50 cm, although within inspection sites were most commonly between 25 and 26 cm.
- The wind erosion risk is Severe.
- EEK soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- EEK soils are similar to RBK, but posses a B horizon.

Gnadenthal (GDH) and Gnadenthal overlying clay (GDHyc) Soil Units

Extent (kilometres/percentage)			GDH = 0.07km/0.07% GDHyc = 0.87km/0.87%		
Soil Classification			Gleyed Rego Black Chernozem		
Parent Material			Medium glaciofluvial and glaciolacustrine overlying fine glaciolacustrine		
Texture: (topsoil/subsoil)			GDH: Very fine sandy loam, loam, silt loam GDHyc: Very fine sandy loam, loam, silt loam/Clay below 100 cm		
Topography/Percent Slope			3/2-5%		
Surface Stoniness			0		
Drainage Class			Imperfectly drained		
Topsoil Depth/Relationship to Topography			15-33 cm		
Land Use			Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray/Dark gray, gray (Poor)		
PROFILE SITE #: KS228			**GDHyc, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Apk	0-33	Black	Loam	Granular	Friable
ACkgj	33-52	Dark gray	Loam	Angular blocky	Friable
Ckgj	52-120	Light olive brown	Fine sandy loam	Massive	Friable
IICkg	120-200	Light olive brown	Clay	Massive	Very firm

Comments:

- GDH soils are dominantly medium textured (very fine sandy loam, loam, silt loam). Strata below the solum commonly include variable textures including fine sandy loam, silty clay loam and clay loam.
- GDHyc soils are similar to GDH, but have fine textured (clay) at some depth below 100 cm.
- Seepage may occur in these soils.
- Topsoil depths ranged from 15 cm to 33 cm.
- The wind erosion risk is Low (Moderate if VFSL surface texture).
- GDH soils occur in close association with RFD and BMG soils.

Graysville (GYV) and Graysville saline (GYVsc) Soil Units

Extent (kilometres/percentage)	GYS = 3.78km/3.78% GYVsc = 0.56km/0.56%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Medium to moderately fine glaciolacustrine overlying fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Loam, silt loam, clay loam, sandy clay loam, silty clay loam, very fine sandy loam/Silty clay, clay, heavy clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	15-60 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Very dark grayish brown, dark grayish brown, dark brown (Good to Poor)

PROFILE SITE #: KS284			**GYV, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-16	Black	Very fine sandy loam	Granular	Friable
Ah	16-32	Black	Very fine sandy loam	Angular blocky	Friable
ACkgj	32-42	Dark grayish brown	Very fine sandy loam	Angular blocky	Friable
IICkgj	42-95	Brown	Silty clay loam	Massive	Firm
IIICkgj	95-200	Light olive brown	Clay	Massive	Firm

Comments:

- GYV soils are medium to moderately fine textured overlying fine textured within 100 cm of the soil surface. The underlying fine textured glaciolacustrine material commonly contains gypsum.
- GYVsc are similar to GYV, but have salinity in subsoil C horizons.
- Topsoil depths ranged from 15 cm to 60 cm, although within inspection sites were most commonly between 16 and 28 cm.
- The wind erosion risk is Low (Moderate if VFSL surface).
- GYV soils occur in close association with RGD soils, but do not possess a B horizon.

Hochfeld (HHF), Hochfeld overblown (HHFo), Hochfeld overlying clay (HHFyc), and Hochfeld overlying loam (HHFyl) Soil Units

Extent (kilometres/percentage)	HHF = 2.12km/2.12% HHFo = 0.22km/0.22% HHFyc = 1.27km/1.27% HHFyl = 0.84km/0.84%
Soil Classification	Orthic Black Chernozem
Parent Material	Moderately coarse glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	HHF: Very fine sand, loamy very fine sand, fine sandy loam HHFyc: Very fine sand, loamy very fine sand, fine sandy loam/Silty clay, clay, heavy clay between 100-200 cm HHFyl: Very fine sand, loamy very fine sand, fine sandy loam/Very fine sandy loam, loam between 100-200 cm
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0-1
Drainage Class	Well drained
Topsoil Depth/Relationship to Topography	14-68 cm/Thicker at headlands, in close proximity to bush and lower slope positions
Land Use	Cultivated, Hayland
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Dark gray, very dark gray/Brown, dark brown (Good)

PROFILE SITE #: KS532			**HHF, Orthic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-20	Very dark gray	Loamy fine sand	Granular	Friable
Bm	20-42	Dark brown	Loamy fine sand	Angular blocky	Friable
Ccagj	42-61	Brown	Fine sand	Angular blocky	Friable
Ckgj	61-120	Yellowish brown	Fine sand	Massive	Very friable
Ckg	120-200	Yellowish brown	Fine sand	Massive	Non sticky

Comments:

- HHF soils are dominantly moderately coarse textured. They are often stratified with layers of coarse textured deposits.
- HHFyc soils are similar to HHF, but have fine textured (clay) glaciolacustrine sediments at some depth between 100-200 cm.
- HHFyl soils are similar to HHF, but have medium textured (very fine sandy loam, loam) glaciolacustrine sediments at some depth between 100-200 cm.

- Seepage is common in these soils and generally occurred at depths ranging from 100 cm to 150 cm.
- Topsoil depths ranged from 14 cm to 68 cm, although within inspection sites were most commonly between 18 and 30 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is High to Severe.
- These soils are susceptible to trench instability during construction activities.
- HHFyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- HHF soils are similar to RLD and KOT, but are moderately well drained.

Horndean (HND) Soil Unit

Extent (kilometres/percentage)	HND = 0.27km/0.27%
Soil Classification	Gleyed Black Chernozem
Parent Material	Fine glaciolacustrine veneer overlying very coarse to moderately coarse glaciolacustrine
Texture: (topsoil/subsoil)	Silty clay, clay/Loamy fine sand to sand, very fine sand to fine sandy loam within 100 cm
Topography/Percent Slope	2/0.5-2 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	19-39 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Very dark brown, dark grayish brown (Good)
PROFILE SITE #: N/A	

Comments:

- HND soils consist of a mantle of fine textured (clay, silty clay) materials overlying very coarse (loamy fine sand, fine sand, sand) to moderately coarse (very fine sand, loamy very fine sand, fine sandy loam) materials within 100 cm of the soil surface.
- Seepage is common in these soils in the underlying coarse material.
- Topsoil depths ranged from 19 cm to 39 cm.
- These fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine textured, level to nearly level soils units.
- The underlying coarse textured soils are susceptible to trench instability during construction activities.
- HND soils occur in close association with DGS, but posses a B horizon.

Kronstal (KOT), Kronstal carbonated (KOTca), and Kronstal overlying clay (KOTyc) Soil Units

Extent (kilometres/percentage)	KOT = 3.48km/3.48% KOTca = 0.18km/0.18% KOTyc = 2.52km/2.52%
Soil Classification	Gleyed Black Chernozem
Parent Material	Moderately coarse glaciofluvial and glaciolacustrine grading to coarse glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	KOT: Very fine sand, loamy very fine sand, fine sandy loam/Fine sand, loamy fine sand KOTyc: Very fine sand, loamy very fine sand, fine sandy loam to fine sand, loamy fine sand/ Clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	13-44 cm/Thicker at headlands, in close proximity to bush and lower slope positions
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Grayish brown, brown (Good)

PROFILE SITE #: KS210			**KOTyc, Gleyed Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-18	Black	Very fine sand	Angular blocky	Friable
Bm	18-26	Dark brown	Very fine sand	Angular blocky	Friable
BCkgj	26-40	Dark grayish brown	Very fine sand	Angular blocky	Friable
Ccagj	40-60	Pale brown	Fine sand	Single grained	Loose
Ckgj	60-120	Grayish brown	Fine sand	Single grained	Loose
IICkgj	120-200	Grayish brown	Clay	Massive	Very firm

Comments:

- KOT soils are dominantly moderately coarse textured. They are often stratified with layers of coarse textured deposits.
- KOTyc soils are similar to KOT, but have fine textured (clay) glaciolacustrine sediments at some depth between 100-200 cm.
- KOTca soils are similar to KOT, but have calcium carbonate in the solum (i.e. A and B horizons).
- Seepage is common in these soils and generally occurred at depths ranging from 95 cm to 150 cm.

- Topsoil depths ranged from 13 cm to 44 cm, although within inspection sites were most commonly between 20 and 30 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is High to Severe.
- These soils are susceptible to trench instability during construction activities.
- KOTyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- KOT soils are similar to RLD, but posses a B horizon.

Lelant overlying clay (LLTyc) Soil Unit

Extent (kilometres/percentage)			LLTyc = 0.47km/0.47%		
Soil Classification			Rego Humic Gleysol		
Parent Material			Coarse glaciolacustrine		
Texture: (topsoil/subsoil)			LLT: Fine sand to loamy fine sand LLTyc: Fine sand to loamy fine sand/Clay below 100 cm		
Topography/Percent Slope			1-2/0-2%		
Surface Stoniness			0		
Drainage Class			Poorly drained		
Topsoil Depth/Relationship to Topography			18-25 cm		
Land Use			Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray/Dark brown, very dark grayish brown, dark grayish brown (Poor)		
PROFILE SITE #: KS150			**LLTyc, Rego Humic Gleysol**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-22	Very dark gray	Sandy loam	Angular blocky	Friable
ACkgj	22-43	Dark gray	Sandy loam	Angular blocky	Friable
Ckg	43-180	Light brownish gray	Sandy loam	Massive	Friable
II Ckg	180-200	Light yellowish brown	Clay	Massive	Firm

Comments:

- LLT soils are dominantly coarse textured (fine sand to loamy fine sand) from the surface to trench bottom.
- LLT-yc soils are similar to LLT, however have fine to very fine textured (silty clay, sandy clay, clay, heavy clay) sediments at some depth between 100 – 200 cm. These soils typically have perched water tables above the fine textured sediments.
- Seepage is common in these soils.
- Topsoil depths ranged from 18 cm to 25 cm.
- The wind erosion risk is Severe, particularly during the spring season following years of low-residue, specialty crop production (e.g. potatoes, beans).
- These soils are susceptible to trench instability during construction activities.
- LLTyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of

underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.

- LLT soils are associated with ASS and WWC, however are poorly drained.

La Salle (LSL) Soil Unit

Extent (kilometres/percentage)	LSL = 0.21km/0.21%
Soil Classification	Cumulic Humic Regosol
Parent Material	Medium recent fluvial
Texture: (topsoil/subsoil)	Very fine sandy loam, loam, silt loam
Topography/Percent Slope	4/5-9 %
Surface Stoniness	0
Drainage Class	Moderately well
Topsoil Depth/Relationship to Topography	20 cm/Topsoil depth greater at lower slope positions
Land Use	Woodland
Sod Quality (good/poor)	Poor
Colour Transition (topsoil/subsoil); (good/poor)	Dark gray/Gray, dark gray (Poor)
PROFILE SITE #: N/A	

Comments:

- LSL soils consist of medium textured (very fine sandy loam, loam, silt loam) recent fluvial materials. Underlying stratified deposits are common and generally consist of silt loam to silty clay loam, but may contain materials of variable texture.
- LSL soils generally occur under wooded land use along significant water courses.
- These soils are at risk of water erosion if left without vegetative cover.

Morris (MRS) Soil Unit

Extent (kilometres/percentage)	MRS = 0.44km/0.44%
Soil Classification	Gleyed Solonetzic Black Chernozem
Parent Material	Fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Clay to heavy clay
Topography/Percent Slope	1/0-0.5%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	18-19 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray, dark gray/Dark gray, gray (Poor)

PROFILE SITE #: KS043			**MRS, Gleyed Solonetzic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-18	Black	Heavy clay	Subangular blocky	Firm
Bnjgj	18-32	Gray	Heavy clay	Prismatic	Very firm
Ccagj	32-50	Grayish brown	Heavy clay	Angular blocky	Firm
Ckgj 1	50-110	Dark gray	Heavy clay	Massive	Very firm
Ckgj 2	110-200	Light olive brown	Heavy clay	Massive	Very firm

Comments:

- MRS soils are fine to very fine textured (clay to heavy clay) from the surface to trench bottom.
- Subsoil C horizons commonly contain gypsum salts.
- Topsoil depths ranged from 18 cm to 19 cm, and generally corresponds to the depth of the plow layer.
- The wind erosion risk is Moderate.
- The very fine to fine textured surface soil is prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine to very fine textured, level to nearly level soils units.
- MRS soils are found in association with RIV and SCY soils.

Myrtle (MYT) Soil Unit

Extent (kilometres/percentage)	MYT = 0.43km/0.43%
Soil Classification	Orthic Black Chernozem
Parent Material	Fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Clay to heavy clay
Topography/Percent Slope	1/0-0.5%
Surface Stoniness	0
Drainage Class	Moderately well drained
Topsoil Depth/Relationship to Topography	17-20 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Grayish brown (Good)

PROFILE SITE #: KS123			**MYT, Orthic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-17	Very dark gray	Clay	Granular	Friable
Bvk	17-120	Grayish brown	Clay	Angular blocky	Firm
Ckgj 1	120-180	2.5y 6/3	Clay	Massive	Firm
Ckgj 2	180-200	2.5y 6/3	Clay	Massive	Firm

Comments:

- MYT soils are fine to very fine textured (clay to heavy clay) from the surface to trench bottom.
- Topsoil depth ranges from 17-20 cm.
- The very fine to fine textured surface soil is prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine to very fine textured, level to nearly level soils units.
- MYT soils are similar to SCY, but have better internal drainage and have a solum free of mottling.

Neuenberg (NBG), Neuenberg saline (NBGsa), and Neuenberg overlying clay (NBGyc, NBGzc) Soil Units

Extent (kilometres/percentage)	NBG = 4.11km/4.11% NBGsa = 0.31km/0.31% NBGyc = 0.24km/0.24% NBGzc = 0.06km/0.06%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Medium glaciofluvial and glaciolacustrine veneer overlying coarse glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	NBG: Very fine sandy loam to sandy clay loam/Loamy very fine sand to fine sand NBGyc: Very fine sandy loam to sandy clay loam/Loamy very fine sand to fine sand/Clay between 100-200 cm NBGzc: Very fine sandy loam to sandy clay loam/Loamy very fine sand to fine sand/Clay below 200 cm
Topography/Percent Slope	1-2/0-2%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	15-55 cm
Land Use	NBG: Wetland, Hayland and Cultivated NBGsa, NBGyc, NBGzc: Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark gray, gray, grayish brown (Good)

PROFILE SITE #: KS562			**NBG, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-23	Very dark gray	Very fine sandy loam	Granular	Friable
ACkgj	23-60	Dark gray	Very fine sandy loam	Angular blocky	Friable
Ckgj	60-120	Yellowish brown	Loamy very fine sand	Single grained	Friable
Ckg	120-200	Yellowish brown	Loamy very fine sand	Single grained	Non sticky

Comments:

- NBG soils consist of dominantly medium textured (very fine sandy loam, loam, silt loam, sandy clay loam) materials overlying moderately coarse (very fine sand, loamy very fine sand) to very coarse (fine sand, loamy fine sand) within 100 cm.
- NBGyc and NBGzc are similar to NBG, but have fine (clay, silty clay) textured materials between 100-200 cm and below 200 cm, respectively.
- NBGsa soils have salinity in the A horizon(s).

- Seepage is common in these soils and generally occurred at depths ranging from 100 cm to 160 cm.
- Topsoil depths ranged from 15 cm to 55 cm, although were most commonly between 20 cm and 30 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low to Moderate.
- The coarse textured soil associated with the NBG soil units is susceptible to trench instability during construction activities.
- NBGyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- NBG soils are associated with RSG, but have imperfect drainage.

Newton Siding (NWN) and Newton Siding saline (NWNsa) Soil Units

Extent (kilometres/percentage)			NWN = 0.4km/0.4% NWNsa = 0.23km/0.23%		
Soil Classification			Gleyed Rego Black Chernozem		
Parent Material			Moderately fine glaciofluvial and glaciolacustrine overlying coarse glaciofluvial and glaciolacustrine		
Texture: (topsoil/subsoil)			Clay loam, sandy clay loam, silty clay loam/Loamy fine sand, fine sand		
Topography/Percent Slope			2-3/0.5-5 %		
Surface Stoniness			0		
Drainage Class			Imperfectly drained		
Topsoil Depth/Relationship to Topography			20-31 cm		
Land Use			Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray/Gray, dark gray (Good)		
PROFILE SITE #: KS692			**NWNsa, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Apsk	0-21	Black	Clay loam	Subangular blocky	Firm
Cscagj	21-55	Dark gray	Sandy clay loam	-	-
IICskg	55-200	Light yellowish brown	Loamy fine sand	Single grained	Non sticky (wet)

Comments:

- NWN soils are moderately fine textured overlying coarse textured within 100 cm of the soil surface.
- NWNsa are similar to NWN, but have soluble salts in the solum.
- Seepage is common in these soils.
- Topsoil depths ranged from 20 cm to 31 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low.
- The underlying coarse textured soil is susceptible to trench instability during construction activities.
- NWNsa soils require alternative 3 lift soil handling where salinity profiles are above guideline criteria as outlined by Pettapiece and Dell (1996).
- NWN soils are found in association with EBG soils, but are imperfectly drained.

Osborne (OBO) and Osborne drained (OBOd) Soil Units

Extent (kilometres/percentage)	OBO = 1.83km/1.83% OBOd = 1.52km/1.52%
Soil Classification	Rego Humic Gleysol Gleysolic Humic Vertisol
Parent Material	Fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Clay to heavy clay/Clay to heavy clay
Topography/Percent Slope	1-3/0-5%
Surface Stoniness	0
Drainage Class	Poorly drained
Topsoil Depth/Relationship to Topography	14-32 cm
Land Use	OBO: Wetland OBOd: Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray, dark gray/Dark gray, olive gray, light olive brown (Good)

PROFILE SITE #: KS049			**OBO, Rego Humic Gleysol**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-22	Dark gray	Heavy clay	Subangular blocky	Firm
Ckg 1	22-90	Olive gray	Heavy clay	Angular blocky	Firm
Ckg 2	90-160	Light olive brown	Heavy clay	Massive	Very firm
Ckg 3	160-200	Light olive brown	Heavy clay	Massive	Very firm

Comments:

- OBO soils are fine to very fine textured (clay to heavy clay) from the surface to trench bottom.
- A significant portion of OBO soils along the RoW have had surface drainage improvements (OBOd), which allow them to be cultivated. Without drainage improvements these soils are generally too wet for annual crop production.
- Seepage is common in these soils.
- Topsoil depths ranged from 14 cm to 32 cm, although within inspection sites were most commonly between 20 and 24 cm. Topsoil depth is generally greater in close proximity to headlands.
- The very fine to fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.

- It is recommended that the roach is periodically breached maintain surface drainage in these fine to very fine textured, level to nearly level soils units.
- OBO soils are associated with RIV and SCY, but have poor drainage.

Osterwick drained, overlying clay (OWKdyc), and Osterwick overlying clay (OWKyc) Soil Units.

Extent (kilometres/percentage)	OWKdyc = 0.3km/0.3% OWKyc = 0.1km/0.1%
Soil Classification	Rego Humic Gleysol
Parent Material	Moderately coarse glaciofluvial and glaciolacustrine grading to coarse glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	OWK: Very fine sand, loamy very fine sand, fine sandy loam/Fine sand, loamy fine sand OWK-yc: Very fine sand, loamy very fine sand, fine sandy loam to fine sand, loamy fine sand/ Clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Poorly drained
Topsoil Depth/Relationship to Topography	18-44 cm
Land Use	Hayland, Native range, Wetland, Cultivated (if drained)
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Very dark gray/Light gray, gray (Good)
PROFILE SITE #: N/A	

Comments:

- OWK soils are dominantly moderately coarse textured. They are often stratified with layers of coarse textured deposits.
- OWKd soils have had surface drainage improvements and are sometimes cultivated for annual crop production.
- OWKyc soils are similar to OWK, but have fine textured (clay) glaciolacustrine sediments at some depth between 100-200 cm.
- Seepage is common in these soils.
- Topsoil depths ranged from 18 cm to 44 cm.
- The wind erosion risk is High to Severe.
- These soils are susceptible to trench instability during construction activities.
- OWKyc and OWKdyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- OWK soils are associated with RLD and KOT, however are poorly drained.

Pigeon Lake (PGK) and Pigeon Lake saline (PGKsc) Soil Units

Extent (kilometres/percentage)			PGK = 0.07km/0.07% PGKsc = 0.31km/0.31%		
Soil Classification			Gleyed Cumulic Regosol		
Parent Material			Medium to moderately fine glaciolacustrine overlying fine to very fine glaciolacustrine		
Texture: (topsoil/subsoil)			Loam, silt loam, clay loam, sandy clay loam, silty clay loam, very fine sandy loam/Silty clay, clay, heavy clay		
Topography/Percent Slope			1-4/0-10 %		
Surface Stoniness			0		
Drainage Class			Imperfectly drained		
Topsoil Depth/Relationship to Topography			15-40 cm		
Land Use			Woodland, Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Variable (Good to Poor)		
PROFILE SITE #: KS448			**PGK, Gleyed Cumulic Regosol**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ckgj	0-12	Light olive brown	Clay loam	-	Friable
Ah	12-40	Black	Clay loam	-	Friable
ACkgj	40-90	Very dark gray	Clay loam	Massive	Friable
Ckg	90-200	Olive	Clay loam	Massive	Firm

Comments:

- PGK soils are medium to moderately fine textured overlying fine textured within 100 cm of the soil surface.
- PGKsc soils are similar PGK, but have salinity in subsurface C horizons.
- PGK soil profiles are variable in nature due to periodic flooding and associated deposition events.
- Seepage is common in these soils.
- Topsoil depths ranged from 15 cm to 40 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low (Moderate if VFSL surface).
- PGK soils occur in close association with RGD and GYV soils, however are found in areas prone to inundation and periodic flooding.

Plum Coulee (PME), Plum Coulee saline (PMEsc), and Plum Coulee saline, solonetzic (PMEsz) Soil Units

Extent (kilometres/percentage)			PME = 1.16km/1.16% PMEsc = 1.54km/1.54% PMEscsz = 0.14km/0.14%		
Soil Classification			PME: Gleyed Black Chernozem PMEsz: Gleyed Solonetzic Black Chernozem		
Parent Material			Fine glaciofluvial and glaciolacustrine		
Texture: (topsoil/subsoil)			Silty clay to clay/Silty clay to clay		
Topography/Percent Slope			2-3/0.5-5%		
Surface Stoniness			0		
Drainage Class			Imperfectly drained		
Topsoil Depth/Relationship to Topography			14-30 cm		
Land Use			Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Black/Dark grayish brown (Poor)		
PROFILE SITE #: KS309			**PME, Gleyed Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-27	Black	Clay	Granular	Friable
Bmgj	27-40	Dark grayish brown	Clay	Angular blocky	Friable
Ckgj 1	40-170	Brown	Clay	Massive	Firm
Ckgj 2	170-200	Brown	Clay	Massive	Firm

Comments:

- PME soils are fine textured (silty clay to clay) from the surface to trench bottom.
- PMEsc soils have saline subsurface C horizons.
- PMEsz soils have properties associated with saline materials and approaching the Solonetzic order.
- Topsoil depths ranged from 14 cm to 30 cm, although within inspection sites were most commonly between 19 and 23 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine textured, level to nearly level soils units.
- PME soils are similar to DHO, but possess a B horizon.

Rosebank (RBK) Soil Unit

Extent (kilometres/percentage)	RBK = 0.29km/0.29%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Coarse to moderately coarse glaciofluvial and glaciolacustrine overlying fine glaciolacustrine
Texture: (topsoil/subsoil)	Fine sand, loamy fine sand to very fine sand, loamy very fine sand, fine sandy loam/Clay, silty clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	22-30 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark gray, dark grayish brown, grayish brown (Good)

PROFILE SITE #: KS156			**RBK, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Apk	0-22	Very dark gray	Loamy fine sand	Subangular blocky	Friable
ACkgj	22-31	Very dark gray	Loamy fine sand	Subangular blocky	Friable
Ccagj	31-45	Dark gray	Loamy fine sand	Subangular blocky	Friable
Ckg	45-90	Brown	Loamy fine sand	Single grained	Non-sticky (wet)
IICkg	90-200	Light olive gray	Clay	Massive	Very firm

Comments:

- RBK soils are coarse to moderately coarse textured overlying fine textured within 100 cm.
- Seepage is common in these soils.
- Topsoil depths ranged from 22 cm to 30 cm.
- The wind erosion risk is Severe.
- RBK soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- RBK soils are similar to EEK, but do not posses a B horizon.

Reinfeld (RFD), and Reinfeld overlying clay (RFDyc, RFDzc) Soil Units

Extent (kilometres/percentage)	RFD = 0.12km/0.12% RFDyc = 0.36km/0.36% RFDzc = 0.24km/0.24%
Soil Classification	Orthic Black
Parent Material	Medium glaciofluvial and glaciolacustrine overlying fine glaciolacustrine
Texture: (topsoil/subsoil)	RFD: Very fine sandy loam, loam, silt loam RFDyc: Very fine sandy loam, loam, silt loam/Clay between 100-200 cm RFDzc: Very fine sandy loam, loam, silt loam/Clay below 200 cm
Topography/Percent Slope	2/0.06-2%
Surface Stoniness	0
Drainage Class	Moderately well drained
Topsoil Depth/Relationship to Topography	24-55 cm/Topsoil depth was generally thicker in close proximity to headlands and bush.
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Brown (Poor)
PROFILE SITE #: N/A	

Comments:

- RFD soils are dominantly medium textured (very fine sandy loam, loam, silt loam). Strata below the solum commonly include variable textures including fine sandy loam, silty clay loam and clay loam.
- RFDyc and RFDzc soils are similar to RFD, but have fine textured (clay) between 100-200 cm and below 200 cm, respectively.
- Seepage may occur in these soils.
- Topsoil depths ranged from 24 cm to 55 cm.
- The wind erosion risk is Low (Moderate if VFSL surface texture).
- RFD soils occur in close association with GDH, but are moderately well drained.

Rignold (RGD) and Rignold saline (RGDsc) Soil Units

Extent (kilometres/percentage)	RGD = 6.43km/6.43% RGDsc = 0.77km/0.77%
Soil Classification	Gleyed Black Chernozem
Parent Material	Medium to moderately fine glaciolacustrine overlying fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Loam, silt loam, clay loam, sandy clay loam, silty clay loam, very fine sandy loam/Silty clay, clay, heavy clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	12-54 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark grayish brown, brown (Good)

PROFILE SITE #: KS321			**RGD, Gleyed Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-18	Black	Loam	Granular	Friable
Ah	18-36	Very dark gray	Loam	Angular blocky	Friable
Bmgj	36-52	Dark grayish brown	Very fine sandy loam	Angular blocky	Friable
Ckgj	52-80	Light olive brown	Loam	Massive	Friable
IICkgj	90-200	Light olive brown	Clay	Massive	Firm

Comments:

- RGD soils are medium to moderately fine textured overlying fine textured within 100 cm of the soil surface. The underlying fine textured glaciolacustrine material commonly contains gypsum.
- RGDsc soils have saline subsurface C horizons.
- Topsoil depths ranged from 12 cm to 54 cm, although within inspection sites were most commonly between 21 cm and 36 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low (Moderate if VFSL surface).
- RGDsc soils do not require alternative 3 lift soil handling according to guidelines outlined by Pettapiece and Dell (1996).
- RGD soils occur in close association with GYV soils, but possess a brown coloured B horizon.

Red River (RIV), and Red River saline (RIVsa, RIVsc) Soil Units

Extent (kilometres/percentage)	RIV = 9.77km/9.44% RIVsa = 0.34km/0.34% RIVsc = 1.42km/1.42%
Soil Classification	Gleyed Rego Black Chernozem Gleyed Vertic Black Chernozem Gleyed Humic Vertisol
Parent Material	Fine to very fine glaciolacustrine
Texture: (topsoil/subsoil)	Clay to heavy clay/Clay to heavy clay
Topography/Percent Slope	1-2/0-2%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	15-45 cm
Land Use	Cultivated, Hayland
Sod Quality (good/poor)	Good
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark grayish brown, gray (Good)

PROFILE SITE #: KS055			**RIV, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-18	Black	Heavy clay	Angular blocky	Friable
ACkgj	18-28	Gray	Heavy clay	Angular blocky	Firm
Ckgj 1	28-155	Olive gray	Heavy clay	Massive	Firm
Ckgj 2	155-200	Olive gray	Heavy clay	Massive	Firm

Comments:

- RIV soils are fine to very fine textured (clay to heavy clay) from the surface to trench bottom.
- RIVsa and RIVsc soils have soluble salts within the solum and subsurface C horizons, respectively.
- Topsoil depths ranged from 15 cm to 45 cm, although within inspection sites were most commonly between 17 cm and 24 cm. Topsoil depth is generally greater in close proximity to headlands.
- The very fine to fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine to very fine textured, level to nearly level soils units.
- RIVsa and RIVsc soils along the RoW do not require alternative 3 lift soil handling for salinity based on guidelines outlined by Pettapiece and Dell (1996).
- RIV soils are similar to SCY, but do not possess a B horizon.

Reinland (RLD), Reinland overblown (RLDo), Reinland saline (RLDsa), and Reinland overlying clay (RLDyc) Soil Units

Extent (kilometres/percentage)	RLD = 9.35km/9.35% RLDo = 0.11km/0.11% RLDsa = 0.33km/0.33% RLDyc = 3.29km/3.29%
Soil Classification	Gleyed Rego Black Chernozem
Parent Material	Moderately coarse glaciofluvial and glaciolacustrine grading to coarse glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	RLD: Very fine sand, loamy very fine sand, fine sandy loam/Fine sand, loamy fine sand RLDyc: Very fine sand, loamy very fine sand, fine sandy loam to fine sand, loamy fine sand/ Clay
Topography/Percent Slope	1-3/0-5 %
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	10-65 cm/Thicker at headlands, in close proximity to bush and lower slope positions
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark gray, grayish brown (Good)

PROFILE SITE #: KS251			**RLD, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Apk	0-24	Black	Fine sandy loam	Angular blocky	Friable
ACk	24-36	Dark gray	Fine sandy loam	Angular blocky	Friable
Ckgj	36-100	Light yellowish brown	Fine sandy loam	Angular blocky	Firm
Ckg	100-200	Light yellowish brown	Fine sandy loam	Massive	Firm

Comments:

- RLD soils are dominantly moderately coarse textured. They are often stratified with layers of coarse textured deposits.
- RLDyc soils are similar to RLD, but have fine textured (clay) glaciolacustrine sediments at some depth between 100-200 cm.
- RLDsa soils have soluble salts in the A horizon.
- RLDo soils are overblown (i.e. have wind deposited material at the soil surface).
- Topsoil depths ranged from 10 cm to 65 cm, although within inspection sites were most commonly between 20 cm and 25 cm. Topsoil depth is generally greater in close proximity to headlands.

- Seepage is common in these soils and generally occurred at depths ranging from 83 cm to 165 cm.
- The wind erosion risk is High to Severe.
- These soils are susceptible to trench instability during construction activities.
- RLDyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- RLDsa soils along the RoW do not require alternative 3 lift soil handling for salinity based on guidelines outlined by Pettapiece and Dell (1996).
- RLD soils are similar to KOT, but do not posses a B horizon.

Rosengart (RSG), Rosengart overlying clay (RSGyc), and Rosengart overlying loam (RSGzl) Soil Units

Extent (kilometres/percentage)	RSG = 1.07km/1.07% RSGyc = 0.52km/0.52% RSGzl = 0.14km/0.14%
Soil Classification	Orthic Black Chernozem
Parent Material	Medium glaciofluvial and glaciolacustrine veneer overlying coarse glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	RSG: Very fine sandy loam to sandy clay loam/Loamy very fine sand to fine sand RSGyc: Very fine sandy loam to sandy clay loam/Loamy very fine sand to fine sand/Clay between 100-200 cm RSGzl: Very fine sandy loam to sandy clay loam/Loamy very fine sand to fine sand/Loam below 200 cm
Topography/Percent Slope	2-3/0.06-5%
Surface Stoniness	0
Drainage Class	Moderately well drained
Topsoil Depth/Relationship to Topography	15-58 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark grayish brown, dark brown (Poor)

PROFILE SITE #: KS348			**RSGyc, Orthic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-20	Black	Loamy sand	Granular	Very friable
Ah	20-54	Black	Fine sandy loam	Prismatic	Friable
Bm	54-70	Dark brown	Fine sand	Subangular blocky	Friable
Ckgj	70-130	Brown	Fine sand	Single grained	Non sticky
IICkgj	130-200	Light olive brown	Clay	Massive	Firm

Comments:

- RSG soils consist of dominantly medium textured (very fine sandy loam, loam, silt loam, sandy clay loam) materials overlying moderately coarse (very fine sand, loamy very fine sand) to very coarse (fine sand, loamy fine sand) within 100 cm.
- RSGyc are similar to RSG, but have fine (clay, silty clay) textured materials between 100-200 cm.
- RSGzl are similar to RSG, but have medium (loam) textured materials below 200 cm.

- Seepage is common in these soils and generally occurred at depths ranging from 100 cm to 150 cm.
- Topsoil depths ranged from 15 cm to 58 cm, although within inspection sites were most commonly between 38 cm and 54 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Low (Moderate if VFSL surface texture).
- These soils are susceptible to trench instability during construction activities.
- RSGyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- RSG soils are associated with NBG, but are moderately well drained.

Scanterbury (SCY) and Scanterbury saline (SCYsc) Soil Units

Extent (kilometres/percentage)			SCY = 6.67km/6.67% SCYsc = 3.3km/3.3%		
Soil Classification			Gleyed Black Chernozem		
Parent Material			Fine to very fine glaciolacustrine		
Texture: (topsoil/subsoil)			Clay to heavy clay/Clay to heavy clay		
Topography/Percent Slope			1-2/0-2%		
Surface Stoniness			0		
Drainage Class			Imperfectly drained		
Topsoil Depth/Relationship to Topography			13-65 cm		
Land Use			Cultivated		
Sod Quality (good/poor)			N/A		
Colour Transition (topsoil/subsoil); (good/poor)			Black, very dark gray/Very dark gray, very dark grayish brown, dark grayish brown (Good)		
PROFILE SITE #: KS394			**SCY, Gleyed Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-18	Black	Clay to heavy clay	Subangular blocky	Friable
Bmgj	18-45	Dark grayish brown	Clay to heavy clay	Angular blocky	Friable
Ckgj	45-200	Light olive brown	Clay	Massive	Very firm

Comments:

- SCY soils are fine to very fine textured (clay to heavy clay) from the surface to trench bottom.
- Topsoil depths ranged from 13 cm to 65 cm, although within inspection sites were most commonly between 18 cm and 25 cm. Topsoil depth is generally greater in close proximity to headlands.
- The very fine to fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine to very fine textured, level to nearly level soils units.
- SCYsc soils do not require alternative 3 lift soil handling where salinity profiles are below guideline criteria as outlined by Pettapiece and Dell (1996). It is recommended that these soils are handled using an alternative approach consisting of topsoil (A horizon material) removal, followed by stripping of an additional 10-15 cm of material below the topsoil (B horizon material), which would be windrowed in a stockpile separate from A horizon

material. This will help ensure that good quality topsoil and B horizon material is separated from saline C materials, and will help ensure agricultural capability is maintained.

- SCY soils are similar to RIV, but possess a B horizon.

St. Claude overlying clay (SUEyc) Soil Unit

Extent (kilometres/percentage)	SUEyc = 0.11km/0.11%
Soil Classification	Gleyed Rego Black Chernozem, carbonated
Parent Material	Very coarse glaciolacustrine
Texture: (topsoil/subsoil)	SUEyc: Fine sand to loamy fine sand/Clay between 100-200 cm
Topography/Percent Slope	3/3-5%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	23 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark gray, very dark grayish brown, brown (Poor)

PROFILE SITE #: KS195			**SUEyc, Gleyed Rego Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Apk	0-20	Black	Very fine sandy loam	Granular	Friable
Ahk	20-44	Black	Very fine sandy loam	Angular blocky	Friable
Ccagj	44-82	Brown	Loamy fine sand	Subangular blocky	Friable
Ckgj	82-112	Pale brown	Loamy fine sand	Single grained	Loose
Ckg	112-150	Pale brown	Loamy fine sand	Single grained	Non sticky
IICkg	150-200	Light yellowish brown	Silty clay loam	Massive	Firm

Comments:

- SUEyc soils consist of coarse textured (fine sand to loamy fine sand) overlying fine to very fine textured (silty clay, sandy clay, clay, heavy clay) sediments at some depth between 100 – 200 cm. These upper strata of these soils are highly enriched with silt and clay-sized secondary carbonates, resulting in a loamy textural feel.
- These soils typically have perched water tables above the fine textured sediments.
- Topsoil depths were 23 cm.
- The wind erosion risk is Severe, particularly during the spring season following years of low-residue, specialty crop production (e.g. potatoes, beans).
- The coarse textured soil associated with the SUE soil units is susceptible to trench instability during construction activities.

- SUEyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- SUE soils are similar to ASS, but are strongly carbonated.

Winkler (WIK) Soil Unit

Extent (kilometres/percentage)	WIK = 0.42km/0.42%
Soil Classification	Orthic Black Chernozem
Parent Material	Fine glaciofluvial and glaciolacustrine
Texture: (topsoil/subsoil)	Silty clay to clay
Topography/Percent Slope	2/0.6-2%
Surface Stoniness	0
Drainage Class	Well drained
Topsoil Depth/Relationship to Topography	23-26 cm
Land Use	WIK: Cultivated and Native range
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark brown, dark grayish brown (Good)

PROFILE SITE #: KS312			**WIK, Orthic Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-23	Black	Clay	Subangular blocky	Friable
Bm	23-62	Very dark gray to dark gray	Clay	Subangular blocky	Firm
Ckgj 1	62-170	Very dark grayish brown	Clay	Massive	Firm
Ckgj 2	170-200	Brown	Clay	Massive	Firm

Comments:

- WIK soils are fine textured (silty clay to clay) from the surface to trench bottom.
- Topsoil depths ranged from 23 cm to 26 cm. Topsoil depth generally corresponded to the depth of the plow layer.
- These fine textured soils are prone to compaction under heavy equipment traffic. Mitigation measures must be implemented during and following construction activities to ensure compaction does not impact agricultural productivity.
- The wind erosion risk is Moderate.
- It is recommended that the roach is periodically breached maintain surface drainage in these fine textured, level to nearly level soils units.
- WIK soils occur in close association with DHO and PME soils, but are moderately well drained.

Willowbend (WWB) Soil Unit

Extent (kilometres/percentage)	WWB = 0.27km/0.27%
Soil Classification	Rego Humic Gleysol
Parent Material	Medium recent fluvial
Texture: (topsoil/subsoil)	Very fine sandy loam, loam, silt loam
Topography/Percent Slope	3/2-5%
Surface Stoniness	0
Drainage Class	Poorly drained
Topsoil Depth/Relationship to Topography	16 – 55 cm/Topsoil depths are variable with topography, topsoil is thicker at lower slope positions
Land Use	Drainage course
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Very dark gray/Light brownish gray, very pale brown (Poor)
PROFILE SITE #: N/A	

Comments:

- WWB soils consist of medium textured (very fine sandy loam, loam, silt loam) recent fluvial materials. Underlying stratified deposits are common and generally consist of silt loam to silty clay loam, but may contain materials of variable texture.
- Seepage is common in these soils.
- WWB soils occur along significant water courses.
- Wind erosion risk is Low (Moderate if VFSL).
- WWB soils occur in close association with LSL soils, but are poorly drained.

Willowcrest (WWC) and Willowcrest overlying clay (WWCyc) Soil Units

Extent (kilometres/percentage)	WWC = 3.82km/3.82% WWCyc = 1.04km/1.04%
Soil Classification	Gleyed Black Chernozem
Parent Material	Coarse glaciolacustrine
Texture: (topsoil/subsoil)	WWC: Fine sand to loamy fine sand WWC-yc: Fine sand to loamy fine sand/Clay below 100 cm
Topography/Percent Slope	1-3/0-5%
Surface Stoniness	0
Drainage Class	Imperfectly drained
Topsoil Depth/Relationship to Topography	12-50 cm
Land Use	Cultivated
Sod Quality (good/poor)	N/A
Colour Transition (topsoil/subsoil); (good/poor)	Black, very dark gray/Dark brown, very dark grayish brown, dark grayish brown (Poor)

PROFILE SITE #: KS204			**WWC, Gleyed Black Chernozem**		
Horizon	**Depth** (cm)	**Colour**	**Texture**	**Structure**	**Consistence**
Ap	0-30	Very dark gray	Fine sand	Granular	Very friable
Bmgj	30-55	Dark brown	Fine sand	Subangular blocky	Friable
Ckgj	55-120	Pale yellow	Fine sand	Subangular blocky	Friable
Ckg	120-200	Light brownish gray	Fine sand	Single grained	Very friable

Comments:

- WWC soils are coarse textured (fine sand to loamy fine sand) from the surface to trench bottom.
- WWC-yc soils are similar to WWC, however have fine to very fine textured (silty clay, sandy clay, clay, heavy clay) sediments at some depth between 100 – 200 cm. These soils typically have perched water tables above the fine textured sediments.
- Seepage is common in these soils and generally occurred at depths ranging from 80 cm to 160 cm.
- Topsoil depths ranged from 12 cm to 50 cm, although within inspection sites were most commonly between 20 and 30 cm. Topsoil depth is generally greater in close proximity to headlands.
- The wind erosion risk is Severe, particularly during the spring season following years of low-residue, specialty crop production (e.g. potatoes, beans).
- These soils are susceptible to trench instability during construction activities.

- WWCyc soils require alternative handling to ensure lateral, shallow groundwater flow across the trench is not impacted by pipeline construction activities, specifically mixing of underlying clay within the trench during backfilling. Trench 3 lift handling will mitigate risks associated with this condition.
- WWC soils are similar to ASS, but possess a B horizon.

Appendix 7G Soil Characteristics of Sampled Soils Within Manitoba

Table 7G-1 Soil Characteristics of Sampled Soils Within Manitoba

Soil Unit	Site	Horizon	Depth (cm)	Ph	EC (dS/m)	SAT (%)	Na (meq/L)	Ca (meq/L)	Mg (meq/L)	SAR
SCYsc	KS005	Ap	0-18	7.0	0.80	91	1.0	3.2	3.8	0.5
		Cskgj2	90-160	8.1	6.45	97	20.8	22.3	67.2	3.1
		Cskgj3	160-200	8.0	4.85	106	14.5	17.1	44.1	2.6
MRS	KS043	Ap	0-18	7.2	0.93	95	1.3	4.5	4.3	0.6
		Bnjgj	18-32	7.8	0.41	90	0.8	1.6	1.7	0.6
		Ckgj2	120-150	8.0	2.01	109	4.6	7.7	12.2	1.5
		Ckgj2	170-200	8.1	1.70	110	4.4	5.9	9.8	1.6
SCYsc	KS078	Ap	0-20	7.2	0.62	92	0.7	3.2	2.3	0.4
		Bmgj	20-33	7.7	0.39	94	0.9	1.7	1.3	0.7
		Ckgj 2	130-170	8.1	1.62	107	5.9	4.0	8.0	2.4
		Cskg	170-200	7.9	4.43	15	9.1	24.8	33.6	1.7
EEKca	KS129	Ap	0-26	7.3	0.89	46	1.5	4.6	2.3	0.8
		IICkgj1	60-150	8.0	2.97	92	3.7	17.2	21.6	0.8
		IICkgj2	150-200	7.9	3.54	101	3.1	28.5	21.2	0.6
BNFyc	KS235	Apk	0-23	8.6	2.56	46	7.2	3.6	21.2	2.0
		ACkg	23-37	8.4	1.80	47	3.6	4.9	13.5	1.2
		Ckg	60-150	8.3	1.69	39	3.8	6.1	9.9	1.3
OBO	KS260	Apk	0-32	7.6	1.13	76	0.7	5.6	5.1	0.3
		IICkg	50-100	8.2	0.87	88	1.3	2.3	4.8	0.7
		IICkg	150-200	8.1	1.28	111	2.0	4.1	7.9	0.8
PMEsc	KS309	Ap	0-27	7.1	0.56	55	2.1	1.3	2.2	1.6
		Ckgj	40-150	8.2	3.28	95	16.4	5.8	20.5	4.5
		Cskgj	170-200	8.1	7.36	108	34.6	21.6	69.2	5.1
RGDsc	KS342	Ap	0-22	6.2	1.02	57	0.9	4.4	4.6	0.4
		IIBmgj	40-52	8.2	1.13	85	3.5	2.3	7.3	1.6
		IICskgj1	52-100	8.2	4.49	103	11.2	11.6	45.4	2.1
		IICskgj2	100-200	8.2	7.83	91	18.9	22.2	96.7	2.5
RGD	KS410	Ap	0-22	6.9	2.02	58	1.7	12.6	9.2	0.5
		Bmgj	22-35	8.0	2.22	52	7.6	8.0	11.8	2.4
		IICkgj	80-200	8.4	3.82	108	22.2	4.0	26.1	5.7
SCYscca	KS428	Apk	0-23	7.2	1.07	61	3.1	4.1	3.3	1.6
		Cskgj1	35-155	8.1	5.71	109	35.5	10.8	29.3	7.9
		Cskgj2	155-200	8.1	8.17	104	48.7	21.3	51.7	8.0
RIVsc	KS434	Ap	0-28	7.5	0.95	93	1.5	5.4	2.7	0.7
		Ckgj	54-150	8.2	1.54	109	11.4	1.9	2.9	7.3
		Cskgj	150-200	8.0	6.29	108	33.5	22.3	32.9	6.4
SCYsc	KS446	Ap	0-21	7.8	1.56	55	1.6	11.3	4.8	0.5
		Bmkgj	21-40	7.9	3.28	55	8.7	17.9	17.4	2.1
		Cskgj	75-200	8.1	7.18	109	31.1	20.7	61.3	4.9
RFDsc	KS461	Ap	0-22	7.5	1.45	48	0.7	7.9	4.8	0.3

Soil Unit	Site	Horizon	Depth (cm)	Ph	EC (dS/m)	SAT (%)	Na (meq/L)	Ca (meq/L)	Mg (meq/L)	SAR
		Bmk	22-44	8.1	0.83	47	0.6	4.5	3.7	0.3
		Cskgj	44-150	8.1	6.42	105	12.3	22.7	68.2	1.8
		Cskg	150-200	8.0	6.67	107	13.4	22.1	77.5	1.9
NBG	KS565	Ap	0-19	7.8	1.28	49	1.6	9.1	3.8	0.6
		Ccagj	35-50	8.2	0.72	45	2.2	2.2	2.9	1.4
		Ckgj	50-83	8.4	1.27	38	8.3	1.5	2.4	5.9
NBGsa	KS580	Apsak	0-40	8.0	7.03	50	38.3	22.9	46.2	6.5
		Ccag	70-105	8.1	1.78	48	4.2	7.0	9.2	1.5
		IICkg	105-200	8.0	1.92	42	5.3	8.6	7.2	1.9
BMG	KS615	Ap	0-30	6.5	0.51	82	0.4	3.4	1.1	0.3
		Ckgj 1	62-140	7.9	0.44	84	1.5	1.9	0.93	1.3
		Ckgj 2	140-200	7.6	3.17	106	4.5	25.2	13.9	1.0
DHOsc	KS621	Ap	0-30	6.7	0.74	100	2.7	3.1	1.8	1.7
		Ckgj	80-110	8.0	1.08	108	8.6	1.5	1.1	7.6
		Cskgj	110-200	7.7	4.56	100	23.3	22.3	13.8	5.5
RLD	KS630	Apk	0-45	7.5	0.96	51	0.6	6.9	2.0	0.3
		Ckgj	45-90	7.8	3.18	50	2.6	28.5	12.4	0.6
		Ckgj	90-120	7.8	3.53	38	5.9	27.1	15.7	1.3
		Ckgj	120-200	7.8	3.40	38	8.7	24.7	9.9	2.1
NBGsa	KS653	Apsak	0-20	8.1	13.1	47	142	20.7	21.8	30.9
		ACskgj	20-38	8.4	7.26	45	59.5	6.0	15.9	18.0
		Cskgj	38-100	8.5	4.26	38	35.2	4.0	9.7	13.5
		Cskg	100-200	8.2	7.25	38	52.9	15.2	25.2	11.8
CTZsays	KS656	Ahsak	0-42	7.8	11.7	80	103	21.2	47.9	17.6
		ACskgj	42-65	7.8	7.72	85	48.0	21.6	30.3	9.4
		Cskg	65-118	7.9	6.18	72	39.9	22.3	23.9	8.3
		IICskg	118-200	8.0	7.48	37	49.3	20.6	26.9	10.1
DHOsays	KS672	Apsk	0-30	7.6	5.48	95	34.8	20.6	18.8	7.8
		ACskgj	30-60	7.8	6.17	93	38.2	22.3	27.8	7.6
		Cskg	60-110	7.8	4.32	93	17.0	23.0	19.9	3.7
		IICkg	110-200	8.0	2.22	38	8.5	9.7	8.0	2.8
DGSsc	KS675	Ap	0-40	7.5	1.38	84	7.8	4.7	2.9	4.0
		Ccagj	62-90	8.0	6.26	72	38.3	23.8	33.0	7.2
		IICskg	90-200	8.2	4.62	37	31.7	9.9	19.5	8.3
DHOscys	KS678	Apk	0-30	7.4	0.86	104	1.3	6.0	2.5	0.6
		ACkgj	30-95	7.6	3.34	70	3.4	30.6	17.7	0.7
		Cscagj	95-130	7.7	3.26	52	4.3	29.2	14.9	0.9
		IICskg	130-200	7.9	5.14	38	28.6	26.3	14.1	6.4
NWNsa	KS692	Apsk	0-21	7.9	7.02	89	50.3	24.5	19.8	10.7
		Cscagj	21-55	7.9	6.35	43	42.0	25.1	20.4	8.8
		IICskg	55-200	8.0	6.34	38	45.3	22.4	17.9	10.1

Soil Unit	**Site**	**Horizon**	**Depth** (cm)	**Ph**	**EC** (dS/m)	**SAT** (%)	**Na** (meq/L)	**Ca** (meq/L)	**Mg** (meq/L)	**SAR**
DHOsays	KS693	Apk	0-16	7.3	1.92	113	8.8	10.3	3.0	3.4
		Ahskgj	16-45	7.6	7.17	111	49.9	24.6	27.6	9.8
		ACskgj	45-90	7.8	7.18	84	50.1	25.3	28.2	9.7
		Cskg	90-160	8.2	9.27	72	65.5	22.3	42.6	11.5
		IICskg	160-200	8.2	9.20	72	63.5	22.7	43.6	11.0

Appendix 7H Dryland Agriculture Capability Guidelines for Manitoba

Table 7H-1 Dryland Agriculture Capability Guidelines for Manitoba

Subclass Limitations	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7
	No significant limitations in use for crops.	Moderate limitations that restrict the range of crops or require moderate conservation practices.	Moderate severe limitation that restrict the range of crops or require special conservation practices.	Severe limitations that restrict the range of crops or require special conservation practices or both.	Very severe limita- tions that restrict soil capability to produce perennial forage crops, and improvement prac-tices are feasible.	Soils are capable only of producing perennial forage crops, and improvement practices are not feasible.	No capability for arable culture or permanent pasture.
Climate (C)	All Ecodistricts[1] within ARDA boundary not explicitly listed under 2C and 3C.	Ecodistricts: 664, 666, 668, 670, 671, 672, 674, 675, 676, 677, 714, 715, 716	Ecodistricts: 356, 357, 358, 359, 363, 366, 663, 665	None within ARDA boundary			
Consolidated Bedrock (R)				50-100 cm	20-50 cm	< 20 cm	Surface bedrock Fragmental over bedrock
Moisture limitation[2] (M)		Stratified loams Moderate moisture holding capacity	Loamy Sands Low moisture holding capacity	Sands Very low moisture holding capacity	Skeletal Sands Very severe moisture deficiency	Stabilized sand dunes	Active sand dunes
Topography[3] (T)	a, b (0-2%)	c (>2-5%)	d (>5-10%)	e (>10-15%)	f (>15-30%)	g (>30-45%) Eroded slope complex	h (>45 - 70%) i (>70 - 100%) j (> 100%)
Structure and/or Permeability (D)	Granular Clay	Massive clay or till soils[4] Slow permeability	Solonetzic intergrades Very slow Permeability	Black Solonetz Extremely slow permeability			
Salinity[5] (N) **a.00-60cm depth** **b.60-120cm depth**	NONE < 2dS/m < 4ds/m	WEAK 2-4 dS/m 4-8 dS/m	MODERATE (s) 4-8 dS/m 8-16 dS/m	STRONG (t) 8-16 dS/m 16-24 dS/m	VERY STRONG (u) [6] 16-24 dS/m >24 dS/m		Salt Flats
Inundation[7] (I)	No overflow during growing season	Occasional overflow (1 in 10 years)	Frequent overflow (1 in 5 years) Some crop damage	Frequent overflow Severe crop damage	Very frequent (1 in 3 years) Grazing > 10 weeks	Very frequent Grazing 5-10 weeks	Land is inundated for most of the season
Excess Water (W)	Well and Imperfectly drained		Loamy to fine textured Gleysols with improved drainage	Coarse textured Gleysols with improved drainage	Poorly drained, no improvements	Very Poorly drained	Open water, marsh
Stoniness (P)	Nonstony (0) and Slightly Stony (1)	Moderately Stony (2)	Very Stony [8] (3)	Exceedingly Stony (4) [9]		Excessively Stony (5)	Cobbly Beach Fragmental
Erosion[10] (E)		Moderate erosion (2)	Severe wind or water erosion (3) lowers the basic rating by one class to a minimum rating of Class 6 [11].				
Cumulative minor adverse Characteristics[12] (x)							

Table 7H-1 Dryland Agriculture Capability Guidelines for Manitoba (cont'd)

NOTES:

[1]Smith, R.E., H. Veldhuis, G.F. Mills, R.G. Eilers, W.R. Fraser, M. Santry, 1996. Terrestrial Ecoregions and Ecodistricts of Manitoba, An Ecological Stratification of Manitoba's Natural Landscapes. Agriculture and Agri-Food Canada, Research Branch, Brandon Research Centre, Manitoba Land Resource Unit, Winnipeg, MB. Report and Provincial Map at scale of 1:1.5m.

[2]With the exception of class2, ratings as indicated are based on the assumption of a single parent material, using the most readily drained representative of each textural class. Prevailing climatic conditions within the Ecodistrict, soil drainage and stratification will affect the moisture limitation accordingly.

[3]Topographic classes are based on the most limiting slope covering a significant portion of an area of complex, variable slopes. Map units with long, unidirectional slopes may be considered equivalent, or one class worse due to an increased erosion hazard.

[4]Extremely calcareous loamy till soils with a high bulk density (>1.7 g/cm^3) are rated 3D.

[5]Soil Salinity is reported in DeciSiemens/metre (dS/m). Soil will be classed according the the most saline depth. For example, if a soil is non-saline from 0-60 cm but moderately saline from 60-120 cm, the soil will be classed as moderately saline (3N).

[6]Strongly saline (u) soils are rated 5N with the exception of poorly and very poorly drained soils, which are rated 6NW.

[7]Inundation may be listed as a secondary subclass for some fluvial soils. In this case, inundation is not class determining, but may become a limitation if the soil is otherwise improved.

[8]Extremely calcareous loamy till soils with a high bulk density (>1.7 g/cm^3) and stony 3 are rated 4DP (4RP if depth to bedrock is 50 - 100 cm).

[9]Stony 4 soils will be rated 4P unless their primary physical composition is sandy skeletal or their parent material is till. In either or both of these cases, the soil will be rated 5P.

[10]If erosion is moderate, a subclass of E is assigned as a secondary limitation, but the basic rating is not lowered. If erosion is severe, the basic soil rating is downgraded by one class, and E becomes the primary limitation. For example, if a soil has a basic rating of 4T, the presence of moderate erosion will result in a rating of 4TE. If erosion is severe, the rating will be lowered to 5ET. Erosion will be the sole limitation only if the basic rating has a subclass of X. For example, a soil with a rating of 3X will be assigned a rating of 3E if moderate erosion is present.

[11]The rating is not lowered from class 6 based on erosion. A rating of 6TE indicates a soil with g topography and either moderate or severe erosion.

[12]Use only for soils with no other limitation except climate. The subclass represents soils with a moderate limitation caused by the cumulative effect of two or more adverse characteristics which are singly not serious enough to affect the rating. Because the limitation is moderate, soils may only be downgraded by one class from their initial climate limitation. Therefore, a soil with a climate limitation of 2c and 2 or more minor adverse characteristics will be rated as 3X. This symbol is always used alone.

SOURCE: Fraser, W.R., P. Cyr, R.G. Eilers and G.W. Lelyk. 2001. *Technical manual for Manitoba RM Soils and Terrain Information Bulletins.* Land Resource Group, Semiarid Prairie Agricultural Research Group, Research Branch, Agriculture and Agri-Food Canada. Special Report 01-1.

Appendix 7I Pump Station Site Inspections – Conversion

Table 7I-1 Site Inspection List for PS18

Site	Series	Subgroup	Parent Material	Slope Position	Slope Class	Stoniness	Drainage	Land Use	Map Unit	TS Depth (cm)
PS9-1	Windthorst-rego	CHER-BL-R	Moraine	Upper	3 - 5%	<0.01%	Moderate Well	HL	Windthorst	15
PS9-2	Windthorst-rego	CHER-BL-R	Moraine	Upper	3 - 5%	<0.01%	Moderate Well	HL	Windthorst	14
PS9-3	Windthorst-rego	CHER-BL-R	Moraine	Mid	3 - 5%	<0.01%		HL	Windthorst	17
PS9-4	Windthorst-calcareous	CHER-BL-CA	Moraine	Mid	11 - 15%	<0.01%	Rapid	HL	Windthorst	35
PS9-5	Windthorst-rego	CHER-BL-R	Moraine	Mid	8 - 10%	0.01 - 0.1%	Rapid	HL	Windthorst	12
PS9-6	Windthorst-rego	CHER-BL-R	Moraine	Mid	3 - 5%	<0.01%	Well	HL	Windthorst	10
PS9-7	Windthorst	CHER-BL-O	Moraine	Mid	3 - 5%	0.01 - 0.1%	Moderate Well	HL	Windthorst	31
PS9-8	Windthorst-rego	CHER-BL-R	Moraine	Upper	11 - 15%	0.01 - 0.1%	Rapid	HL	Windthorst	13
PS9-9	Windthorst	CHER-BL-O	Moraine	Mid	11-15%	0.01 - 0.1%	Well	HL	windthorst	43