

**TFL 23**  
**Caribou Field Assessment Report**  
**CP 425**  
**St. Leon face**

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December 30, 2005

## **BACKGROUND**

### ***Planning Unit***

The CP 425 St. Leon Face planning unit is illustrated in Figure 1.

### ***Description***

The proposed forest development area within this planning unit is within the ICHmw2 biogeoclimatic variant (Figure 2). The planning unit also includes the ridgeline to the south of the confluence of St. Leon Creek and Upper Arrow Lake.

Caribou management strategy for TFL23 (LUP Working Group 2002) identifies that the upper east portion of this proposed development is within the mapped caribou special management zone (Zone 2).

Early winter caribou telemetry point locations identify use along the steep creek bottom to the north east of this development area, as well as in the south portion of this planning unit. Late winter, spring and summer fall locations are found throughout the high country to the east of the development area between Cape Horn and St. Leon creek (Figure 2).

PEM-based seasonal caribou habitat suitability mapping assigns ratings of moderate for early winter and low for the late winter (Hamilton and Wilson 2003). Spring and summer fall seasons are rated as low through the proposed development area. (Appendices 12-14).

## **RESULTS and DISCUSSION**

Both stand level and reconnaissance level assessments were conducted in 2005. Field sampling procedures followed those reported by Hamilton and Leitch (2004). Arboreal lichen was estimated according to Armleder et al (1992). Results were recorded on standardized Wildlife Habitat Assessment (WHA) field forms (RIC 1998). These results are referenced within the report and the WHA field forms are found in Appendices 1-11. Field surveys included recording evidence of caribou, rating caribou habitat value (RIC 1998) and other wildlife observations.

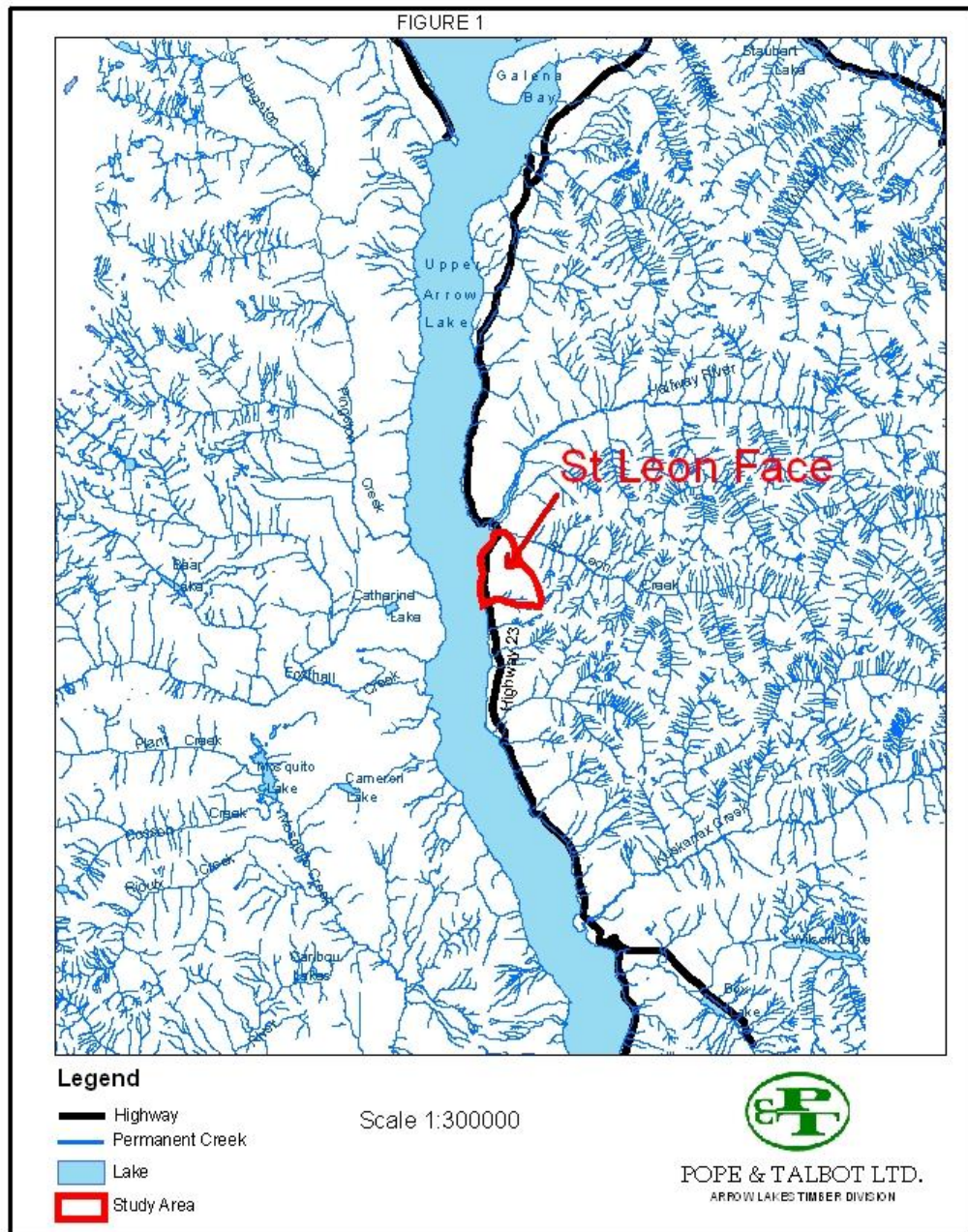


Figure 1: Planning Unit

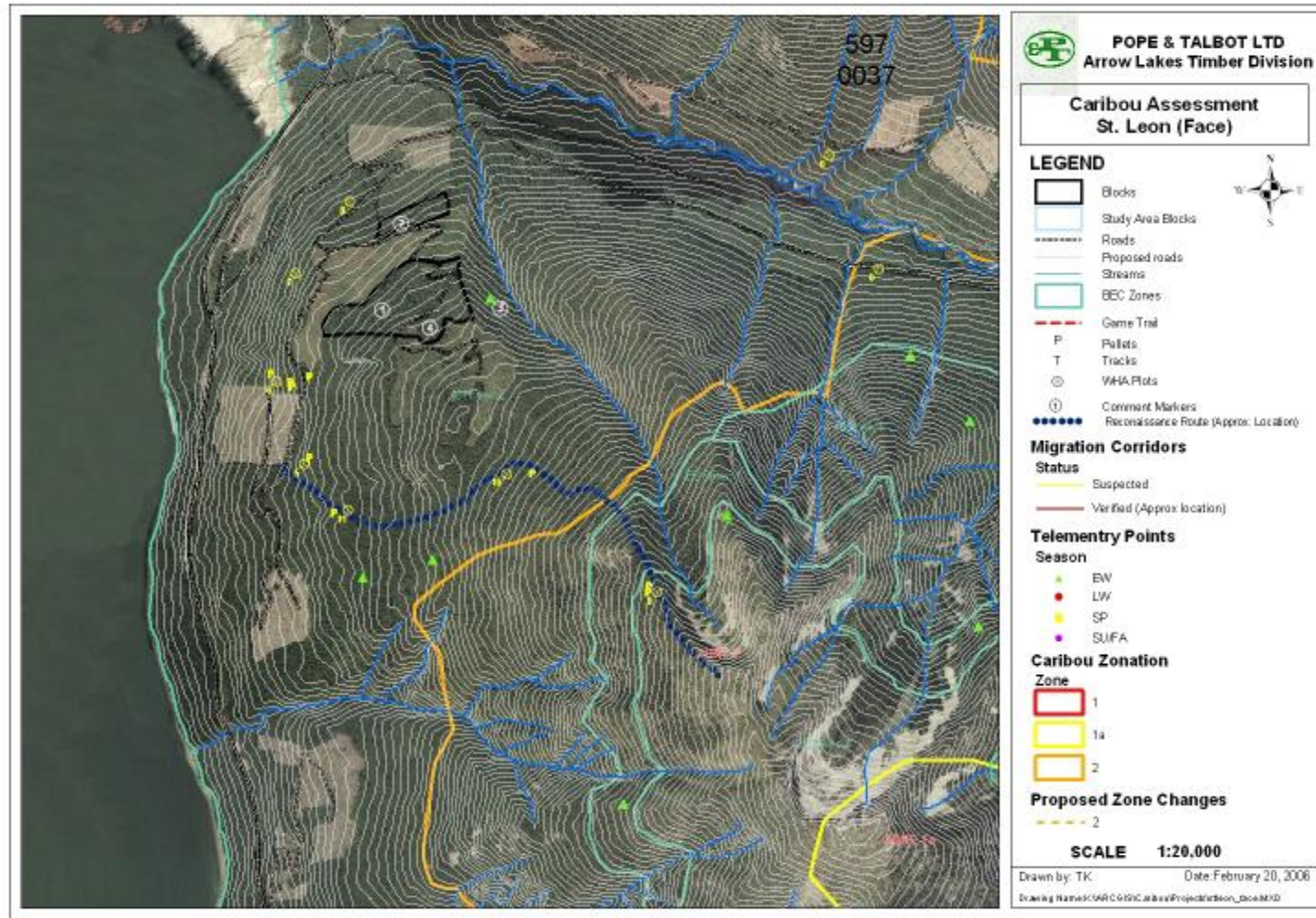


Figure 2: St. Leon Field Map and Plot Locations



### ***Stand-level Surveys***

Field surveys were completed on June 19<sup>th</sup> and October 20<sup>th</sup> & 21<sup>st</sup>, 2005. The purpose was to assess caribou use and to rate the habitat value.

#### **Plot 1**

##### **Evidence of Use:**

No evidence of caribou use was observed.

##### **Habitat Evaluation:**

This area was field rated as low for the early winter, very low for late winter and low for the spring and summer fall seasons (Appendix 1). Lichen abundance was rated Class 2 (50% *Alectoria*), and was only present in the upper canopy (Figure 3).



**Figure 3: WHA plot 1**

##### **Other Species:**

Evidence of deer browsing (<1 yr old), as well as antler scrapes was observed along the road above plot 1.

## **Plot 2**

### **Evidence of Use:**

No evidence of caribou use was observed.

### **Habitat Evaluation:**

This area was field rated as low for the summer fall and early winter and very low for late winter and spring (Appendix 2). Lichen abundance was rated low (Class 1 with 80% *Alectoria spp.*) and available only in the upper canopy (>4m). The closed canopy allowed very little light penetration and the forest floor lacked herbaceous forage (Figure 4).



**Figure 4: WHA Plot 2**

### **Other Species:**

No other wildlife sign was observed.



### **Plot 3**

#### **Evidence of Use:**

No evidence of caribou use was observed

#### **Habitat Evaluation:**

This area was field rated as moderate for the early winter, low for the spring and summer fall and very low for the late winter seasons (Appendix 3). Lichen abundance was rated high (Class 4; 80% *Alectoria spp.*) and was present only on the scattered dead and dying larch and pine trees. There was abundant branch litterfall on the forest floor. Palatable forage species were generally lacking (Figure 5).



**Figure 5: WHA Plot 3**

#### **Other Species:**

No other wildlife sign was observed.

#### **Plot 4**

##### **Evidence of Use:**

No evidence of caribou use was observed.

##### **Habitat Evaluation:**

This area was field rated as high for the early winter, low for late winter and very low for the spring and summer fall seasons (Appendix 4). Lichen abundance was rated as class 4 (80% *Alectoria spp.*). Lichen is found on the trees at two meters from the ground, and readily available on the abundant litterfall. The forest floor lacks herbaceous forage (Figure 6).



**Figure 6: WHA Plot 4**

##### **Other Species:**

Deer pellets (<1 yr old) were observed.



## Plot 5

### **Evidence of Use:**

Caribou scat and tracks (< 1yr old) were observed near Plot 5.

### **Habitat Evaluation:**

This area was field rated as low for the early winter, and summer-fall, and very low for the late winter seasons (Appendix 5). Lichen abundance was rated as very Low (Class 1; 95% *Alectoria spp.*) and was only present high in the canopy (> 5m from ground level). This area generally lacks palatable forage for caribou(Figure 6).



Figure 7: WHA plot 5

### **Other Species:**

No other wildlife sign was observed.

## **Plot 6**

### **Evidence of Use:**

Caribou scat (< 1yr old) was found in and around Plot 6.

### **Habitat Evaluation:**

This area was field rated as moderately high for the early winter, and low for the late winter, spring and summer fall seasons (Appendix 6). Lichen abundance was rated as moderate (Class 2; 80% *Alectoria spp.*) and was available for feeding (<1m from ground level; Figure 8).



**Figure 8: WHA plot 6**

### **Other Species:**

Deer tracks were observed.



## **Plot 7**

### **Evidence of Use:**

No evidence of caribou use was observed.

### **Habitat Evaluation:**

This area was field rated as high for the early winter, low for late winter, and moderate for the spring and summer fall seasons (Appendix 7). Lichen abundance was rated as moderate (Class 3; 65% *Alectoria spp.*). Lichen was available for feeding (<1m from the ground). Branch litterfall was high and lush herbaceous forage was present (Figure 9).



**Figure 9: WHA plot 7**

### **Other Species:**

Deer scat less (<1yr old) was observed.



### **Plot 8**

#### **Evidence of Use:**

No evidence of caribou was observed.

#### **Habitat Evaluation:**

This area was field rated as low for the summer-fall and early winter seasons. Very low ratings were assigned the late winter and spring seasons (Appendix 8). Lichen abundance was rated as very low (Class 1; 80% *Alectoria spp.*), and was found mostly in the upper canopy (>4m above the ground). Some lichen was present on branch litterfall (Figure 10).



**Figure 10: WHA plot 8**

#### **Other Species:**

No other wildlife evidence was observed.

## **Reconnaissance-level Survey**

A reconnaissance level survey down the ridge above and to the south east of the proposed development area was completed on October 5, 2005. The purpose of this reconnaissance was to assess seasonal habitat values for caribou through the St. Leon Face planning unit in relation to proposed forestry developments.

### **Plot 9**

#### **Evidence of Use:**

Caribou scat (< 1yr old) was recorded.

#### **Habitat Evaluation:**

This area was field rated as high for the late winter, very low for early winter and spring and low for the summer fall seasons (Appendix 9). Lichen abundance was rated high (Class 5; 10% *Alectoria spp.*). Abundant branch litterfall was present (Figure 11).



**Figure 11: WHA plot 9**

#### **Other Species:**

Evidence of deer browsing and bear feeding on huckleberries was observed. Three black bears were seen feeding on huckleberries in the high basin to the east of plot 9.



### **Plot 10**

#### **Evidence of Use:**

Caribou scat (>1 yr old) was recorded.

#### **Habitat Evaluation:**

Caribou habitat values were field rated as low for the early winter, spring and summer fall seasons and very low for the late winter (Appendix 10). Lichen abundance was rated as very low (Class 1; 10% *Alectoria spp.*) This area generally lacked forage for feeding caribou.



**Figure 12: WHA plot 10**

#### **Other Species:**

Deer excrement (> 1yr old) and antler scrapes were present.



### **Plot 11**

#### **Evidence of Use:**

Both juvenile and adult caribou scat was observed.

#### **Habitat Evaluation:**

Plot 11 was field rated as having high caribou habitat suitability for the early winter season, low for the spring and summer fall seasons and very low habitat value for the late winter (Appendix 11). Lichen abundance was rated as moderate (Class 3; 50% *Alectoria spp.*). Lichen is available at one meter above the ground and there is a moderate amount of branch litterfall. Very little lush forage is present (Figure 13)



**Figure 13 WHA plot 11**

#### **Other Species:**

No other wildlife sign was observed.

## References Cited

- Armleder, H.M., S. Stevenson, and S.D. Walker. 1992. Estimating the Abundance of Arboreal Forage Lichens. Land Management Handbook Field Guide Insert 7. Ministry of Forests, Research Program, Victoria, BC.
- LUP (Landscape Unit Planning) Working Group. 2002. Caribou Management in TFL#23: Agreement for District-Level Implementation Issues. Prepared for Arrow Forest District, Castlegar, BC.
- Hamilton, D., D. Seaton and C. Leitch. 2004. TFL23 Mountain Caribou Landscape Unit Planning and Reporting Procedures, Version 3.0. Arrow Forest District.
- Hamilton, D., and S.F. Wilson. 2002. Central Selkirk Mountain Caribou Habitat Use and Species-habitat Model for TFL23. Prepared for Pope & Talbot, Nakusp, BC.
- Resource Inventory Committee. 1998. Field manual for describing terrestrial ecosystems, Land Management Handbook No. 25. BC Ministry of Forests and BC Ministry of Environment, Lands and Parks, Victoria, BC.

## Appendix 1: WHA Plot1

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## Appendix 7: WHA Plot 7

BRITISH COLUMBIA

Project id: ST LEON FACE Date: 10/5/2019 Plot no: 7

Plot no: 7 Surveyor: A.S.

Species: HABITAT USE / Ssn Plot type: Plot-in-context

Species	Ssn	LA	FD	SH	TH	Com.	Habitat	Dist	Distance (km)	FIG	LA	Imp.	Habitat	Dist	Distance (km)	FIG	LA	Imp.	FD	SH	TH	Suit	Com.
MARATA	L1	WE2																					
	LW4																						
	P3																						
	SP3																						

Comments/Notes: GOOD LICHEN 0.1m HIGH LITTER: ALL

PG

FS 682 (SI) HRE 905

BRITISH COLUMBIA

Project id: ST LEON FACE Plot no: 7

Evidence of Use

Species	Sex	Life Stage	Activity	Des.	No.	Com.	Sex	Life Stage	Activity	Des.	No.	Com.	Sex	Life Stage	Activity	Des.	No.	Com.
M.O.D.H.H			U.A.E		4	M												

Comments/Notes:

Abbreviated Tree Attributes for Wildlife

S.A.F.	Area	Min DBH	No. of trees	No. dead	No. live	Avg. DBH (cm)	Avg. length (m)	Avg. lch load (kg)	Comments
									65% ALBERTA

Simple Coarse Woody Debris

Decay class	Diam. class	Decay class	Diam. class	Decay class	Diam. class

Comments:

Management

Species (Sp. group)	Use	San.	FIG 1/1(s)	Cap.	Myrm. Tech.	N. Fast link	Comments/Notes

FS 682 (SI) HRE 905





## Appendix 9: WHA Plot 9

BRITISH COLUMBIA

Project Id. ST/LEON Date 10 SEP 2015 N-hab. 100% type dist. page 1 of 1

Plot no. 9 Surveyor D-S. A.A.

Species	Habitat / Ssn	Plot type	Habitat feature	Cont.	Distance (km)	FAC L/R	Imp.	Habitat feature	Cont.	Distance (km)	FAC L/R	Imp.	FD	SH	TH	Sub.	Com.
M.R.A.T.A.	L1 WES																
	W2																
	P5																
	SE4																
Comments / Notes																	

FS 082 (5) HFE 985

BRITISH COLUMBIA

Project Id. ST/LEON Plot no. 9

Evidence of Use																	
Inside plot										Outside plot and inside ecosystem unit							
Species	Ssn	Life Stage	Activity	Dist.	No.	Com.	Ssn	Life Stage	Activity	Dist.	No.	Ssn	Life Stage	Activity	Dist.	No.	Com.
M.R.A.T.A.																	
M.O.P.H.P.																	
M.V.A.A.M.																	
Comments / Notes <u>10 BROWN IN HUCKLEBERRY</u>																	
Abbreviated Tree Attributes for Wildlife										Simple Coarse Woody Debris							
B.A.F.	Area	Min DBH							Decay class	m of 50m transect							
No. of trees	No. dead	No. live							Diam. class								
Avg. DBH (cm)	Avg. length (m)								Decay class								
Avg. ich. class	5	Comments <u>10% ALBERTA</u>						Diam. class									
<u>LICHEN</u>										Comments <u>BR. LITTER HIGH</u>							
Management																	
Species (Ssn, g, etc.)	Use	Ssn	FAC (R/S)	Cap.	Height	Tech.	M. Feet / m	Comments / Notes									

FS 082 (5) HFE 985

RIDGE ABOVE LOW LICHEN  
OLD BURN HUCKLEBERRY





## Appendix 11: WHA Plot 11

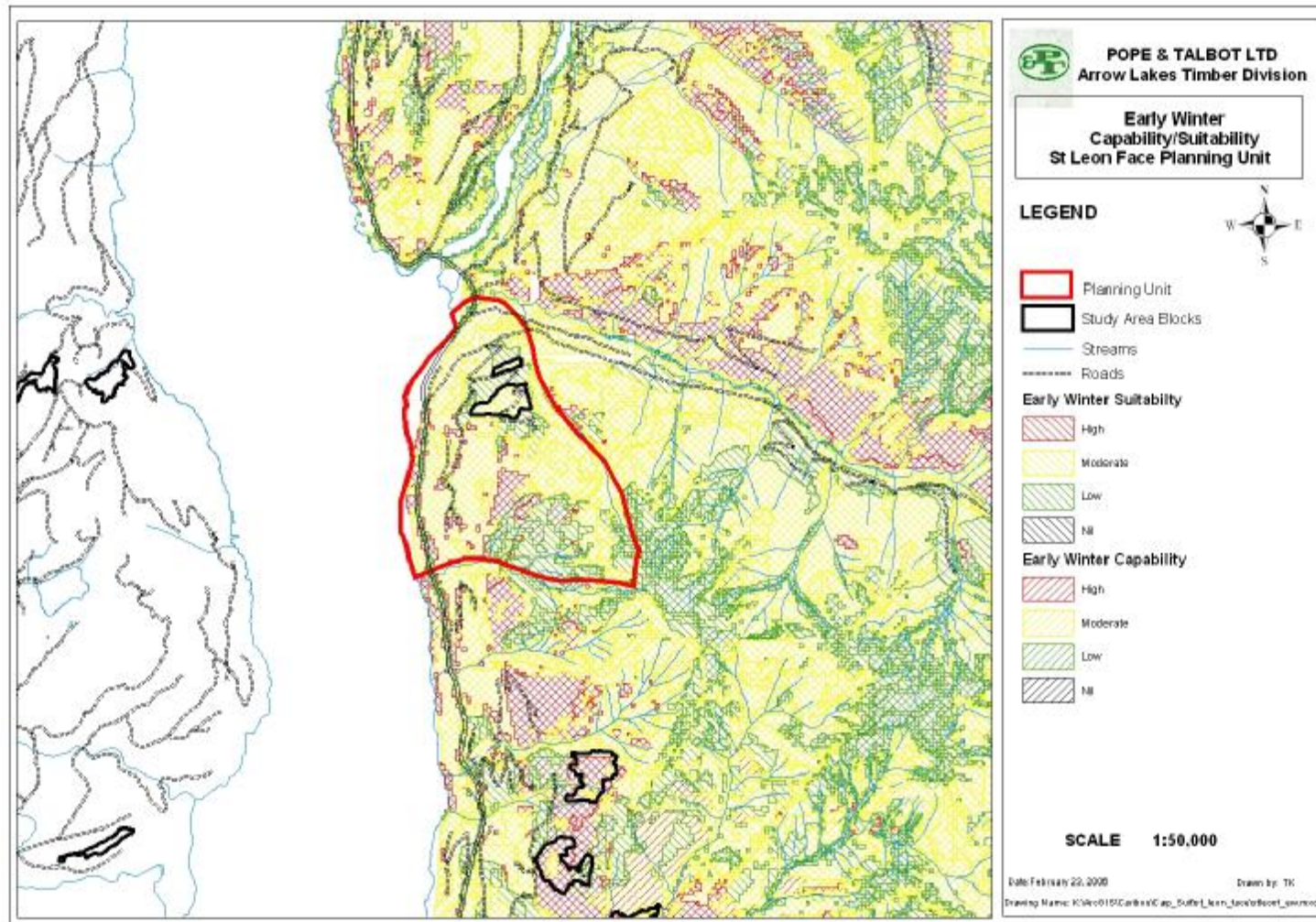
**BRITISH COLUMBIA**

Project id: ST-LEON Date: 12 SEP 2012 NHab. feature:            type:            page: 1 of 1

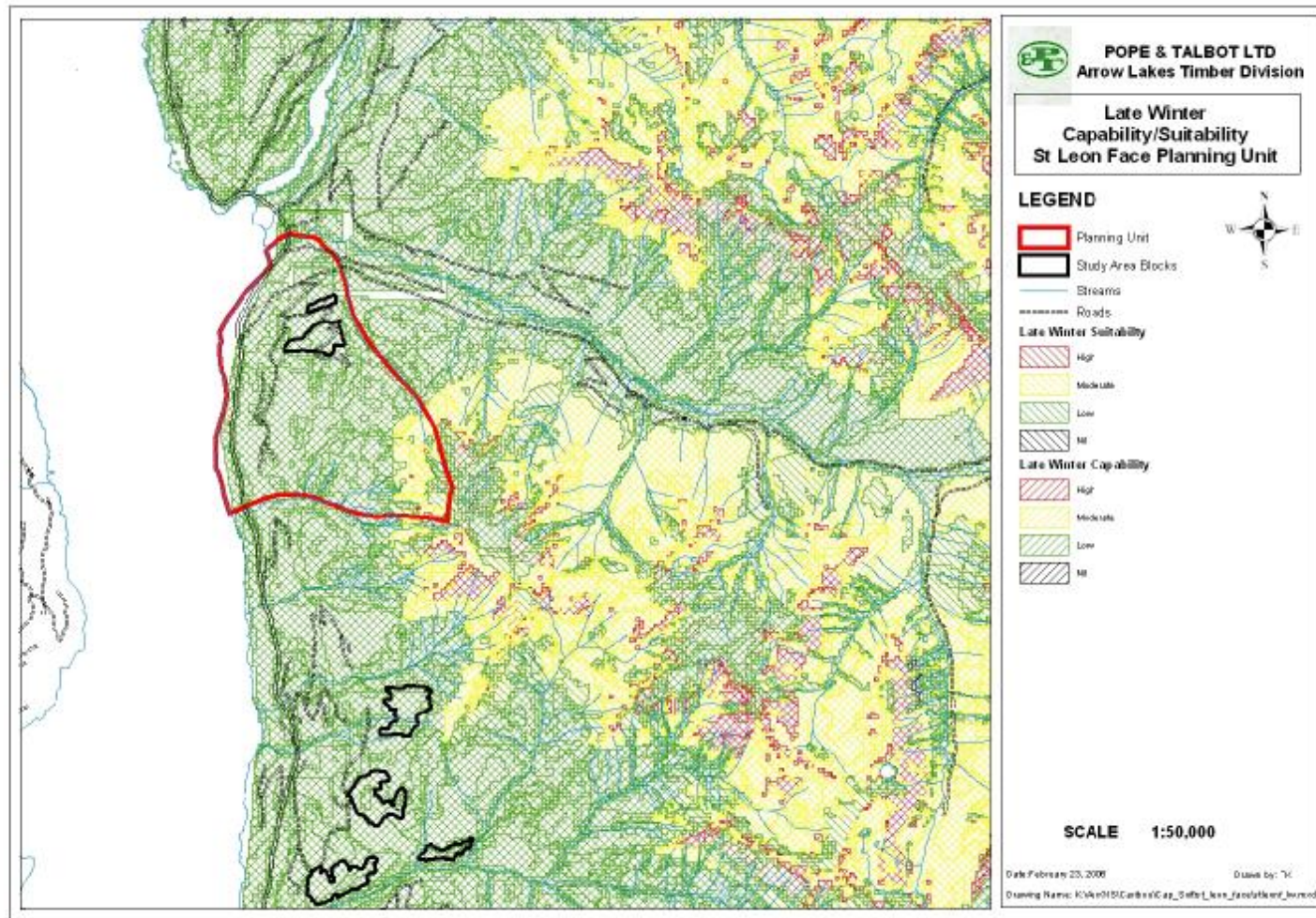
Plot no.: 11 Surveyor:           

Species	Habitat use / Sex	Plot type	Plot-in-context																									
			5 letter code	Sp	LR	Sex	FD	SH	TH	Com.	Habitat feature	Dist.	Distance (km)	FC	LR	Imp.	Habitat feature	Dist.	Distance (km)	FC	LR	Imp.	FD	SH	TH	Suit.	Com.	
<u>MRATAUS</u>	<u>LINE 2</u>																											
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**Appendix 12: St. Leon Face PU – caribou early winter suitability/capability habitat map**

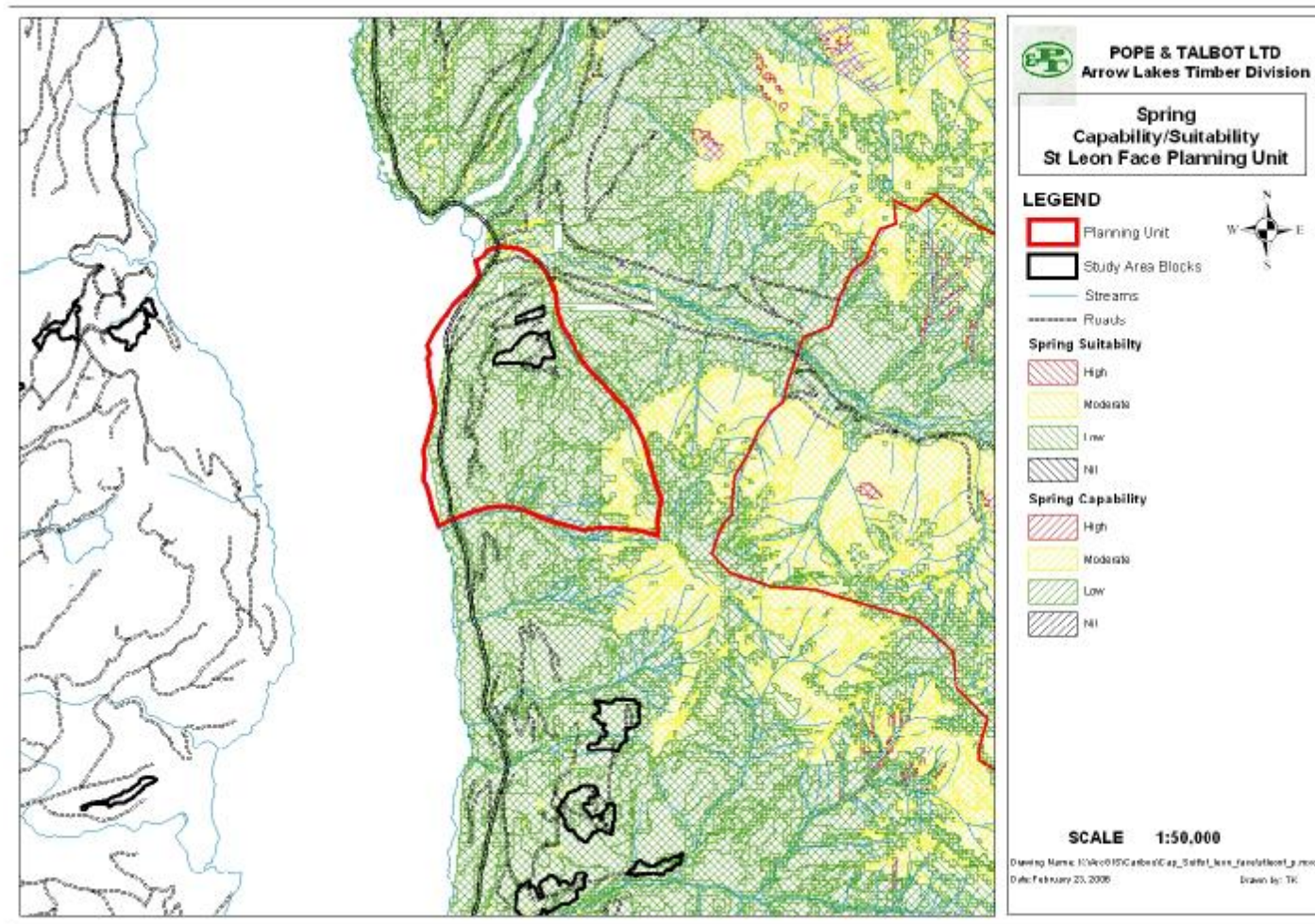


Appendix 13: St. Leon Face PU – caribou late winter suitability/capability habitat map





**Appendix 14: St. Leon Face PU – caribou spring suitability/capability habitat map**





Appendix 15: St. Leon Face PU – caribou summer/fall suitability/capability habitat map

