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INTERIM REPORT: A93370 - ACA15_11

Project Information

Development Name:	TSL: A93370, Planning ID: ACA15_11
Operating Area:	Academus Fort St. James Forest District
Proponent:	BC Timber Sales, Stuart-Nechako Business Area, PO Box 190, Vanderhoof, BC
Proponent Contact:	Sara Lazaruk 250-567-6513, sara.lazaruk@gov.bc.ca
Ecofor Project Number:	2015-1203-065
Heritage Inspection Permit:	2015-0078, forestry developments in the Fort St James Forest District
Permit Holder:	Jean-Jacques Baillaut, 250-996-1980, jean-jacques@ecofor.ca
Archaeology Branch:	Kira Kristensen 250-953-3302, kira.kristensen@gov.bc.ca
Development Description:	Proposed block for timber harvest (114.6 ha). The block boundaries were not flagged at the time of assessment. Portions of the 250 m buffer were assessed.
Assessment Type:	Archaeological Impact Assessment

Report Information

Report Author:	Chandra Young-Boyle, Rebecca Williams
Reviewed by:	Barbara Horrell
Date:	September 25, 2015

First Nations Traditional Territories

Organization	Contact	Phone	Fax	Email
Doig River First Nation	Jane Calvert or Marilyn Pouce Coupe	250-827-3776	250-827-3778	jcalvert@doigriverfn.com mpoucecoupe@doigriverfn.com
McLeod Lake Indian Band	LRO Reception	250-788-2227	250-788-8824	lroreception@mlib.ca
Prophet River First Nation	Robin Tsakoza	250-773-6555	250-773-6556	lands.rtsakoza@blueberryfn.ca
Takla Lake First Nations	John A French	250-564-9321	250-564-9521	Forestry.takla@gmail.com
Treaty 8 Coordinating Lands Office	Jason Lee and Karen Aird	250-785-0612	250-785-2021	jlee@treaty8.bc.ca k_aird@hotmail.com
West Moberly First Nation	Land Use Department	250-788-3663	250-788-9792	lureception@westmo.org
Yekooche First Nations	Shane Perry	250-562-2487	250-562-8540	shane@frostlake.ca

Field Visit

Date	Field Director	Crew Supervisor	Field Assistants
August 6, 2015	Joss Clifford	Chandra Young-Boyle	Sarah Schenker
August 7, 2015	Joss Clifford	Chandra Young-Boyle	Sarah Schenker

Management Summary

Pre-1846 Sites Identified:	No pre-1846 sites were identified.
Post-1846 Sites Identified:	Two post-1846 sites were identified. These sites are both blazed trails with CMTs, are most likely sections of the Takla to Tsayta Lake Trail. These sites are not protected by the BC Heritage Conservation Act.
Areas of Potential Identified:	Two areas were identified as having high potential for subsurface cultural material. It is recommended that these areas be excluded from harvest or further shovel testing is required. See "Recommendations" section below for further details.

Other Sites Identified:	A trap and modern blazes were found within the block that are not protected by the Heritage Conservation Act. No further work is required, but it is recommended that stakeholders in the area be consulted.

Provided recommendations are followed and block boundaries do not change significantly no further work is required.

Location

The block is located on both sides of Maclaing Creek, 920 m west-northwest of Academus Lake, and 5.6 km northeast of the confluence of Maclaing Creek and Takla Lake (see Figure 1).

To access the block from Fort St James, head north on the North Road. At the railway tracks turn left (west) onto the Tachie Hwy and follow for approximately 40 km. Turn right (north) onto the Leo Creek FSR and follow for approximately 68 km. Turn right (north) onto the Driftwood FSR and follow to the 64 km mark, at which point the road intersects the block.

UTM (NAD 83):	10 N 320863 E 3152232 N
NTS Mapsheet:	93 N/05
BCGS Mapsheet:	93N.041

Methods

Background Research:	Prior to field assessment, provincial databases were queried for previous archaeological sites and studies completed in the general area. Maps and sources pertaining to the natural and cultural environment were consulted. First Nations whose traditional territory covers the block were provided with maps and a review period ending July 9, 2015.
Pedestrian Survey:	A two-member crew spaced at 5-30 m intervals conducted survey transects throughout the block. Surfaces were inspected for archaeological sites and areas of potential. Visibility was generally good throughout the block ranging, typically ranging from 15-30 m, with areas of low visibility in more poorly drained terrain with dense alder. Survey transects were influenced by predicted archaeological potential, mapped block boundary, topography, hydrology, and vegetation encountered during assessment (see "Archaeological Potential Assessment" below). The block was not flagged at the time of assessment. Pedestrian transects are shown on Figure 3. Note that block boundaries provided at the time of field assessment are shown on Figure 2 and final block layout is shown on Figure 3.
Areas of Potential (AOP):	Areas identified as having subsurface archaeological potential were mapped, photographed and recorded as to size, type of landform, and associated features. All AOPs were flagged with red and purple ribbon.
Subsurface Testing:	No subsurface testing was conducted
Pre-1846 Site Recording:	No pre-1846 sites were recorded.
Post-1846 Site Recording:	Two post-1846 CMT and trail sites were recorded. Sites were recorded by GPS, flagged with yellow "CMT" flagging, and photographed.

Environment

Biogeoclimatic Zone:	Sub Boreal Spruce dominated by pine and spruce age class 6-8 (101-250 years old)
Elevation Range:	900-1050 m ASL
Hydrology & Associated Landforms:	Maclaing Creek is approximately 5 m wide on a well-defined pebble bed (photo 982). The creek is immediately surrounded by alder, willow, grasses and horsetail. Associated terrain within the block is undulating. Wetland A surrounds Maclaing Creek. It is covered in alder and willow and immediately surrounded by black spruce at its northern extent (photo 975). Along its southern margin, the wetland is covered in marsh grasses and scrub birch with large pools of standing water. Terrain immediately adjacent to the wetland is low-lying and wet with black spruce (photo 995). Wetland B is also located along Maclaing Creek. It is an open grass and willow covered wetland with pools of standing water. The wetland is immediately surrounded by black spruce. Associated terrain within the block is generally undulating and sloping towards the wetland.

	Stream B is well-defined with running water on rocky bed. Associated terrain slopes gently down to the stream without breaking. Further into the block, terrain is undulating and poorly drained. Streams C and D are well-defined, running streams with rock bottoms. Surrounding terrain slopes steeply down to the streams. The top of slope is uneven and undulating. Stream E is not a stream. The area is low-lying and wet with some standing water. The block slopes down to the southeast (photo 991). Stream F was not directly seen, but is associated with Stream E and is assumed to have similar characteristics. Lake A is open and well-defined with marshy edges of grasses, willow and scrub birch. Within the block, the terrain slopes down to the lake without breaking. Stream H drains east out of Lake A; it is low-lying and wet, covered in horsetails, grasses, willow and alder. Associated terrain is sloping towards the stream without breaks. Stream G drains east into Stream H; it is a seasonal drainage within a draw with a north-facing aspect. Wetland C is located along Stream G; it is open and well-defined, covered in grasses and scrub birch. Associated terrain slopes moderately down to the wetland without breaks.
Topography:	The northwestern portion of the block is uneven (photo 972) to undulating with rolling hills and drumlins. A moderate slope is located along the western block boundary, down to Stream C, becoming low-lying and poorly-drained adjacent to Streams C and D. The central portion north of Maclaing Creek is generally low-lying and poorly drained with some rolling terrain to the east. The southwestern portion south of Maclaing Creek consists of poorly-drained terrain near Wetland A/Maclaing Creek. Further south, the terrain features moderate to steep, north-facing slope. The southeastern portion south of Lake A is slopes continuously to the north and east towards the lake and the streams.
Vegetation:	The overstory consists mainly of pine and spruce with scattered sub-alpine fir and aspen. The understory consists of mosses, lichens, ferns, blueberry, huckleberry, fireweed, horsetail, alder, rose and Labrador tea.

Archaeological Potential Assessment

Previously Recorded Archaeological Sites:	No previously recorded sites are in conflict with the block. The following archaeological sites are located within 5 km: **GiSk-2:** Subsurface lithic (one obsidian flake), located 1.5 km east **GiSk-3:** Subsurface lithic (two obsidian flakes), located 1.7 km east
Previous Studies:	The Fort St. James Forest District Archaeological Predictive Model (Marshall and Bond 2005) was used as an aid in predicting potential. Polygons of high archaeological potential from this model are shown on Figure 2. The Takla Lake to Tsayta Lake Trail (56) is estimated to run through the block (estimated located shown on Figures 2 and 3 as a green dotted line). This information comes from the Fort St James Ministry of Forests Cultural Heritage Resources Trail Database (2001). The database indicates that the trail is historic and noted on post-1900 maps only; however, the database notes that it may have aboriginal origins.
Pre-field Predicted Potential:	The predictive model assigns high potential to the northern portions of the block, as well as scattered pixels in the southern portion. Professional opinion is that there could be archaeological potential on landforms associated with Maclaing Creek and its associated tributaries and wetlands. Potential in the southwestern part of the block (from Stream A north to Stream B) is considered to be low due to steeply sloping, north-facing terrain; this area was not slated for field survey. The potential in the 250 m buffer along the southwestern and southern block boundary is assessed as low due to poorly-drained and sloping conditions. Existing cutblocks in the southeastern and northern 250 m buffers indicate that those areas will not be part of the harvest area and were not assessed. High potential in the 250 m buffer is predicted in association with Lake A in the northeastern corner of the buffer as well as associated with Maclaing Creek/Wetland A in the northwestern buffer.

	The potential for trails is considered high in the northern portion of the block and/or adjacent to Maclaing Creek, given that the Takla Lake to Tsayta Lake Trail is estimated to run through the block. The potential for pre-1846 CMTs is considered to be high through the majority of the block as VRI data indicates a predominance of pine in age class 8 (estimated 141-250 years old). Potential for post-1846 CMTs is also considered high where pine is present.
In-field Assessed Potential:	Two areas were identified as having potential for subsurface archaeological remains: • AOP1: knoll overlooking Wetland B to the south and west, 20 x 5 m, photo 979 • AOP2: southeast-facing break-in-slope overlooking Wetland A, 20 x 5 m, photo 976 AOP2 is located within modeled high potential while AOP 1 is located directly adjacent to modeled high potential. The remainder of the block was assessed as having low archaeological potential due to poorly drained, uneven and sloping terrain. Pre-1846 CMT potential was assessed as low, as the trees are fairly small (10-25 cm DBH) and don't appear to be old enough for pre-1846 features. The potential for post-1846 CMTs was assessed as high where pine are present. Post-1846 blazes and choppings/kindled trees associated with an intermittent trail bed were found near the Driftwood FSR, close to the estimated location of the Takla Lake to Tsayta Lake Trail.

Subsurface Testing

No subsurface testing was conducted, as the block boundaries were not flagged and it was not known if the identified AOPs would be within the harvest plan.

Sites Identified

The following post-1846 sites were identified during assessment.

Assigned Site Number:	ACA15_11-CYB1
Site Type:	Post-1846 traditional use, trail bed, blazes, kindling trees
UTM (NAD 83):	Southeast end: 10 U 321580 E, 6152445 N Northwest end: 10 U 321480 E, 6152603 N
Site Boundaries:	200 m northwest-southeast x 5 m northeast-southwest
Investigations:	The site was flagged in yellow CMT ribbon. The blazed and kindled trees were GPS'd and Level 1 recorded (Stryd 2001). Representative photographs were taken.
Setting and Landforms:	The site is located on a moderate southwest-facing slope, approximately 100 m north of Maclaing Creek/Wetland A.
Features:	The site runs in a northwest-southeast direction, consisting of 3 kindled/chopped trees and 20 blazes (see photos 983-988). There is also an intermittent trail bed following the CMTs.
Age:	The majority of the scarred trees (22 of 23) are all small pine with a DBH of 15-20 cm. One blaze is on a spruce tree of similar DBH. Four cores were taken, indicating germination dates of AD 1862 to 1915. The scarring events took place sometime after the trees germinated and were well established, likely well into the 20th century.
Condition Assessment:	The majority of the CMTs are on dead standing pine (16 of 23 trees). The remaining seven trees are alive.
Impact Assessment:	Impact was not known at the time of field survey, as the block boundaries were not laid out at the time of assessment. Final block layout provided to Ecofor in January, 2016 shows that the site has been removed from the block (see Figure 3).
Significance Assessment:	The site may have high ethnic or traditional use significance.
Remarks & Interpretation:	The site likely represents the Takla Lake to Tsayta Lake Trail. It is speculated that the Driftwood FSR was built over the trail in this area, as the trail roughly parallels the road and the northwestern end of the trail is found at the road.

Assigned Site Number:	ACA15_11-CYB2
Site Type:	Post-1846 traditional use, trail bed, blazes, kindling trees
UTM (NAD 83):	Eastern end: 10 U 322002 E, 6152442 N Western end: 10 U 321912 E, 6152447 N

Site Boundaries:	100 m east-west x 5 m north-south
Investigations:	The site was flagged in yellow CMT ribbon. The blazed and kindled trees were GPS'd and Level 1 recorded (Stryd 2001). Representative photographs were taken.
Setting and Landforms:	The site is located on the north side of the Driftwood FSR, paralleling the road.
Features:	The site runs in an east-west direction, consisting of 2 kindled/chopped trees and 9 blazes (see photos 996-999). There is also an intermittent trail bed following the CMTs.
Age:	The CMTs are all small pine with a DBH of 10-24 cm. The site is considered contemporaneous with ACA15_11-CYB1 and it is likely that the scarring events took place well into the 20th century.
Condition Assessment:	All of the CMTs are on dead standing pine.
Impact Assessment:	Impact was not known at the time of field survey, as the block boundaries were not laid out at the time of assessment. Final block layout provided to Ecofor in January, 2016 shows that the site has been removed from the block (see Figure 3).
Significance Assessment:	The site may have high ethnic or traditional use significance.
Remarks & Interpretation:	The site likely represents the Takla Lake to Tsayta Lake Trail. It is speculated that the Driftwood FSR was built over the trail in this area, as the trail roughly parallels the road.

Other Findings

Northwestern portion of the block (west of Wetland A)
A single modern blaze was found; it may be associated with other resource gathering activities in the block (firewood gathering and trapping).

Central portion of the block (north of Maclaing Creek and west and north of Wetland B)
A modern trap was found just south of the Driftwood FSR (purple triangle symbol on Figure 3). Modern blazes and chainsaw cut stumps were also found, which are interpreted as firewood gathering activities. A north-south line of recent blazes west of Wetland B are interpreted as related to modern resource gathering activities.

Recommendations

The CMT and trail sites identified within the block are post-1846 in age and are not protected by the *Heritage Conservation Act*.

No further archaeological work is recommended provided that the block boundaries do not expand significantly.

NOTE

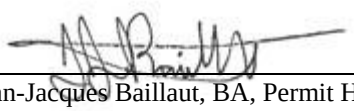
Although every attempt was made to locate and record all archaeological and cultural heritage features located within the specified survey area, the possibility exists that remains may have been missed. If any unidentified archaeological or cultural heritage remains are encountered during development activities, work in the nearby vicinity must stop and the Archaeology Branch, relevant First Nations, and/or the Ministry of Forests, Lands and Natural Resource Operations must be informed. These agencies will then provide direction as to an appropriate course of action to take regarding management of the remains.

It was not the intent of this survey to identify, evaluate, or comment on the presence or absence of Aboriginal Rights in the survey area. Completion of this survey does not "abrogate or derogate from aboriginal treaty rights" (*Heritage Conservation Act* Sec. 8). The results of this assessment have been forwarded to the appropriate First Nations, who may have additional management recommendations for the located sites and/or the proposed development area. The survey was conducted without prejudice to First Nations Treaty Negotiations, aboriginal rights, or aboriginal title.

References Cited

Fort St James Forest District. 2001. *FSJ District CHR Site/Trail Information by Number*. An internal database created by the Ministry of Forests in Fort St James.

Marshall, Amanda and Tara Bond. 2005. *Fort St. James Forest District Archaeological Predictive Model Revision Project: Final Report*. Ecofor Consulting Ltd., Fort St. James, BC.



Jean-Jacques Baillaut, BA, Permit Holder

September 30, 2015
Dated

Photodocumentation

Photo 982. Maclaing Creek, view northeast

Photo 975. Wetland A in northwestern portion of block; view southeast.

Photo 995. Wetland A along southern margin, view north

Photo 991. Stream E, view southeast

Photo 976. AOP2, view east

Photo 979. AOP1, view south.

Photo 977. Stick trap

Photo 983. ACA15_11-CYB1, CMT 1

Photo 984. ACA15_11-CYB1, CMT 4

Photo 985. ACA15_11-CYB1, CMT 12

Photo 987. ACA15_11-CYB1, CMT 19

Photo 988. ACA15_11-CYB1, CMT 21

Photo 996. ACA15_11-CYB2, CMT 3

Photo 997. ACA15_11-CYB2, CMT 5

Photo 998. ACA15_11-CYB2, CMT 7

Photo 999. ACA15_11-CYB2, CMT 10

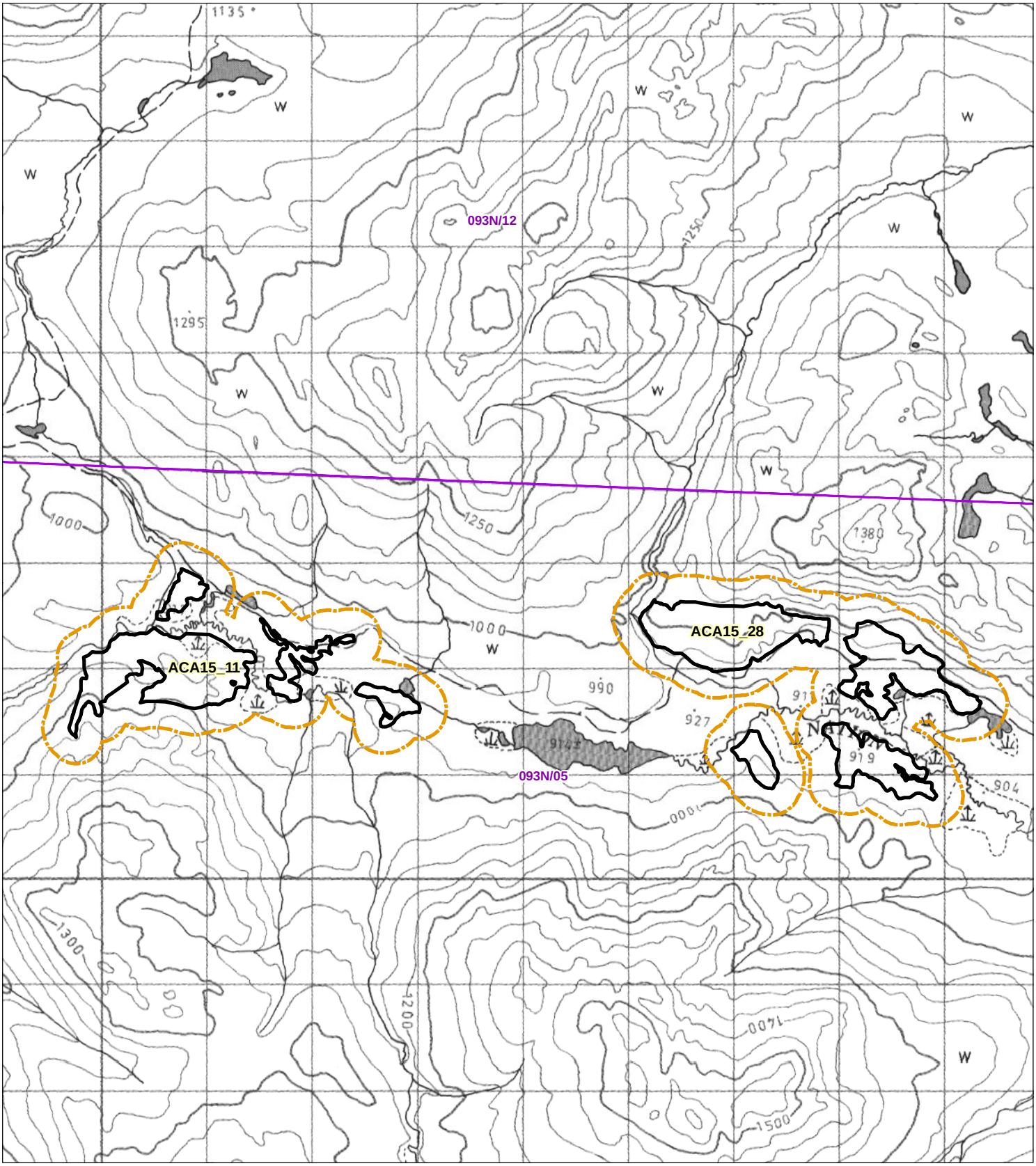


FIGURE 1. BCTS FORT ST. JAMES PROPOSED HARVEST OVERVIEW

BCTS
BC Timber Sales

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0 0.5 1 2 3
Kilometers

NAD 1983 UTM Zone 10N
Date: 09/06/2015

Disclaimer:
NTS mapsheets provided by Surveys and Mapping Branch, Department of Energy, Mines and Resources. Previously Recorded Archaeological Site Boundaries were obtained by the Ministry of Forests, Lands and Natural Resources Operations Archaeology Branch's RAAD Sites

LEGEND
Proposed Cutblock
250m Block Buffer
NTS 50k Grid

Map 1

BCTS
BC Timber Sales

FIGURE 2
ARCHAEOLOGICAL POTENTIAL MAP
1:15,000

ACA15_11

0 150 300 600 900 m

NAD 1983 UTM Zone 10N
BCGS 20k Mapsheet: 93N.041
NTS 50k Mapsheet: 93N/05

L E G E N D

Base Features (20k)
- Contour - Index
- Contour - Intermediate
- River/Stream - Definite
- River/Stream - Indefinite
- Waterbody
- Wetland
- Forest Cover (VRI)

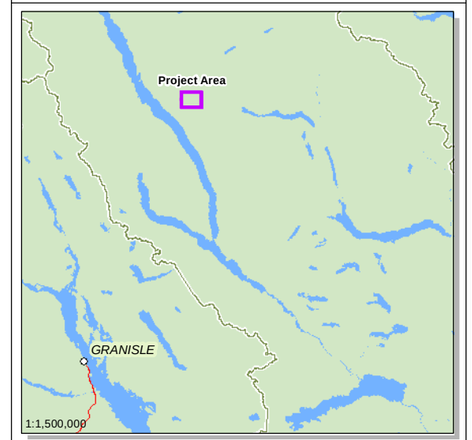
Land Use
- Cutblock
- Trapline

Access
- Forest Service Road
- Road - Other
- Proposed Road

Cultural Heritage
- Heritage Trail - Estimated

Assessment Features
- Proposed Block
- High Archaeological Potential
- 250 m Assessment Buffer

Block ID:	ACA15_11
Block Area:	123.5 ha
Easting:	320863
Northing:	6152232
EPN	2015-1203-065



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Date: 10/06/2015 (MM)

BCTS
BC Timber Sales

FIGURE 3
ARCHAEOLOGICAL RESULTS MAP
1:15,000

ACA15_11

0 150 300 600 900 m

NAD 1983 UTM Zone 10N
BCGS 20k Mapsheet: 93N.041
NTS 50k Mapsheet: 93N/05

L E G E N D

Base Features (20k)
- Contour - Index
- Contour - Intermediate
- River/Stream - Definite
- River/Stream - Indefinite
- Waterbody
- Wetland

Land Use
- Cutblock
- Trapline
- Wildlife Tree Patch (WTP)

Access
- Forest Service Road
- Road - Other
- Proposed Road

Cultural Heritage
- Heritage Trail - Estimated

Assessment Features
- Proposed Block
- 250 m Assessment Buffer
- Assessed Area
- Site Boundary
- Trail
- Post 1846 CMT
- Modern Blaze
- Trap

Block ID:	ACA15_11
Block Area:	114.6 ha
Easting:	321066
Northing:	6152317
EPN	2015-1203-065

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Date: 14/01/2016 (KL)

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