

BRITISH COLUMBIA ARCHAEOLOGICAL IMPACT ASSESSMENT INTERIM REPORT FORM



1. REPORT TITLE

2019-0140-13415	Archaeological Impact Assessment of Proposed British Columbia Timber Sales Stuart-Nechako Cutblock SAL078.
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2. MANAGEMENT SUMMARY

2.1	<i>Protected HCA Sites:</i>	N/A
2.2	<i>Brief Overview of Study:</i>	
	ARCHER CRM Partnership (ARCHER) conducted an archaeological impact assessment (AIA) on the subject project at the request of David Zurevinski of British Columbia Timber Sales Stuart-Nechako (BCTS Stuart Nechako). An in-office review of the proposed cutblock prior to field assessment identified areas of archaeological potential (AOPs), as well as the potential for culturally modified trees (CMTs) based on the VRI data of a tree stand of a sufficient age.	
2.3	<i>Results:</i>	
	<p>No archaeological sites, or other cultural heritage resources protected under the <i>Heritage Conservation Act</i> (HCA) were identified as a result of this study.</p> <p>A total of 221 shovel tests were placed at five locations exhibiting archaeological potential. All subsurface tests returned negative results for archaeological materials.</p> <p>Two bark stripped lodgepole pine CMTs were identified in the western portion of the block, both of which were dead. The features were GPS located and metrics were collected. One CMT was successfully dated by increment coring. The increment core sample dated the feature to AD 1949.</p> <p>Two areas of archaeological potential were identified during the assessment (AOP 1 & 2), illustrated on Figure 1, and described in Table 4 below. The AOPs locations were included in the original proposed block layout but have been excluded from the final block shape.</p>	
2.4	<i>Management Recommendations:</i>	
	<p>Our visual inspection and subsurface testing program of the proposed BCTS Stuart-Nechako cutblock SAL078 did not result in the identification of archeological or other cultural heritage remains protected under <i>Heritage Conservation Act</i> (HCA). Post AD 1846 CMTs not protected under the HCA were recorded. Two areas of archaeological potential (AOP1 & 2) were also recorded in association with the block. Recommendations are provided below, followed by general recommendations related to further development of the project area.</p> <p>AOP1 & AOP2 may be impacted by timber harvest and related activities:</p> <ol style="list-style-type: none"> 1. If the AOPs are to be subject to timber harvest and/or other ground altering activities, additional archaeological assessment including shovel testing will be required. 2. Alternatively, each AOP may be avoided by excluding it from the harvest area and implementing a 30 m machine free buffer around each AOP perimeter. <p>Considerations for Post-1846 CMTs are as follows:</p> <ol style="list-style-type: none"> 1. No further work is recommended for these CMTs. The CMTs at this site all post-date AD 1846 and do not represent exceptional, unique, or scientifically significant examples of culturally modified trees. Therefore, they are not protected under the HCA. 	

	<p>2. A sample of increment core dates of sufficient size to capture the representation of the variation of stripping ages of lodgepole pine CMTs within the study area was recorded resulting in an age range of AD 1946 (Muir & Moon 2000).</p> <p>3. These CMTs may be considered cultural heritage resources of significance to the relevant First Nations as CMTs provide dateable evidence regarding the practice of aboriginal right.</p> <p>To address the prospect of unanticipated archaeological materials and/or features being discovered, it is recommended that the proponent inform its employees and contractors of this possibility. If archaeological materials or other heritage remains are uncovered during construction, work in the area of the find must immediately cease and the Archaeology Branch and/or ARCHER informed. It is recommended that the proponent also promptly inform the relevant First Nations concerning any unanticipated archaeological findings.</p>
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3. ADMINISTRATIVE INFORMATION

3.1	<i>Permit Holder:</i>	Frank Craig f.craig@archercrm.ca	3.2	<i>Permit Holder Affiliation:</i>	ARCHER CRM Partnership T: 250-567-9496
3.3	<i>Proponent Contact:</i>	David Zurevinski David.Zurevinski@gov.bc.ca	3.4	<i>Proponent Affiliation:</i>	BCTS Stuart Nechako T: 250-567-6331
3.5	<i>Interim Report Author(s):</i>	Marina Russell			
3.6	<i>Interim Report Date & Version:</i>	December 14, 2020, V1			
3.7	<i>Notification of Work Date:</i>	May 11, 2020: <ul style="list-style-type: none"> • McLeod Lake Indian Band • Nak'azdli Whut'en Band 			

4. PROPOSED DEVELOPMENT

4.1	<i>Description:</i>	British Columbia Timber Sales Stuart Nechako Business Area SAL078 <ul style="list-style-type: none"> • Cutblock for timber harvest • Total area 577.9 ha
4.2	<i>Location:</i>	The development is located southeast of Salmon Lake, east of Noonlang Lake and southwest of Mount MacKinnon. It is situated at NAD 83 UTM Zone 10 UTM Coordinates (approximate center) E: 452531 N: 6071898.

5. FIELD CREW

Table 1. Field Crew

<i>Date (dd/mm/yy)</i>	<i>Field Director (on site? Y/N)</i>	<i>Field Supervisor</i>	<i>Other Field Personnel</i>
13/07/20	Marina Russell (Y)	N/A	Ashley How, Tanner Humphreys
14/07/20	Marina Russell (Y)	N/A	Ashley How, Tanner Humphreys, Cyrus Prince (Nak'azdli)
15/07/20	Marina Russell (Y)	Ashley How	Tanner Humphreys, Cyrus Prince
04/09/20	Laura Enns (Y)	N/A	Tanner Humphreys, Gene Kristiansen, Carling Reid, Marina Russell
24/09/20	Laura Enns (Y)	N/A	Tanner Humphreys, Carling Reid
25/09/20	Laura Enns (Y)	N/A	Tanner Humphreys, Carling Reid
26/09/20	Laura Enns (Y)	N/A	Tanner Humphreys, Carling Reid

21/10/20	Marina Russell (Y)	N/A	Greg Ketlo, Gene Kristiansen
22/10/20	Marina Russell (Y)	N/A	Greg Ketlo, Gene Kristiansen

6. ARCHAEOLOGICAL METHODS & RESULTS

6.1. Pre-field Methodology

- ☒ Archaeological potential and sites are indicated on the Study Area Map
- ☐ An AOA and /or archaeological predictive model exists for the study area

Details:

- ☒ Previous field studies influenced this assessment

Details: A previous AIA overlaps part of the study area and influenced the field assessment, as areas surveyed during the previous assessment were not revisited (ARCHER CRM Partnership 2013).

- ☒ Review of Provincial Heritage Register

Date Accessed: May 21 and November 23, 2020

- ☒ Other

Details: Prior to fieldwork, the study area was subject to an in-office map review, this included identifying areas of archaeological potential and determining the potential presence of culturally modified trees (CMTs), orthographic photos, and records of previous archaeological assessments. Identified areas of potential which could be impacted by development activities were subject to field assessment by crew members on the ground. The terms and conditions guiding the overview and identification of archaeological potential are defined in the corresponding permit.

Table 2. Archaeological Sites in the Vicinity of the Study Area

<i>Borden No.</i>	<i>Distance & Direction from the Proposed Development</i>	<i>Site Type</i>	<i>Permit No. of Previous Visits</i>	<i>Site in Conflict (Y/N)</i>
GeRw-8	2274 m N	PRECONTACT – Cultural Material – Subsurface – Lithic	2019-140	N
GeRw-6	2532 m WSW	PRECONTACT – Cultural Material – Subsurface – Lithic	2019-140	N
GeRw-7	2687 m NW	PRECONTACT – Subsistence Feature – Cultural Depression – Cache Pit	2019-140	N
GeRw-1	3135 m NW	PRECONTACT – Subsistence Feature – Cultural Depression – Cache Pit	2007-140	N
GeRw-5	3760 m WSW	PRECONTACT – Cultural Material – Subsurface – Lithic	2019-140	N

6.2. In-field Methodology

☒ Subsurface test measurements are a minimum of 35 x 35 cm

Date Accessed: July 13-15, September 4, 24-26 and Oct 21-22, 2020

During the assessment the study area was visually assessed by one crew with three to four crew members walking parallel to each other, spaced in a manner that would enable maximum coverage depending on visibility and archaeological potential of the area. Where applicable, natural and anthropogenic soil exposure (eroded banks, tree throws, etc.) in the project footprint were visually assessed for cultural remains in disturbed or secondary contexts. No survey was conducted on the day when the crew consisted of five crew members.

The depths of the tests varied from 20 to 45 cm, at which point glacial sediments were encountered and the tests were discontinued. All sediments from the tests were screened through ¼" mesh

CMTs in or adjacent to the subject project were sought given the presence of mature forest cover. Where identified, CMTs were recorded, cored and exemplary modifications and/or scars photographed (Muir and Moon 2000).

6.2.1	Number of Crew Members:	3-5	6.2.2	Crew Spacing:	5-20 m
6.2.3	Other:	Transects were spaced according to archaeological potential, forest/vegetation cover density and ground surface visibility. When transecting crew size consisted of a maximum of 4 crew members, only shovel testing was conducted when the crew consisted of 5 crew members.			

6.3. In-field Observations

Terrain throughout the proposed study area ranges from featureless with patches of low-lying wet terrain in the western and middle sections, to gentle to moderately sloping in the east. Some terracing was present around streams in the southwest.

Forest cover is primarily comprised of lodgepole pine, subalpine fir, and hybrid spruce with some trembling aspen. The understory consists of bunchberry, alder, rose, Labrador tea, lichen, moss, grass, clasping twisted stock, huckleberry, gooseberry, horsetail, twinberry, colt's foot, ferns, club moss, pelt, five-leaf bramble, red columbine, fireweed, Queen's cup, soapberry, arnica, lupin, spirea and trailing twinflower.

The block flagging at the time of assessment significantly differed from the proposed block shapefile. No previous disturbances were noted.

6.4. Results

A total of 221 subsurface tests were placed at five locations exhibiting archaeological potential. All subsurface tests returned negative results for archaeological materials. Two additional areas of subsurface archaeological potential were recorded within proposed block layout as illustrated in Figure 1 and are described in Table 4. As the AOPs have not been included in the final block layout, no shovel testing was conducted at the two AOPs.

Two bark stripped CMTs were identified in the western portion of the block, both of which were dead. The features were GPS located and metrics were collected. One CMT (50%) was successfully dated by increment coring. Increment core sample dated the feature to AD 1949.

No archaeological sites or other cultural heritage resources protected under the *Heritage Conservation Act* (HCA) were identified as a result of this study.

Table 3. Assessment Results

Subsurface Test Area	Description*	Stratigraphy	Dimensions (m) (L x W)	Subsurface Tests		
				Total	Positive	Negative
TLA1	A well-defined terrace associated with the junction of two ephemeral streams. Both had water present at the time of assessment. Systematic shovel testing was conducted.	Stratigraphy was uniform throughout as follows: 0-9 cm organics; 9-27 cm orange clayey sand with 5% gravels; 27-37 cm tan sand with 5% gravels; 37-43 cm + tan compact sand with 30% gravels.	110 m x 4 m	46	0	46
TLA2	A terrace which overlooks an ephemeral stream. No shovel testing was conducted within a small section of low-lying terrain within the area of the test location. Systematic shovel testing was conducted.	Stratigraphy was uniform throughout as follows: 0-6 cm organics; 6-9 cm grey silt; 9-15 cm red brown silt; 15-25 cm yellow brown wet clayey silt. With 15% pebbles throughout.	50 m x 4 m	22	0	22
TLA3	A well-defined terrace associated with the junction of two ephemeral streams. Both had water present at the time of assessment. Systematic shovel testing was conducted, with one judgemental test placed at the point of the landform.	Stratigraphy is uniform throughout as follows: 0-6 cm organics; 6-8 cm grey silt; 8-24 cm red brown silt; 24-26 cm + yellow brown wet clayey silt with 5% inclusions.	130 m x 4 m	59	0	59
TLA4	A small well-defined terrace associated with an ephemeral stream. Systematic shovel testing was conducted.	Stratigraphy is uniform throughout as follows: 0-6 cm organics; 6-8 cm grey silt; 8-24 cm red brown silt; 24-26 cm + yellow brown wet clayey silt with 5% inclusions.	30 m x 4 m	22	0	22
TLA5	A large well-defined terrace associated with an ephemeral stream. Systematic	Stratigraphy is uniform throughout as follows: 0-9 cm organics; 9-20 cm tan clayey	175 m x 3 m	72	0	72

Subsurface Test Area	Description*	Stratigraphy	Dimensions (m) (L x W)	Subsurface Tests		
				Total	Positive	Negative
	shovel testing was conducted.	sand with 10-15% gravels and pebbles; 20-29 cm orange clayey sand with 10-15% gravels and pebbles; 29-37 cm + tan-grey clayey sand with 25% gravels.				

Table 4. Locations identified as having archaeological potential (not subject to impact assessment)

AOP ID#	Orientation	Description	Dimensions (m) (L x W)
AOP1	East-West	A high terrace, minimum 10 m above a small stream to the southeast. The AOP is located within the proposed boundary but has been excluded from the final block layout. The AOP was flagged with purple flagging at the POC and POT.	30 m x 15 m
AOP2	North-South	A terrace approximately 10 m above an unnamed lake, the northern end is situated at the confluence of a small stream and the lake. The AOP is located within the proposed boundary but has been excluded from the final block layout. The AOP was flagged with purple flagging at the POC and POT.	55 m x 25 m

7. ARCHAEOLOGICAL SITE SUMMARY

No archaeological sites were identified or revisited.

8. DISCLOSURE STATEMENT & SIGNATURE

Project footprint boundaries illustrated on the attached map(s) indicate those areas subject to the archaeological assessment described in this report, unless otherwise noted. If future or final construction and development plans differ from those presented here, the results of this assessment may not be applicable in part or in whole.

To address the prospect of unanticipated archaeological remains being discovered, it is recommended that the proponent inform its employees and contractors of this possibility. If archaeological materials or other heritage remains are uncovered during construction, work in the area of the find must immediately cease and the Archaeology Branch and/or ARCHER informed. It is recommended that the proponent also promptly inform the relevant First Nations concerning any unanticipated archaeological findings.

It was not the intent of this study to identify, evaluate, or comment on the presence or absence of Aboriginal Rights in the study area. Completion of this study does not "abrogate or derogate from aboriginal treaty rights" (Heritage Conservation Act Sec. 8). The study was conducted without prejudice to First Nations Treaty Negotiations, aboriginal rights or aboriginal title.

It is my opinion that the reported fieldwork and this corresponding report were completed in agreement with the requirements of the relevant Heritage Inspection Permit issued by the Archaeology Branch. I concur that the above information is true given available information.

Sincerely,

ORIGINAL DOCUMENT SIGNED

Marina Russell, B.Sc.
Field Director, on behalf of,

Frank Craig, B.A., RPCA
Permit holder

9. REFERENCES CITED

ARCHER CRM Partnership

2013 Archaeological Impact Assessment of Stuart-Nechako BCTS (Fort St. James) cutblock SAL078. HCA Permit 2013-0099. ARCHER CRM Partnership File 10074. Submitted to British Columbia Timber Sales Stuart Nechako. Copies on file at the Archaeology Branch, Victoria, BC.

Muir, R.J., and H. Moon

2000 *Sampling Culturally Modified Tree Sites*. British Columbia Ministry of Forests and Range, Aboriginal Affairs Branch, Copies available from Archaeology Branch, Victoria, BC.

Subject Report Citation:

ARCHER CRM Partnership

2020 *Archaeological Impact Assessment of Proposed British Columbia Timber Sales Cutblock SAL078*. HCA Permit 2019-0140. ARCHER CRM Partnership file 13415. Submitted to British Columbia Timber Sales Stuart Nechako. Copies on file at the Archaeology Branch, Victoria, BC.

10. REPORT DISTRIBUTION

Contact	Affiliation
David Zurevinski 250-567-6331 David.Zurevinski@gov.bc.ca	British Columbia Timber Sales Stuart Nechako 15560 BC-16, Vanderhoof, BC, V0J 3A0
Damian Hind 250-953-3334 Damian.Hind@gov.bc.ca	Archaeology Branch 1250 Quadra St, Victoria, BC, V8W 2K7

11. SHAPE FILES

☒ Study area shape files have been sent to archsitereform@gov.bc.ca Study area shapefiles will be submitted on the anniversary date of the Permit.

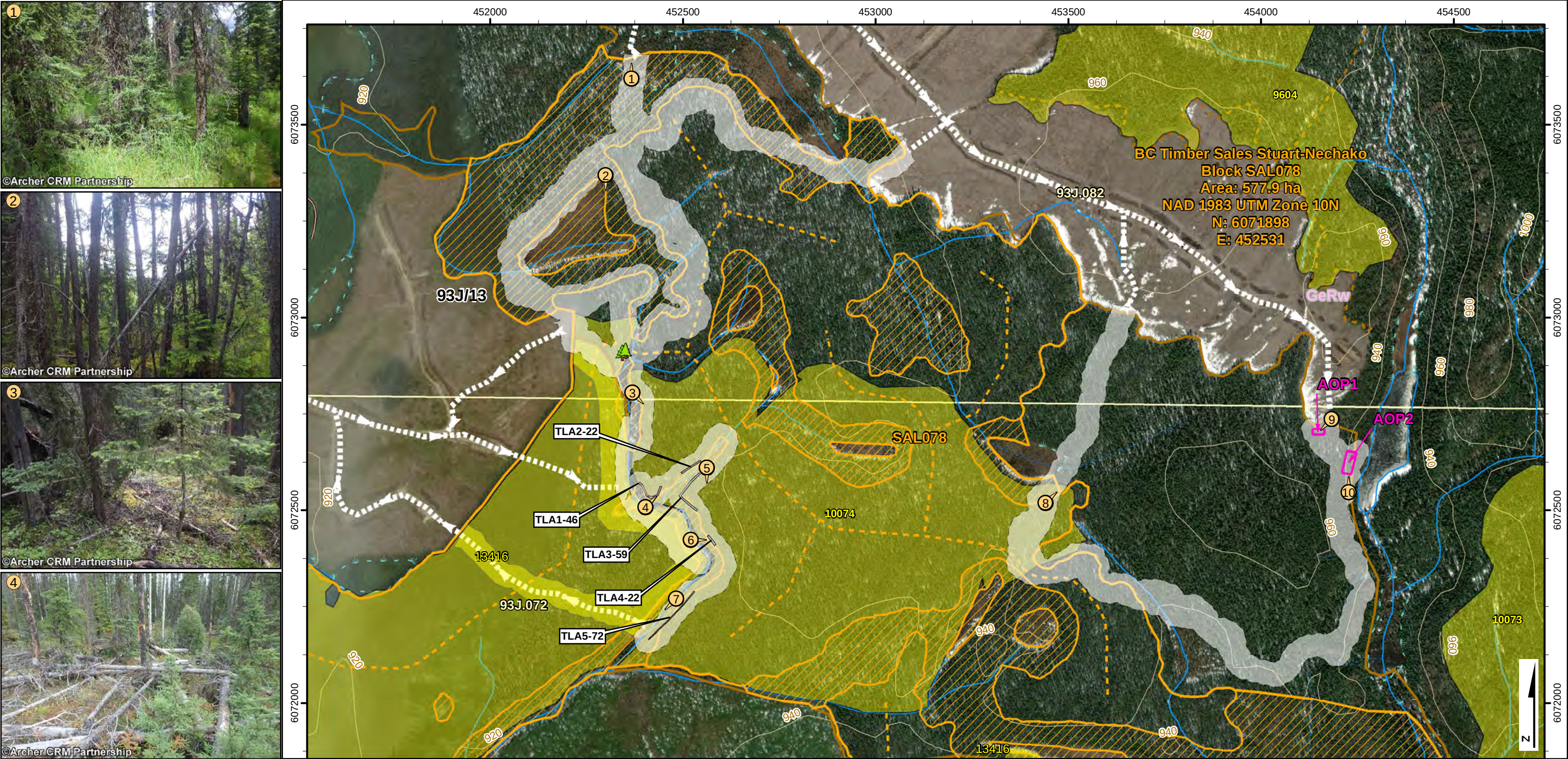
12. APPENDICES

Required:

- ☒ General Area Map (Figure 1)
- ☒ Study Area Map (Figure 1)
- ☒ Photo Plate(s) (Figures 1-2)

If Applicable:

- ☒ Detailed Development Map (Figure 1)
- ☐ Subsurface Test Log
- ☐ Site Forms, Site Maps and Related Documents
- ☐ Other Details:





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Archaeological Impact Assessment

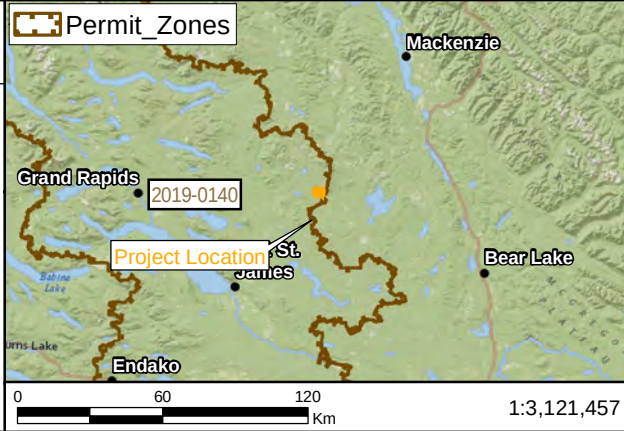
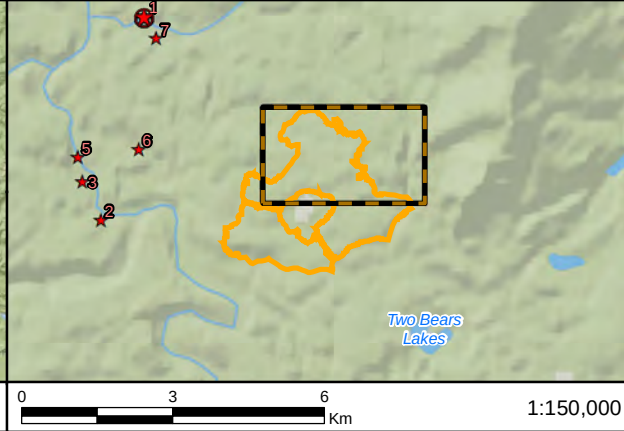
BC Timber Sales Stuart-Nechako

Block SAL 078

Detailed Results Map

Figure: 1

Page: 8



- Post 1846 CMT
- Subsurface Testing
- Archaeological Potential - Verified
- Archer Survey Area
- Archer Access
- Block_Roads
- Final Block
- Non_Merch
- Recce Block
- Prior Archer Project (Fieldwork)
- Lake / Open Water
- Gravel Road
- Rec Trail
- Water Body
- Intermittant Water Body
- Wetland
- Contour 20 m
- BCGS Grid
- Borden Grid
- NTS Grid

Archer Project:	13415
Proponent:	BC Timber Sales Stuart-Nechako
HCA Permit:	2019-0140 (Sec. 12.2)
OGC AMS AA#:	N/A
Surveyor's File:	N/A
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0 100 200 400 Meters 1:10,000	
Version	Detail
0	Original



See Figure 1 for photo locations.

 13415	Figure: 2	Photo Plate: Stuart Nechako BC Timber Sales - Block SAL078	HCA Permit 2019-0140	Date 26/Nov/2020	9
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