

**BRITISH COLUMBIA
ARCHAEOLOGICAL IMPACT ASSESSMENT
INTERIM REPORT FORM**



1. REPORT TITLE

2020-0176-013, AIA of BCTS SNBA block BAP131

2. MANAGEMENT SUMMARY

2.1. Protected HCA Sites
N/A
2.2. Brief Overview of Study
British Columbia Timber Sales, Stuart Nechako Business Area (BCTS SNBA) requested an archaeological assessment within proposed forestry cut block BAP131. Ecofor conducted a detailed pre-field review, followed by an archaeological impact assessment (AIA) survey within the development. The survey focused primarily on areas identified during the pre-field review as having high potential, including along the northern boundary in association with Bivouac Creek and in the central and southern areas in association with Streams E and H, tributaries to Takla Lake.
2.3. Results
During the field assessment 10 locations were shovel tested, found to be negative for cultural material, and assessed to have low potential as a result. Two (2) additional areas of potential (AOPs) were not tested, but the areas were flagged in the field and are located within a portion of the block removed from development. The remainder of the development has been assessed as having low archaeological potential due to sloping, poorly drained, and featureless terrain.
Two (2) post-1846 culturally modified trees (CMTs) were identified.
2.4. Management Recommendations
The AOPs identified are areas where there is a high potential for subsurface archaeological materials. Both AOPs are currently removed from harvest within a wildlife tree patch. No impacts to the AOPs are anticipated if the harvest areas do not change. Should harvest areas change to incorporate the AOPs, options for management include: <ol style="list-style-type: none"> 1. Avoidance with a buffer that is 30 m for BAP131-AOP1 and 30 m or to the existing road for BAP131-AOP2. These buffers are shown on Figure 3. 2. If operationally feasible, implement a machine free zone to stub the trees within the AOP with equipment staying outside of AOP boundaries. If this option is favoured, no ground disturbance can occur within the AOP boundaries and all trees within the boundaries should be stubbed to prevent ground disturbance caused by falling trees. 3. Shovel test under a heritage inspection permit prior to harvest. <p>The post-1846 CMTs are not protected by the <i>Heritage Conservation Act</i>. No further archaeological work is recommended provided AOP recommendations are followed and block boundaries do not change significantly.</p>

3. ADMINISTRATIVE INFORMATION

3.1. Permit Holder:	Greg Holland	
3.2. Permit Holder Affiliation:	Ecofor Consulting 1315 Noranda E, Road, Prince George, BC V2K 5R6	Phone: 250-960-1155 Email: greg@ecofor.ca

3.3. Proponent Contact:	David Zurevinski	
3.4. Proponent Affiliation:	BCTS Stuart Nechako Business Area 1560 Highway 16 East Vanderhoof, BC V0J 3A0	Phone: 250-567-6331 Email: david.zurevinski@gov.bc.ca
3.5. Interim Report Author(s):	Cory Vickruck	
3.6. Interim Report Date (dd/mm/yy) & Version:	01/03/21, V1	
3.7. Notification of Work Date:	15/05/20	
3.8. OGC Ref No.:	N/A	

4. PROPOSED DEVELOPMENT

4.1. Description:	<p>Proposed block for timber harvest BAP131 (98.4 ha) and associated existing access roads. A preliminary block shape and associated 250 m assessment buffer were used for the Notice of Intent distributed prior to fieldwork (Figure 1).</p> <p>The block boundaries had been updated and were flagged at the time of survey. Assessment was conducted within the revised block boundaries. Both preliminary and revised boundaries are shown on Figure 3.</p>
4.2. Location:	<p>Baptiste Operating Area, Stuart Nechako Natural Resource District</p> <p>A point in the centre of the block is located 6.2 km southwest of Takla Lake, 17 km southeast of Natowite Lake, and 20 km northeast of Tochcha Lake (see Figure 1).</p> <p>To access the block from the intersection of the Driftwood FSR and the Leo Creek FSR, travel 25.6 km west on the Leo Creek FSR then turn right (northwest) onto the Leo Kazchek FSR. Continue for 2.9 km then turn left (southwest) onto the Leo-Sakeniche FSR. Continue for 1.6 km over the Middle River Bridge, then keep to the right at the fork to continue on the Leo-Sakeniche FSR. Continue for 4.9 km then turn left (south) onto an unnamed FSR. Follow the road for 8.5 km, at which point the road intersects with the block.</p> <p>UTM coordinates of block centre: NAD 83, Zone 10N, 331170 E, 6102433 N NTS Mapsheet (1:50,000): 93N/04 BCGS Mapsheet (1:20,000): 93N.002</p>

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>
16-19/09/20, 22/09/20	David Wills (N)	Becky Dreyer	Emily Stach
27/10/20	Kari Carter (N)	Ariel McIntyre	Gwen Topacio
28/10/20	Kari Carter (N)	Ariel McIntyre	Zebedee Kawei, Gwen Topacio
28/10/20	Kari Carter (N)	Becky Dreyer	Tristan Pedersen
29/10/20	Kari Carter (N)	Ariel McIntyre	Gwen Topacio
29/10/20	Kari Carter (N)	Zebedee Kawei	Tristan Pedersen, Becky Dreyer

31/10/20	Kari Carter (N)	Becky Dreyer	Ariel McIntyre
31/10/20	Kari Carter (N)	Zebedee Kawei	Gwen Topacio, Tristan Pedersen

6. ARCHAEOLOGICAL METHODS & RESULTS

6.1. Pre-field Methodology

☒	<i>Archaeological potential and sites are indicated on Figures 1 and 3</i>
☒	<p><i>An AOA and/or archaeological predictive model exists for the study area</i> <i>Details:</i> The Fort St. James Forest District Archaeological Predictive Model (Marshall and Bond 2004) indicates high potential in the centre of the block around Lake A and Wetland B and in the southwest corner of the block in association with Stream G. High potential is also indicated along Bivouac Creek in the northern assessment buffer.</p>
☐	<p><i>Previous field studies influenced this assessment</i> <i>Details:</i> N/A</p>
☒	<p><i>Review of Provincial Heritage Register (RAAD)</i> <i>Date Accessed:</i> 04/06/20</p>
☒	<p><i>Review of Vegetation Resources Inventory (VRI) Data</i> <i>Details:</i> VRI data indicate an overstory consisting of age class 8 (141-250 years old) pine, hybrid spruce, and subalpine fir.</p>
☒	<p><i>Other</i> <i>Details:</i> The Fort St. James Trails Database (Ministry of Forests 2001) indicates that the Purvis Lake Trail is estimated to run through the block near its centre. The database indicates that the Purvis Lake Trail is known to have been used historically but may have Aboriginal origins. If present, the trail would be considered a protected archaeological sites and areas surrounding the trail would have high archaeological potential in association.</p> <p>Topographical analysis through Terrain Resources Information Management (TRIM) contour data and satellite imagery indicates that the block is located on gently sloping terrain which drops sharply into significant hydrological features adjacent to the northern and southern boundaries. High archaeological potential is predicted along the northern boundary as TRIM data indicates elevated terrain overlooking Bivouac Creek where level breaks-in-slope may be present. High potential is also predicted along the center and southern portions of the block that surround several unnamed hydrological features that drain into Takla Lake. TRIM contours suggest the presence of breaks-in-slope and level terrain in these areas.</p> <p>Archaeological potential is predicted to be low in much of the interior sections of the block, where there are no significant hydrological features and TRIM contours indicate sloping, featureless terrain.</p> <p>Potential for pre-1846 CMTs is predicted to be high throughout the block as VRI data indicate a tree cover which contains age class 8 (141-250 years old) pine trees.</p>

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

<i>Borden No.</i>	<i>Distance & Direction from Proposed Development</i>	<i>Site Type</i>	<i>Permit No. of Previous Visits</i>	<i>Site in Conflict (Y/N)</i>
None within 5 km				

6.2. In-field Methodology

6.2.1. Subsurface Testing

☒	Subsurface test measurements are a minimum of 35 x 35 cm, excavated by shovel, screened through 6 mm mesh, and backfilled. Date Accessed: 22/09/20, 27/10/20, 28/10/20, 29/10/20, 31/10/20
☐	Describe if other: N/A

6.2.2. Pedestrian Survey

Number of Crew Members:	The crew consisted of 2-3 members. Two crews were present on 28, 29, and 31/10/20. Crews and crew members are listed in Table 1 above.
Crew Spacing and Visibility:	Crew members were spaced 5-10 m apart depending on visibility which ranged from 25-35 m throughout the block.
Other:	Crew members conducted transects which inspected surfaces for sites and areas of potential. The survey followed predicted archaeological potential (see Section 6.1 above), hydrological features, landforms, arbitrary compass bearings, and flagged block boundaries. Pedestrian transects are shown on Figures 2 and 3.

6.2.3. Site Recording

☒	CMTs were flagged and recorded. Describe: CMTs were recorded using Level II Standards and flagged with yellow ribbon with black 'CMT' text (BC Archaeology Branch 2017). Core samples were obtained from the CMTs with an increment borer to date the CMTs.
☐	Trail(s) recorded. Describe: N/A
☐	Other. Describe: N/A

6.3. In-field Observations

6.3.1. Hydrology & Associated Landforms

Stream D is a 3-5 m wide flowing stream at the bottom of a gully with steep north and south aspect slopes on either side, with the exception of two-level terraces recorded as BAP131-AOPs 1 and 2 (see Section 6.4.2 below, Photo 1).

Stream G is located within a wildlife tree patch. The areas surrounding the stream are characterized by a moderately steep slope leading into the stream, located at the base of a gully. Portions of the surrounding terrain contained terraces which were tested in-field as BAP131-STLs 3, 4, 7, and 8 (see Section 6.4.1 below).

Stream H is located outside of the block boundaries and was not observed. The associated terrain within the block exhibits a steep slope leading towards the stream, with level terraces tested during survey as BAP131-STLs 5 and 6 (see Section 6.4.1 below).

Wetland A is a poorly drained low-lying area (Photo 2). The associated terrain is low-lying with a gentle continuous slope into the wetland. The area contains scattered pools of water.

Wetland B and Lake A consist of a small lake with a surrounding wetland. The associated terrain to the south exhibits a gentle to moderate slope with a north aspect leading into the lake and wetland. North of the features,

the terrain exhibits a south-southwest aspect gentle to moderate slope with no breaks and poorly drained soils (Photo 1).

Wetland C and Stream E are located at the bottom of a continuous north-northwest aspect slope with no breaks. The surrounding terrain is low-lying and poorly drained.

Bivouac Creek is located outside of the block boundaries and was not observed. The associated terrain along the northern block boundary exhibits a steep and continuous north aspect slope, apart from a terrace and three breaks-in-slope that were tested in-field as BAP131-STLs 1, 2, 9, and 10.

6.3.2. Topography

The block is generally located on gently to moderately sloping, undulating terrain. Terrain drops sharply in the northern and southern portions of the block that overlook Bivouac Creek and unnamed tributaries of Takla Lake. Continual slopes along the water features give way to several terraces and breaks-in-slope that were dug as STLs or recorded as AOPs (see Sections 6.4.1 and 6.4.2 below). The terrain in the northeastern portion is undulating with a moderate to steep slope to the north leading towards Bivouac Creek. In the northwest, the terrain exhibits somewhat hummocky and poorly drained terrain with undulating sections (Photo 3). The southern portion generally slopes to the south-southeast with a gentle grade. Soil drainage is generally moderate but ranges from poorly drained to well-drained within the development area.

6.3.3. Vegetation

The observed overstory is generally consistent with the VRI data, with subalpine fir and spruce as the leading species, interspersed with a mix of pine trees. Pine trees are generally more prevalent in the southern block, as indicated by VRI data. The understory includes bunchberry, club moss, black huckleberry, soapberry, fireweed, rose, twisted clasping stock, oak fern, and thimbleberry.

6.3.4. In-field Assessed Archaeological Potential

A total of 12 high potential landforms were observed during the survey, though 10 were subsequently shovel tested with negative results and reassessed to have low potential (see Sections 6.4.1 and 6.4.2 below). All 12 landforms are located within areas predicted during the pre-field review to have high potential, based on proximity to significant hydrological features and the TRIM suggested presence of breaks-in-slope and level terrain. The terraces and breaks-in-slope in these areas, recorded as STLs and AOPs, are consistent with the pre-field review. In contrast to the review, however, the remaining areas adjacent to hydrological features were assessed to have low potential. Crew members observed continuously sloping, featureless terrain in these areas rather than the predicted breaks-in-slope and level terrain.

The remainder of the block was assessed to have low potential due to sloping terrain and an absence of hydrological features. This assessment is consistent with the pre-field review, which predicted low potential due to the same factors. Small portions of the block interior were not visually inspected but assessed to have low potential based on the pre-field review and the survey observations made in adjacent areas.

The Purvis Lake Trail was not encountered during the survey despite thorough survey transects within and surrounding the overlapping estimated location from the Ministry of Forests' (2001) database.

Two post-1846 CMTs were identified during survey, but no pre-1846 CMTs were identified. therefore, the potential for pre-1846 CMTs is considered to be low.

BAP131-AOPs 1 and 2 are located within a wildlife tree patch that is separated from the remainder of the block to the north, west and south by existing roads. With the current block layout, no impacts to the AOPs as a result of timber harvest are anticipated. Avoidance buffers of 30 m for BAP131-AOP1 and 30 m or the existing road for BAP131-AOP2 are shown on Figures 2 and 3, should the block layout change prior to harvest.

6.4. Results

6.4.1. Subsurface Testing

The following table describes the results of subsurface testing. See Figure 3 for all subsurface test locations (STLs). See Appendix B for subsurface testing logs and stratigraphy.

Table 3. Subsurface Testing Results

Subsurface Test Area	Description	Dimensions (L x W)	Subsurface Tests		
			Total	Positive	Negative
BAP131-STL1	Break-in-slope overlooking Bivouac Creek	9 x 3 m	8	0	8
BAP131-STL2	Terrace overlooking Bivouac Creek	20 x 3 m	12	0	6
BAP131-STL3	Terrace overlooking Stream G (Photo 4)	12 x 4 m	10	0	10
BAP131-STL4	Terrace overlooking Stream G	20 x 3 m	15	0	15
BAP131-STL5	Terrace overlooking Stream H	25 x 5 m	16	0	16
BAP131-STL6	Break-in-slope overlooking Stream H	27 x 4 m	20	0	20
BAP131-STL7	Terrace overlooking Stream G	20 x 5 m	12	0	12
BAP131-STL8	Terrace overlooking Stream G	30 x 5 m	20	0	20
BAP131-STL9	Break-in-slope overlooking Bivouac Creek	5 x 5 m	6	0	6
BAP131-STL10	Break-in-slope overlooking Bivouac Creek (Photo 5)	12 x 4 m	8	0	8

6.4.2. Untested Areas of Potential

The following table describes all areas of potential (AOP) that were untested. See Figure 3 for all AOP locations.

Table 4. Areas of Potential Recorded

AOP	Description	Dimensions (L x W)
BAP131-AOP1	Terrace overlooking Stream D	25 x 5 m
BAP131-AOP2	Terrace overlooking Stream D	25 x 5 m

6.4.3. Sites Not Protected by the HCA

All traditional use, post-1846, and modern sites that are not protected by the Heritage Conservation Act are described in Appendix C.

7. ARCHAEOLOGICAL SITE SUMMARY

No archaeological sites were identified or revisited during the assessment.

8. DISCLOSURE STATEMENT & SIGNATURE

Although every attempt was made to locate and record all archaeological and cultural heritage features within the specified survey area, the possibility exists that materials may have been missed. If any unidentified archaeological or cultural heritage materials are encountered during development activities, work in the 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 materials.

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 survey was conducted without prejudice to First Nations’ treaty negotiations, Aboriginal rights, or Aboriginal title.

As permit holder, it is my opinion that the field work and reporting were completed in accordance with the Heritage Inspection Permit issued by the Archaeology Branch.



Greg Holland, Permit Holder

9. REFERENCES CITED

- BC Archaeology Branch. 2017. Information Bulletin Number 27 – March 22 – 2017. Culturally Modified Trees Guidelines. Manuscript on file, Archaeology Branch. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/archaeology/forms-publications/bulletin_27_cmt_guidelines.pdf. Date accessed: 16/12/20.
- Marshall, Amanda and Tara Bond. 2004. Fort St. James Forest District Archaeological Predictive Model Revision Project: Final Report. Ecofor Consulting Ltd., Fort St. James, BC.
- Ministry of Forests. 2001. FSJ District CHR Site/Trail Information by Number. An internal database created by the Ministry of Forests, Fort St James.

10. REPORT DISTRIBUTION

Contact	Affiliation
Damian Hind	Archaeology Branch
David Zurevinski	BCTS SNBA
Kelley Williams	Binche Whut'en
Georgina West, Crown Engagement Referral Officer	Lake Babine Nation
Takla Nation Stewardship Portal	Takla Nation
Natural Resource Dept	Tl'azt'en First Nation

11. SHAPEFILES

- ☒ Study area shapefiles have been sent to archsiteform@gov.bc.ca

12. APPENDICES

- ☒ Appendix A – Photos (required)
- ☒ Appendix B – Subsurface Test Log (where applicable)
- ☒ Appendix C – Sites Not Protected by the HCA (where applicable)
- ☒ Appendix D – Figures (per Archaeology Branch Mapping and Spatial File Standards released November 1, 2017)
- ☒ General Location Map (required)
 - ☒ Midrange Location Map (required)
 - ☒ Detailed Results Map (required)
 - ☐ Detailed Site Map (where applicable)

APPENDIX A – PHOTOS



Photo 1. Terrain north of Stream D and Lake A, view east.



Photo 2. Wetland A, view northeast.



Photo 3. Typical terrain in the northwestern block, view east.



Photo 4. BAP131-STL3, view north-northeast.



Photo 5. BAP131-STL10, view north-northwest.



Photo 6. BAP131-STL1 ST#1 soil stratigraphy, northwest wall.



Photo 7. BAP131-STL8 ST#1 soil stratigraphy, north wall.



Photo 8. BAP131-AGM1, CMT1, view east.

APPENDIX B – SUBSURFACE TEST LOGS

BAP131-STL1

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.05 m LFH; 0.05-0.20 m red brown silty loam with 20% to 30% subangular pebbles; 0.20-0.38 m red brown silty loam with 40-50% subangular cobbles	None	10 U 033100 E 6103014 N Test pits placed at 3 m spacing	6
2, 4 to 8	Negative	Same as #1	None		
3	Negative	0-0.03 m LFH; 0.03-0.20 m light grey silt with 10-20% subangular pebbles; 0.20-0.31 m red brown silty loam with 20% subangular pebbles and 20% cobbles	None		

BAP131-STL2

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.06 m LFH; 0.06-0.11 m light grey silt; 0.11-0.19 m reddish brown silty sand; 0.19-0.31 m brownish grey silty sand with 20% cobbles and 10-15% subangular pebbles.	None	10 U 0331789 E 6101809 N Test pits placed at 3 m spacing	
2 to 12	Negative	Same as #1	None		

BAP131-STL3

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.05 m LFH; 0.05-0.26 m light red brown silt with 30% subrounded to subangular pebbles; 0.26-0.32 m light grey silt with 25% subrounded to subangular pebbles	None	10 U 0331789 E 6101809 N Test pits placed at 3 m spacing	
2 to 10	Negative	Same as #1	None		

BAP131-STL4

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.03 m LFH; 0.03-0.26 m reddish brown silty clay; 0.26-0.33 m grey brown silty clay with 20-50% subangular to subrounded pebbles and cobbles	None	10 N 495921 E 6181423 N Test pits placed at 3 m spacing	
2 to 15	Negative	Same as #1	None		

BAP131-STL5

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.06 m LFH; 0.06-0.35 m light grey silt with 70% subangular pebbles and cobbles, poorly sorted	None	10 U 330892 E 6101572 N Test pits placed at 3 m spacing	
2 to 16	Negative	Same as #1	None		

BAP131-STL6

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.06 m LFH; 0.06-0.37 m grey silt with 15-20% subangular pebbles and cobbles; 0.37-0.40 m compact grey silt with 50% pebbles and cobbles;	None	10 N 495921 E 6181423 N Test pits placed at 3 m spacing	
2 to 20	Negative	Same as #1	None		

BAP131-STL7

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.05 m LFH; 0.05-0.28 m red brown sandy silt with 45% subrounded pebbles and cobbles; 0.29-0.33 m light brown clayey silt with 40% subrounded and subangular pebble and cobble inclusions;	None	10 U 331014 E 6101736 N Test pits placed at 3 m spacing	
2 to 12	Negative	Same as #1	None		

BAP131-STL8

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.04 m LFH; 0.04-0.30 light grey clayey silt with 40% subangular and subrounded pebbles and cobbles; 0.30-0.36 m light grey coarse sand with trace silt and 50% subrounded and subangular cobbles and pebbles	None	10 U 330911 E 6101759 N Test pits placed at 3 m spacing	7
2 to 20	Negative	Same as #1	None		

BAP131-STL9

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.05 m LFH; 0.05-0.35 brown coarse sand with 40% cobbles and 20% pebbles, poorly sorted.	None	10 U 331376 E 6103264 N Test pits placed judgementally.	
2-6	Negative	Same as #1	None		

BAP131-STL10

Shovel Test #	Positive/Negative	Soil Stratigraphy	Cultural Material	UTM (NAD 83)	Photo #
1	Negative	0-0.05 m LFH; 0.05-0.35 light brown coarse sandy loam with 20% subangular cobbles and 30% subangular and rounded pebbles.	None	10 U 331376 E 6103264 N Test pits placed at 3 m spacing	
2 to 8	Negative	Same as #1	None		

APPENDIX C – SITES NOT PROTECTED BY THE HCA

☐ No sites were recorded.

☒ Post-1846 / traditional use sites were recorded.

Assigned Site Number:	BAP131-BDD1
Site Type:	Post-1846 CMT
UTM (NAD 83):	Zone 10, 331763 E 6103290 N
Location Description:	The site is located 130 m south of Bivouac Creek, see Figure 3.
Dimensions:	1 x 1 m, based a single observed CMT.
Features:	There is one cambium stripped pine with a DBH of 36 cm. The tree is alive.
Age:	One core was obtained, indicating a scar date of AD 1883.
Photos:	
Interpretation:	The site represents post-1846 use of the area for cambium collection.

Assigned Site Number:	BAP131-AGM1
Site Type:	Post-1846 CMT
UTM (NAD 83):	Zone 10, 331388 E 6103006 N
Location Description:	The site is located 350 m south of Bivouac Creek, see Figure 3.
Dimensions:	1 x 1 m, based a single observed CMT.
Features:	There is one cambium stripped pine with a DBH of 36 cm. The tree is alive.
Age:	One core was obtained, indicating a scar date of AD 1856.
Photos:	8
Interpretation:	The site represents post-1846 use of the area for cambium collection.

☐ Modern sites were recorded.

☐ Ecological or biological sites were recorded.

APPENDIX D – FIGURES

The following maps are included in Appendix D:

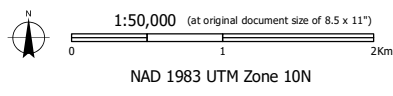
Figure 1. General Location Map

Figure 2. Midrange Location Map

Figure 3. Detailed Results Map



FIGURE 1
GENERAL LOCATION MAP



Disclaimer: This product is for informational purposes only and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. The base data layers have been obtained from the British Columbia Geographic Warehouse (BCGW). Archaeological Site Boundaries were obtained by the Ministry of Forests, Lands and Natural Resources Operations Archaeology Branch's RAAD Sites. Service Layer Credits: Airbus, USGS, NASA, CGIAR, NCEAS, NLS, OS, NMA, Geodastatys, GSA, GSI and the GIS User Community

- | | |
|-----------------|---|
| Rail Line | Assessment Buffer (250m) |
| Road - Resource | Previously Assessed Block |
| Road - Other | High Archaeological Potential (FTSJ) |
| Stream | Previously Recorded Archaeological Site |
| Waterbody | NTS 50K GRID |
| Proposed Block | |

Subsurface Test Location Information

BAP131-STL1:	8(-), 9m x 3m
BAP131-STL2:	12(-), 20m x 3m
BAP131-STL3:	10(-), 12m x 4m
BAP131-STL4:	15(-), 20m x 3m
BAP131-STL5:	16(-), 25m x 5m
BAP131-STL6:	20(-), 27m x 4m
BAP131-STL7:	12(-), 20m x 5m
BAP131-STL8:	20(-), 30m x 5m
BAP131-STL9:	6(-), 5m x 5m
BAP131-STL10:	8(-), 12m x 4m

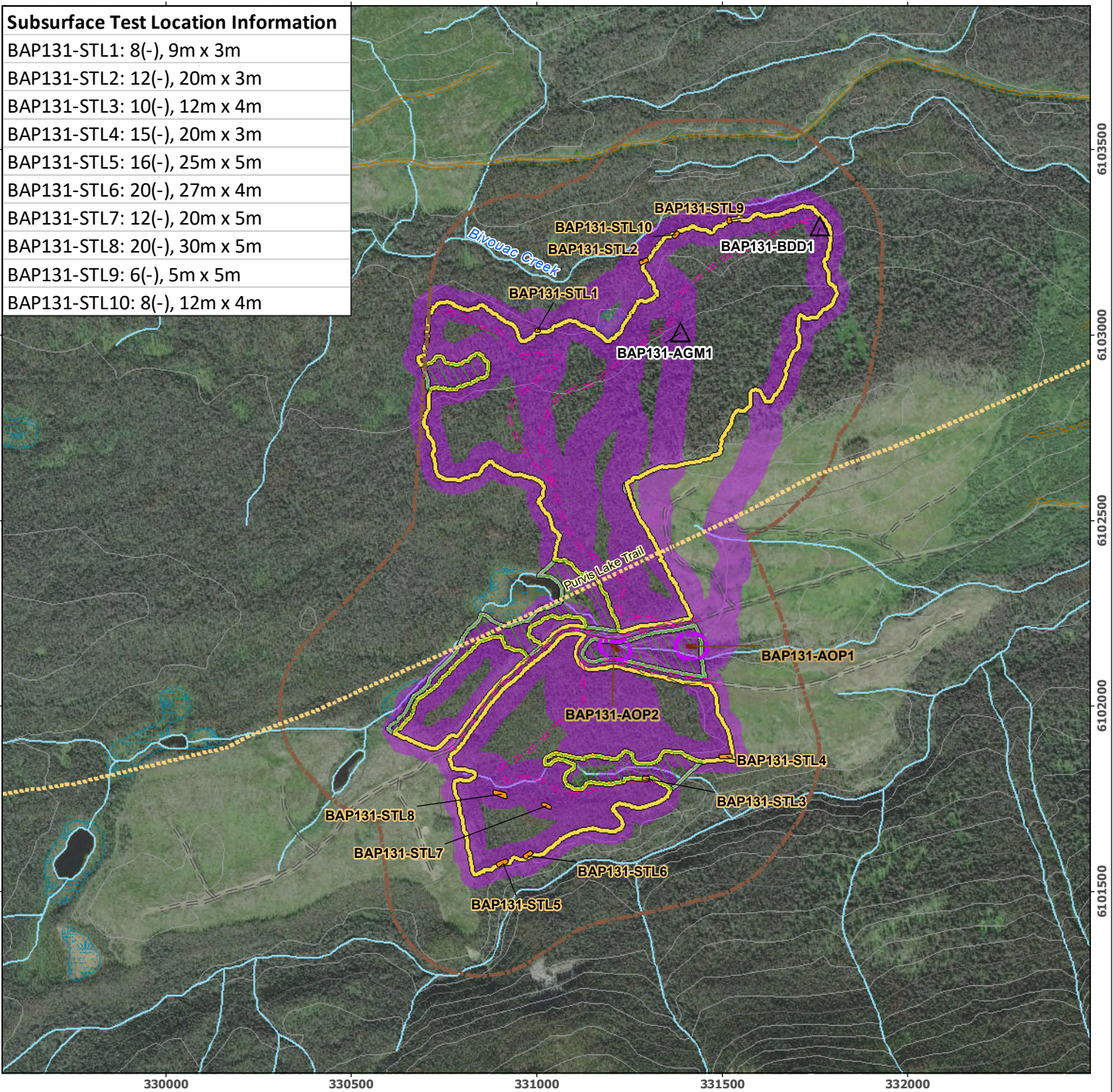
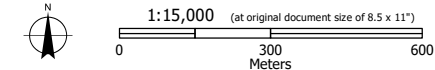


FIGURE 2. MIDRANGE LOCATION MAP
BAP131

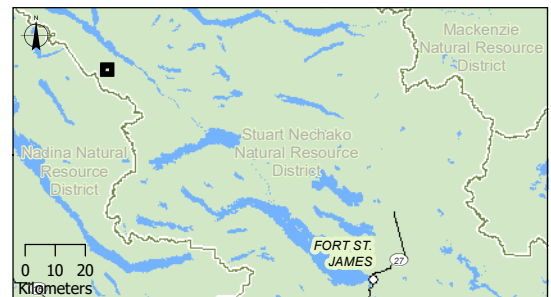


NAD 1983 UTM Zone 10N
NTS MAPSHEET: 93N/04
BCGS MAPSHEET: 93N.002

Permit Number: 2020-0176

EPN: 2020-1203-012

- | | | | |
|-----------------------|-----------------------|----------------------------------|-----------------------------|
| — Contour (100m) | △ Post-1846 CMT | ▨ Area of Potential (AOP) | ▭ Proposed Block |
| — Contour (20m) | == Resource Road | ▨ Management Buffer (30m) | ▭ Previously Proposed Block |
| — Stream - Definite | == Road - Other | ▨ Subsurface Test Location (STL) | |
| — Stream - Indefinite | == Proposed Road | ▨ Assessment Buffer (250m) | |
| ▭ Waterbody | == Trails - Estimated | ▨ Wildlife Tree Patch (WTP) | |
| ▨ Wetland | | ▨ Survey Transect Area | |



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