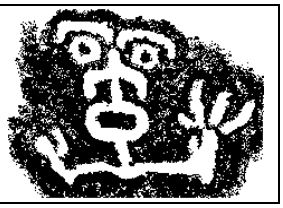
BRITISH COLUMBIA
ARCHAEOLOGICAL IMPACT ASSESSMENT
INTERIM REPORT FORM



1. REPORT TITLE

2020-0176-007, AIA of BCTS Stuart Nechako block AIR20_01

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 AIR20_01. Ecofor conducted a detailed pre-field review, followed by an archaeological impact assessment (AIA) survey within the developments. The survey focused primarily on areas that were identified during the pre-field review as having high potential, including along the northeast boundary between Streams C and D, and adjacent to Stream A in the west.
2.3. Results
The development area was assessed as having low archaeological potential based on the sloping, hummocky, and poorly drained terrain observed. No culturally modified trees (CMTs) were identified, and no shovel testing was conducted.
2.4. Management Recommendations
No further archaeological work is recommended provided block boundaries do not change significantly.

3. ADMINISTRATIVE INFORMATION

3.1. Permit Holder:	Greg Holland	
3.2. Permit Holder Affiliation:	Ecofor Consulting 1315 Noranda Rd E 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):	Tristan Pedersen	
3.6. Interim Report Date (dd/mm/yy) & Version:	29/12/20, V1	
3.7. Notification of Work Date:	15/05/20	
3.8. OGC Ref No.:	N/A	

4. PROPOSED DEVELOPMENT

4.1. Description:	Proposed block for timber harvest, AIR20_01 (102.1ha). The block boundary was flagged at the time of assessment therefore the 250 m buffer was not assessed.
4.2. Location:	Airline, Stuart Nechako Natural Resource District

	A point near the centre of AIR20_01 is located 4.3 km southwest of Glaucers Lake, 4 km southeast of Purvis Lake, and 10.8 km northwest of Takatoot Lake (see Figure 1). To access the block from the intersection of the Germansen Landing Road and Tachie Road near Fort St. James, turn left (northwest) onto Tachie Road. Continue for 40.5 km, then turn right (north) onto the Leo Creek FSR. Continue for 70.3 km then bear right onto the Driftwood FSR. Continue for 14.8 km then turn left (west) onto the Purvis FSR. Follow the road for 17 km then turn left (southeast) onto an unnamed road. Drive for 700 m then bear left at the fork. In 1.8 km, keep left (east) at the fork. Continue for 2 km, at which point the block is located directly north of the road. UTM coordinates of block centre: NAD 83, Zone 10N, 347998 E, 6113894 N NTS Mapsheet (1:50,000): 93N/03 BCGS Mapsheet (1:20,000): 93N.014

5. FIELD CREW

Table 1. Field Crew

Date (dd/mm/yy)	*Field Director (On site? Y/N)*	*Field Supervisor*	*Other Field Personnel*
01/10/20	Johnny Huynh (N)	Zebedee Kawei	Ashley Fuhr

6. ARCHAEOLOGICAL METHODS & RESULTS

6.1. Pre-field Methodology

☒	*Archaeological potential and sites are indicated on Figures 1 and 3*
☒	*An AOA and/or archaeological predictive model exists for the study area* *Details:* The Fort St. James Forest District Archaeological Predictive Model (Marshall and Bond 2004) indicates high potential in the eastern corner of the block in association with Streams C and D.
☐	*Previous field studies influenced this assessment* *Details:* N/A
☒	*Review of Provincial Heritage Register (RAAD)* *Date Accessed:* 02/06/20
☒	*Review of Vegetation Resources Inventory (VRI) Data* *Details:* VRI data indicate age class 7-8 (121-250 years old) hybrid spruce, sub-alpine fir, and pine.
☒	*Other* *Details:* Topographical analysis through Terrain Resource Information Management (TRIM) contour data and satellite imagery indicates the block is located on a continuous moderate slope. Archaeological potential is predicted to be high along the northwestern boundary where TRIM data indicate a topographic high and breaks-in-slope may be present overlooking Stream A. Archaeological potential is also predicted to be high through the centre of the block and in the eastern portion of the block in association with Streams A, C, and D. TRIM data indicate the streams are surrounded by elevated terrain and breaks-in-slope may be present. Archaeological potential is predicted to be low in the southern portion of the block as TRIM data indicates continuously sloping terrain and a lack of hydrological features. Potential for pre-1846 CMTs is predicted to be high in the northern portion of the block. VRI data indicate that tree cover in the area include age class 8 (141-250 years) pine. Potential for pre-1846

	CMTs is predicted to be low throughout the remainder of the block as VRI data indicate the tree cover lacks pine or is estimated as belonging to a younger age class.

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

Borden No.	*Distance & Direction from Proposed Development*	*Site Type*	*Permit No. of Previous Visits*	*Site in Conflict (Y/N)*
GgSh-7	4.4 km northeast	Precontact, Cache Pit	2007-140	N
GgSh-8	4.8 km northeast	Traditional Use, Culturally Modified Tree	2007-140	N
GgSh-9	3.7 km northeast	Precontact, Subsurface Lithics	2007-140	N
GgSi-18	2.7 km west	Precontact, Subsurface Lithics	2017-137	N
GgSi-19	3 km west	Precontact, Subsurface Lithics	2017-137	N
GhSi-1	1.8 km north	Traditional Use, Culturally Modified Tree	2000-120	N
GhSi-2	2 km north	Traditional Use, Culturally Modified Tree	2016-124	N

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: N/A
☐	Describe if other: N/A

6.2.2. Pedestrian Survey

Number of Crew Members:	The crew consisted of two people.
Crew Spacing and Visibility:	Crew members were spaced 2-20 m apart. Visibility ranged from 5-40 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, and flagged block boundaries. Pedestrian transects are shown on Figures 2 and 3.

6.2.3. Site Recording

☐	CMTs were flagged and recorded. Describe: N/A
☐	Trail(s) recorded. Describe: N/A
☐	Other. Describe: N/A

6.3. In-field Observations

6.3.1. Hydrology & Associated Landforms
Stream A is a 1 m wide, 5 cm deep slow flowing stream. The surrounding terrain is poorly drained, hummocky, and consistently slopes gently with an east aspect (Photo 1). Stream B is 40 cm wide and 5 cm deep slow flowing stream. The stream cuts through terrain that is low-lying, poorly drained, and hummocky. Terrain is very gently sloped with a southeast aspect and includes the occasional standing pool of water (Photo 2).

Stream C and Stream D are low-lying areas with no defined stream bed or channel. The terrain surrounding is low-lying, poorly drained, hummocky, very gently sloped, with a south east aspect, and includes the occasional standing pool of water (Photo 3).

6.3.2. Topography

Overall, terrain in the western portion of the block exhibits a gentle east aspect slope and is hummocky. In the eastern portion of the block, terrain exhibits a gentle, southeast aspect slope. Terrain throughout the block is generally low-lying, hummocky, and poorly drained to saturated (Photo 4).

6.3.3. Vegetation

In-field observations of the overstory included pine, black spruce, and sub-alpine fir which is consistent with VRI data. The observed understory includes ostrich fern, thimble berries, devil's club, alder, horsetail, fireweed, stinging nettle, clasping twisted stalk, mosses, cow parsnip, huckleberry, hellebore, brambleberry, queen's cup, and bunch berry.

6.3.4. In-field Assessed Archaeological Potential

The block has been assessed as having low archaeological potential based on the sloping, hummocky, and poorly drained to saturated terrain that was encountered during the assessment. Contrary to the pre-field review which predicted high archaeological potential adjacent to hydrology throughout the block, potential surrounding Streams A, B, C and D was assessed as low due to the poorly drained nature of nearby terrain as well as the lack of any distinct topographical features.

No CMTs were encountered during the assessment. Therefore, potential for pre-1846 CMTs was assessed as low.

6.4. Results

6.4.1. Subsurface Testing

No subsurface testing was conducted within the block.

6.4.2. Untested Areas of Potential

No untested areas of potential are present within the block.

6.4.3. Sites Not Protected by the HCA

No traditional use, post-1846, or modern sites were identified during the survey.

7. ARCHAEOLOGICAL SITE SUMMARY

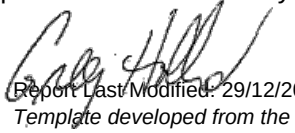
No archaeological sites were identified during the assessment.

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

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.

10. REPORT DISTRIBUTION

Contact	Affiliation
Damian Hind	Archaeology Branch
David Zurevinski	BCTS SNBA
Kelley Williams	Binche Whut'en
Natural Resource Dept.	Tl'azt'en First Nation
Debra Pinkston, Stephanie Rocheleau, Cody Ross, Nathan Prince, Eran Spence, LRO Reception	McLeod Lake Indian Band
Takla Nation Stewardship Portal	Takla Nation
Land Use, Tamara Dokkie	West Moberly First Nation
Chief Waylon John, Rob Diaz	Yekooche 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. Stream A, view north

Photo 2. Stream B, view east

Photo 3. Stream C, view south.

Photo 4. Terrain in the eastern portion of block, view east.

APPENDIX C – SITES NOT PROTECTED BY THE HCA

☒ No sites were recorded.

☐ Post-1846 / traditional use sites were recorded.

☐ 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

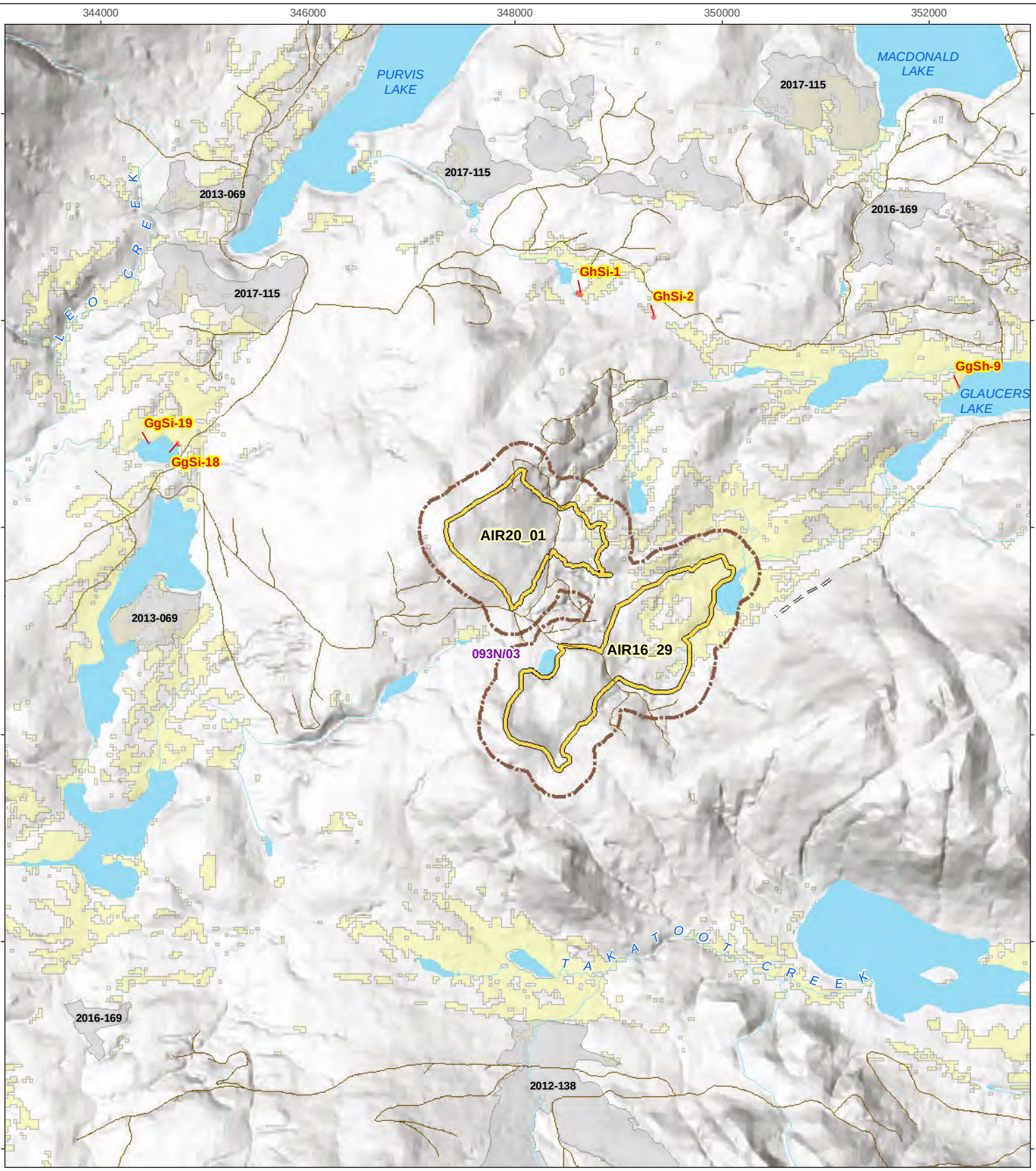


FIGURE 1
GENERAL LOCATION MAP

BCTS BC Timber Sales

ECOFOR natural and cultural resource consultants
Ecofor Consulting Ltd. May 14, 2020 (JM)

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0 1 2Km

NAD 1983 UTM Zone 10N

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,NGA,NASA,CGIAR,NCEAS,NLS,OS,NMA,Geodatastyrelsen,GSA,GSI and the GIS User Community

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

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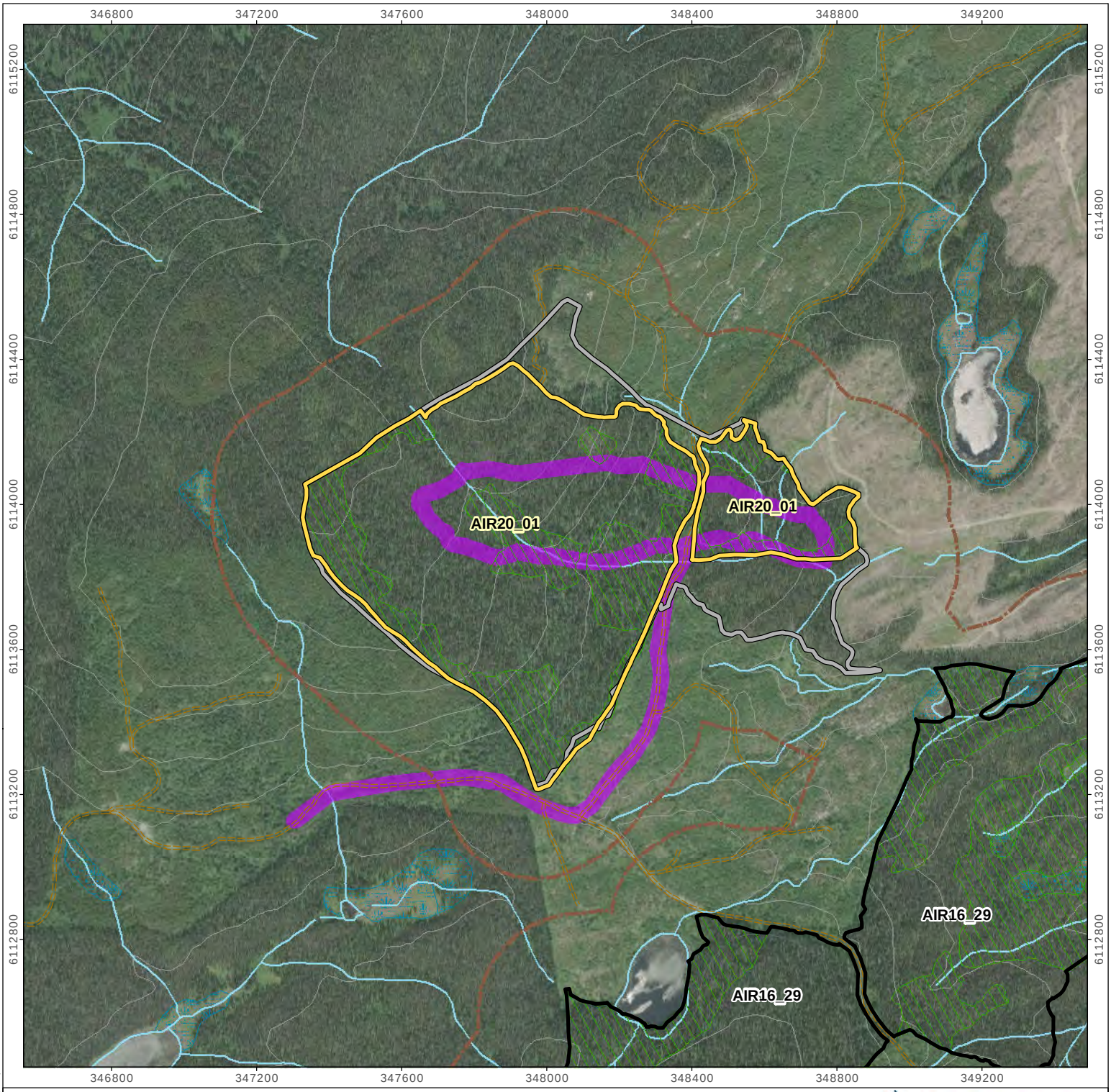

FIGURE 2. MIDRANGE LOCATION MAP

AIR20_01

BCTS BC Timber Sales

ECOFOR Ecofor Consulting Ltd.

December 15, 2020 (ED)

N

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0 300 600 Meters

NAD 1983 UTM Zone 10N
NTS MAPSHEET: 93N/03
BCGS MAPSHEET: 93N.014

Permit Number: 2020-0176

EPN: 2020-1203-003

- Contour (100m)
- Contour (20m)
- Stream - Definite
- Stream - Indefinite
- Waterbody
- Wetland
- Road - Other
- Survey Transect Area
- Adjacent Block
- Proposed Block
- Assessment Buffer (250m)
- Wildlife Tree Patch (WTP)
- Previously Proposed Block

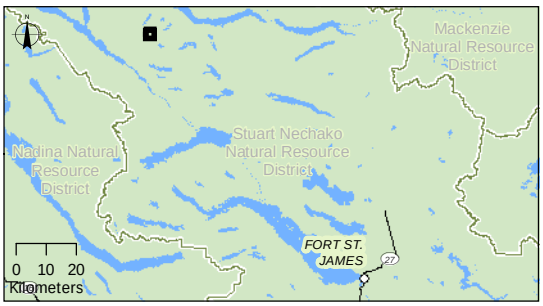

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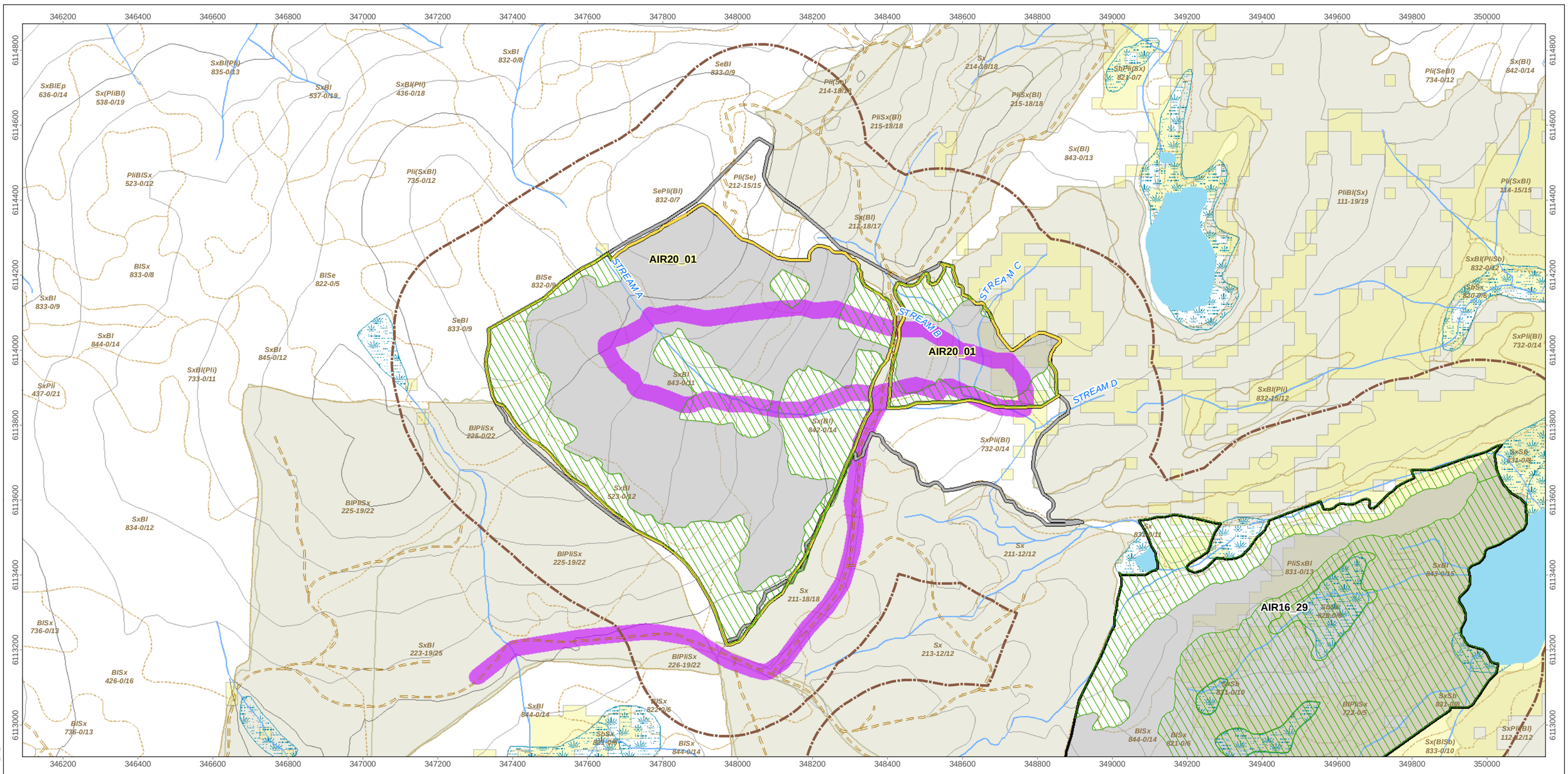
FIGURE 3
ARCHAEOLOGICAL RESULTS MAP
AIR20_01



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0 200 400m

NAD 1983 UTM Zone 10N
BCGS MAPSHEET: 93N.014
NTS MAPSHEET: 93N/03

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- Stream - Definite
- Contour (100m)
- Contour (20m)
- Wetland
- Waterbody
- Assessment Buffer (250m)
- Wildlife Tree Patch (WTP)
- Adjacent Block
- Proposed Block
- Previously Proposed Block
- Survey Transect Area
- Road - Other
- Assessed Area
- Forest Cover (VRI)
- High Archaeological Potential (FTSJ)
- Cutblock

Block ID:	AIR20_01
Permit Number:	2020-0176
EPN:	2020-1203-001
Easting:	347998
Northing:	6113894
Area (Ha):	84.1
Culture Area:	Sub-Arctic Boreal Forest

BCTS BC Timber Sales

ECOFOR

Ecofor Consulting Ltd. December 15, 2020 (ED)

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