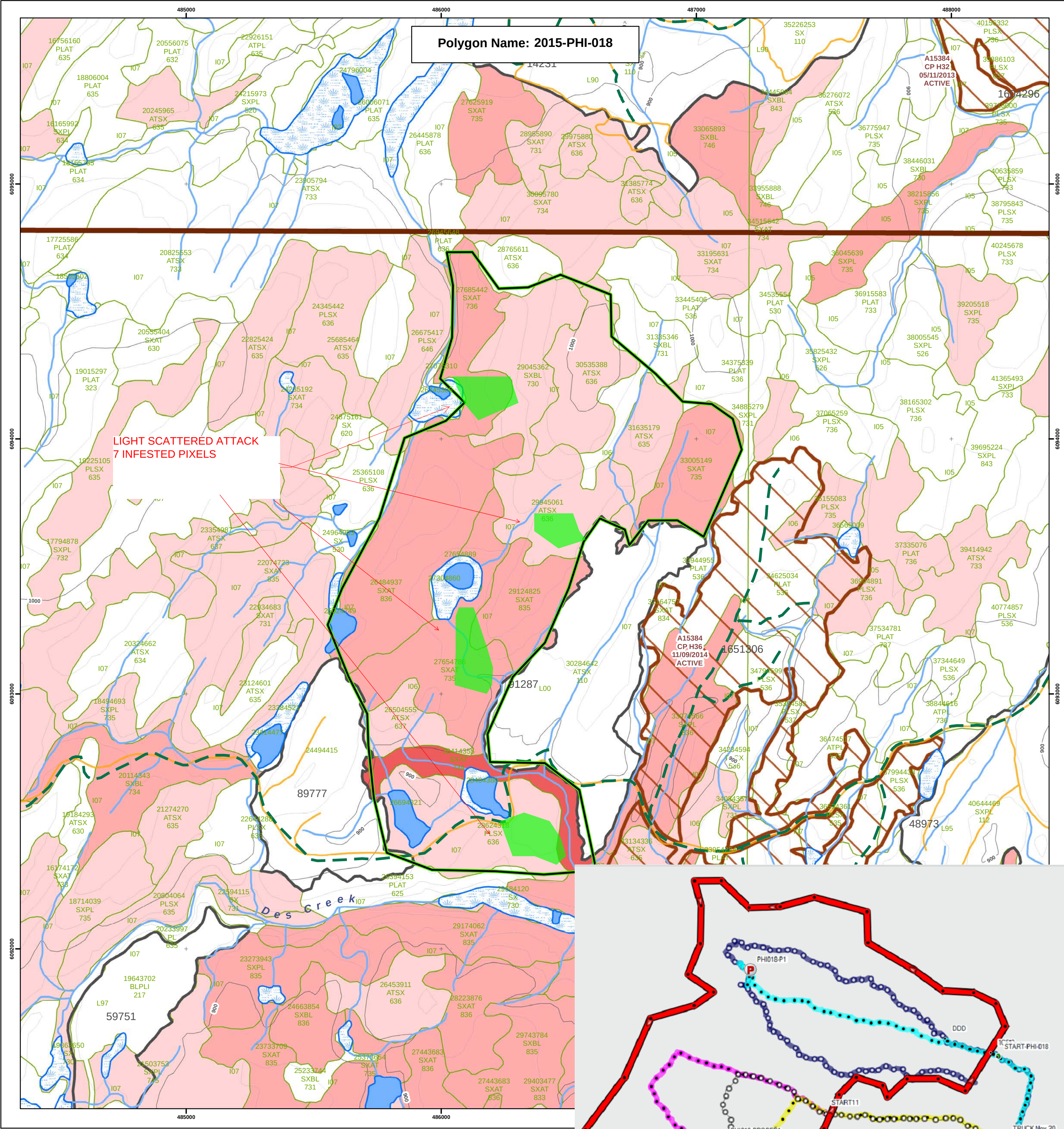




British Columbia Ministry of Forests, Lands and Natural Resource Operations

Spruce Bark Beetle Field Map

Polygon Name: 2015-PHI-018

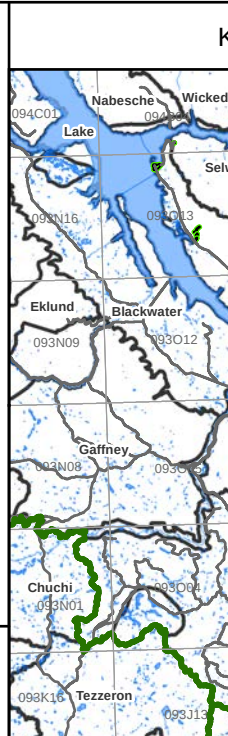
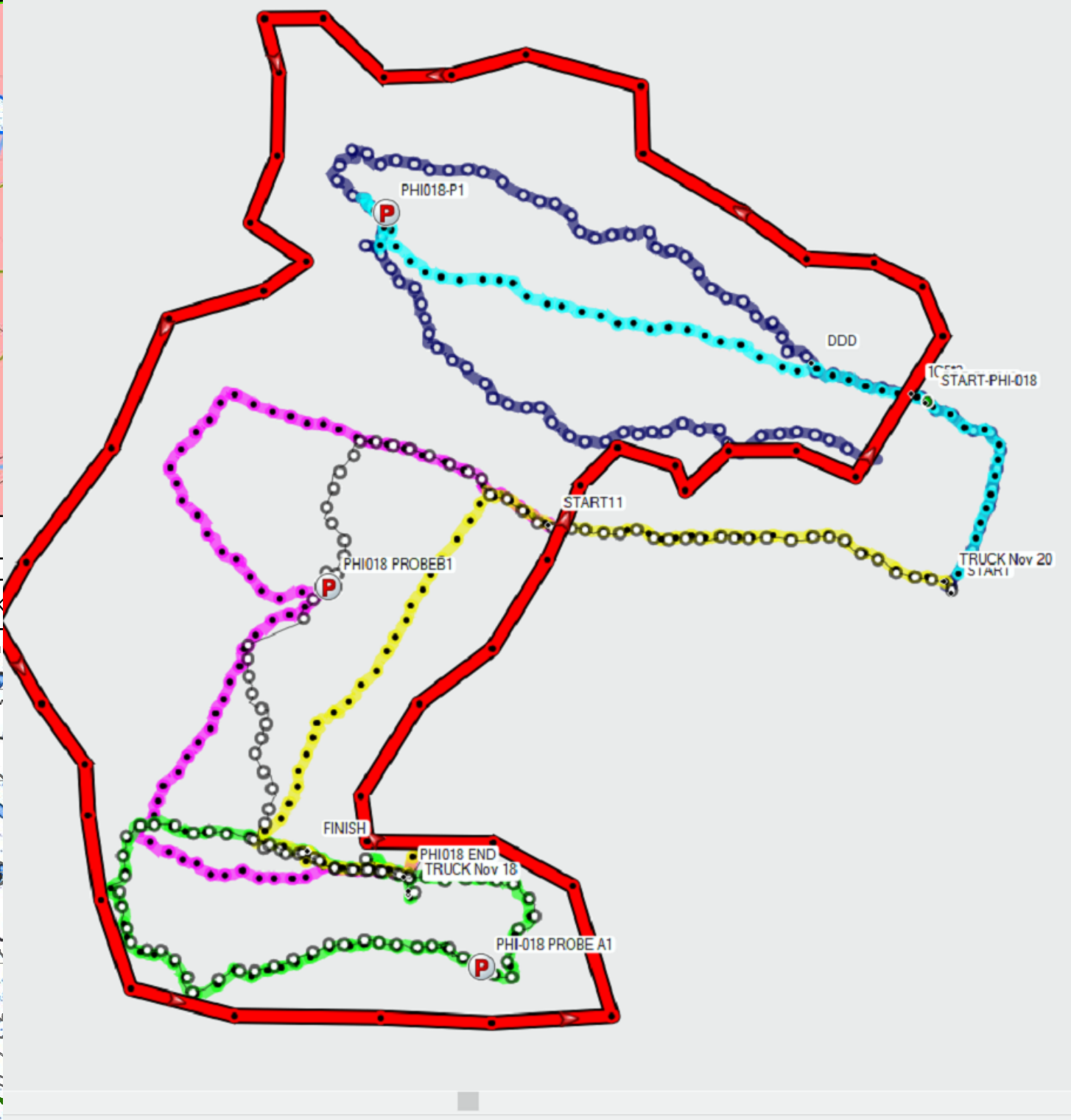
Landscape Unit/BMU: Philip
Region: Omineca
District: Mackenzie
Mapsheet: 093J14
Hectares: 196.55
Scale: 1:10,000
When plotted on ANSIC
Coordinate System: NAD 1983 UTM Zone 10N
Datum: North American 1983
Date Drawn: 01/11/2015
Drawn By: msnively

Map Features

- Susceptible Spruce Bark Beetle Polygon
- 2013 SB Hazard Rating (20% increments)
- Hazard Classes
 - Low/Med (21-40)
 - Med (41-60)
 - High (61-80)
 - Very High (81-100)
- VRI Polygon
- Cutting Permit
- RESULTS Opening
- Landscape Unit
- Road Permit Active
- Road Permit Pending
- Km_Marker_Points
- Communities
- First Nations Reserves
- Mackenzie District
- OGMA Legal Current
- Ungulate Winter Range
- Wildlife Habitat Area
- Protected Lands Designation
 - Ecological Reserve
 - Protected Area
 - Provincial Park
- Contour - Index
- Contour - Intermediate
- Lakes and Rivers
- Wetlands
- Streams

Disclaimer

The accuracy and completeness of the information on this map is not guaranteed.



**SENECA ENTERPRISES LTD.**

PO BOX 1902, PRINCE GEORGE, BC, V2L 5E3

Phone: (250) 561-0890, Fax: (250) 564-3275

**SPRUCE BARK BEETLE REPORT
FH16DMK010**POLYGON: **2015-PHI-018**HECTARES: **196.55**WALKTHROUGH DISTANCE: **11100**ESTIMATED INFESTED PIXELS FROM
WALKTHROUGH (Code 1-4)**7 6.3%****SUMMARY OF CURRENT INFESTATION**

Walkthrough shows 6% of polygon has recent attack that is light in intensity and scattered throughout. While can stratify somewhat, there are other areas within polygon with 2013 Code 5 attack and may be additional trees that are lightly scattered in these areas as well. Polygon has patchy spruce stands with patches of swamps and alder pockets throughout. pOLYGON 2015-PHI020 is off the west and to the South is 2015-PHI-012.

LIGHT SCATTERED ATTACK**ACCESS**

Access to south of Polygon by 4wd. Newer plantation in the east has access to within a few hundred meters.

POLYGON FEATURES (Topography, Terrain, Timber Types, Age)

Slopes rise from east to west and are minimal. Large areas scattered within polygon of open ground with dense alder swales. North section low spruce component. Recent plantation located to the east side of polygon. Drainages run throughout polygon.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Polygon has pockets of light attack with 7 infested pixels noticed on walkthrough. These are light and scattered with one or two trees only found per pixel. There was a mix of code 1 and 3 attack, and older attack was also found scattered throughout polygon.

INCIDENCE AND SEVERITY OF ATTACK

From 3 probe lines and an additional bark sample, attack is sporadic and scattered throughout polygon. Have tried to separate into areas based on walkthroughs but there are other pockets with older attack noticed throughout, however no fresh attack found in these areas but may be some light scattered attack in other areas as well.

RISK OF BEETLE SPREAD

Polygon has pockets of attack that are scattered throughout polygon, both 2014 and 2015 attack, and could spread slowly through polygon. Polygon has cutblocks to the east and SW with minimal spruce to the west and north. Low rate of spread.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access through two points with road running into the south portion of polygon and can be accessed off of cutblock road from the east. Swamps and drainages throughout, minimal slopes.

RECOMMENDATIONS**OPTION 1****MONITOR**

Sanitation and salvage rating is light from 3 probe lines and one bark sample. These probe lines taken where attack found and recommend Monitor site and schedule another Walkthrough Fall of 2016. With some light code 3 attack noticed, need to track and see impact after 2016 flight.

OPTION 2**BAIT MONITOR**

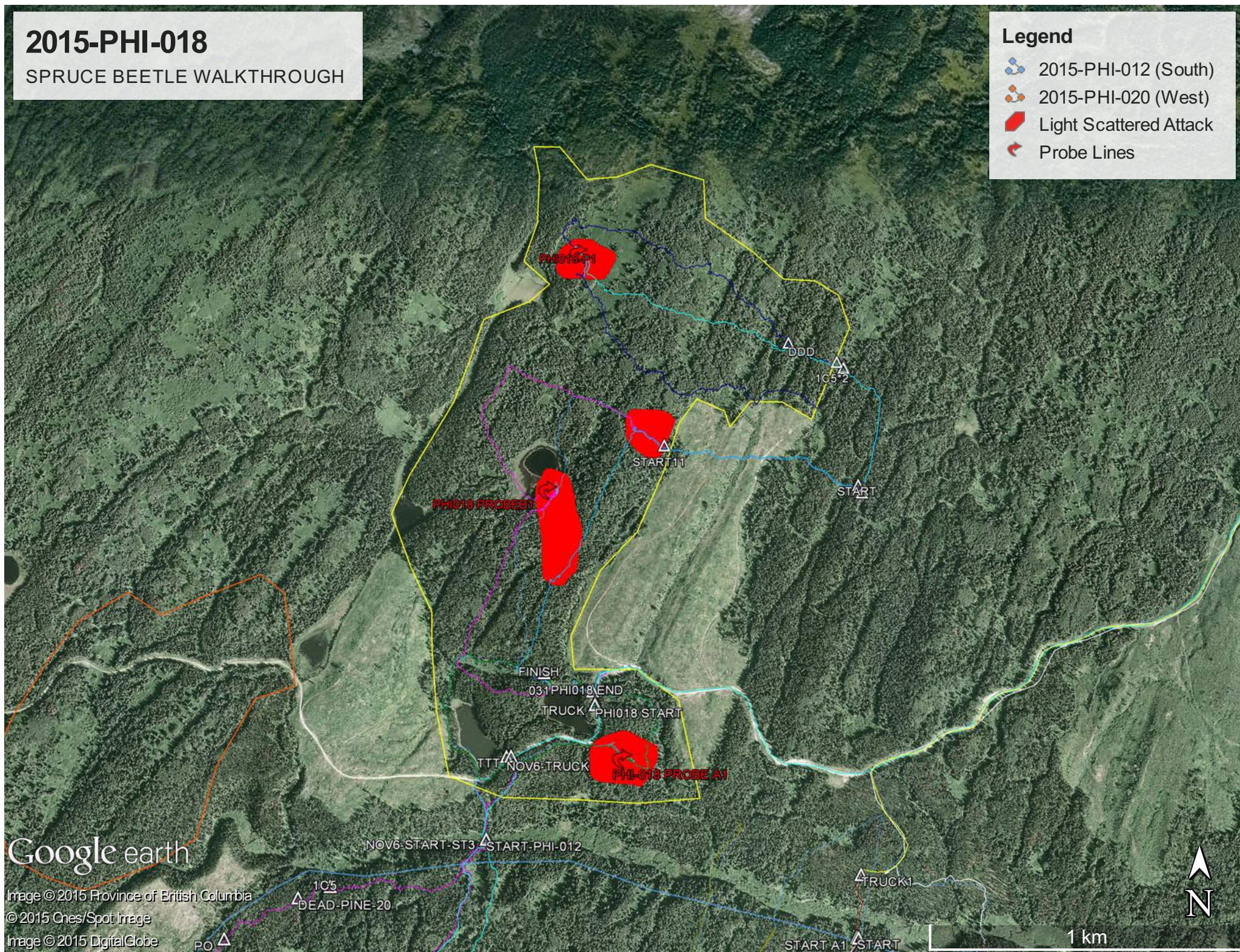
With some Code 3 Attack trees noticed, may want to setup a Bait tree program from good access points off of both road systems to catch any 2016 flights. This can be incorporated into any plans with PHI-020 and PHI-012

2015-PHI-018

SPRUCE BEETLE WALKTHROUGH

Legend

- 2015-PHI-012 (South)
- 2015-PHI-020 (West)
- Light Scattered Attack
- Probe Lines



SPRUCE BEETLE PROBE CARD

LOCATION 0486384		6092427		PAGE 1 OF 1						
BEARING 312°		DISTANCE 100m		STRIP WIDTH 10m						
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES	
			1	2	3	4	5	6	ASP	BLS
17.5 - 25.0	3.3									
25.1 - 30.0	5.3									
30.1 - 35.0	7.1									
35.1 - 40.0	9.4									
40.1 - 45.0	11.6									
45.1 - 50.0	13.8									
50.1 - 55.0	16.2									
55.1 - 60.0	18.7									
60.1 +	25.3									
TOTALS										
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN				
						Attacked	Unattacked			
1A	5	0	3	0	0					
1B	3	0	1	0	0					
COMMENTS										
CREW NAMES Steffen, Norjon						DATE 13 / 11 / 18				

FS 1111 RPG 2000/01 7530881048 (100/bdl)



BEETLE PROBE CARD

LOCATION 0484428 6092265		ELEVATION 163m		LATITUDE		PAGE 1 OF 1				
BEARING 160°		STRIP LINE NO Probe 1		STRIP WIDTH 10m		DISTANCE 100m				
				BEETLE SPECIES ☒ SB ☐ MPB ☐ DFB						
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES	
			1	2	3	4	5	6	MAIN	OTHER
12.5 - 17.4	2.0									
17.5 - 25.0	3.3									
25.1 - 30.0	5.3									
30.1 - 35.0	7.1									
35.1 - 40.0	9.4									
40.1 - 45.0	11.6									
45.1 - 50.0	13.8									
50.1 - 55.0	16.2									
55.1 - 60.0	18.7									
60.1 +	25.3									
TOTALS										
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN				
						Attacked	Unattacked			
1a	4	1	14	1	1					
1b	3	1	5	1	1					
COMMENTS 30° downhill Small alder patches										
CREW NAMES Dailen, V.						DATE 15 / 11 / 18				

FS 1111A RPG 00/02 7530881049 (100/bdl)



BRITISH
COLUMBIA



BEETLE PROBE CARD

LOCATION		0486228		ELEVATION	950		LATITUDE	PAGE	OF	
PHJ 018		6044260								
BEARING	STRIP LINE NO	STRIP WIDTH	DISTANCE	BEETLE SPECIES						
180°	P1	10m	100m	☒ SB ☐ MPB ☐ DFB						
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES	
									MAIN	OTHER
			1	2	3	4	5	6	BI	ASP.
12.5 - 17.4	2.0									
17.5 - 25.0	3.3	..							..	..
25.1 - 30.0	5.3	..							..	..
30.1 - 35.0	7.1	..							..	..
35.1 - 40.0	9.4	..							..	..
40.1 - 45.0	11.6	..							..	..
45.1 - 50.0	13.8	..							..	..
50.1 - 55.0	16.2									
55.1 - 60.0	18.7									
60.1 -	25.3									
TOTALS		13					1		41	22
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN				
						Attacked	Unattacked			
/										
/										
COMMENTS										
- OPEN STAND. REPRESENTS FIRST 2KM OF WALK.										
CREW NAMES								DATE		
JAMES / PAT								Y	M	D
								15	11	20



BRITISH
COLUMBIA



BEETLE PROBE CARD

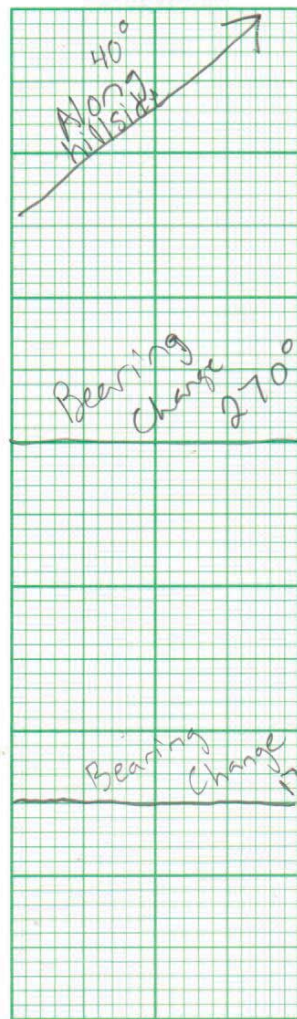
LOCATION 0486126 6093350		ELEVATION		LATITUDE		PAGE 1 OF				
BEARING 195°	STRIP LINE NO PH-018	STRIP WIDTH 10m	DISTANCE 100m	BEETLE SPECIES ☒ SB ☐ MPB ☐ DFB						
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES	
			1	2	3	4	5	6	MAIN	OTHER
12.5 - 17.4	2.0								BS	AS
17.5 - 25.0	3.3									
25.1 - 30.0	5.3									
30.1 - 35.0	7.1									
35.1 - 40.0	9.4									
40.1 - 45.0	11.6									
45.1 - 50.0	13.8									
50.1 - 55.0	16.2									
55.1 - 60.0	18.7									
60.1 -	25.3									
TOTALS		16	1	1	2	10				
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN				
						Attacked	Unattacked			
1A	9	0	2	0	1	0	0			
1B	12	0	3	0	0	0	0			
COMMENTS										
CREW NAMES NORTON						DATE Y M D 15 11 20				

TOPOGRAPHY

STRIP No.

phi-018
700

TIMBER TYPE



5m 0 5m 10m 5m 5m

STRIP NO.: phi-018 DIRECTION: 85°

START STRIP: 0-100m

JOB NO.: Service Walkthrough DATE: Nov. 18/15

CREW: Steffen, Norjon

REMARKS:



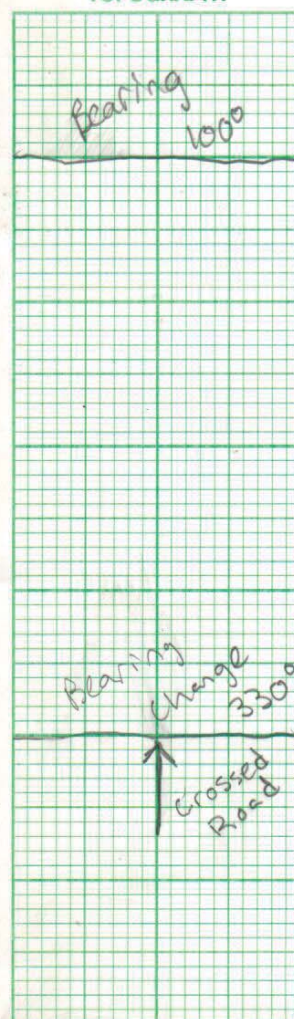
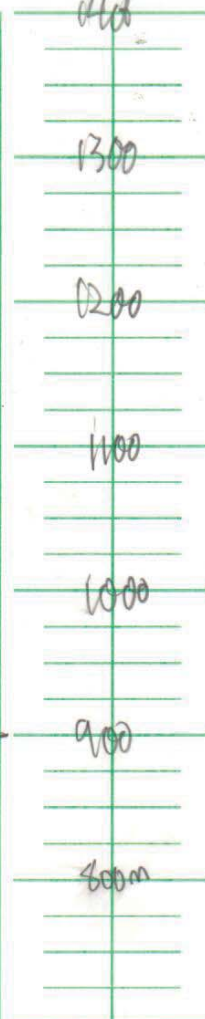
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TOPOGRAPHY

STRIP No.

phi-018
400

TIMBER TYPE



200m 5m 200m 5m 200m 5m

STRIP NO.: phi-018 DIRECTION: 270°

START STRIP: 700-1400

JOB NO.: Service Walkthrough DATE: Nov. 18/15

CREW: Steffen, Norjon

REMARKS:



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STRIP NO.: phi -014 DIRECTION: 100°
START STRIP: H100 - 2100
JOB NO.: Sesca Walkthrough DATE: Nov. 8/15
CREW: steffey Norjon
REMARKS:



STRIP NO.: phi-016 DIRECTION: 300°
START STRIP: 0-700m
JOB NO.: Sereca Walkthrough DATE: Nov. 20 / 15
CREW: Steffen
REMARKS: _____

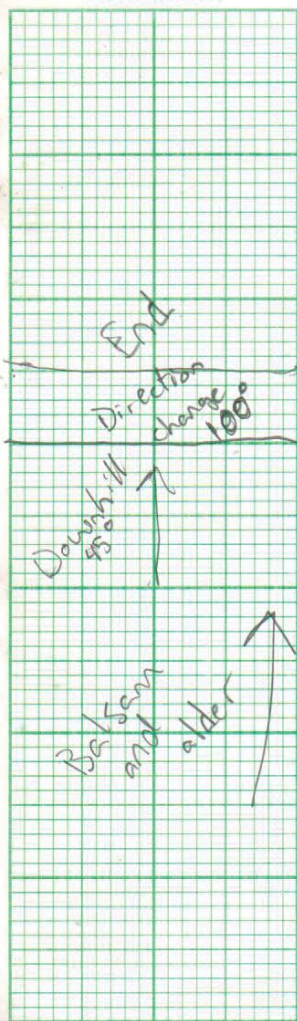
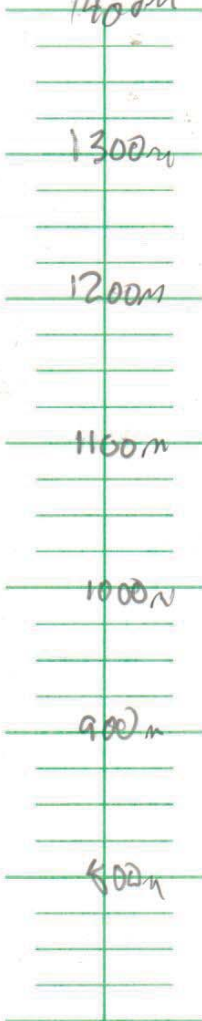
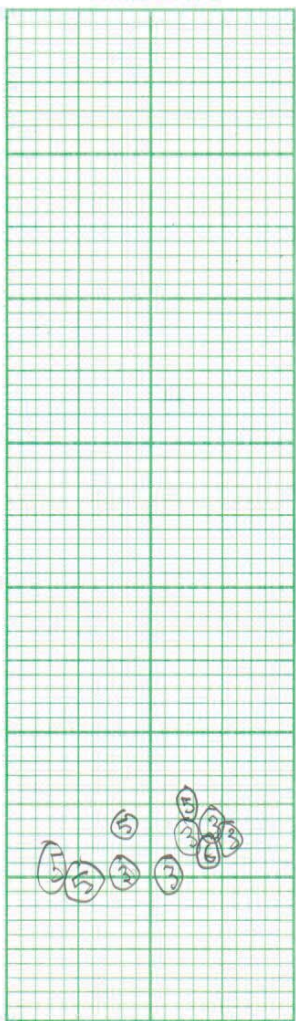


TOPOGRAPHY

STRIP No.

phi-019
1400m

TIMBER TYPE



200m 5m 0 200m 5m 200m 5m 0 200m

STRIP NO.: phi-019

DIRECTION: 200°

START STRIP: 700-1400m

JOB NO.: General Walkthrough DATE: Nov. 20/15

CREW: Steffen

REMARKS:



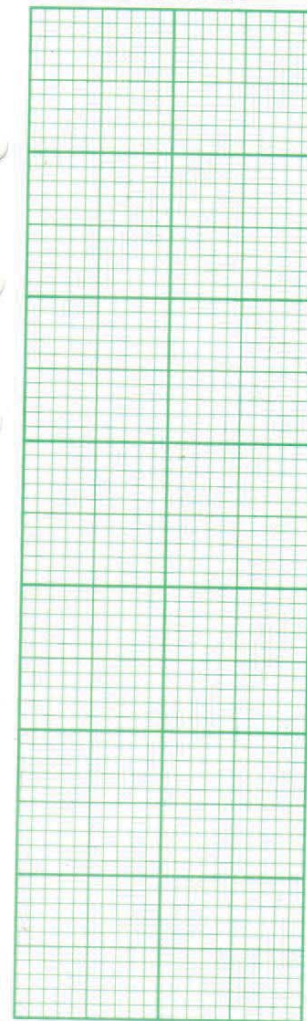
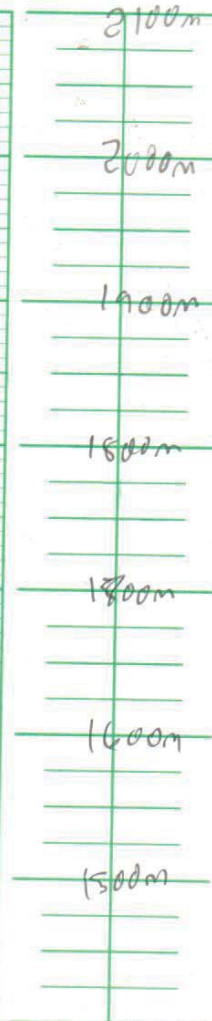
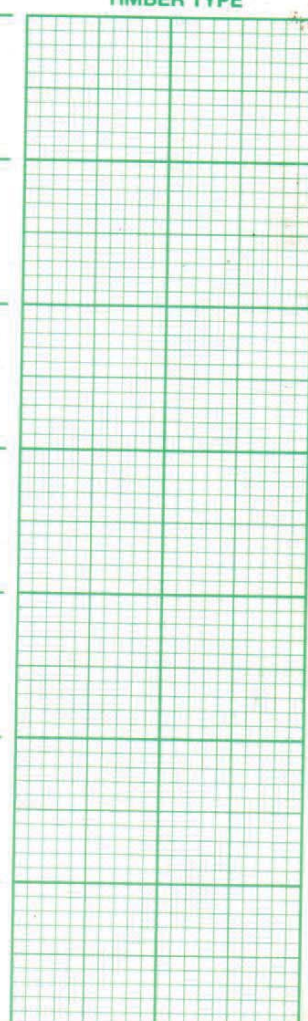
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TOPOGRAPHY

STRIP No.

phi-019
2100m

TIMBER TYPE



200m 5m 0 200m 5m 200m 5m 0 200m

STRIP NO.: phi-019

DIRECTION:

START STRIP: 1400-2100

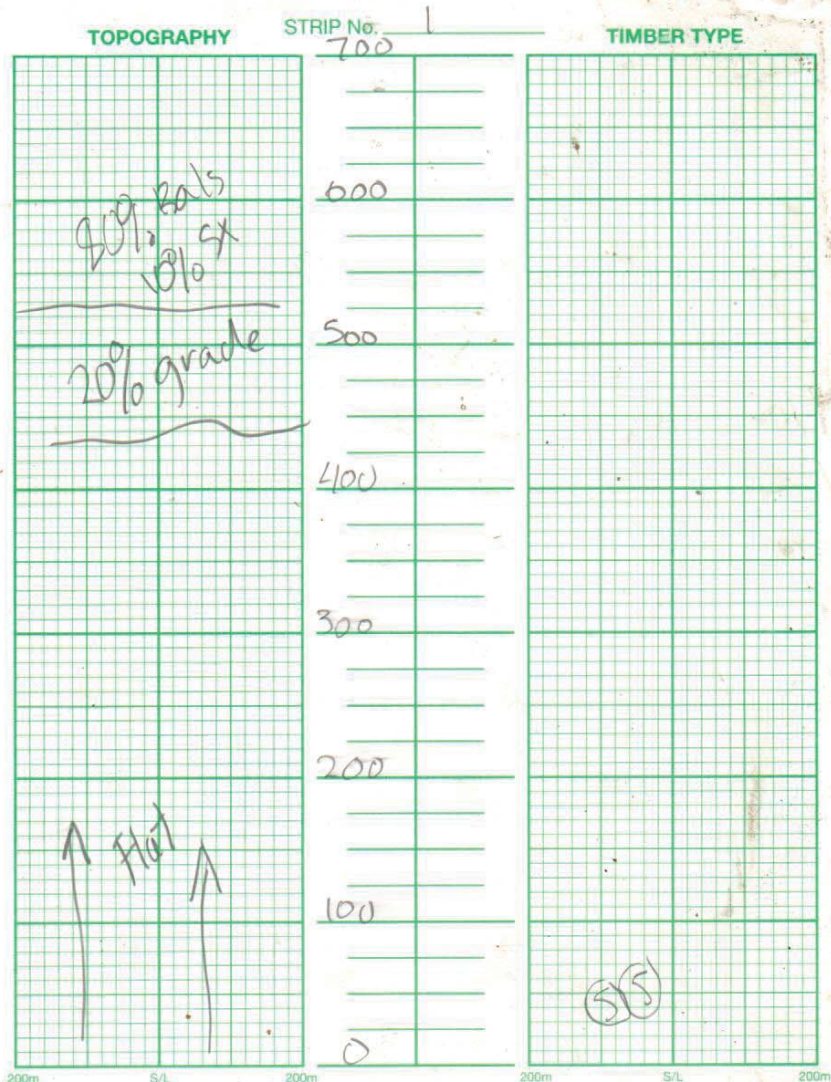
JOB NO.: General Walkthrough DATE: Nov. 20/15

CREW: Steffen

REMARKS:



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STRIP NO.: 1 DIRECTION: 320°

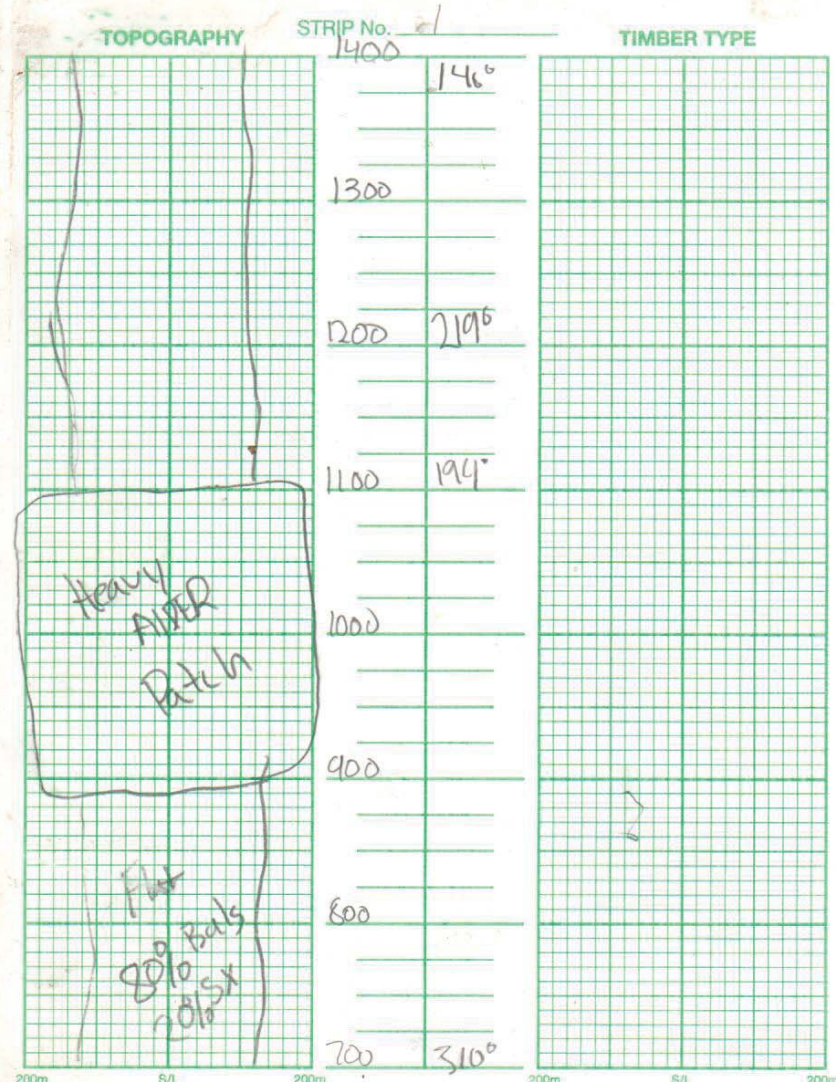
START STRIP: 0-700

JOB NO.: PHI-018 DATE: Nov 20, 15

CREW:

REMARKS:

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STRIP NO.: 1 DIRECTION: 310°, 194°, 219°

START STRIP: 700 - 1400

JOB NO.: PHI-018 DATE: Nov 20, 15

CREW:

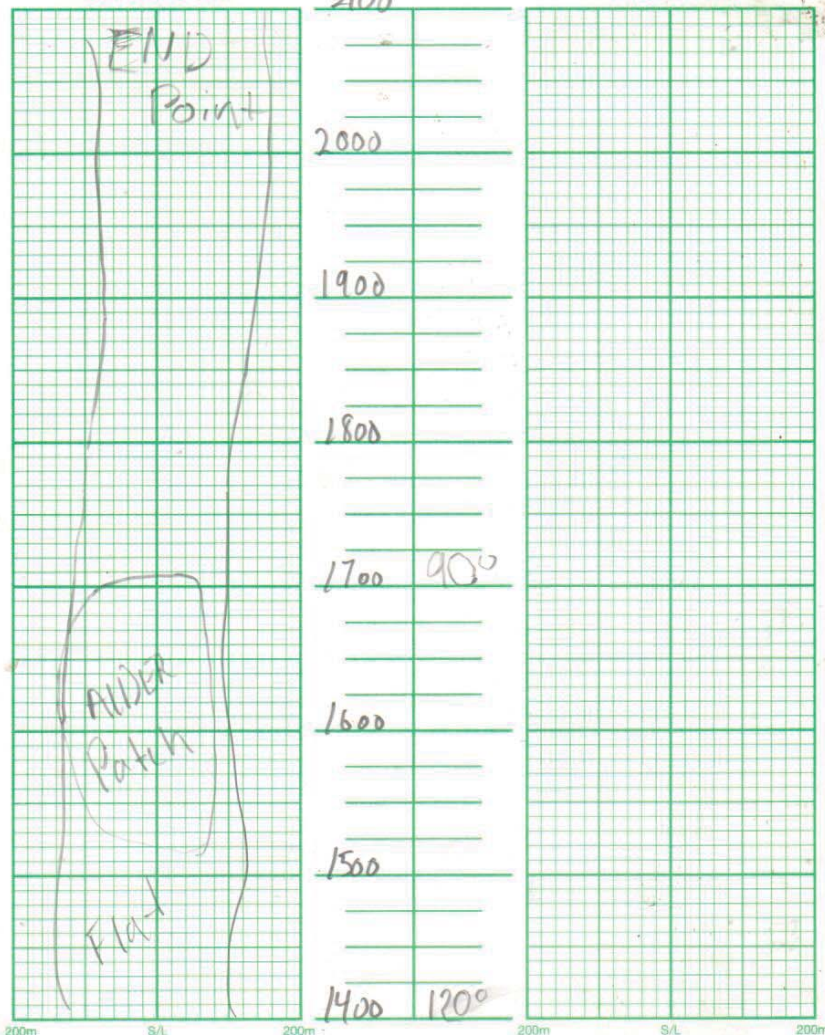
REMARKS:

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TOPOGRAPHY

STRIP NO. 1

TIMBER TYPE



STRIP NO. 1

DIRECTION: 120° 90°

START STRIP: 1400 - 2100

JOB NO.: PHI-018

DATE: Nov 20, 15

CREW:

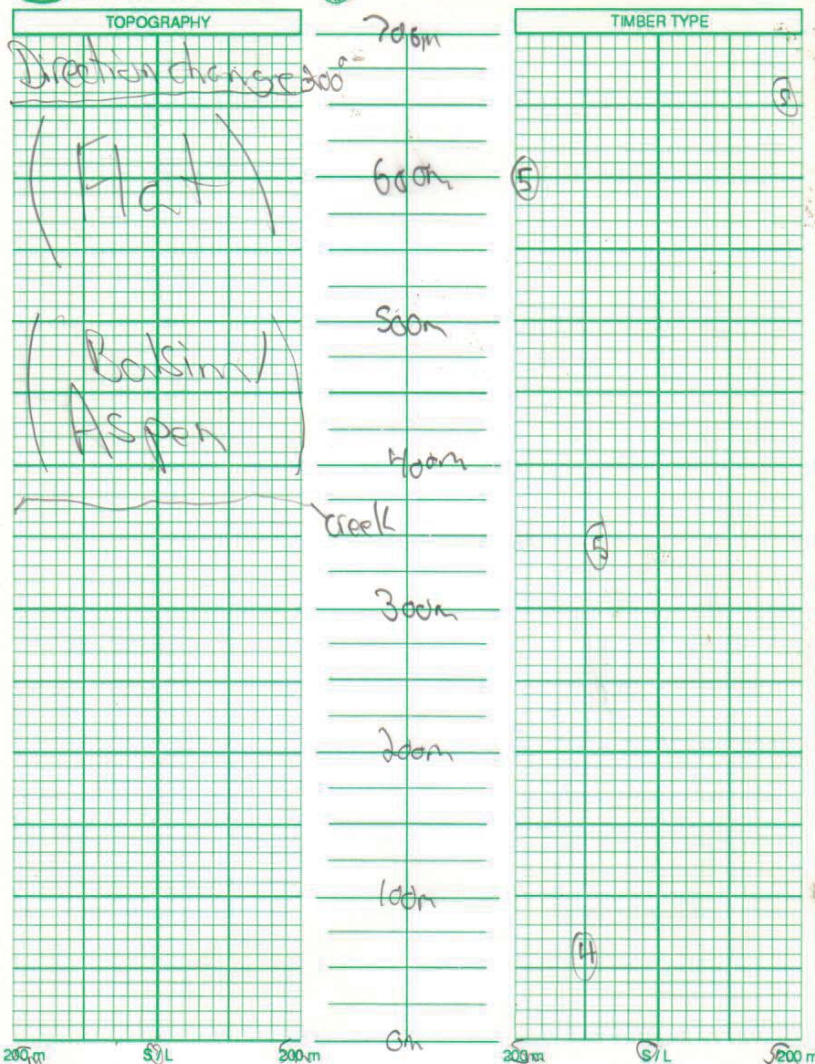
REMARKS:



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Province of
British ColumbiaMinistry of
Forests

COMPASS AND TRAVERSE



C.P. No. PHI-018

BLOCK

DIRECTION 300°

START OF STRIP 0m - 700m

JOB NO. Seres Walk thru

DATE Nov. 20/15

CREW Dailen V

REMARKS

FS 375 HVA 92/01

Ministry of
Forests[illegible]

C.P. No. PHI-018	BLOCK	
DIRECTION 2000		START OF STRIP 700m - 1400m
JOB NO. Seneca walk thru		DATE Nov. 20/15
CREW Dailen, V		
REMARKS		

FS 375 HVA 92/01

Ministry of
Forests

The figure is a hand-drawn topographic map on green grid paper. It features a path starting from the bottom left and moving towards the top right. The path is marked with several points and labels:

- End**: A wavy line at the top left of the path.
- 1800m**: A point on the path, indicated by a horizontal line.
- 1700m**: A point on the path, indicated by a horizontal line.
- 1600m**: A point on the path, indicated by a horizontal line.
- 1500m**: A point on the path, indicated by a horizontal line.
- 1400m**: A point on the path, indicated by a horizontal line.

A **250 slope** is indicated by a line segment with an arrow pointing towards the path, labeled "250 slope".

The map is divided into two main sections by a vertical line. The left section is labeled **TOPOGRAPHY** and the right section is labeled **TIMBER TYPE**. The right section contains a small sketch of a tree and some handwritten notes.

The map includes a scale bar at the bottom, labeled **200 m** on both ends. The grid lines are spaced at 100m intervals.

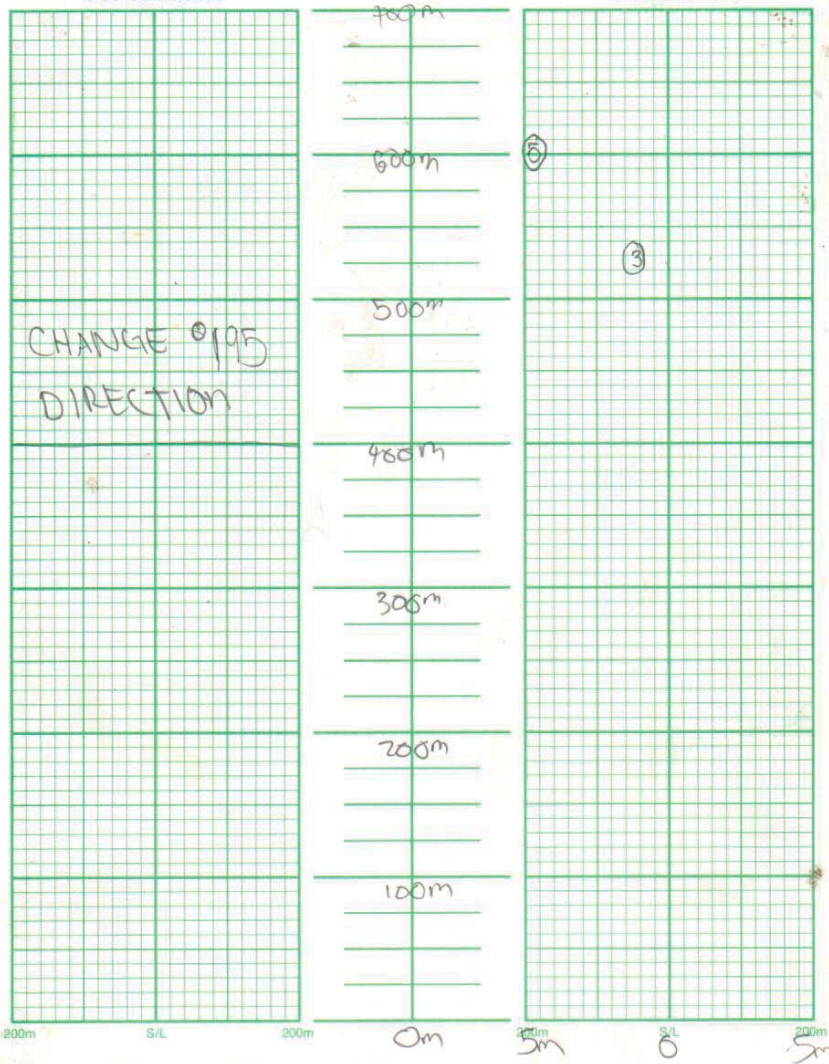
C.P. No. PHI-018	BLOCK	
DIRECTION 225°		START OF STRIP 14:00am - 1800am
JOB NO. Seneca walk thru		DATE Nov. 20/15
CREW Dailen V		
REMARKS		

FS 375 HVA 92/01

TOPOGRAPHY

STRIP No. _____

TIMBER TYPE



STRIP NO.: PH1-018 DIRECTION: 300°
 START STRIP: 0-700m
 JOB NO.: SENECA WALKTHROUGH DATE: NOV 20 2015
 CREW: NORTON
 REMARKS: _____

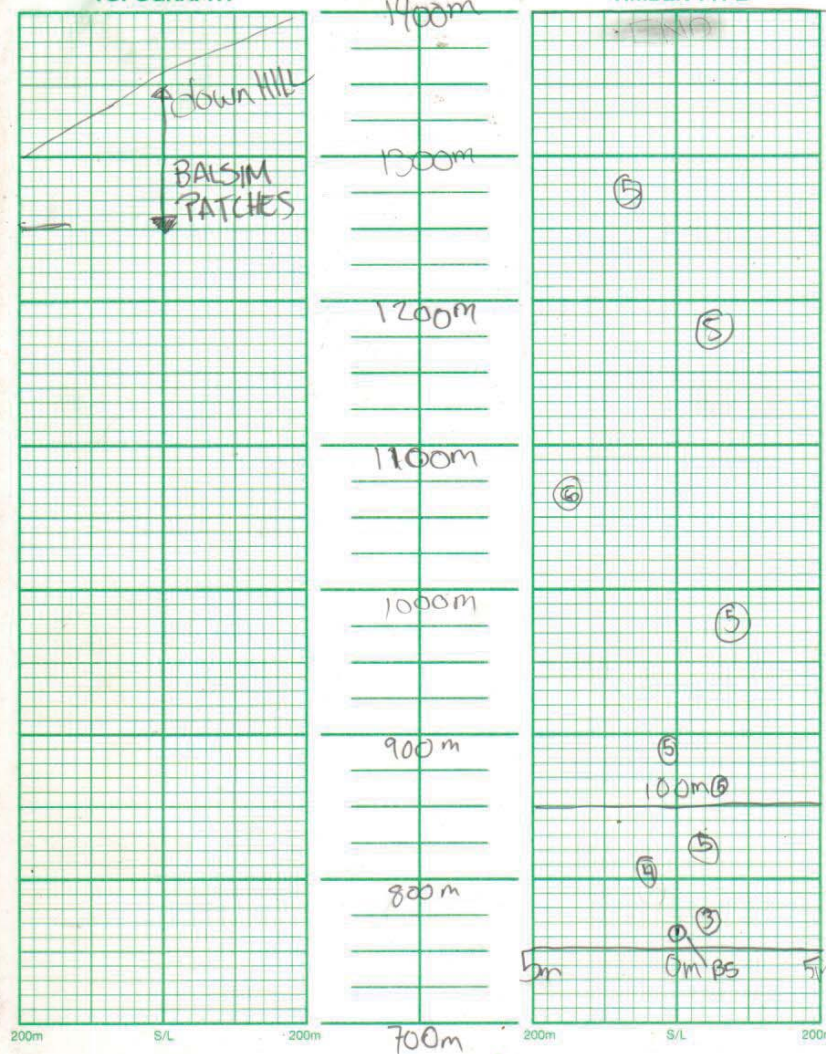


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TOPOGRAPHY

STRIP No. _____

TIMBER TYPE



STRIP NO.: PH1-018 DIRECTION: 195°
 START STRIP: 700m - 1400m
 JOB NO.: SENECA WALKTHROUGH DATE: NOV 20 2015
 CREW: NORTON
 REMARKS: _____

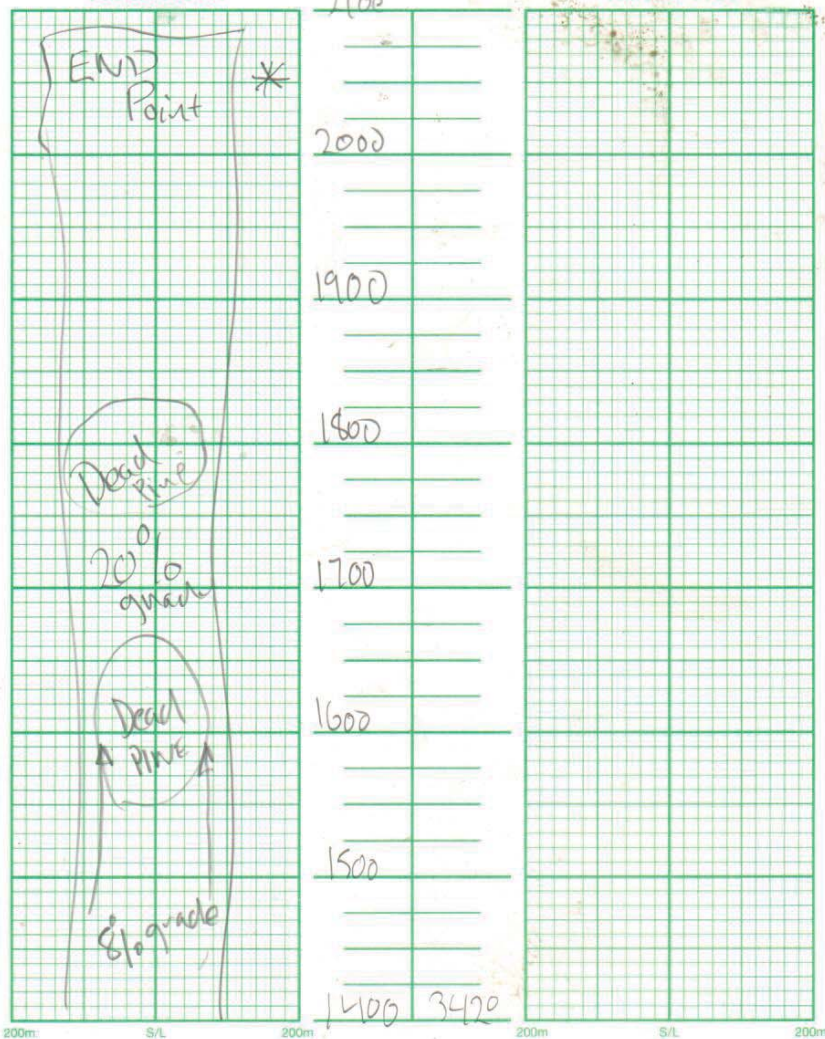


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TOPOGRAPHY

STRIP No. 1

TIMBER TYPE



STRIP NO.:

PHI-018

DIRECTION:

START STRIP:

JOB NO.:

DATE:

Nov 20 / 2015

CREW:

NORSON

REMARKS:

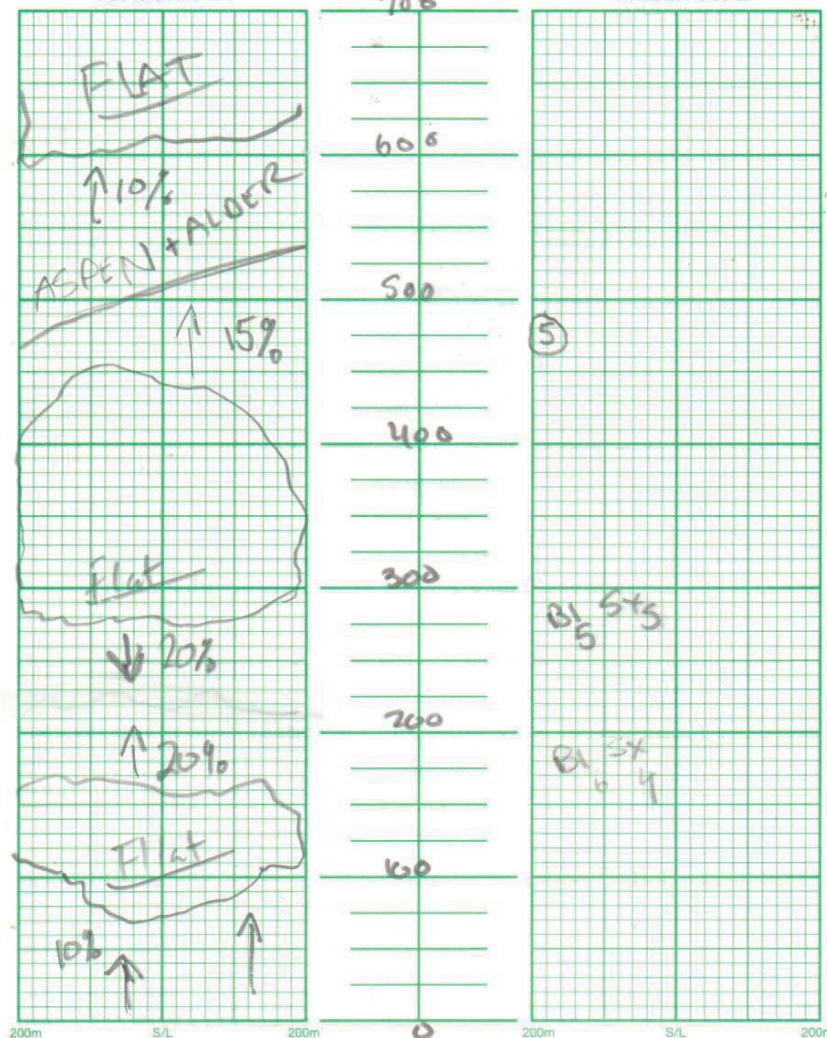


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TOPOGRAPHY

STRIP No. 5

TIMBER TYPE



STRIP NO.:

5

DIRECTION:

285°

START STRIP:

0-100

JOB NO.:

PHI-018

DATE:

Nov 20 / 2015

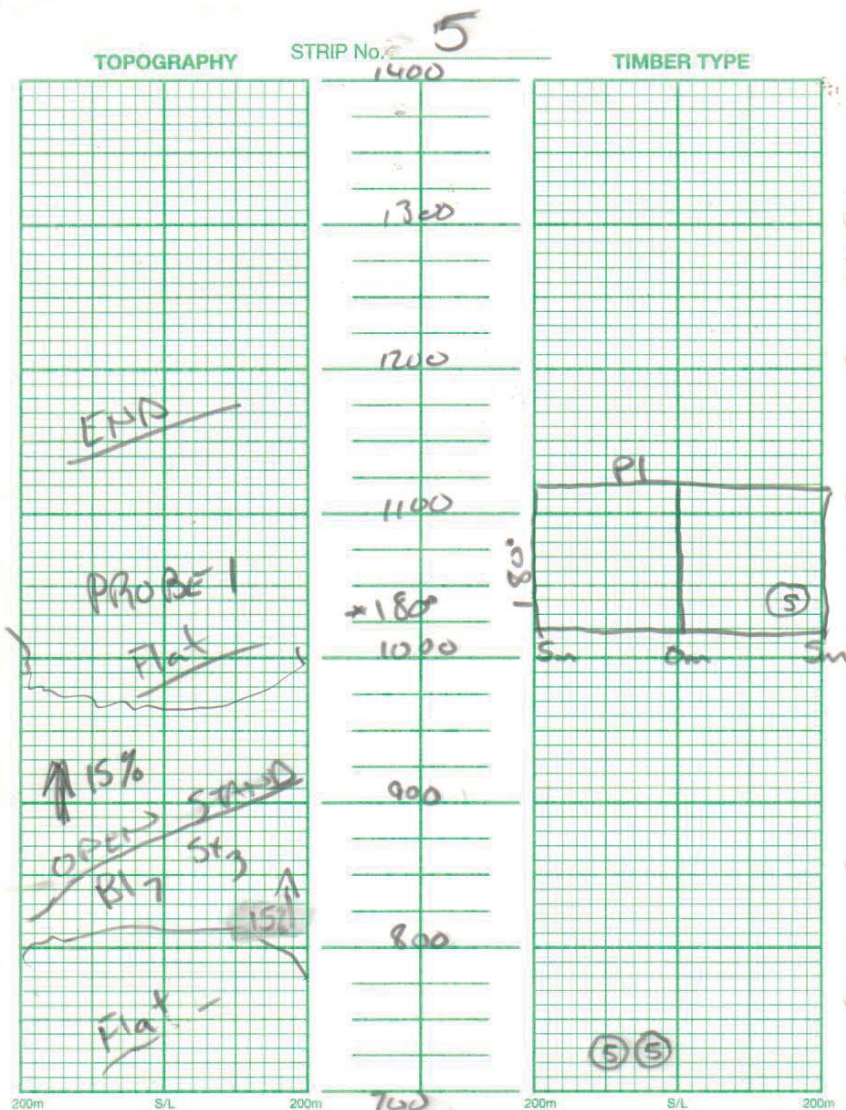
CREW:

JAMES KELLY

REMARKS:



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STRIP NO.: 5 DIRECTION: 285°-180°

START STRIP: 700-1400

JOB NO.: PH1-2018 DATE: NOV 20 / 2015

CREW: SAMOS KELLY

REMARKS: _____



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