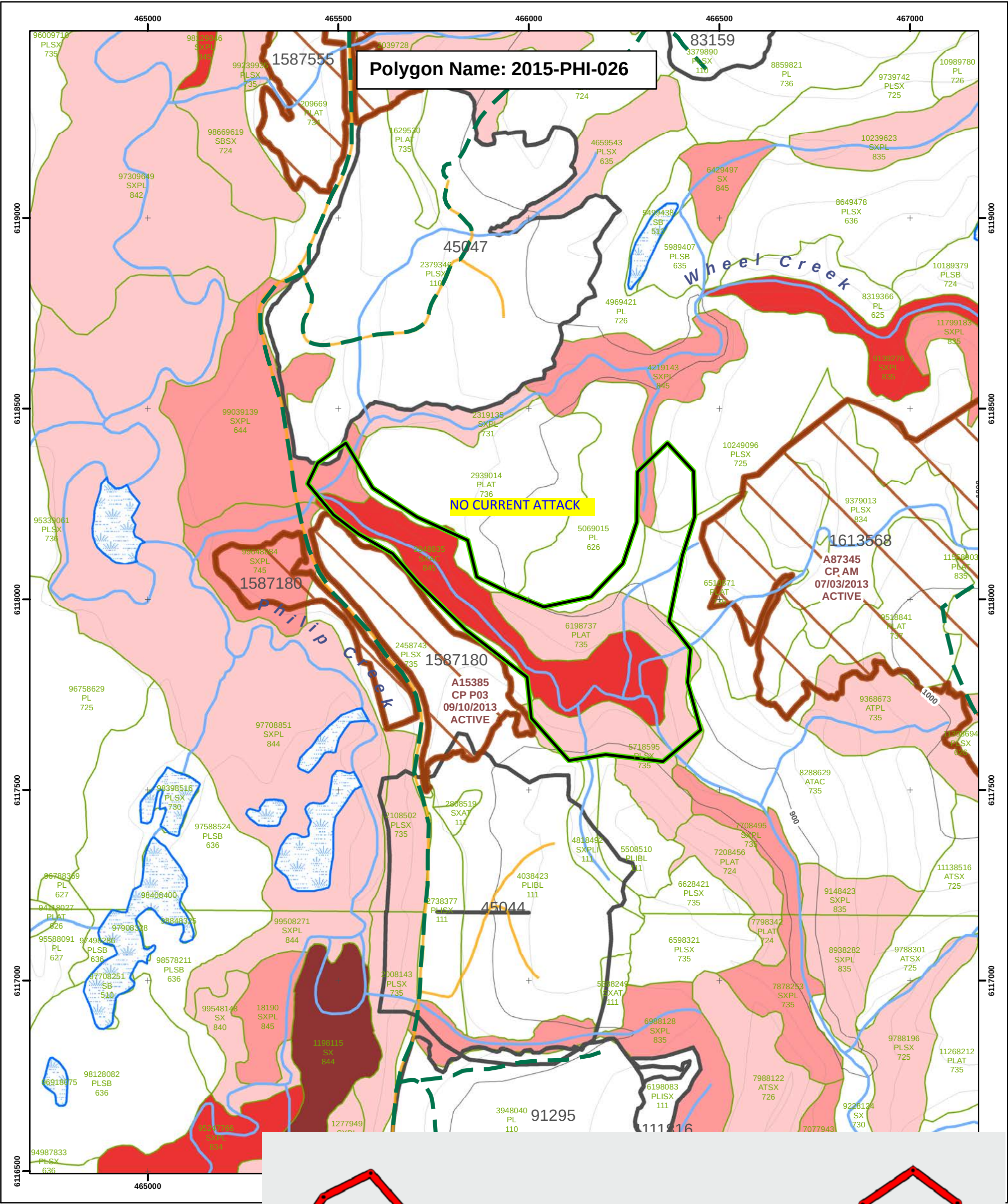




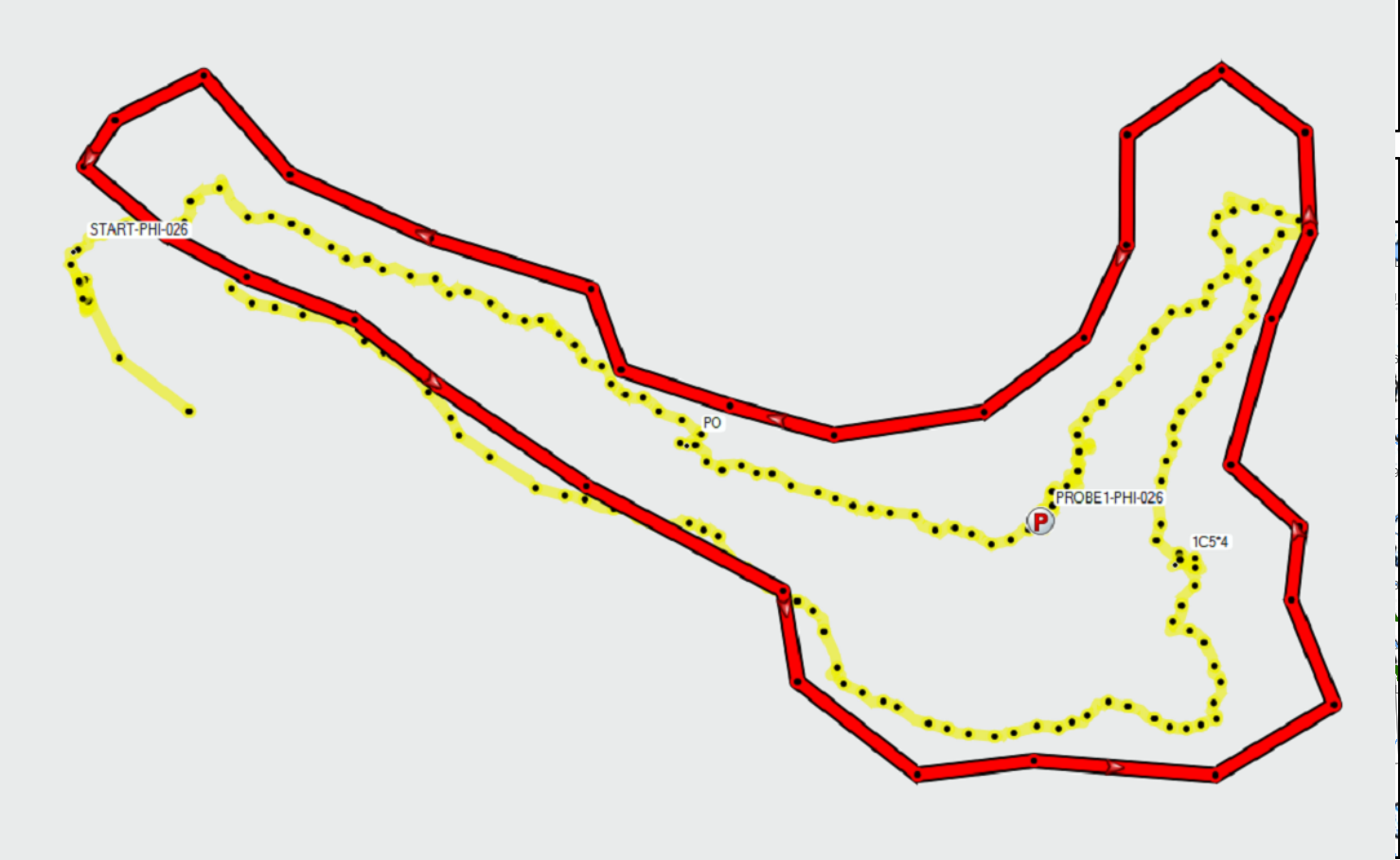


Ministry of
Forests, Lands and
Natural Resource Operations

Spruce Bark Beetle Field Map

Polygon Name: 2015-PHI-026

Landscape	
Unit/BMU:	Philip
Region:	Omineca
District:	Mackenzie
Mapsheet:	093O04
Hectares:	32.24
Scale:	1:10,000
When plotted on 11x17	
Coordinate System:	NAD 1983 UTM Zone 10N
Datum:	North American 1983
Date Drawn:	01/11/2015
Drawn By:	msnively



**SENECA ENTERPRISES LTD.**

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

**SPRUCE BARK BEETLE REPORT
FH16DMK010**

POLYGON: 2015-PHI-026

HECTARES:

32.24

WALKTHROUGH DISTANCE:

2100

ESTIMATED INFESTED PIXELS FROM
WALKTHROUGH (Code 1-4)

0 0.0%

SUMMARY OF CURRENT INFESTATION

Walkthrough found no current signs of attack. Polygon is to the east of Polygon PHI-025 and is surrounded by cutblocks. A couple of pockets of Code 5 attacked trees found and light in intensity. Also, 1 pitchout noticed in walkthrough.

NO CURRENT ATTACK.

ACCESS

Access to the west point of Polygon by 4WD. Polygon is located to the East of Polygon 2015-PHI0025

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

Slopes on North and South sides going down to drainage where spruce stand is most prominent. Polygon has areas of dead pine throughout and has plantations to the north and south.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Polygon had no signs of recent attack from walkthrough. There were pockets of old Code 5 attack and evidence of 1 pitchout tree with no beetle present.

INCIDENCE AND SEVERITY OF ATTACK

Very light intensity as no current attack beetle was found. A couple of patches of code 5 attack near draws, but only 1 pitchout noticed,

RISK OF BEETLE SPREAD

Polygon has plantations surrounding it and no current attack found.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access to west edge, has a drainage running through polygon with some steep slopes. Areas of Dead pine and corresponding blowdown.

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

No Current attack but polygon shows signs of odler attack and evidence of 1 pitchout. There may be isolated trees of attack and may want to schedule another walkthrough although surrounded by cutblocks.

OPTION 2**NO ACTION**

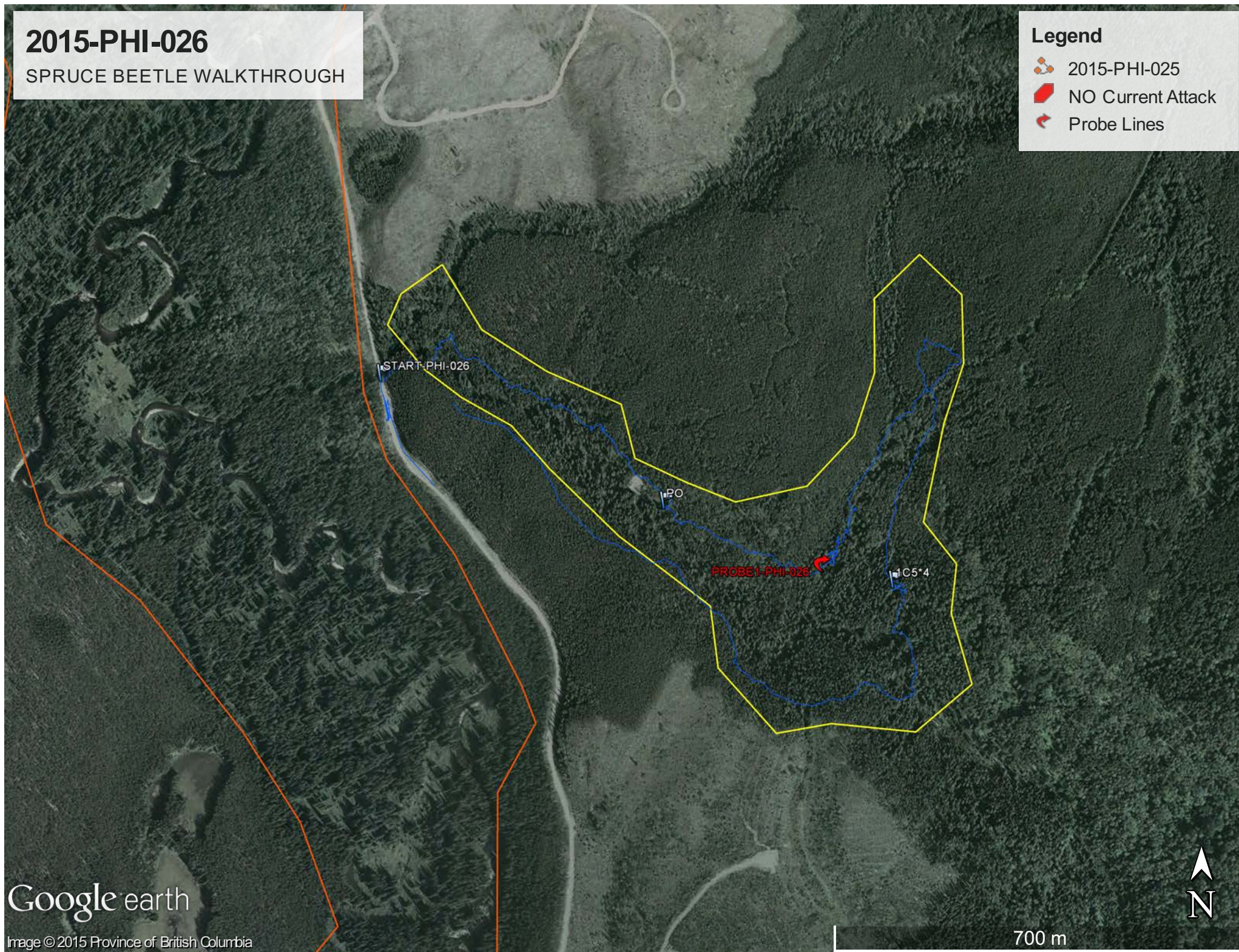
No action required.

2015-PHI-026

SPRUCE BEETLE WALKTHROUGH

Legend

-  2015-PHI-025
-  NO Current Attack
-  Probe Lines



Summary						
2015-PHI-026	HEC	32.24	METERS WALKED	2100	% TRAVERSED	6.5%
PIXELS COVERED BY WALKTHROUGH	21	INFESTED PIXELS	0	ESTIMATED % OF BLOCK INFESTED (From Walk through)		0.0%

TABLE 5- Spruce Beetle Infestation Summary Sheet

OF NOTE- Results taken from a 100m Probe Line established at 1 per 50 hectares to represent

DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES
			2015		2014		2013		
			1	2	3	4	5	6	
17.5-25.0	3.3	0	0.0	0.0	0.0	0.0	0.0	0.0	19.8
25.1-30.0	5.3	10.6	0.0	0.0	0.0	0.0	0.0	0.0	31.8
30.1-35.0	7.1	21.3	0.0	0.0	0.0	0.0	0.0	0.0	21.3
35.1-40.0	9.4	9.4	0.0	0.0	0.0	0.0	0.0	0.0	28.2
40.1-45.0	11.6	46.4	0.0	0.0	0.0	0.0	0.0	0.0	11.6
45.1-50.0	13.8	69	0.0	0.0	0.0	0.0	0.0	0.0	0
50.1-55.0	16.2	48.6	0.0	0.0	0.0	0.0	16.2	0.0	0
55.1-60.0	18.7	74.8	0.0	0.0	0.0	0.0	0.0	0.0	0
60.1 +	25.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0
TOTALS	296.3	280.1	0.0	0	0.0	0.0	16.2	0	112.7

TABLE 4- Spruce Beetle Attack Density and Larval Density Rating

MEAN NO. OF ENTRANCE HOLES PER 225 cm ² PHLOEM SAMPLE	< 1 LOW Attack Density	MEAN NO. OF LIVING LARVAE PER 225 cm ² PHLOEM SAMPLE	< 4.9 LOW Mean Larval Density
	1.0- 1.9 MOD Attack Density		5.0 - 14.9 MOD Mean Larval Density
	2.0 - 3.9 HIGH Attack Density		15-24.9 HIGH Mean Larval Density
0.00	< 3.9 SEVERE Attack Density	0.00	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

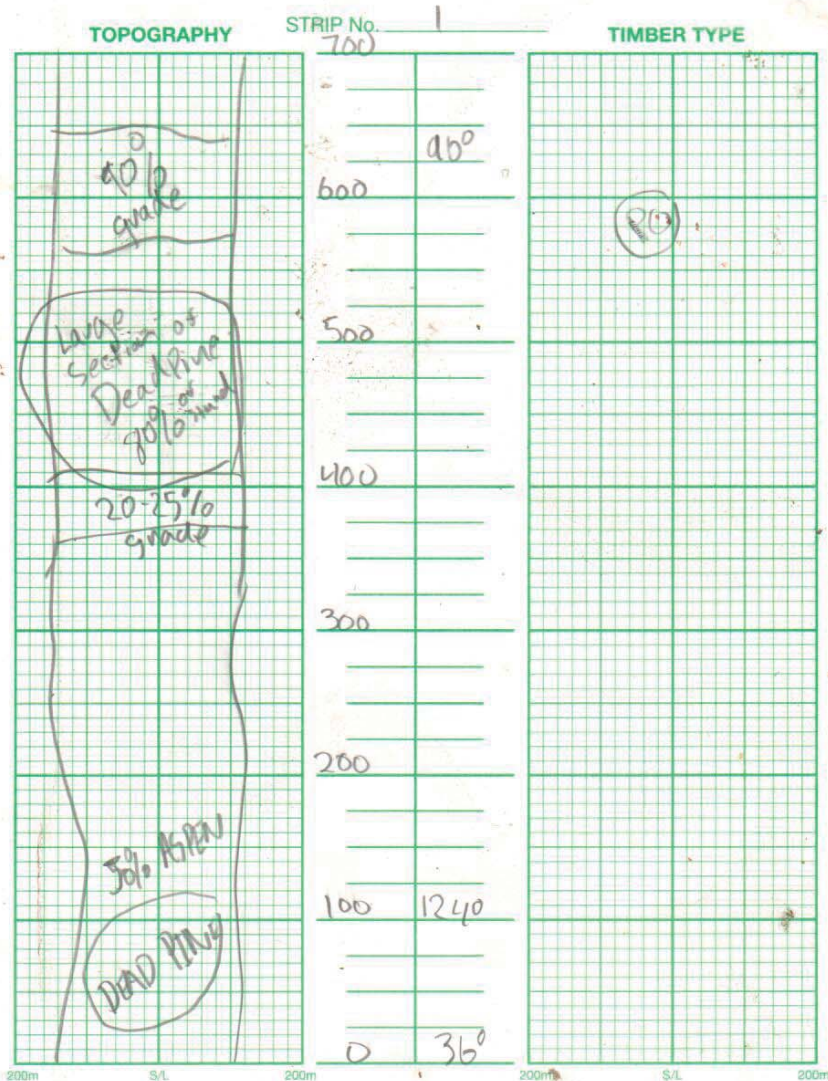
% 2015 ATTACK	0.0%	0.0	SANITATION AND SALVAGE HARVEST PRIORITY RATING			
% 2014 ATTACK	0.0%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)	99.0
% 2013 ATTACK	5.5%	##	MODERATE	600-999	PROBE (To Obtain Further Info)	
% HOST IN STAND	72.4%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING	

FROM ONE CARD, NO CURRENT ATTACK TAKEN IN AREA WITH OLDER ATTACK

SUMMARY OF ALL CARDS FS1111						NUMBER OF CARDS		1		
ACCESS -		Access to the west point of Polygon by 4WD. Polygon is located to the East of Polygon 2015-PHI0025								
POLYGON FEATURES -		Slopes on North and South sides going down to drainage where spruce stand is most prominent. Polygon has areas of dead pine throughout and has plantations to the north and south.								
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						OTHER TREE SPECIES	
			2015		2014		2013			
			1	2	3	4	5	6	BL	AT
17.5-25.0	3.3	0	0	0	0	0	0	0	6	0
25.1-30.0	5.3	2	0	0	0	0	0	0	6	0
30.1-35.0	7.1	3	0	0	0	0	0	0	3	0
35.1-40.0	9.4	1	0	0	0	0	0	0	3	0
40.1-45.0	11.6	4	0	0	0	0	0	0	1	0
45.1-50.0	13.8	5	0	0	0	0	0	0	0	0
50.1-55.0	16.2	3	0	0	0	0	1	0	0	0
55.1-60.0	18.7	4	0	0	0	0	0	0	0	0
60.1 +	25.3	0	0	0	0	0	0	0	0	0
TOTALS		22	0	0	0	0	1	0	19	0
BARK SAMPLES 15 cm x 15 cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE ADULTS	NO. CALLOW	FRESH (GREEN) BLOWDOWN				
						Attacked Y r		Y r ____ Unattacked		
2	0	0	0	0	0	0	0	0	0	
SIZE, BOUNDARY AND PATTERN OF THE INFESTATION										
Polygon had no signs of recent attack from walkthrough. There were pockets of old Code 5 attack and evidence of 1 pitchout tree with no beetle present.										
INCIDENCE AND SEVERITY OF THE INFESTATION										
Very light intensity as no current attack beetle was found. A couple of patches of code 5 attack near draws, but only 1 pitchout noticed,										
RISK OF BEETLE SPREAD										
Polygon has plantations surrounding it and no current attack found.										
ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES										
Good access to west edge, has a drainage running through polygon with some steep slopes. Areas of Dead pine and corresponding blowdown.										

SPRUCE BEETLE PROBE CARD

LOCATION PHI-026		00966209 6117878		PAGE OF						
BEARING 230		DISTANCE 100 m		STRIP WIDTH 10 m						
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		
17.5 - 25.0	3.3									B
25.1 - 30.0	5.3	•								E
30.1 - 35.0	7.1	••								30
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		22					1		18	
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN				
						Attacked	Unattacked			
N/A										
N/A										
COMMENTS NO CURRENT ATTACK.										
CREW NAMES PAT					DATE Y M D 15 11 19					



STRIP NO.: 1 DIRECTION: 36°, 124°, 96°

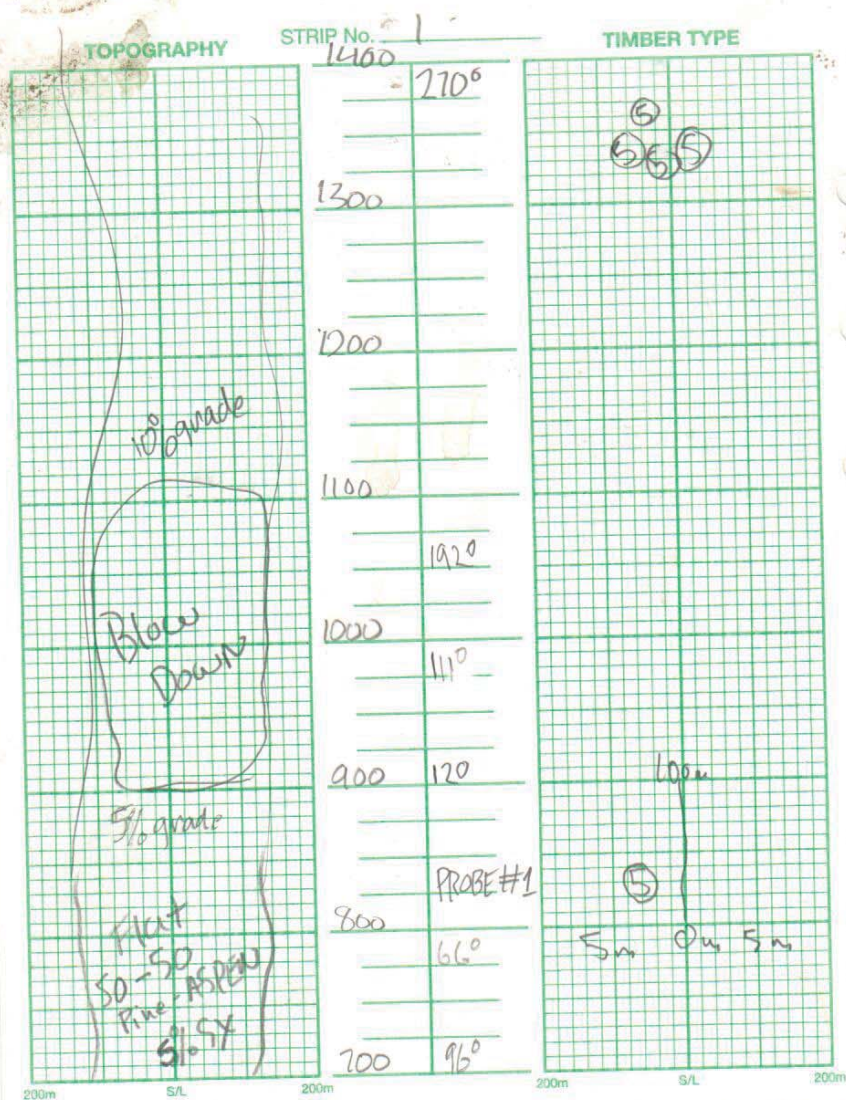
START STRIP: 0-700

JOB NO.: PH1-26 DATE: NOV 19, 15

CREW: Patrick Poirier

REMARKS:

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STRIP NO.: 1 DIRECTION: 96°, 66°, 12°, 111°, 102°

START STRIP: 700-1400 270°

JOB NO.: PH1-26 DATE: NOV 19, 15

CREW: Patrick Poirier

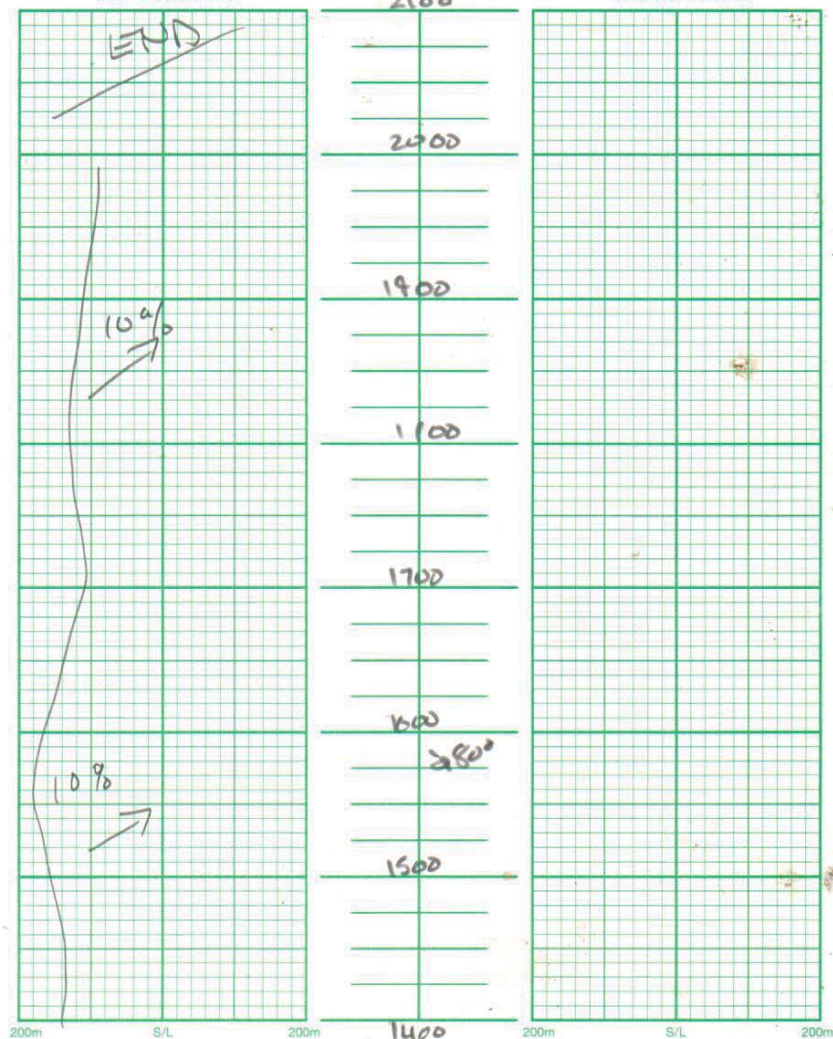
REMARKS:

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TOPOGRAPHY

STRIP NO. 1

TIMBER TYPE

STRIP NO.: 1DIRECTION: 192°, 280°START STRIP: 1400 - 2100JOB NO.: PHI - 020DATE: NOV 19 / 15CREW: PP

REMARKS: _____



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