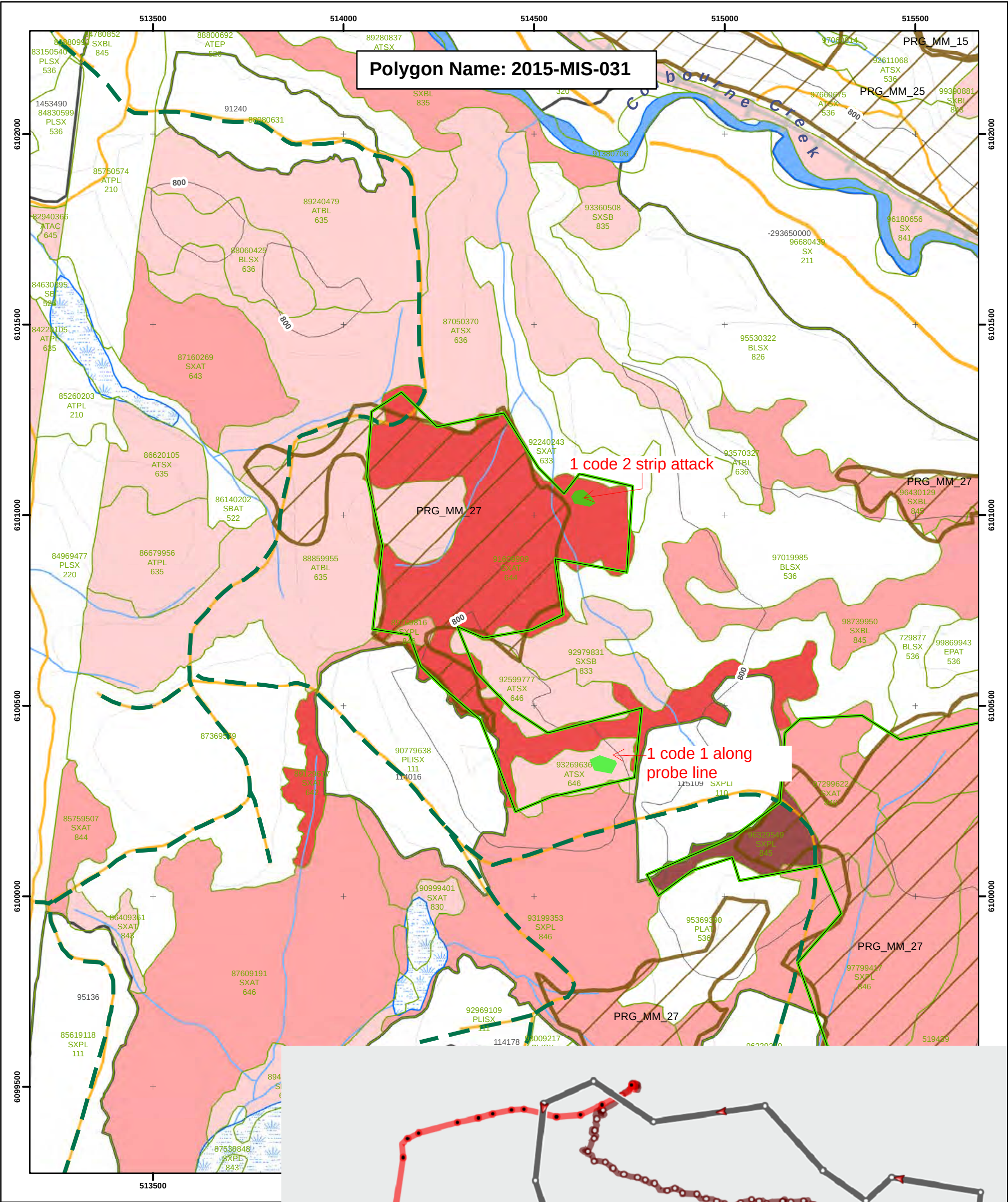




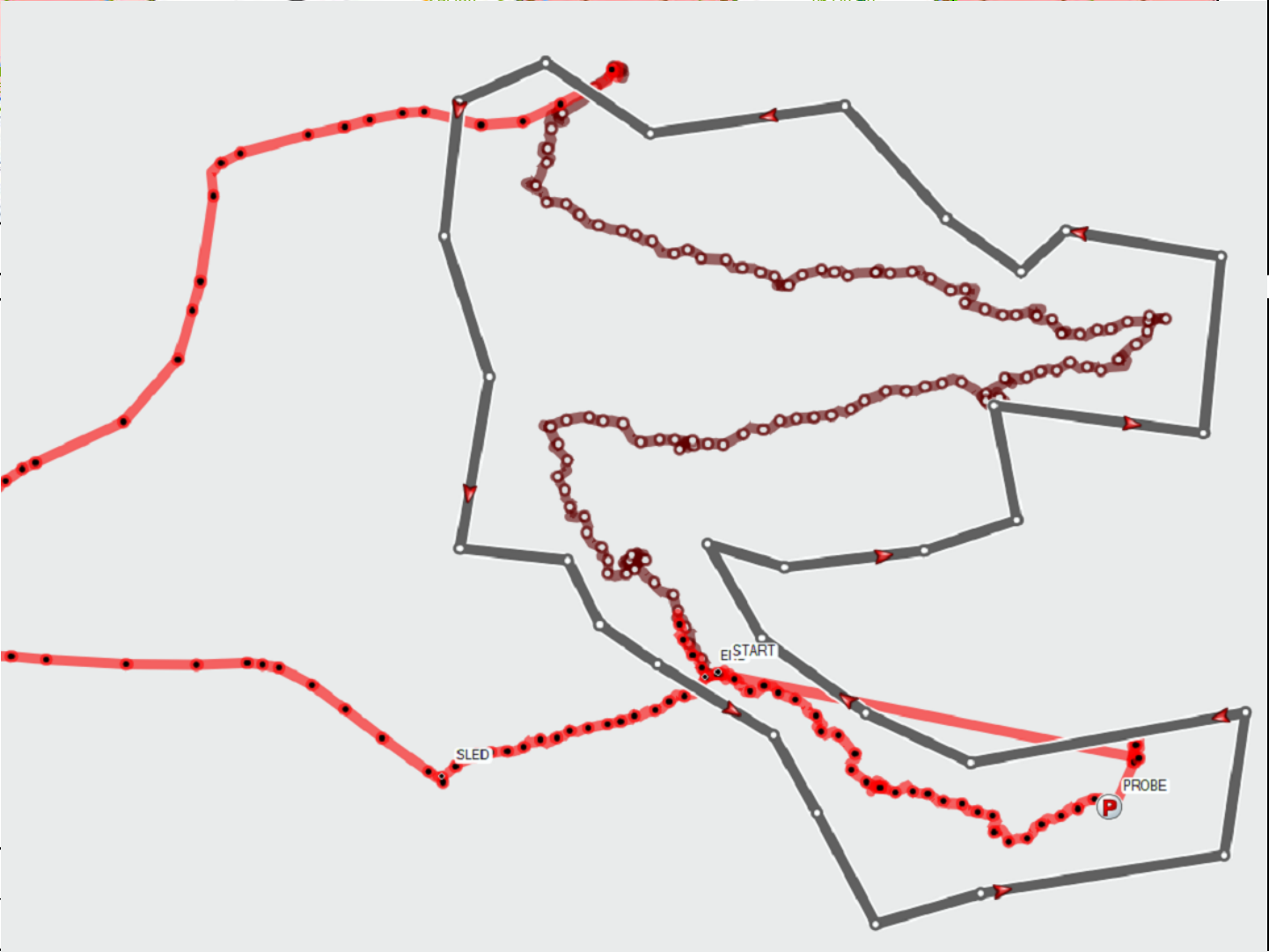


Ministry of
Forests, Lands and
Natural Resource Operations

Spruce Bark Beetle Field Map

Polygon Name: 2015-MIS-031

Landscape	Misinchinka
Unit/BMU:	
Region:	Omineca
District:	Mackenzie
Mapsheet:	093O02
Hectares:	40.31
Scale:	1:10,000
When plotted on 11x17	
Coordinate System:	NAD 1983 UTM Zone 10N
Datum:	North American 1983
Date Drawn:	03/12/2015
Drawn By:	msnively



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**SPRUCE BARK BEETLE REPORT
FH16DMK016,017**

POLYGON: 2015-MIS-031

HECTARES:

40.31

WALKTHROUGH DISTANCE:

2400

ESTIMATED INFESTED PIXELS FROM

WALKTHROUGH (Code 1-4)

2

8.3%

SUMMARY OF CURRENT INFESTATION

Walkthrough shows less than 10% infested pixels and this is from two isolated trees. (One strip attack, one Code 1) The code 1 was located in the south of the polygon near access road and in close proximity to MIS032 which has more attack. Potential for spread within polygon moderate

LIGHT SCATTERED ATTACK

ACCESS

Accessed by road which has via sled from mainline 6km. Polygon has good access points to the east.

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

Minimal slopes with 0-15% rising in the south. Drainage in the north portion of polygon, areas of birch in the south.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Walkthrough found two attacked trees, one code 2 and one code 1. Code one in the wouth of polygon is close to Polygon MIS032 which has more attack.

INCIDENCE AND SEVERITY OF ATTACK

Light scattered attack found and one probe line established where code 1 attacked tree found. This is within a couple hundred meters of MIS032 where more centralized attack noticed.

RISK OF BEETLE SPREAD

Polygon has minimal attack and is scattered and is surrounded by cutblocks to the east. Polygon has susceptible timber and could grow.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access, minimal slopes. Located to the NW of polygon MIS032

RECOMMENDATIONS

North- MONITOR

OPTION 1

South- TRAP TREES

While Sanitation rating is low, near polygon MIS032 where more concentrated attack. When determining action plans, may want to include some trap trees as in viinity of MIS032 and can easily be incorporated with actions there.

OPTION 2

MONITOR

Monitor and schedule walkthrough 2016/2017. There is minimal attack noticed from current walkthrough but stand is susceptible for the attack to grow,

2015-MIS-031

SPRUCE BEETLE WALKTHROUGH

Legend

 PROBE

 Light Scattered Attack

Google earth

© 2016 Qnes/Spot Image
Image © 2016 DigitalGlobe

START/END

SLED

PROBE 118

N

600 m

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	0
25.1-30.0	5.3	10.6	0.0	0.0	0.0	0.0	0.0	0.0	10.6
30.1-35.0	7.1	14.2	7.1	0.0	0.0	0.0	0.0	0.0	21.3
35.1-40.0	9.4	0	0.0	0.0	0.0	0.0	0.0	0.0	28.2
40.1-45.0	11.6	23.2	0.0	0.0	0.0	0.0	0.0	0.0	46.4
45.1-50.0	13.8	27.6	0.0	0.0	0.0	0.0	0.0	0.0	27.6
50.1-55.0	16.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0
55.1-60.0	18.7	37.4	0.0	0.0	0.0	0.0	0.0	0.0	0
60.1 +	25.3	25.3	0.0	0.0	0.0	0.0	0.0	0.0	0
TOTALS	145.4	138.3	7.1	0	0.0	0.0	0.0	0	134.1

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
2.50	< 3.9 SEVERE Attack Density	3.50	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough						
% 2015 ATTACK	4.9%	4.9	SANITATION AND SALVAGE HARVEST PRIORITY RATING			
% 2014 ATTACK	0.0%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)	254.0
% 2013 ATTACK	0.0%	##	MODERATE	600-999	PROBE (To Obtain Further Info)	
% HOST IN STAND	52.0%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING	

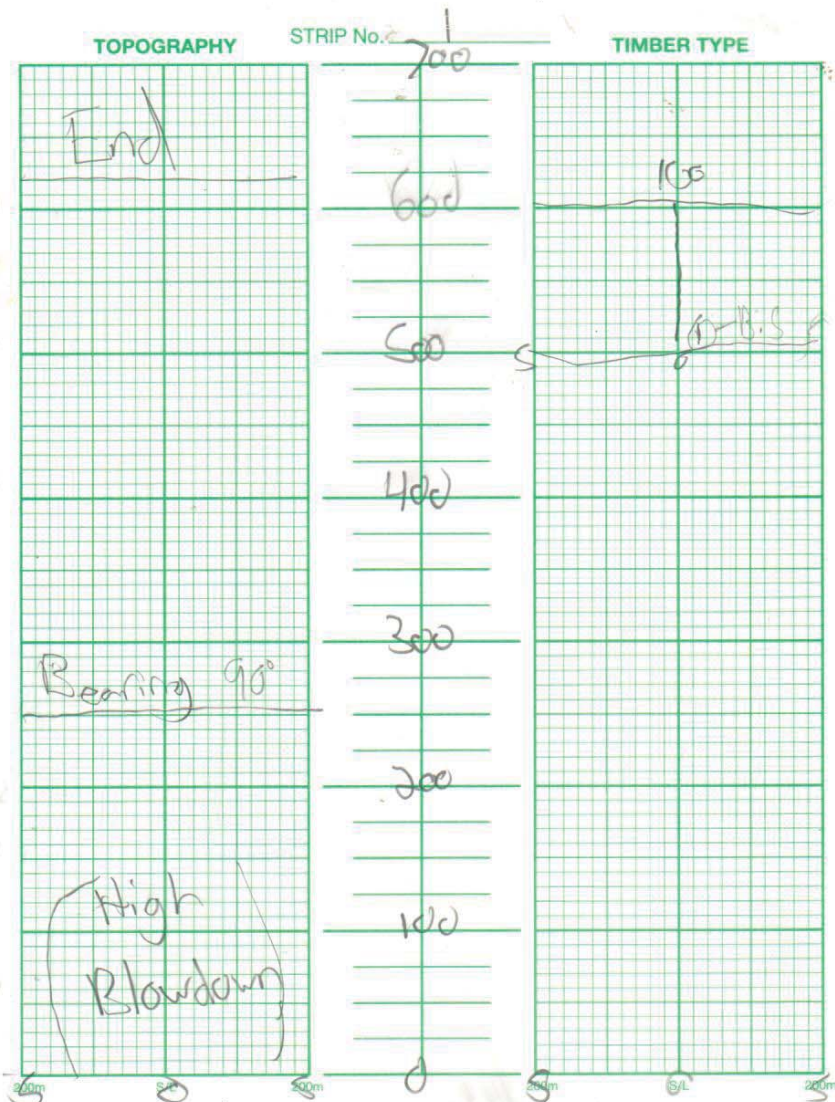
DATA FROM ONE PROBE LINE ESTABLISHED WHERE ONE CODE 1 TREE FOUND.

SUMMARY OF ALL CARDS FS1111						NUMBER OF CARDS		1		
ACCESS -		Accessed by road which has via sled from mainline 6km. Polygon has good access points to the east.								
POLYGON FEATURES -		Minimal slopes with 0-15% rising in the south. Drainage in the north portion of polygon, areas of birch in the 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	0	0
25.1-30.0	5.3	2	0	0	0	0	0	0	0	2
30.1-35.0	7.1	2	1	0	0	0	0	0	1	2
35.1-40.0	9.4	0	0	0	0	0	0	0	0	3
40.1-45.0	11.6	2	0	0	0	0	0	0	1	3
45.1-50.0	13.8	2	0	0	0	0	0	0	0	2
50.1-55.0	16.2	0	0	0	0	0	0	0	0	0
55.1-60.0	18.7	2	0	0	0	0	0	0	0	0
60.1 +	25.3	1	0	0	0	0	0	0	0	0
TOTALS		11	1	0	0	0	0	0	2	12
BARK SAMPLES 15 cm x 15 cm	NO. ENTRANC E HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE ADULTS	NO. CALLOW	FRESH (GREEN) BLOWDOWN				
						Attacked Y r	Y r	Unattacked		
2	5	0	7	0	4	0	0	0		
SIZE, BOUNDARY AND PATTERN OF THE INFESTATION										
Walkthrough found two attacked trees, one code 2 and one code 1. Code one in the wouth of polygon is close to Polygon MIS032 which has more attack.										
INCIDENCE AND SEVERITY OF THE INFESTATION										
Light scattered attack found and one probe line established where code 1 attacked tree found. This is within a couple hundred meters of MIS032 where more centralized attack noticed.										
RISK OF BEETLE SPREAD										
Polygon has minimal attack and is scattered and is surrounded by cutblocks to the east. Polygon has susceptible timber and could grow.										
ACCESS, OPERABILITY AND INTEGRATED RESOURCE MANAGEMENT ISSUES										
Good access, minimal slopes. Located to the NW of polygon MIS032										



BEETLE PROBE CARD

LOCATION		ELEVATION		LATITUDE		PAGE		OF		
Q514660 6100373		818m				1		11		
BEARING	STRIP LINE NO	STRIP WIDTH	DISTANCE	BEETLE SPECIES						
20	1	10	100	☒ 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								Bir	BL
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		11	1						12	2
BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN				
						Attacked		Unattacked		
1a	3	1	3	1	1	1	1	1	1	1
1b	2	1	4	1	4	1	1	1	1	1
COMMENTS										
1B side of BS on 2nd year of 2 year life cycle.										
CREW NAMES						DATE				
Deilen, V						Y M D 16 1 25				



STRIP NO.: 1

DIRECTION: 135°

START STRIP: 0-700m

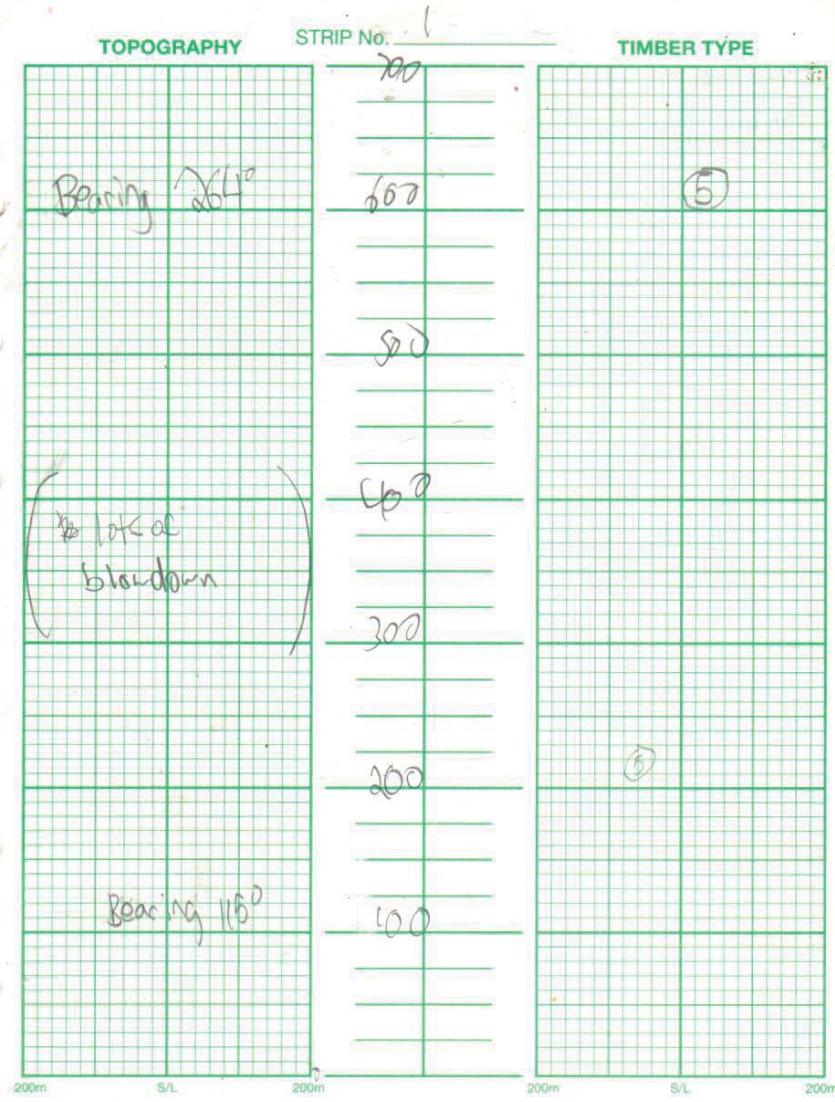
JOB NO.: MIS-031

DATE: Jan 25 1206

CREW: Hulen V

REMARKS: 45% Spruce 45% Birch 10% other

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STRIP NO.: MIS 031

DIRECTION: 195°

START STRIP: 0-700 m

JOB NO.: MK 021

DATE: Jan, 25/16

CREW: Blake B

REMARKS: No current attack

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TOPOGRAPHY

STRIP No.

1405 2

TIMBER TYPE

Bearing 150°

1300

1200

1100

1000

900

800

⑤

②

200m S/L 200m 200m S/L 200m

STRIP NO.: MIS 031 DIRECTION: 264° (600m)

START STRIP: 800 - 1400 m

JOB NO.: MIS 031 DATE: Jan 25/16

CREW: Blake B

REMARKS: even amount of Bir, Spr

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TOPOGRAPHY

STRIP No.

3

TIMBER TYPE

2000

1900

1800

1700

END

1600

1500

200m S/L 200m 200m S/L 200m

STRIP NO.: MIS 031 DIRECTION: 150° (400m)

START STRIP: 1500 - 2100 m

JOB NO.: MIS 031 DATE: Jan 25/16

CREW: Blake B

REMARKS:

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