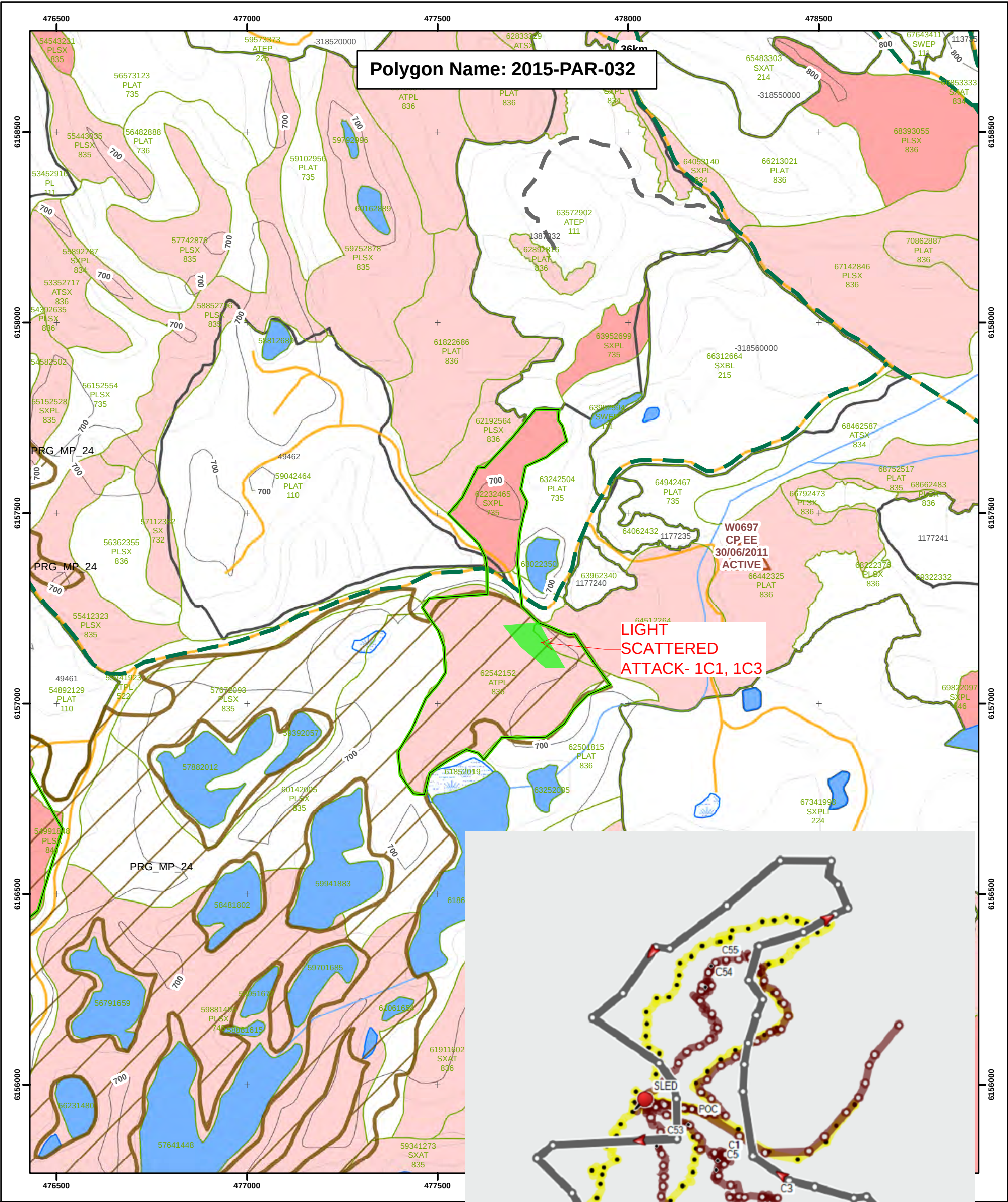
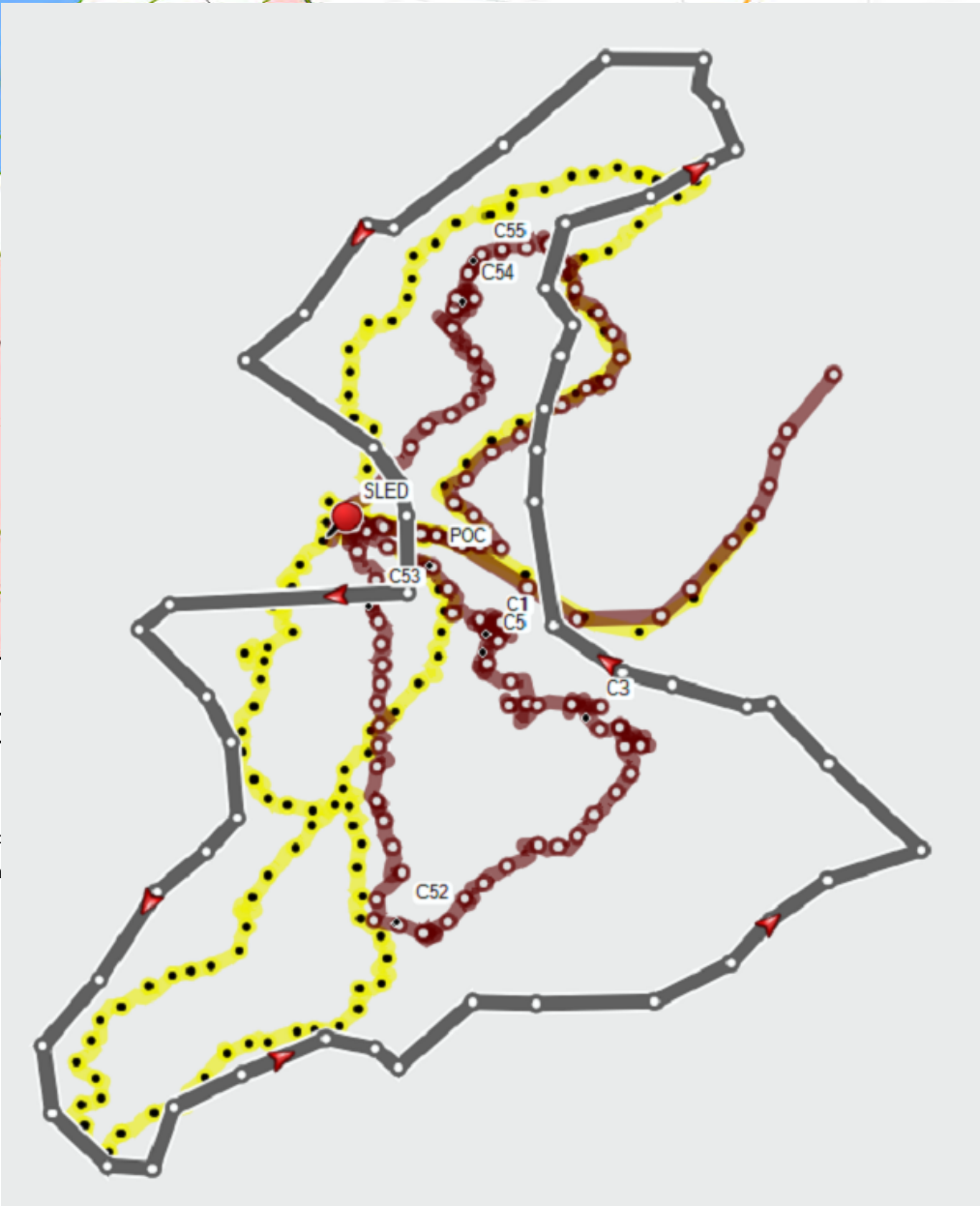




 Ministry of Forests, Lands and Natural Resource Operations

Spruce Bark Beetle Field Map

Polygon Name: 2015-PAR-032

Landscape Unit/BMU: Parsnip

Region: Omineca

District: Mackenzie

Mapsheet: 093O11

Hectares: 21.5

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

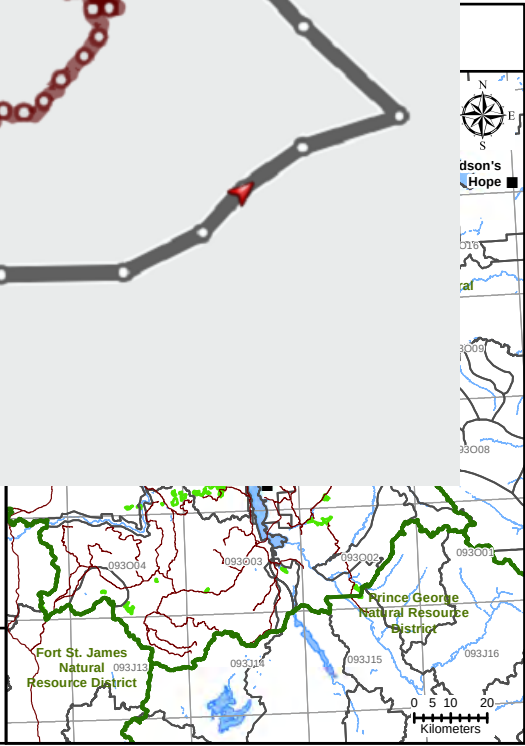
Map Features

- Susceptible Spruce Bark Beetle Polygon
- 2013 SB Hazard Rating (20% increment)
- Hazard Classes
 - Low/Med (21-40)
 - Med (41-60)
 - High (61-80)
 - Very High (81-100)
- Cutting Permit
- RESULTS Opening
- VRI Polygon
- Beetle Management Unit
- Natural Resource District
- Road Permit Active
- Road Permit Pending
- Km Markers

0 0.1 0.2 0.4 Kilometers

Disclaimer

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



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

WALKTHROUGH DISTANCE: 2200

**SPRUCE BARK BEETLE REPORT
FH16DMK016,017**

POLYGON: 2015-PAR-032 HECTARES: 21.50

ESTIMATED INFESTED PIXELS FROM
WALKTHROUGH (Code 1-4) 1 4.5%**SUMMARY OF CURRENT INFESTATION**

Found one infested pixel with 1-C1 and 1-C3 attack. Polygon has all stages of attack and has good access with the attack showing close to the road. Small Polygon and need to work with 2015-PAR-033. Steeper slopes to the south. While attack is isolated, there are code 5's scattered throughout polygon and there may be more single trees.

LIGHT SCATTERED ATTACK**ACCESS**

Truck parked on Parsnip road, Sled in 5km to polygon on unplowed road. Road splits polygon through the middle

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

Road through the middle of polygon, Steep topography in the south, Heavy understory, difficult walking, About 50/50 Balsam and Spruce.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Walkthrough found 1 code 1 tree and 1 code three tree within same pixel. Scattered Code 5 attack also noted. Attacked Code 1 had minimal larvae when hacked into. Light scattered attack.

INCIDENCE AND SEVERITY OF ATTACK

Light scattered attack with one infested pixel having 1 Code 1 and 1 Code 3 attack.

RISK OF BEETLE SPREAD

Surrounded by cutblocks and with light attack minimal risk of spread. All stages of attack represented in polygon, 2015-PAR-033 just further down the access road.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access splits polygon on unplowed road. Steeper to the south but attack is close to road.

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

As only 1 code 1 tree and 1 Code 3 found and scattered in a mixed stand by Balsam, best to schedule another walkthrough 2016/2017. There are many code 5 attacked trees and the Code 1 infested tree found is on the first year of a 2 year cycle.

OPTION 2**TRAP TREES**

As close enough to a road (Unplowed), would be effective to setup a couple trap trees and group with 2015-PAR-033. As PAR033 has trees on first year of 2 year cycle, and this polygon found 1 Code 3, maybe best to wait until late 2017 to lay trap tree

2015-PAR-032

SPRUCE BEETLE WALKTHROUGHS

Legend

-  LIGHT SCATTERED ATTACK1-C1, 1-C3
-  PROBES



Google earth

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Image Landsat



500 m

Summary						
2015-PAR-032		21.50	METERS WALKED	2200	% TRAVERSED	10.2%
PIXELS COVERED BY WALKTHROUGH	22	INFESTED PIXELS	1	ESTIMATED % OF BLOCK INFESTED (From Walk through)		4.5%

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	0
25.1-30.0	5.3	0	0.0	0.0	0.0	0.0	0.0	0.0	21.2
30.1-35.0	7.1	0	0.0	0.0	0.0	0.0	0.0	0.0	63.9
35.1-40.0	9.4	0	0.0	0.0	0.0	0.0	0.0	0.0	9.4
40.1-45.0	11.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0
45.1-50.0	13.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0
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	0	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	0.0	0	0.0	0	0.0	0.0	0.0	0	94.5

TABLE 4- Spruce Beetle Attack Density and Larval Density Rating

MEAN NO. OF ENTRANCE HOLES PER 225 cm2 PHLOEM SAMPLE	< 1 LOW Attack Density	MEAN NO. OF LIVING LARVAE PER 225 cm2 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)	0.0
% 2013 ATTACK	0.0%	##	MODERATE	600-999	PROBE (To Obtain Further Info)	
% HOST IN STAND	0.0%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING	

NO PROBE LINE TAKEN, PAT HAD A LOOK AT THE ONE CODE 1, FOUND ONLY A FEW LARVAE ON THE ONE TREE WHEN HACKED INTO, 1ST YEAR OF A 2 YEAR CYCLE

SUMMARY OF ALL CARDS FS1111						NUMBER OF CARDS		0		
ACCESS -		Truck parked on Parsnip road, Sled in 5km to polygon unplowed road. Road splits polygon through the middle								
POLYGON FEATURES -		Road through the middle of polygon, Steep topography in the south, Heavy understory, difficult walking, About 50/50 Balsam and Spruce.								
DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						O+AW6:B18THER 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	0	0	0	0	0	0	0	4	0
30.1-35.0	7.1	0	0	0	0	0	0	0	9	0
35.1-40.0	9.4	0	0	0	0	0	0	0	1	0
40.1-45.0	11.6	0	0	0	0	0	0	0	0	0
45.1-50.0	13.8	0	0	0	0	0	0	0	0	0
50.1-55.0	16.2	0	0	0	0	0	0	0	0	0
55.1-60.0	18.7	0	0	0	0	0	0	0	0	0
60.1 +	25.3	0	0	0	0	0	0	0	0	0
TOTALS		0	0	0	0	0	0	0	14	0
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 Yr _____		Unattacked		
0	0	0	0	0	0	0	0	0	0	0
SIZE, BOUNDARY AND PATTERN OF THE INFESTATION										
Walkthrough found 1 code 1 tree and 1 code three tree within same pixel. Scattered Code 5 attack also noted. Attacked Code 1 had minimal larvae when hacked into. Light scattered attack.										
INCIDENCE AND SEVERITY OF THE INFESTATION										
Light scattered attack with one infested pixel having 1 Code 1 and 1 Code 3 attack.										
RISK OF BEETLE SPREAD										
Suurrounded by cutblocks and with light attack minimal risk of spread. All stages of attack represented in polygon, 2015-PAR-033 just further down the access road.										
ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES										
Good access splits polygon on unplowed road. Steeper to the south but attack is close to road.										

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TOPOGRAPHY

STRIP No. 2
1400

TIMBER TYPE

Bearing 240°

Flat
Open
50% balam
50% spare

Bearing 002°

Bearing 50°

1300

1200

1100

1000

900

800

⑤

⑤

STRIP NO: 2DIRECTION: 50° START STRIP: 800-1400JOB NO: PAR-032DATE: Jan 30th/16CREW: Blake B

REMARKS:



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COMPASS AND TRAVERSE SHEET

TOPOGRAPHY

TIMBER TYPE

END

2000

1900

1800

1700

1600

1500

⑤

C.P. No 3 BLOCK

DIRECTION 240° START OF STRIP 1500-2000

JOB NO PAR-032 DATE Jan 30th/16

CREW Blake B

REMARKS

FS 375 HFP 92/1 7530881021 (100/Bide)