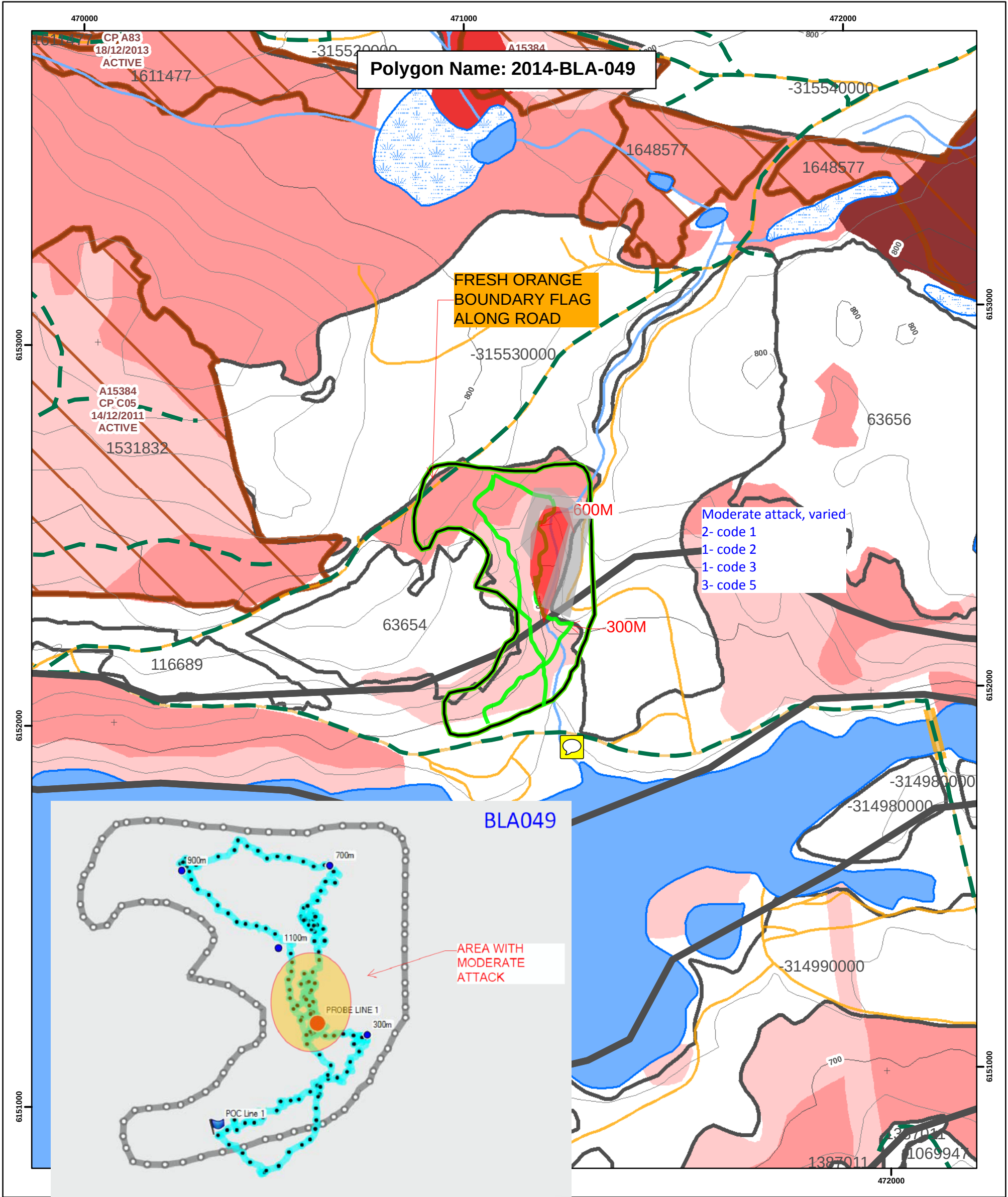






Ministry of
Forests, Lands and
Natural Resource Operations

Spruce Bark Beetle Field Map

Polygon Name: 2014-BLA-049

Landscape	Blackwater
Unit/BMU:	Omineca
Region:	Mackenzie
District:	093O11
Mapsheets:	20.21
Hectares:	1:10,000
Scale:	When plotted on 11x17
Coordinate System:	PCS Albers
Datum:	North American 1983
Date Drawn:	03/06/2015
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)

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

Streams

Lakes and Rivers

Wetlands

00.00.00

0.1

0.2

0.4

Kilometers

Disclaimer

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

Key Map

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**SPRUCE BARK BEETLE REPORT
FH16DMK010**

POLYGON: BLA049

HECTARES: 20.21

WALKTHROUGH DISTANCE: 1100

ESTIMATED INFESTED PIXELS FROM
WALKTHROUGH (Code 1-4)

2 18.2%

SUMMARY OF CURRENT INFESTATION

Walkthrough estimate shows less than 20% of polygon has Light attack . This area is alongside a creek and has Code 5's mixed with Codes 1,2,3's. It has a minimal rate of spread as surrounded by cutblocks, and only moderate again in identified area. Fresh Orange Boundary flag hung along the north part of the polygon.

MODERATE ATTACK NORTH OF ROAD (20 Hec), LIGHT SCATTERED ATTACK IN SOUTHWEST

ACCESS

ACCESS IS MAIN ROAD TO SOUTH OF POLYGON, THAN WALK IN NORTH, and a road to the north in good condition.

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

Steep slope with drainage through middle running north to south.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Polygon is 20 hectares and has patchy attack from the walkthrough (see Map) Only approx 20% of polygon showing signs of beetle,

INCIDENCE AND SEVERITY OF ATTACK

Sanitation and salvage rating of heavy, 1 and 2 year cycles patchy.

RISK OF BEETLE SPREAD

Polygon has moderate beetle infestation and surrounded by cutblocks and poses minimal rate of spread outside of polygon.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Polygon has a draw through with moderate slopes of 20-50%. Where beetle is

RECOMMENDATIONS**North-HARVEST/ TRAP TREES****OPTION 1**

Boundary to North has Fresh Orange Boundary Flag and does not likely incorporate this polygon as slopes quite steep running down to attacked areas. As equip in area, lay down tree trails off mainline. May be able to harvest.

OPTION 2**TRAP TREES/ MONITOR**

Monitor and kay down trap trees along main road,

2014-BLA-049

Spruce Beetle Walkthrough

Legend

-  MODERATE ATTACK
-  PROBE 1



Google earth

Image Landsat
© 2015 Google

Summary						
BLA049	HEC	20.21	METERS WALKED	1100	% TRAVERSED	5.4%
PIXELS COVERED BY WALKTHROUGH	11	INFESTED PIXELS	2	ESTIMATED % OF BLOCK INFESTED (From Walk through)		18.2%

TABLE 5- Spruce Beetle Infestation Summary Sheet

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	13.2	0.0	0.0	0.0	0.0	0.0	0.0	16.5
25.1-30.0	5.3	0	0.0	0.0	0.0	0.0	0.0	0.0	5.3
30.1-35.0	7.1	14.2	0.0	0.0	0.0	0.0	0.0	0.0	14.2
35.1-40.0	9.4	18.8	0.0	0.0	0.0	0.0	9.4	0.0	0
40.1-45.0	11.6	46.4	0.0	0.0	0.0	0.0	0.0	0.0	0
45.1-50.0	13.8	69	0.0	6.9	0.0	0.0	0.0	0.0	0
50.1-55.0	16.2	16.2	0.0	0.0	0.0	0.0	0.0	0.0	0
55.1-60.0	18.7	18.7	18.7	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	231.5	196.5	18.7	6.9	0.0	0.0	9.4	0	36

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		< 4.9 LOW Mean Larval Density
1.50	< 3.9 SEVERE Attack Density	2.50	< 4.9 LOW Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough						
% 2015 ATTACK	11.1%	##	SANITATION AND SALVAGE HARVEST PRIORITY RATING			
% 2014 ATTACK	0.0%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)	1044.9
% 2013 ATTACK	4.1%	##	MODERATE	600-999	PROBE (To Obtain Further Info)	
% HOST IN STAND	86.5%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING	

SPRUCE BEETLE PROBE CARD

LOCATION Be. Drebel Ref PAGE OF

BEARING 344° 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	
17.5 - 25.0	3.3	••••							Bg
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		19	1	1			1		8

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN	
						Attacked	Unattacked
4	1	1	2	0	3		
5	2	1	3	0	8		

COMMENTS 0 means 1 year life callos + larvae

CREW NAMES Brandon Sparks / Aaron Goldblatt DATE 15 10 10

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TOPOGRAPHY		TIMBER TYPE
10 Spruce	700	700
3440	344° 60'	③ possibility on still garden 1600 ft woods
70% 90 Spruce	200	500
50% slope 90 20 Spruce	400	400
90 20 Spruce	344°	400
80 40%	264° 300'	300
50% slope 264°	2000	100
40% slope		
20% slope 120m 40%		
60% Spruce		
5 Dead Pine 50/50 flat		

C.P. No.	BLOCK	
DIRECTION	25°, 269°, 349°	START OF STRIP 0-700
JOB NO.		DATE Oct 10 / 2015
CREW	Aaron Colebank Brandon Sparkes	
REMARKS	BS = Bark Sample 3's	

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The figure is a hand-drawn map on a grid, divided into two main sections: TOPOGRAPHY (left) and TIMBER TYPE (right). Both sections are 200m wide and 200m high.

TOPOGRAPHY Section:

- Topography:** The left half of the map. It features several elevation contours: 80%, 60%, 40%, and 20%. The 80% contour is at the top, followed by 60%, 40%, and 20% at the bottom. The contours are labeled with '80%', '60%', '40%', and '20%' respectively.
- Vegetation:** The right half of the map. It is labeled with 'spruce' and 'fir'. The 'spruce' label is at the top, and the 'fir' label is at the bottom.

TIMBER TYPE Section:

- Timber Type:** The right half of the map. It features several labels: 'fir', 'spruce', and 'fir'. The 'fir' label is at the top, followed by 'spruce' in the middle, and 'fir' at the bottom.

C.P. No.	BLOCK	
DIRECTION 258°/136°		START OF STRIP
JOB NO.		DATE
CREW		
REMARKS		

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