SENECA ENTERPRISES LTD.
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SPRUCE BARK BEETLE REPORT
FH17DPG218

STAR PROBE# **2016-PHI-0159** 267

NUMBER OF CODE 1-4 ATTACK 3

PROBE LINE YES

SUMMARY OF CURRENT INFESTATION

LIGHT ATTACK

Grouping of sites PHI-0144, 0145, 0158, 0159 and 0160. All sites walkins south of old road (ATV) 500m to 1.8km. The only site with signs of attack was site PHI0159 Which has three Code 1 attacked trees (Concentrated Attack).. Further to the south of this site is PHI-0160 which had no signs of attack and was mostly alder and than further south from there is a grouping of sites PHI-0161 and 0162 where moderate signs of attack was noticed. There is poor access to PHI0159 and 1 probe line showed moderate Priority rating. Isolated attack.

ACCESS

From Quad, walk 600m to 1.8km south to sites. (Site 0159 1km, creek through north)

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

All sites very wet with heavy patches of alder. Low volumes of spruce. Stream in site 0159 at 50m North

SIZE, BOUNDARY and PATTERN OF INFESTATION

Three Code 1 attacked tree found in site 0159, no other evidence of attack in surrounding sites. Very light attack, very minimal spruce within stands. Further south, moderate attack in another grouping of sites 0161 and 0162

INCIDENCE AND SEVERITY OF ATTACK

Three Code 1 attacked tree found in site 0159, no other evidence of attack in surrounding sites. Very light attack, very minimal spruce within stands. Further south, moderate attack in another grouping of sites 0161 and 0162

RISK OF BEETLE SPREAD and SURROUNDING SITES

Three Code 1 attacked tree found in site 0159, no other evidence of attack in surrounding sites. Very light attack, very minimal spruce within stands. Further south, moderate attack in another grouping of sites 0161 and 0162

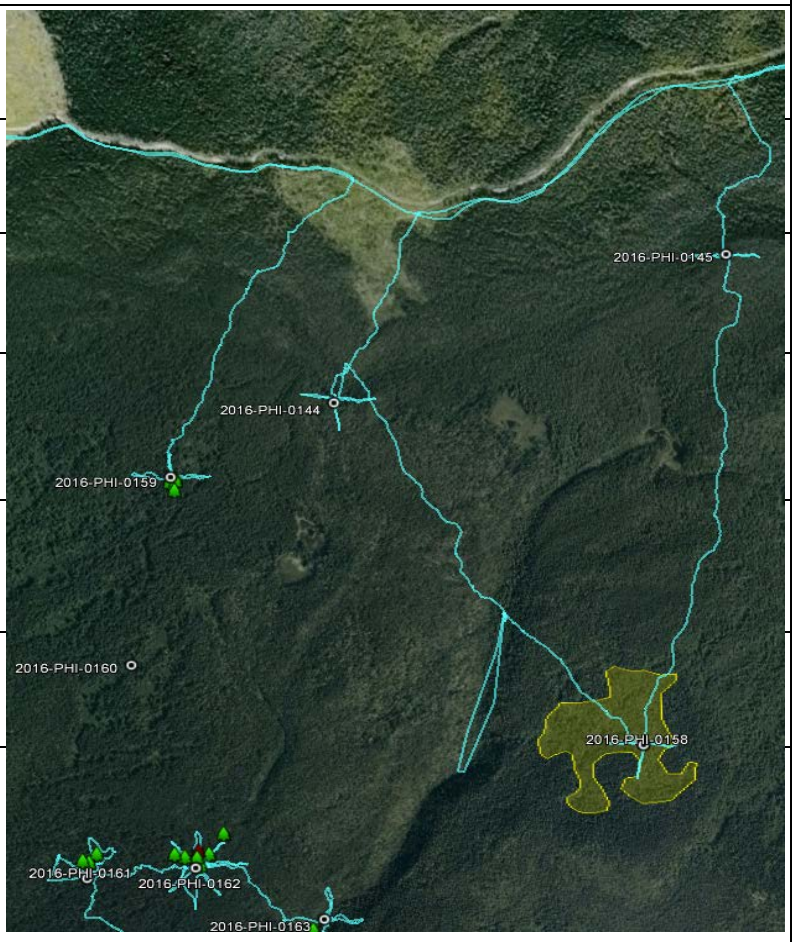
ACCESS, OPERABILITY and INTEGRATED RESOURCE MGMT ISSUES

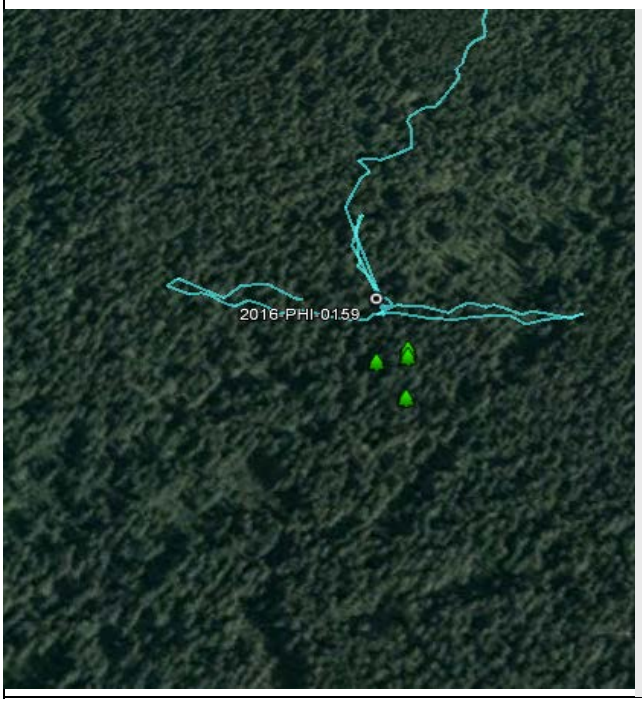
From Quad, walk 600m to 1.8km south to sites. (Site 0159 1km, creek through north)

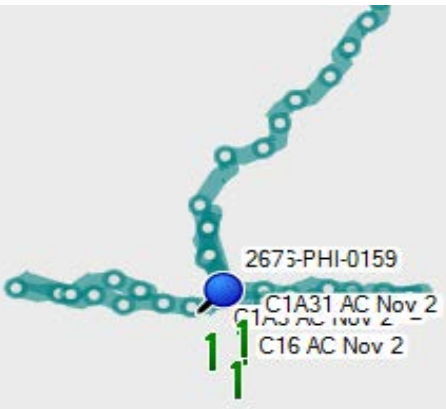
RECOMMENDATIONS

OPTION 1 **MONITOR**

Site 0159 has three signs of current attck. Bark sample showed both 1 and 2 year life cycle. As access very poor and isolated, MONITOR area and work in conjunction with Sites PHI0161 and PHI0162. Those sites as well have poor access. All other sites no action as no attack noticed.







Summary

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TABLE 5- Spruce Beetle Infestation Summary Sheet

OF NOTE- Results taken from a 100m Probe Line

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	3.3	0.0	0.0	0.0	0.0	0.0	0.0	26.4
25.1-30.0	5.3	15.9	0.0	0.0	0.0	0.0	0.0	0.0	26.5
30.1-35.0	7.1	42.6	0.0	0.0	0.0	0.0	0.0	0.0	42.6
35.1-40.0	9.4	28.2	18.8	0.0	0.0	0.0	0.0	0.0	37.6
40.1-45.0	11.6	23.2	11.6	0.0	0.0	0.0	0.0	0.0	34.8
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	143.6	113.2	30.4	0	0.0	0.0	0.0	0	167.9

TABLE 4- Spruce Beetle Attack Density and Larval Density Rating

MEAN NO. OF ENTRANCE HOLES PER 225 cm2 PHLOEM SAMPLE		MEAN NO. OF LIVING LARVAE PER 225 cm2 PHLOEM SAMPLE	
	< 1 LOW Attack Density		< 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
1.00	< 3.9 SEVERE Attack Density	4.50	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2016 ATTACK	21.2%	##	SANITATION AND SALVAGE HARVEST PRIORITY RATING		
% 2015 ATTACK	0.0%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)
% 2014 ATTACK	0.0%	##	MODERATE	600-999	PROBE (To Obtain Further Info)
% HOST IN STAND	46.1%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING

975.9

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS: 1

ACCESS - From Quad, walk 600m to 1.8km south to sites. (Site 0159 1km, creek through north)

SITE FEATURES - All sites very wet with heavy patches of alder. Low volumes of spruce. Stream in site 0159 at 50m North

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	1	0	0	0	0	0	0	8	0
25.1-30.0	5.3	3	0	0	0	0	0	0	5	0
30.1-35.0	7.1	6	0	0	0	0	0	0	6	0
35.1-40.0	9.4	3	2	0	0	0	0	0	4	0
40.1-45.0	11.6	2	1	0	0	0	0	0	3	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		15	3	0	0	0	0	0	26	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	2	0	9	4	2	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

Three Code 1 attacked tree found in site 0159, no other evidence of attack in surrounding sites. Very light attack, very minimal spruce within stands. Further south, moderate attack in another grouping of sites 0161 and 0162

INCIDENCE AND SEVERITY OF THE INFESTATION

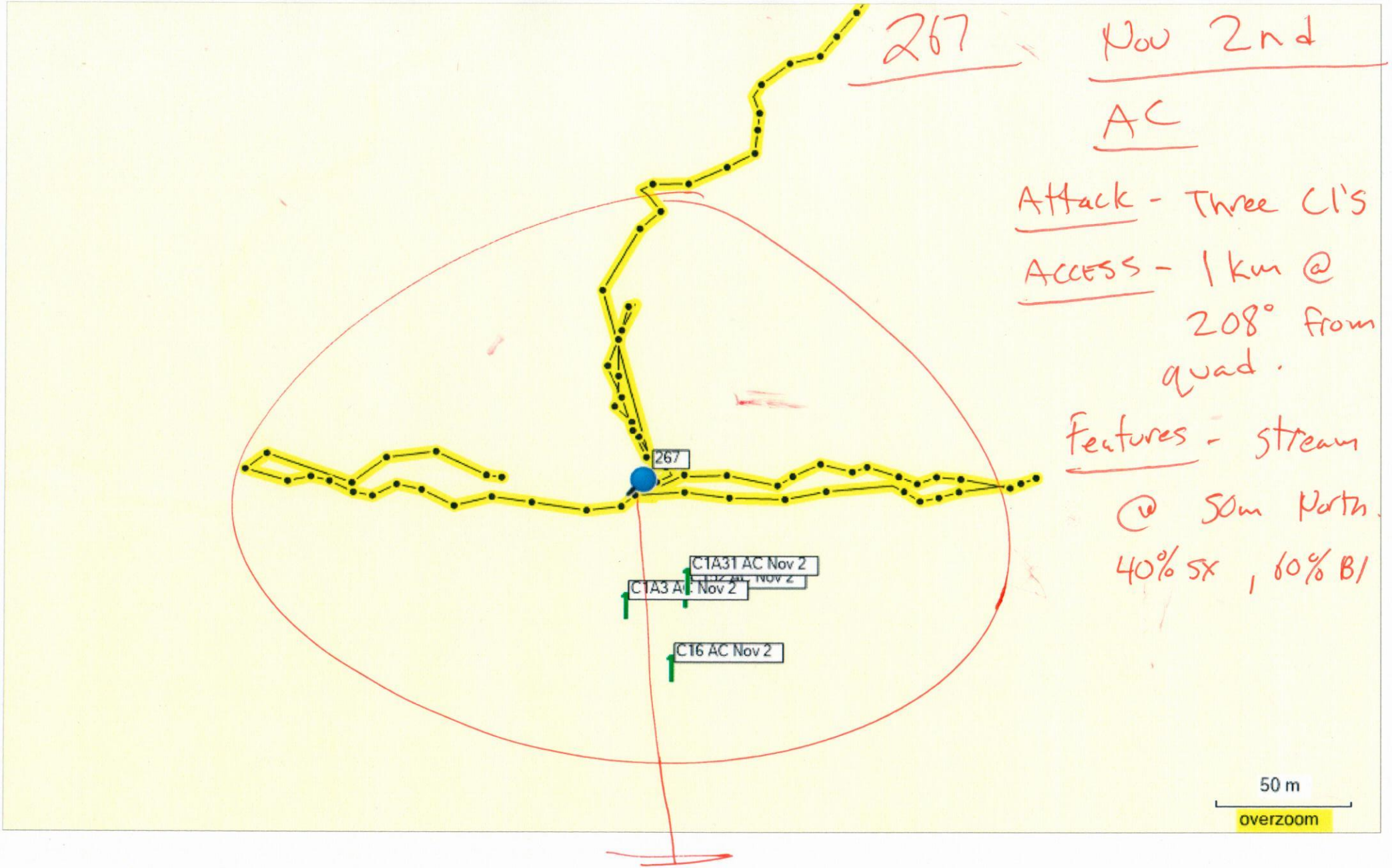
One Code 1 attacked tree found in site 0113, Single Code 5 attack tree found in 0115 with no other evidence of attack. Probe line in 0113 had light sanitation priority rating. Very light attack, very minimal spruce within stands.

RISK OF BEETLE SPREAD

Minimal. Site 0113 has one current attacked tree amongst heavy alder, all sites low volume of spruce. Sites 0114,0115 had no current attack

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

All accessed North of mainline, about a 600m walk in. Very wet sites with creeks and swamps, heavy alder throughout, difficult walking except PHI-0113, walk in on skid trail.



267 Nov 2nd

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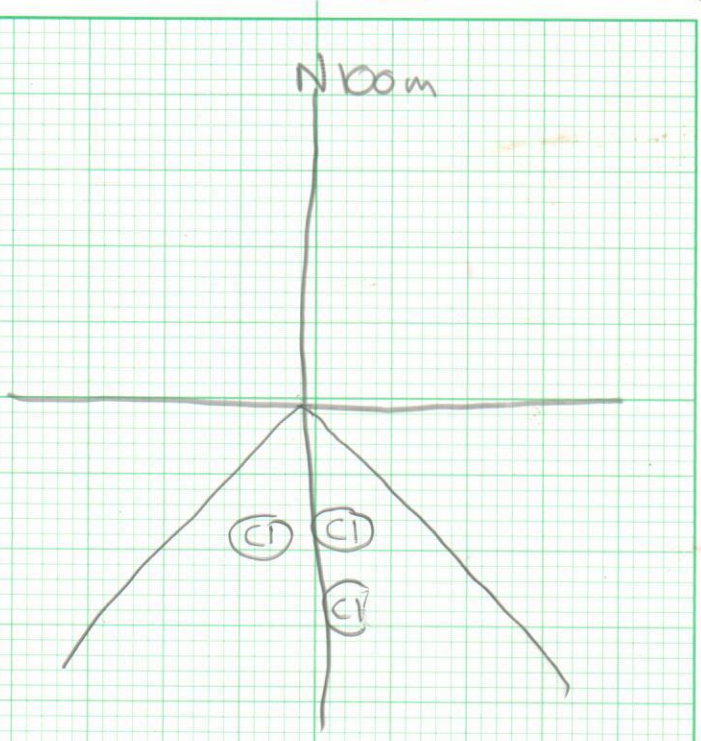
Attack - Three C1's

Access - 1 km @ 208° from quad.

Features - stream @ 50m North.

40% SX, 60% BI

267



Access: walked from quad @ 10 U 0475614 6119424
truck parked @ 10 U 0478670 6119732

267 Plot Centre- 10 U 0475140 6119557

Aaron Colebank Nov 2nd, 2016

Ⓐ Stream @ 50m North

R.D. PENHALL LTD. MADE IN VANCOUVER, CANADA
DUKSBAK WATERPROOF

METRIC FIELD

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE
267 South	10U 0475140 6118531	OF elev: 1200m
BEARING	DISTANCE	STRIP WIDTH
180°	100m	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	B1
17.5 - 25.0	3.3	6							
25.1 - 30.0	5.3								
30.1 - 35.0	7.1								
35.1 - 40.0	9.4		6						
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		14	3						26

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

COMMENTS: 6 - Bark Sample, Code 1 and 3

CREW NAMES	DATE (Y M D)
Aaron Colebank	2016 11 03