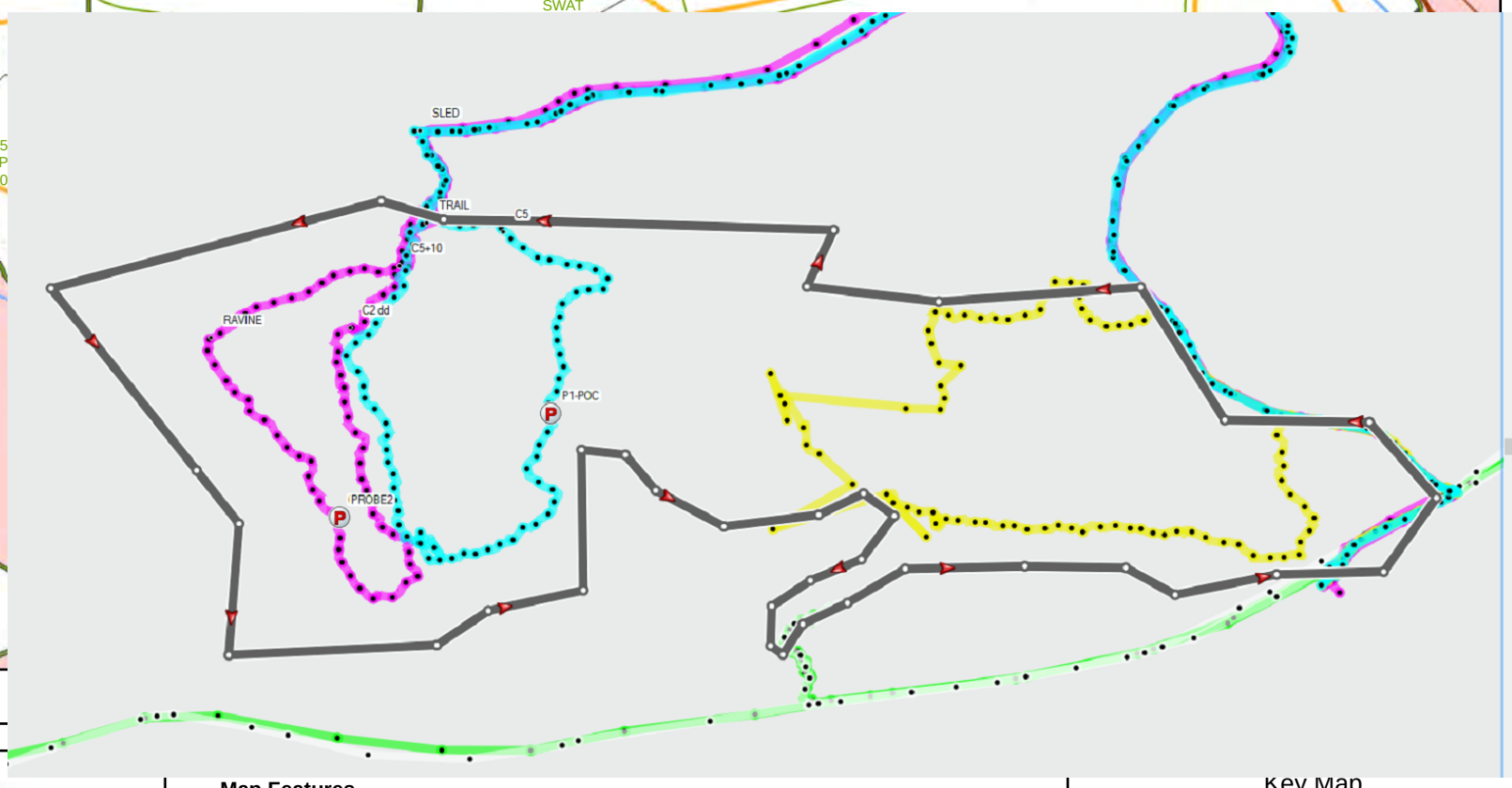
Polygon Name: 2015-CHU-002

405500 406000 406500 407000 407500

6122000 6121500 6121000 6120500 6120000 6119500

316
833 PLSW 211 -205060000
311 SW 221
312
315
232 PLSE 836
302 PLBL
303 PLSW 221
841
491 SXPL 846
489
488 PLSX 836
490
487 SBSX 823
261 PLBL 220
1100
483 SXBL 835
513
486 PLBL
-204960000
263
496 PLBL 220
495 PLBL 220
492 PLBL 220
494 PLBL 220
264 PLSW 220 -210330000
498 BLSW 220
58879954 PLSE 836
63419610 SEPL 836
88010
59569758 PLBL 113
A18156 CP 405 01/01/2000 ACTIVE
499 PLBL 220
266 PLBL 220
268 PLBL 220
550
ISOLATED ATTACK
834 SWPL 210
485 PLSX 836
57119108 SXBL 845
57629099 PLSX 836
1287098 60839035 SXPLI 111
A64418 CP 815 02/07/2009 ACTIVE
57049910
58708987 PLSX 836
257 PLAT 221
839 PLSW 322
407 SWAT 211
62088587 PLSX 846
1654597
A64418 CP 821 16/12/2013 ACTIVE
836 ATPL 221
-204980000
1000
243 PLSW 221
244 PLSW 221
837 SWAT 211
246 PLAT 211
408 SWAT
-204970000
249 PLBL 220
835 SWP 210
652 SXPL 836
1000
191 SWPL 214 113858 -205070000
60539219 PLSX 836



BRITISH COLUMBIA
Ministry of Forests, Lands and Natural Resource Operations

Spruce Bark Beetle Field Map

Polygon Name: 2015-CHU-002

Landscape Unit/BMU:	Chuchi
Region:	Omineca
District:	Mackenzie
Mapsheet:	093N01
Hectares:	109.94
Scale:	1:10,000
When plotted on 11x17	
Coordinate System:	NAD 1983 UTM Zone 10N
Datum:	North American 1983
Date Drawn:	02/12/2015
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
- VRI Polygon
- Beetle Management Unit
- Natural Resource District
- Road Permit Active
- Road Permit Pending
- Km Markers
- Communities
- First Nations Reserves
- 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

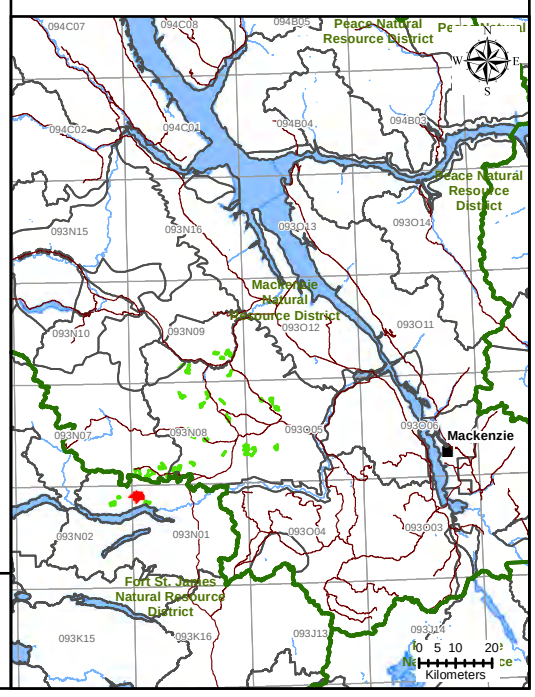
N W E S

0 0.1 0.2 0.4 Kilometers

Disclaimer

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

Key Map



SENECA ENTERPRISES LTD.
PO BOX 1902, PRINCE GEORGE, BC, V2L 5E3
Phone: (250) 561-0890, Fax: (250) 564-3275

SPRUCE BARK BEETLE REPORT FH16DMK016,017

POLYGON: **2015-CHU-002** HECTARES: 109.94

WALKTHROUGH DISTANCE: 6200

ESTIMATED INFFESTED PIXELS FROM WALKTHROUGH (Code 1-4) 2 **3.2%**

SUMMARY OF CURRENT INFESTATION

Walkthrough only found 2 infested pixels, one Code 2 and one Code 3 Attack. Patchy old attack where more noticed in the NW portion of Polygon. Old attack follows main drainage and new attack although patchy exists within this same drainage. Very light attack at this time.

LIGHT ISOLATED ATTACK (2 areas)

ACCESS

Due to winter conditions, polygon accessed via sled 3.5km along unplowed road. Access to the West half of the polygon additionally from the north as access blocked through polygon by ravine.

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

South portion of polygon very steep. Could not access from road and had to come in from the north. Polygon has numerous rolling steep ravines. Heavy Balsam understory with lots of dead pine.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Large polygon over 100 hectares with only 1 Code 2 strip attack found along with one Code 3. Very scattered between the recent attacks with scattered Code 5's within draws as well.

INCIDENCE AND SEVERITY OF ATTACK

2 probe lines didn't find any recent attack and attack is light with only one strip attack and one Code 3 found in walkthrough.

RISK OF BEETLE SPREAD

Polygon has rough terrain with some ravines and blowdown and may spread in isolated pockets within. There is a heavy Balsam component within the stand and won't move very quickly if at all being surrounded by cutblocks.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access on mainlline for Eastern half of polygon. Steep slopes prevent much access to the west and access is from old cutblock in the north

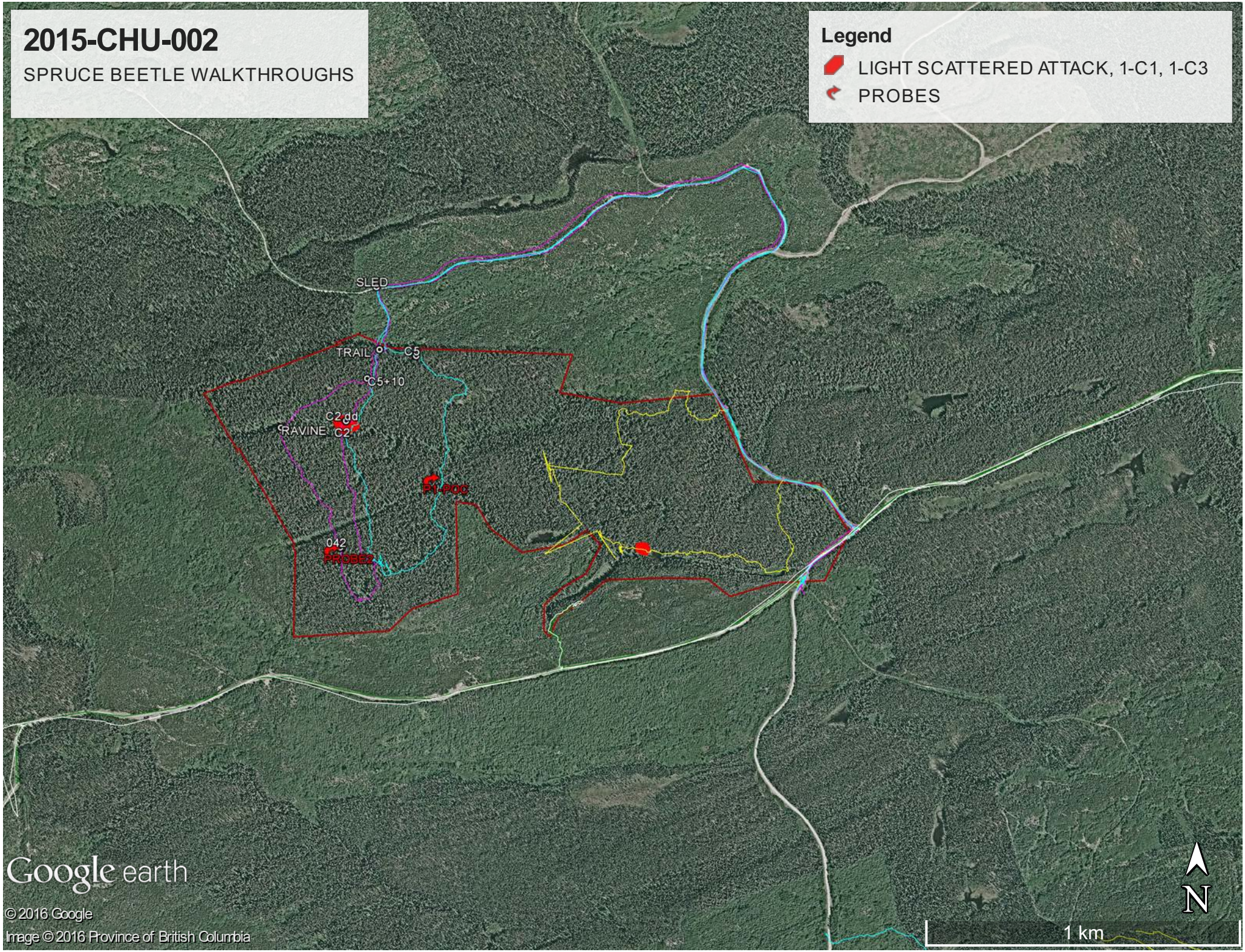
RECOMMENDATIONS

OPTION 1 **MONITOR**

As along mainline (not plowed), easy to monitor as not much recent activity noticed. There are some draws that are perfect for growing population, and need to shedule another walkthrough 2016/2017. To the northwest, lots of old attack noticed.

OPTION 2 **NO ACTION**

Minimal activity and very light isolated attack, no action required.


2015-CHU-002
SPRUCE BEETLE WALKTHROUGHS
Legend
LIGHT SCATTERED ATTACK, 1-C1, 1-C3
PROBES
SLED
TRAIL
C5
C5+10
C2-gd
RAVINE
C2
P1-POC
042
PROBE2
Google earth
© 2016 Google
Image © 2016 Province of British Columbia
N
1 km

Summary

2015-CHU-002	HEC	109.94	METERS WALKED	6200	% TRAVERSED	5.6%
PIXELS COVERED BY WALKTHROUGH	62	INFESTED PIXELS	2	**ESTIMATED % OF BLOCK INFESTED (From Walk through)**		**3.2%**

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	6.6	0.0	0.0	0.0	0.0	0.0	0.0	75.9
25.1-30.0	5.3	31.8	0.0	0.0	0.0	0.0	5.3	0.0	21.2
30.1-35.0	7.1	21.3	0.0	0.0	0.0	0.0	0.0	0.0	63.9
35.1-40.0	9.4	37.6	0.0	0.0	0.0	0.0	0.0	0.0	9.4
40.1-45.0	11.6	58	0.0	0.0	0.0	0.0	0.0	0.0	11.6
45.1-50.0	13.8	27.6	0.0	0.0	0.0	0.0	0.0	0.0	0
50.1-55.0	16.2	64.8	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	0	0.0	0.0	0.0	0.0	0.0	0.0	0
TOTALS	290.4	285.1	0.0	0	0.0	0.0	5.3	0	182

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	**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)
% 2013 ATTACK	1.8%	##	MODERATE	600-999	PROBE (To Obtain Further Info)
% HOST IN STAND	61.5%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING

28.0

FROM 2 PROBE LINES, NO CURRENT ATACK within probes

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS: 2

ACCESS - Due to winter conditions, polygon accessed via sled 3.5km along unplowed road. Access to the West half of the polygon additionally from the north as access blocked through polygon by ravine.

POLYGON FEATURES - South portion of polygon very steep. Could not access from road and had to come in from the north. Polygon has numerous rolling steep ravines. Heavy Balsam understory with lots of dead pine.

DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK						O+AW6:BI8THER TREE SPECIES	
			2015		2014		2013			
			1	2	3	4	5	6	BL	AT
17.5-25.0	3.3	2	0	0	0	0	0	0	23	0
25.1-30.0	5.3	6	0	0	0	0	1	0	4	0
30.1-35.0	7.1	3	0	0	0	0	0	0	9	0
35.1-40.0	9.4	4	0	0	0	0	0	0	1	0
40.1-45.0	11.6	5	0	0	0	0	0	0	1	0
45.1-50.0	13.8	2	0	0	0	0	0	0	0	0
50.1-55.0	16.2	4	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	0	0	0	0	0	0	0	0	0
TOTALS		28	0	0	0	0	1	0	38	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	0	0	0	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

Large polygon over 100 hectares with only 1 Code 2 strip attack found along with one Code 3. Very scattered between the recent attacks with scattered Code 5's within draws as well.

INCIDENCE AND SEVERITY OF THE INFESTATION

2 probe lines didn't find any recent attack and attack is light with only one strip attack and one Code 3 found in walkthrough.

RISK OF BEETLE SPREAD

Polygon has rough terrain with some ravines and blowdown and may spread in isolated pockets within. There is a heavy Balsam component within the stand and won't move very quickly if at all being surrounded by cutblocks.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access on mainlline for Eastern half of polygon. Steep slopes prevent much access to the west and access is from old cutblock in the north

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
0405188	6120527	1	1
BEARING	DISTANCE	STRIP WIDTH	
190	100m	10 m	

DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK 1	2	3	4	5	6	OTHER TREE SPECIES
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		10	0	0	0	0	1	0	15

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN Attacked	Unattacked
✓	2	/	/	/	/		/
✓	0	/	/	/	/		/

COMMENTS: HILLY

CREW NAMES	DATE Y	M	D
OJ DD	16	01	03

FS 1111 RPG 2000/01 7530881048 (100/bdl)

CHU - 002

BRITISH COLUMBIA BEETLE PROBE CARD

LOCATION	ELEVATION	LATITUDE	PAGE	OF
0406021 6120734	1052			

BEARING	STRIP LINE NO	STRIP WIDTH	DISTANCE	BEETLE SPECIES
200°	3	10	100	[X] SB [ ] MPB [ ] DFB

DIAMETER CLASS	SURFACE AREA FACTOR	NUMBER OF HEALTHY HOSTS	BARK BEETLE CODE BY YEAR OF ATTACK 1	2	3	4	5	6	OTHER TREE SPECIES MAIN	OTHER
12.5 - 17.4	2.0								B1	
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		19							37	

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN Attacked	Unattacked
/							
✓							

COMMENTS:
- NO ATTACK / Heavy Balsam understory
- LOTS OF DEAD PINE

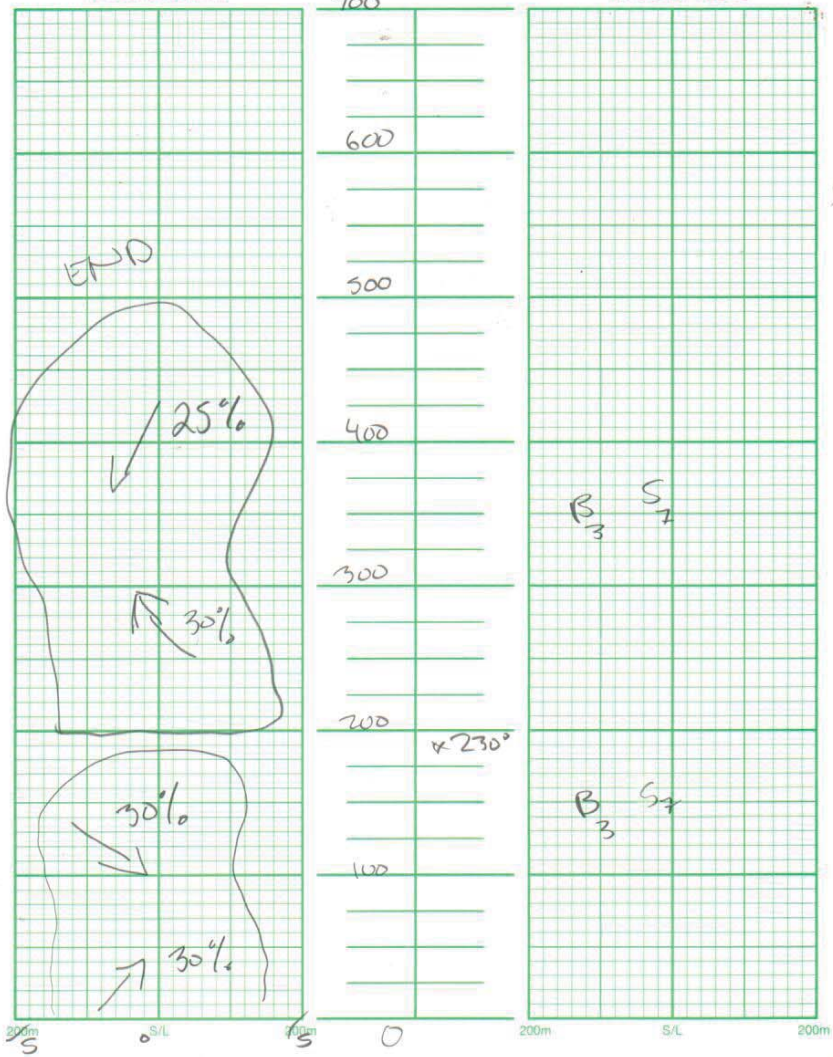
CREW NAMES	DATE Y	M	D
James Kelly	16	02	03

FS 1111A RPG 00/02 7530881049 (100/bdl)

TOPOGRAPHY

STRIP No. 4

TIMBER TYPE



STRIP NO.: 4 DIRECTION: 42°, 230°

START STRIP: 0m

JOB NO.: CHU-002 DATE: Jan 21 / 2016

CREW: James / Darryl

REMARKS:

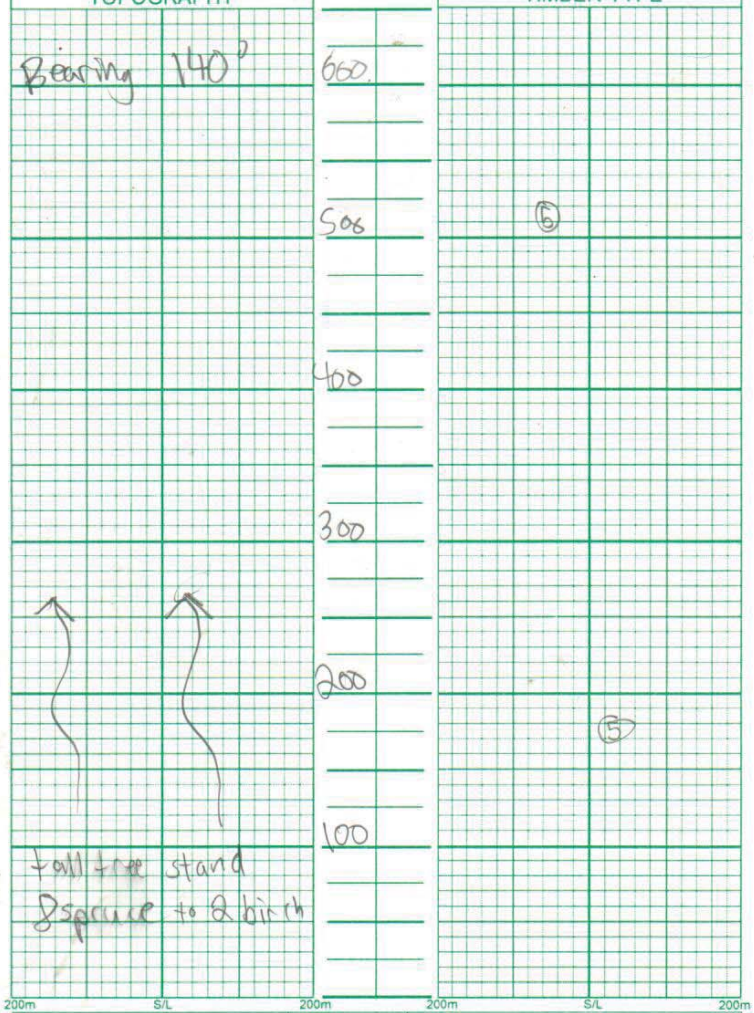
irl www.irlsupplies.com Ph: 1-800-663-6843

BRITISH COLUMBIA

COMPASS AND TRAVERSE SHEET

TOPOGRAPHY

TIMBER TYPE



C.P. No. 1	BLOCK		
DIRECTION 259°		START OF STRIP 0-600	
JOB NO. CHU-007		DATE Feb 3/16	
CREW Blake			
REMARKS			

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

BRITISH COLUMBIA

COMPASS AND TRAVERSE SHEET

TOPOGRAPHY		TIMBER TYPE
50% balsam 50% spruce	1200	5
Valley	1100	n
	1000	
	900	
Bearing 61°	800	3
Hills with dead spruce odd birch	700	

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

C.P. No. 2	BLOCK		
DIRECTION 140°		START OF STRIP 700-1200	
JOB NO. CHU-002		DATE Feb 3/16	
CREW Blake B			
REMARKS			

FS 375 HFP 92/1 7530881021

BRITISH COLUMBIA

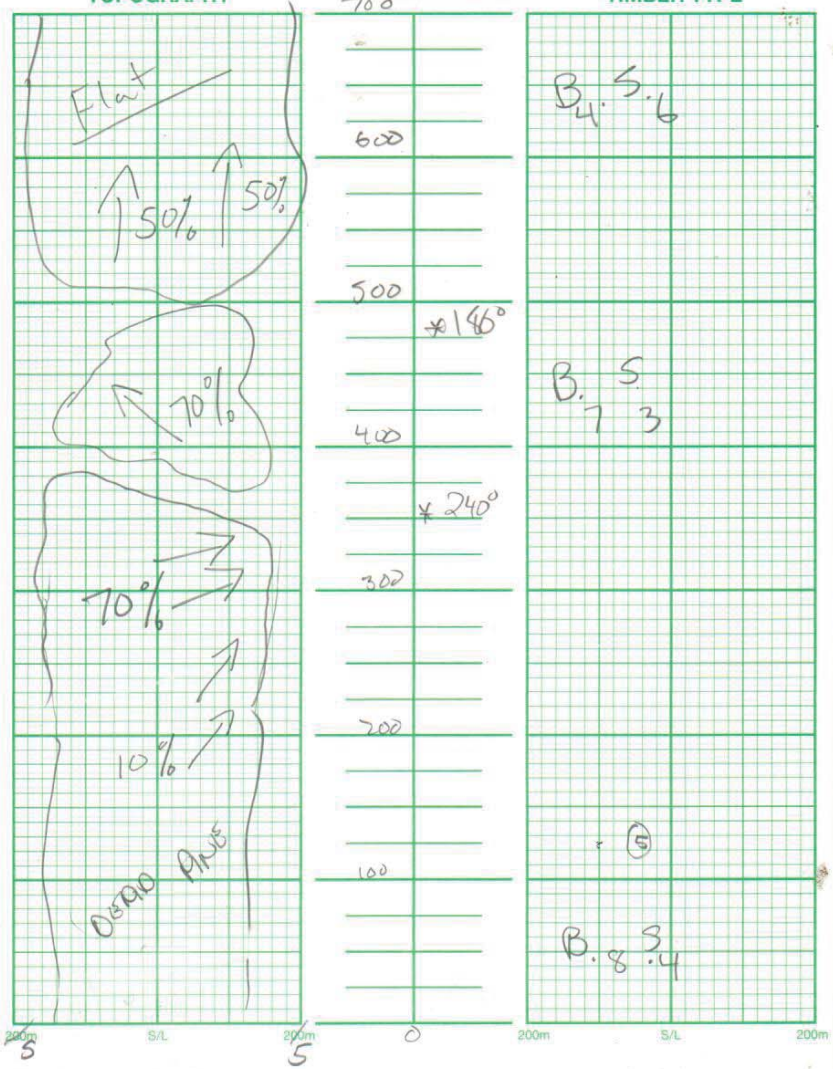
COMPASS AND TRAVERSE SHEET

TOPOGRAPHY		TIMBER TYPE
	1800	
	1700	
END		
	1600	
	1500	
	1400	5 5
Bearing 350°		
	1300	

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

C.P. No. 3	BLOCK		
DIRECTION 61°		START OF STRIP 1300-1800	
JOB NO. CHU-002		DATE Feb 3/16	
CREW Blake B			
REMARKS			

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



STRIP NO.: 3 DIRECTION: 110°, 240°, 180°

START STRIP: 0m

JOB NO.: CHU-002 DATE: FEB 03 / 2016

CREW: James / Blake / Daryl

REMARKS:

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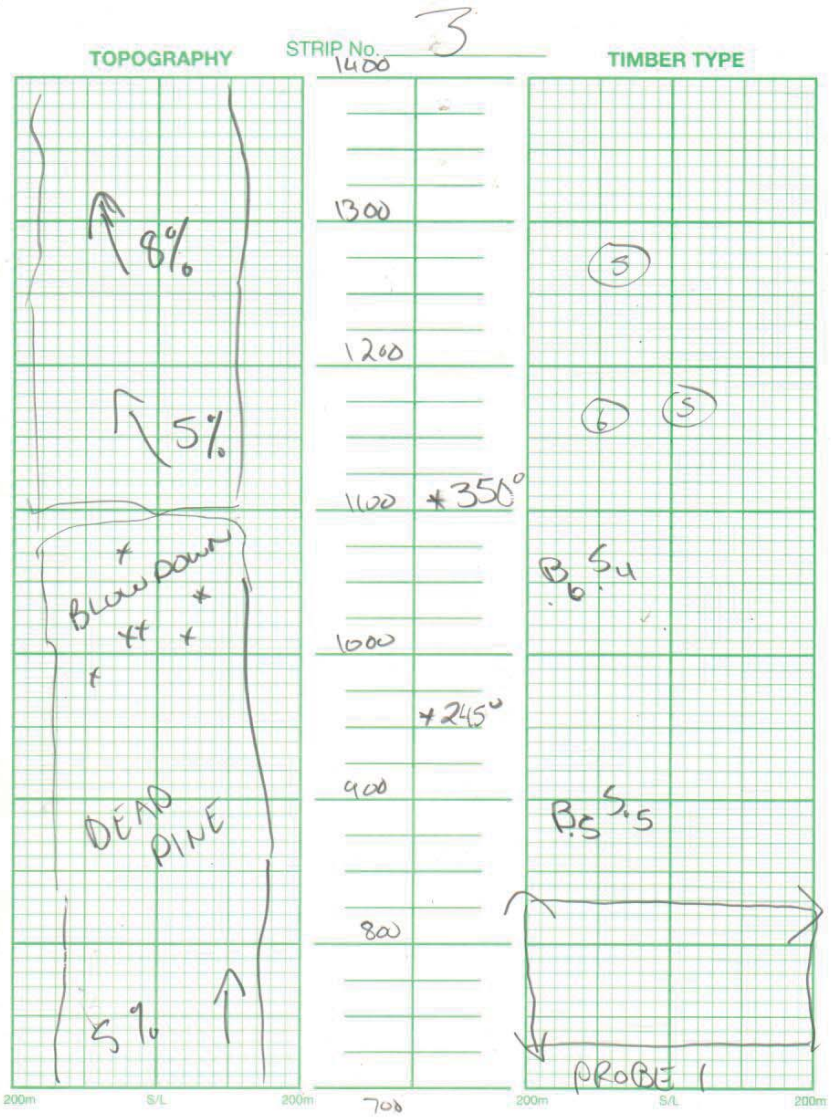

STRIP NO.: 3 DIRECTION: 180°, 245°, 350°

START STRIP:

JOB NO.: CHU-002 DATE: FEB 03 / 2016

CREW: James / Daryl / Blake

REMARKS:

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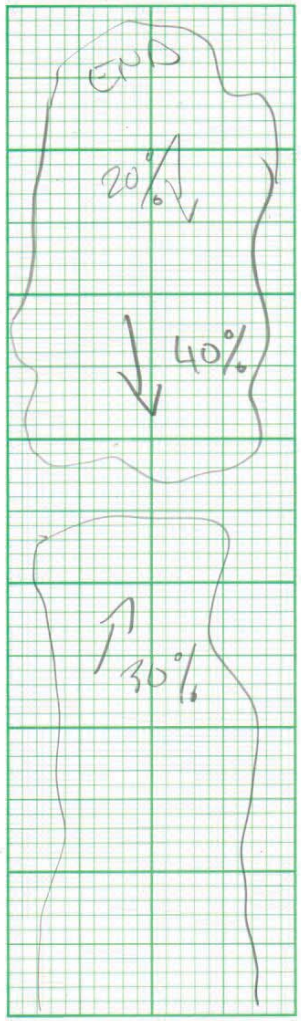
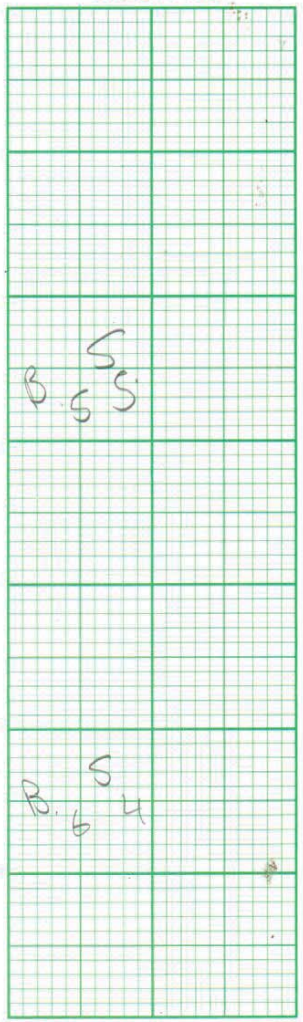
STRIP No. 3

TOPOGRAPHY



2100 2000 1900 1800 1700 1600 1500 1400

TIMBER TYPE



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

STRIP NO.: 3 DIRECTION:

START STRIP: 1400

JOB NO.: CHO-002 DATE: FEB 03 / 2016

CREW:

REMARKS:

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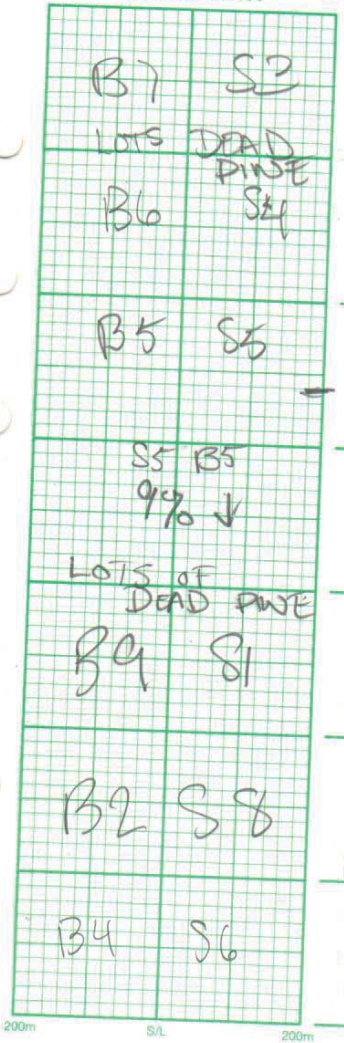
STRIP No. 2

TOPOGRAPHY



700 600 500 400 300 200 100 0

TIMBER TYPE

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

STRIP NO.: 2 DIRECTION: 232°, 157°, 67°, 358°

START STRIP: 0

JOB NO.: CHO-002 DATE: FEB 3 2016

CREW: JJ, DD

REMARKS:

www.irlsupplies.com
Ph: 1-800-663-6843

TOPOGRAPHY | STRIP No. | TIMBER TYPE

TOPOGRAPHY			TIMBER TYPE
S7 B3	1400		
LOTS OF DEAD	1300		PINE
S7 B3			HILLY
	1200	358°	
S6 B4			S6 B4
	1100		
BIG SPRUCE			
	1000	67°	
S7 B3			S7 B3
FOUND PITCH OUTS			
	900		
	PROBE		
	800	820	C5
S3 B7			S3 B7
	700		

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

STRIP NO.: DIRECTION: 232°, 157°, 67°, 358°

START STRIP: 700

JOB NO.: CHU 002 DATE: FEB 3 2016

CREW: JJ, DD

REMARKS:

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TOPOGRAPHY | STRIP No. | TIMBER TYPE

TOPOGRAPHY			TIMBER TYPE
	2100		
	2000		
	1900		
DEAD			PINE
B5 S5			B5 S5
	1800		
	1700		
B6 S4			B6 S4
	1600		
			C2 55% ↑
RAVINE	1500		
B3 S7			60% ↓
	1400		

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

STRIP NO.: DIRECTION: 232°, 157°, 67°, 358°

START STRIP: 1400

JOB NO.: CHU 002 DATE: FEB. 3 2016

CREW: JJ DD

REMARKS:

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