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SPRUCE BARK BEETLE REPORT FH17DPG218

POLYGON: **TONY 2** HECTARES: 45.0

WALKTHROUGH DISTANCE: 4600

ESTIMATED INFFESTED PIXELS FROM WALKTHROUGH (Code 1-4) 5 **6.5%**

SUMMARY OF CURRENT INFESTATION

Walkthrough probe found 6 Code 1 attacked trees. They were mostly singluar attacked areas amongst some older code 5 attacked trees and represented 5 pixels. 4 probe lines were established and resulted in a moderate sanitation rating (Entire polygon would be light). Most of the attacked trees are on a one year life cycle and have callow adults. The attack is scattered throughout and don;t think a treatment would be benficial. There is an inaccessible river through the middle of the polygon, with a site HDL-003 to the west. Appears attack has moved to the east and to the north and there is heavier attack in the adjacent Tony Polygon to the east.

LIGHT SCATTERED ATTACK,

ACCESS

Polygon has access on the east edge and walk in access from the west. There is a river splitting the polygon that cannot cross.

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

Polygon slopes up from middle of river that splits polygon. Area along river open sparse stand. Rest of polygon 60% Spruce, 40% Balsam. 35-40cm DBH.

SIZE, BOUNDARY and PATTERN OF INFESTATION

Polygon has light scattered attack and has less than 10% infested pixels. Where attack occurred along probe, singular attack with a higher attack density and lower mean larval density. Attack seems to have moved heavier to the North and East to adjacent Polygon Tony2.

INCIDENCE AND SEVERITY OF ATTACK

Incidence is scattered through polygon and moderate sanitation and salvage rating from 4 probe lines. These probe lines represent 4 of the 5 attacked pixels so overall polygon would be light sanitation rating. As polygon to the west (HDL-003) has no current attack, think this may be the remnants of attack that has moved east and north.

RISK OF BEETLE SPREAD

Polygon has cutblock to the south, heavy attack to the east and north and oipen sparse stand to the west. Think risk of beetle spread is minimal although beetle will fly in 2017.

ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access, with slopes coming up to the east and west from River drainage through middle of polygon.

RECOMMENDATIONS

OPTION 1 **MONITOR**

Sanitation rating Moderate but this represents 4 of the 5 attacked pixels in polygon. Overall, polygon has light rating and has isolated scattered attack. As attack is more severe in adjacent Polygon in the North and East, just monitor. Attack is further away from roads so monitor would be best option, scheduling another walkthrough 2017

OPTION 2 **TRAP TREE TRAIL**

May want to consider trap tree trail as there will be activity in adjacent polygon and beetles will fly in 2017. Attack is on both sides of river that splits polygon, but could due a trail in the center of the polygon starting in the east downslope towards river. Polygon has cutblock to south and heavier infested area to the north and east.

Summary

TONY 2	45.0	METERS WALKED	4600	% TRAVERSED	10.2%
PIXELS COVERED BY WALKTHROUGH	46	INFESTED PIXELS	3	**ESTIMATED % OF BLOCK INFESTED (From Walk through)**	**6.5%**

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	31.8	0.0	0.0	0.0	0.0	0.0	0.0	47.7
30.1-35.0	7.1	71	0.0	0.0	0.0	0.0	0.0	0.0	63.9
35.1-40.0	9.4	103.4	9.4	4.7	0.0	0.0	9.4	0.0	84.6
40.1-45.0	11.6	69.6	11.6	0.0	0.0	0.0	11.6	0.0	23.2
45.1-50.0	13.8	69	13.8	0.0	0.0	0.0	0.0	0.0	55.2
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	405.3	344.8	34.8	4.7	0.0	0.0	21.0	0	274.6

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
3.33	< 3.9 SEVERE Attack Density	**4.83**	>24.9 EXTREME Mean Larval Density

TABLE 2- Spruce Beetle Management Options after Walkthrough

% 2015 ATTACK	9.7%	9.7	SANITATION AND SALVAGE HARVEST PRIORITY RATING		
% 2014 ATTACK	0.0%	##	LIGHT	0-599	LEAVE (Monitor, Trap Trees, Baits, etc)
% 2013 ATTACK	5.2%	##	MODERATE	600-999	PROBE (To Obtain Further Info)
% HOST IN STAND	59.6%	##	HEAVY	1000+	RECOMMEND CRUISING/ LOGGING

658.2

SUMMARY OF ALL CARDS FS1111

NUMBER OF CARDS 3

ACCESS - Polygon has access on the east edge and walk in access from the west. There is a river splitting the polygon that cannot cross.

POLYGON FEATURES - Polygon slopes up from middle of river that splits polygon. Area along river open sparse stand. Rest of polygon 60% Spruce, 40% Balsam. 35-40cm DBH.

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	6	0	0	0	0	0	0	9	0
30.1-35.0	7.1	10	0	0	0	0	0	0	9	0
35.1-40.0	9.4	11	1	1	0	0	1	0	9	0
40.1-45.0	11.6	6	1	0	0	0	1	0	2	0
45.1-50.0	13.8	5	1	0	0	0	0	0	4	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		38	3	1	0	0	2	0	33	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
6	20	18	29	0	26	0	0	0

SIZE, BOUNDARY AND PATTERN OF THE INFESTATION

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INCIDENCE AND SEVERITY OF THE INFESTATION

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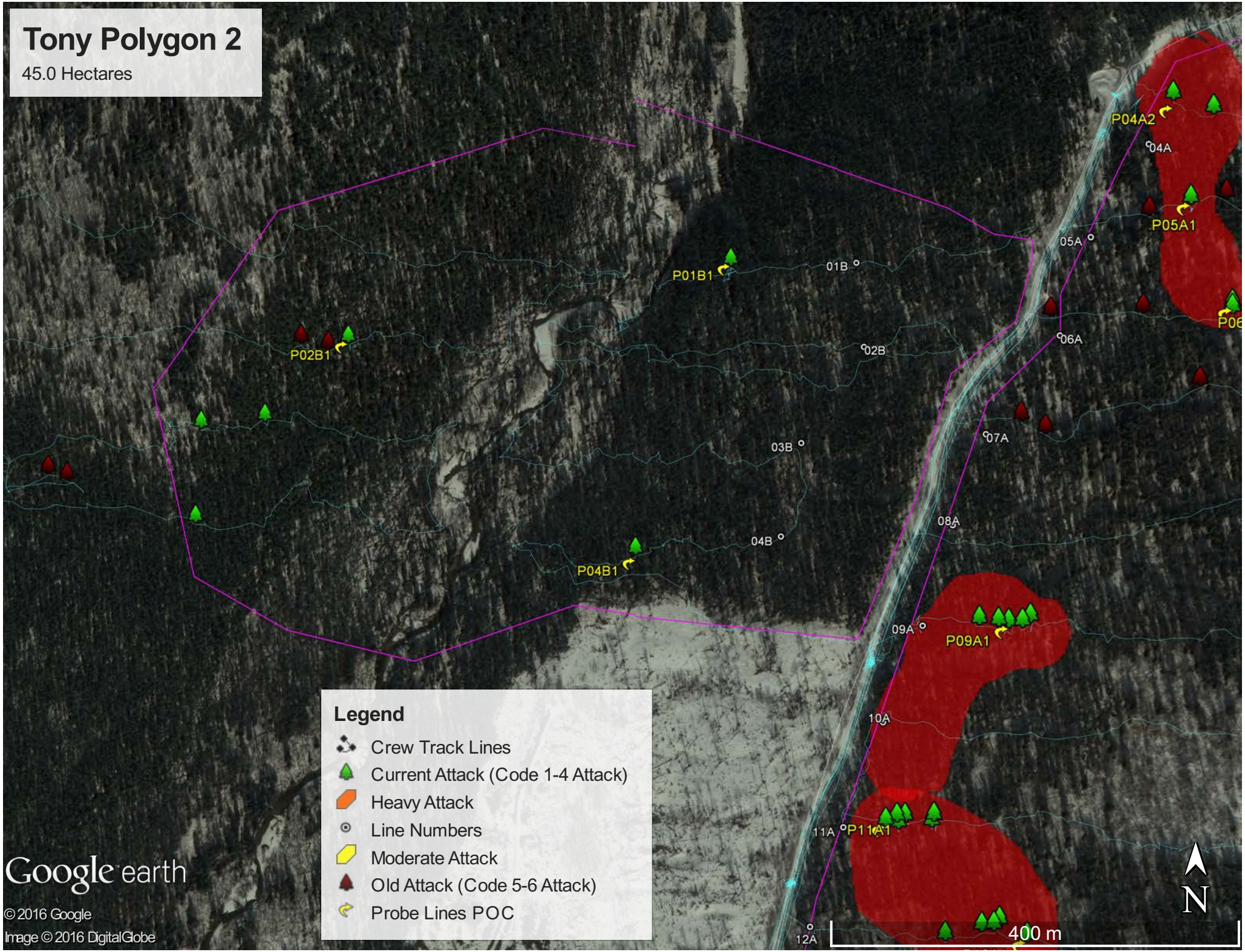
ACCESS, OPERABILITY and INTEGRATED RESOURCE MANAGEMENT ISSUES

Good access, with slopes coming up to the east and west from River drainage through middle of polygon.


Tony Polygon 2
45.0 Hectares
P04A2
04A
P05A1
05A
01B
P01B1
P02B1
02B
06A
03B
07A
08A
04B
P04B1
09A
P09A1
10A
11A
P11A1
12A
Legend
Crew Track Lines
Current Attack (Code 1-4 Attack)
Heavy Attack
Line Numbers
Moderate Attack
Old Attack (Code 5-6 Attack)
Probe Lines POC
Google earth
© 2016 Google
Image © 2016 DigitalGlobe
N
400 m

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
Tony Creek	0486066 6150234	1B	
BEARING	DISTANCE	STRIP WIDTH	
270°	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	Balsam
17.5 - 25.0	3.3								
25.1 - 30.0	5.3								
30.1 - 35.0	7.1								
35.1 - 40.0	9.4		①						
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		15	1	1					19

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN		
						Attacked		Unattacked
N	3	2	6		5			
S	4	5	4		6			

COMMENTS: ① = BS

CREW NAMES	DATE Y	M	D
Blake B	16	11	13

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

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
Tony Creek	0485614 6150141	2B	
BEARING	DISTANCE	STRIP WIDTH	
270°	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	Balsam
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		①						
50.1 - 55.0	16.2								
55.1 - 60.0	18.7								
60.1 +	25.3								
TOTALS		10	1				2		12

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN		
						Attacked		Unattacked
N	2	1	4		2			
S	5		6		8			

COMMENTS: ① = BS

CREW NAMES	DATE Y	M	D
Blake B	16	11	13

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

SPRUCE BEETLE PROBE CARD

LOCATION		PAGE	OF
Tony Creek 4B		4B	
BEARING	DISTANCE	STRIP WIDTH	
270°	100 m	10 m	

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	Balsam
17.5 - 25.0	3.3								
25.1 - 30.0	5.3	:							:
30.1 - 35.0	7.1	:							:
35.1 - 40.0	9.4	:	(1)						:
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		13	1						15

BARK SAMPLES 15cm x 15cm	NO. ENTRANCE HOLES	NO. PARENT ADULTS	NO. LARVAE	NO. PUPAE	NO. CALLOW ADULTS	FRESH (GREEN) BLOWDOWN	
						Attacked	Unattacked
N	4	7	4		3		
S	2	3	5		2		

COMMENTS

(1) BS

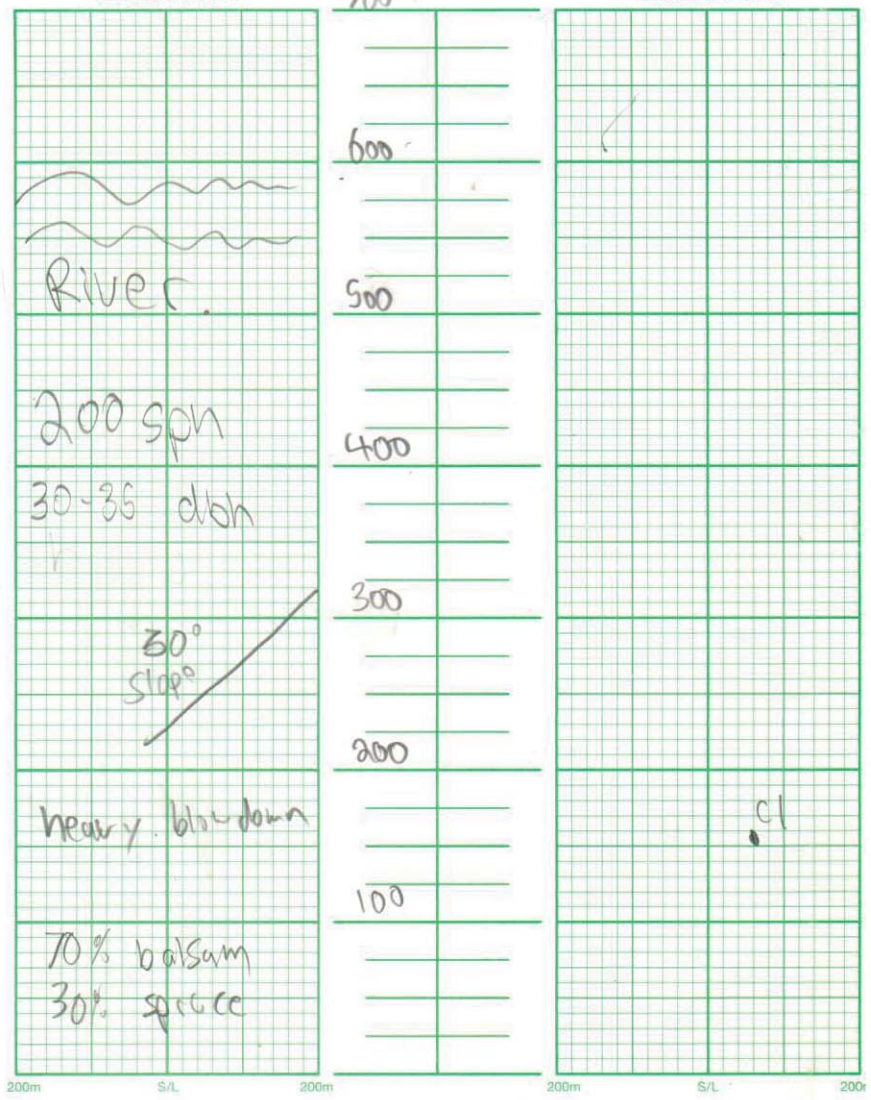
CREW NAMES	DATE (Y, M, D)
Blake B	16, 11, 13

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

TOPOGRAPHY

STRIP No. 1B

TIMBER TYPE



STRIP NO.: 1B DIRECTION: 270°

START STRIP: 0-700

JOB NO.: Tony Creek DATE: Nov 13/16

CREW: Blake B

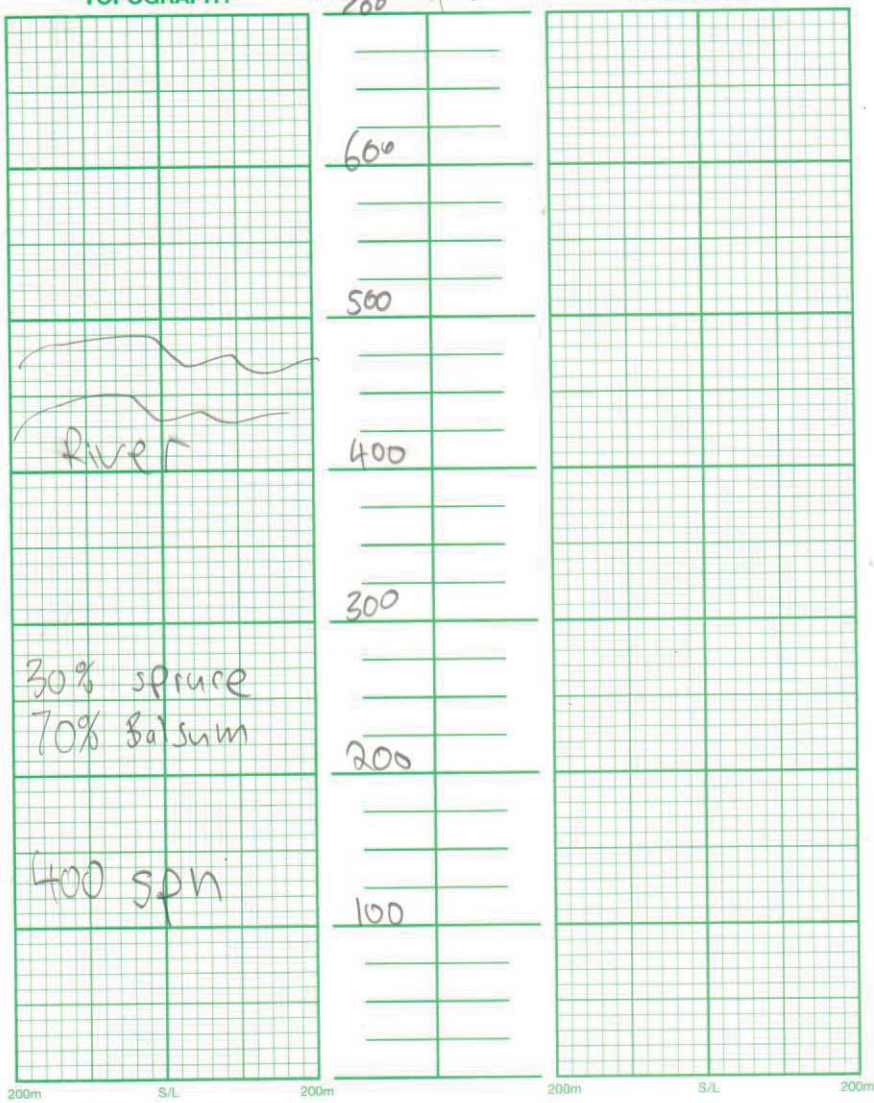
REMARKS:

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

TOPOGRAPHY

STRIP No. 1B

TIMBER TYPE



STRIP NO.: DIRECTION: 90°

START STRIP: 0-700

JOB NO.: Tony Creek DATE: Nov 13/16

CREW: Blake B

REMARKS: finished walkthrough 90°

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

TOPOGRAPHY STRIP No. 2B TIMBER TYPE

700
600
500
400
300
200
100

creek

cliff

60% Balsum
40% Spruce

400 Sph

CS
CS
C1

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

STRIP NO.: 2B DIRECTION: 270°
START STRIP: 0-700
JOB NO.: Tony Creek DATE: Nov 13/16
CREW: Blake B
REMARKS:

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

TOPOGRAPHY STRIP No. 2B TIMBER TYPE

700
600
500
400
300
200
100

river

30% Spruce
90% Balsum

300 sph

heavy blowdown

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

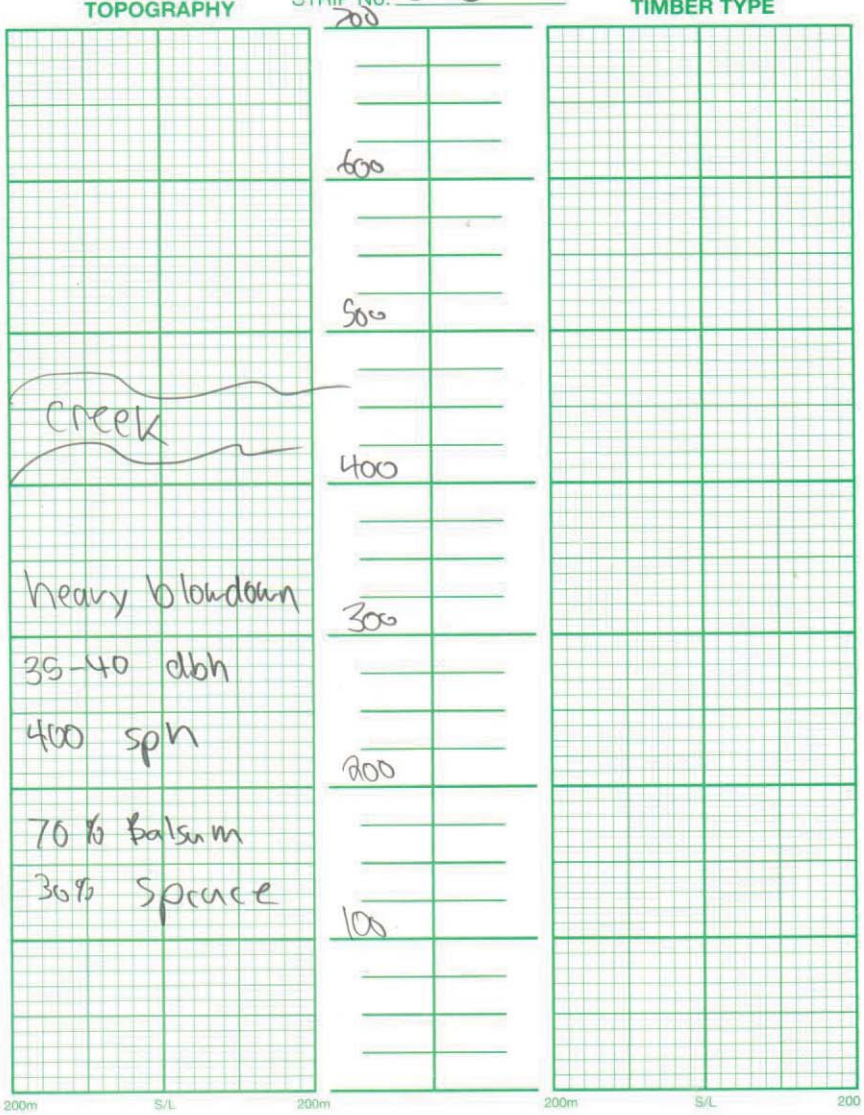
STRIP NO.: 2B DIRECTION: 270°
START STRIP: 0-700
JOB NO.: Tony Creek DATE: Nov 13/16
CREW: Blake B
REMARKS:

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

TOPOGRAPHY

STRIP No. 3B

TIMBER TYPE



STRIP NO.: 3B DIRECTION: 90°

START STRIP: 0-700

JOB NO.: Tony creek DATE: Nov 13/16

CREW: Blake B

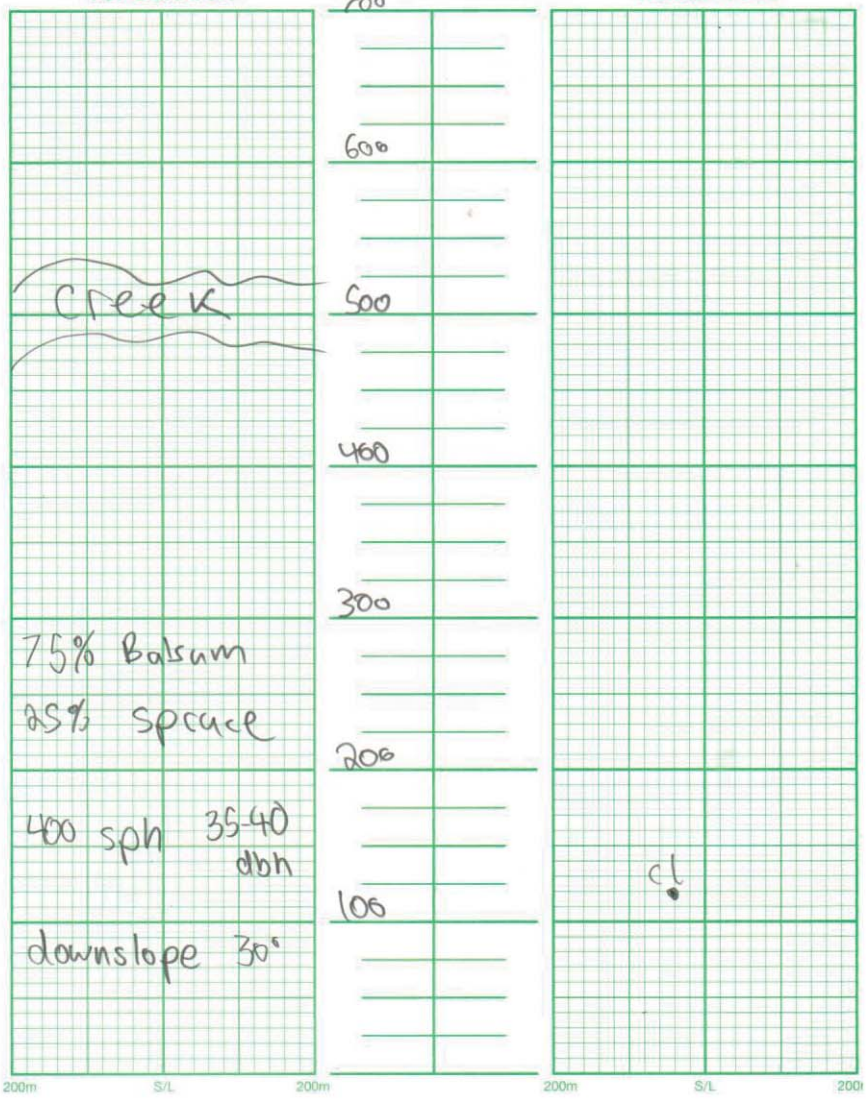
REMARKS:

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

TOPOGRAPHY

STRIP No. 4B

TIMBER TYPE



STRIP NO.: 4B DIRECTION: 270°

START STRIP: 0-700

JOB NO.: Tony Creek DATE: Nov 13/16

CREW: Blake B

REMARKS:

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