



ALL-WEATHER  
**OUTDOOR JOURNAL**

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Project *MacKenzie Wood*

*Notebook 7*



**RiteintheRain.com**

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Tacoma, WA 98424-1017 USA

US Pat No. 6,863,940

7-16

Site Red 2 8-29-  
2019

~~DS/DL/S/D/BSA~~

Lost the drone!

We did a large  
piece survey  
down the bank  
a little way.

~~oops -~~ Just for  
comparison against  
other rivers  
should do full all piece  
survey on the

Mackenzie R. us. of  
Tsig. & us. of Red

Wood deposit within  
willows - placed here  
from ice push

67.44673

133.73830

I am walking along  
deposit w/in willows

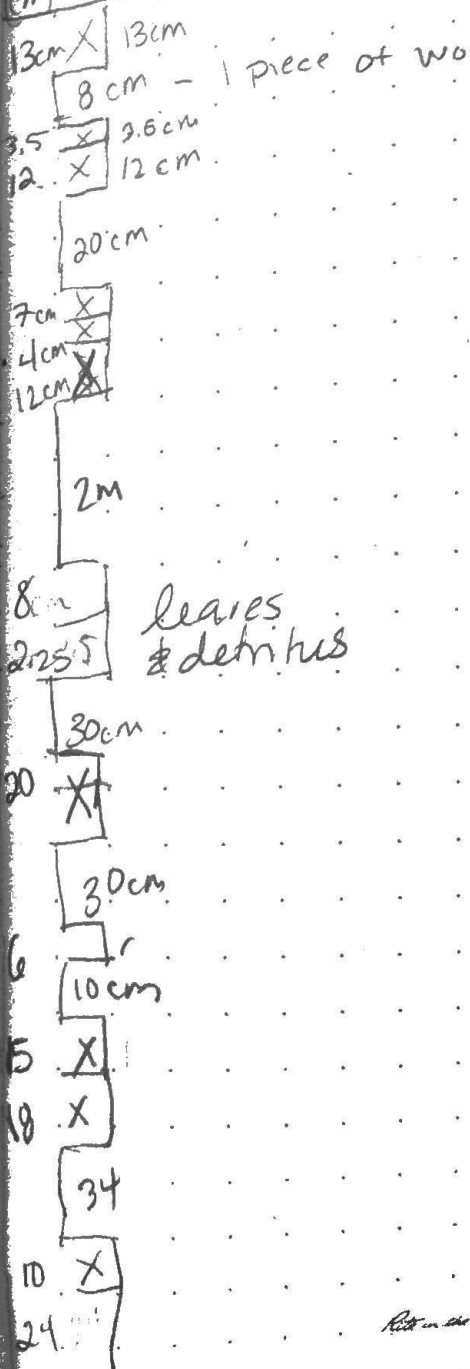
1. 67.44673 start  
133.73830 near  
pictur. ditch

2. 67.44675 pictures  
133.73795 looking  
back toward Allen  
3720

Traced pieces wrapped around  
willows willows not  
growing up & through  
& altered willows away  
from River

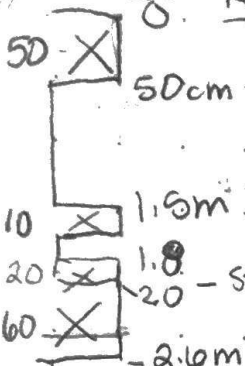
Laser says Az 100 (but I don't think it's  
calibrated)

(cm) - Diameters



wood X  
air

dist River



### Transect 2

Picture 27 - small jumble pieces 30cm thick 80%

Med. sized logs jumbled 90% porosity thickness =

Inland

GPS

67.44678  
133.73785

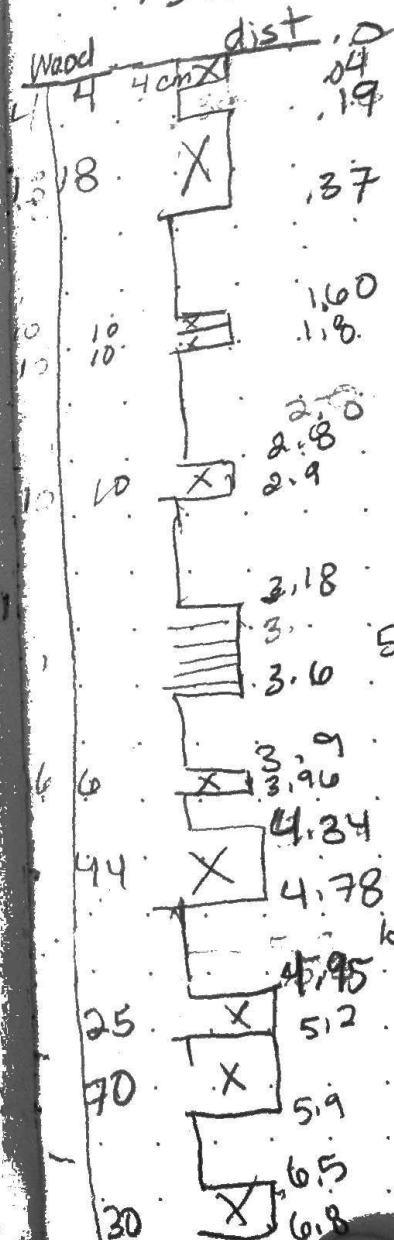
2 landward side

327.7° Az?

### Transect 3

67.44684  
133.73739

→ 2 landward side



Random small pieces on ground

5 pieces wood impregnated ~ 5cm diam. Th = 5cm

loose piece wood med 20cm 90% p Th = 30cm

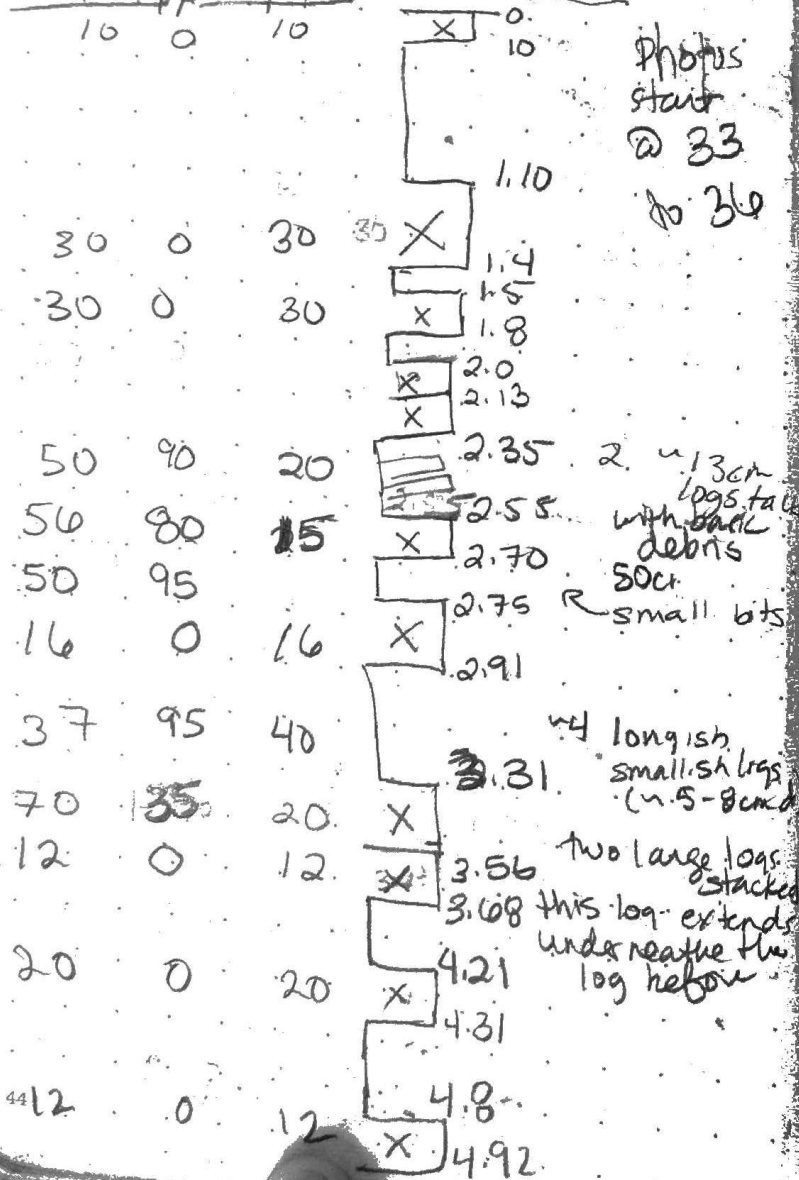
lots in the rain

Transect 4

Thick  $\phi$  diam. width  
16 0 10

GPS end  
67.44689  
133.73695  
dist

Photos start @ 33 to 36

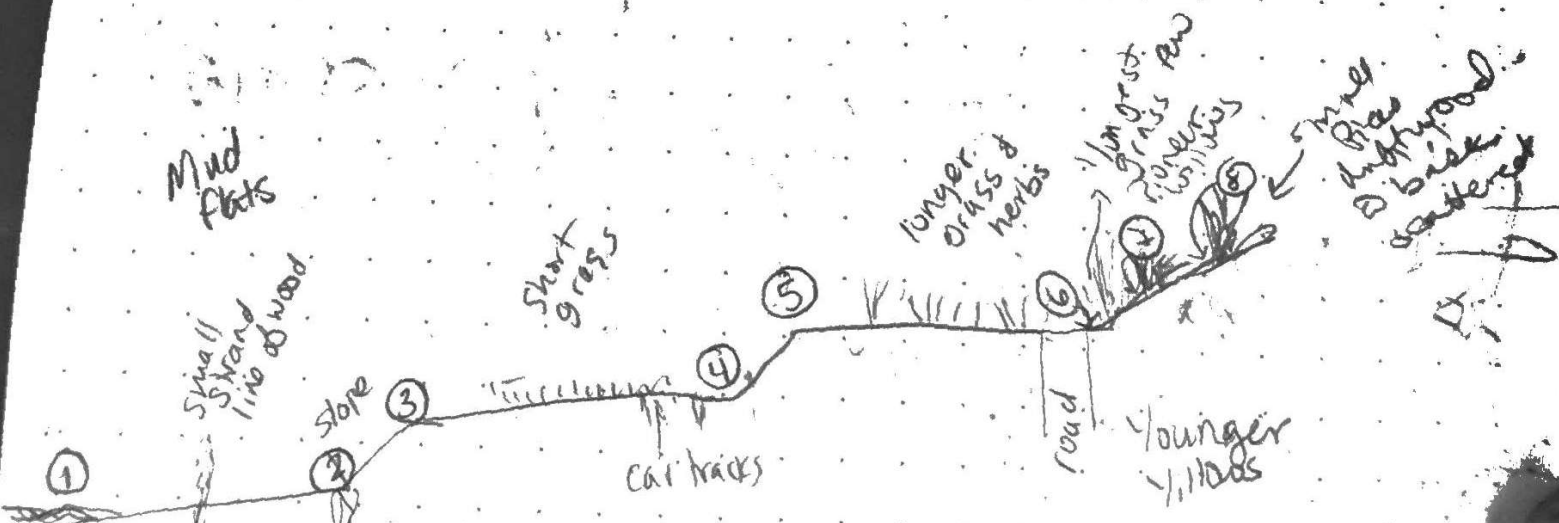
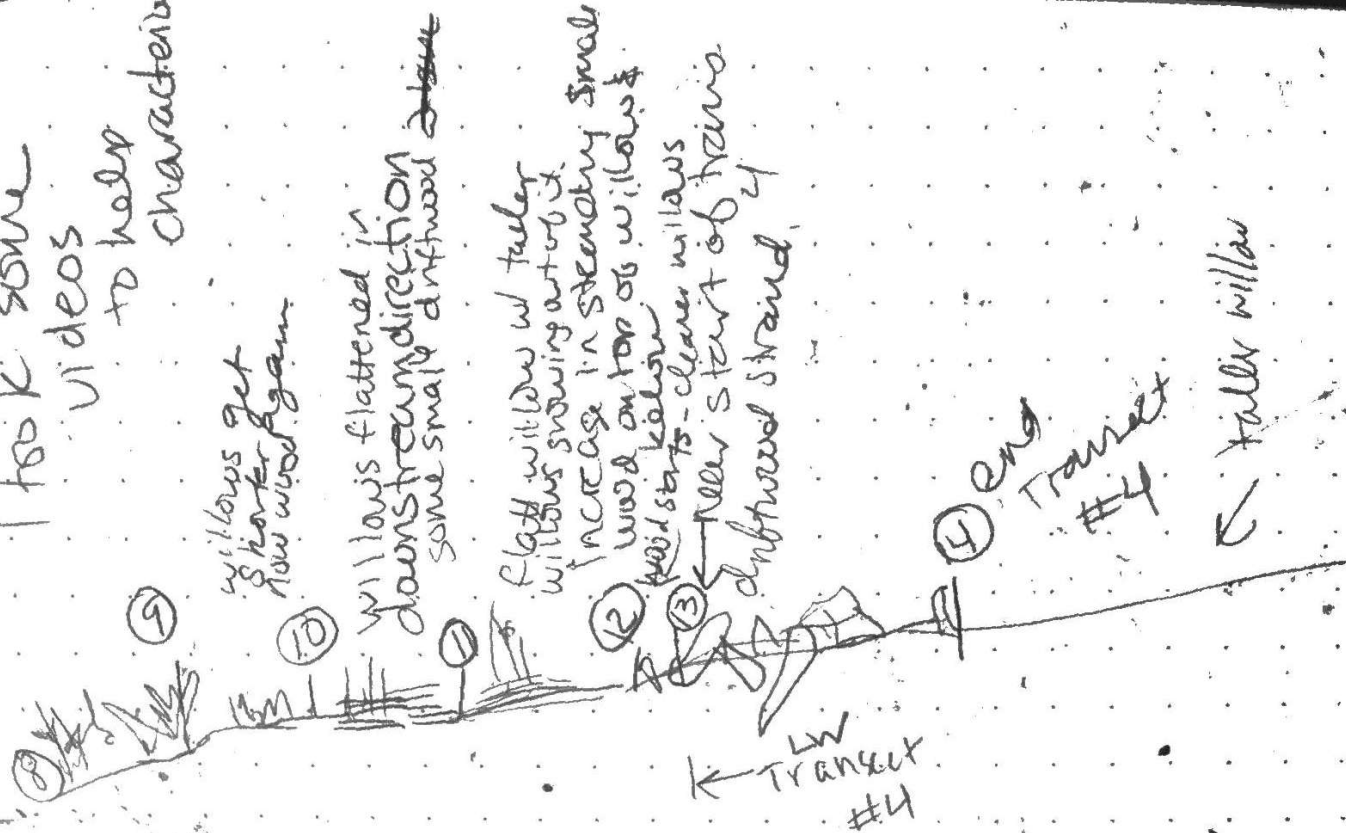


Transect ~~4~~ all piece survey  
Draw of shore elevations

Alicia is on. laser eye height = 160cm  
starts @ waters edge ①

Az	Inc	SD	ND	HD	Note	
137.7	3.3	25.7	1.5	25.8	Waters edge across mud wood strand	②
131.3	12.5	1.6	0.3	1.7	top of slope break	③
140.0	2.0	28.7	1.0m	28.6	bot of slope break	④
144.5	7.0	5.7	0.7m	5.7	top bis	⑤
145.6	3.0	19.2	1.0m	13.6	start long grass edge	⑥
141.1	4.5	8.6	0.7m	8.8	start willow (most)	⑦
141.5	7	6.9	0.9m	6.9	older willow start	⑧
147.3	9.8	6.1	1.0m	6.0	willows get shorter again	⑨
156.3	3.5	3.4	0.2	3.4	flat willow	⑩
139.0	6.3	5.9	0.6	5.7	flat willow	⑪
149.6	8.9	4.6	0.8	4.6	edge wood	⑫
137	3.3	3.0	0.2	3.0	start T4	⑬
151.3	2.0	5.1	0.7m	5.1	end T4	⑭

I took some  
videos  
to help  
characterize



Natalie was FS.  
Alicia was behind her shooting forward  
to her next spot. @ her eye height.

## Boat Ride to Pt Separation

at start travelling  $\sim$   
52 mi/hr photo  
taking every 2 sec.

@ 2.83 km ds ↑ in wood  
close to where camera  
is currently located.

wood is ↑ towards end  
of shallow bars as come  
up towards bluffs.

@ 7.5 km travelling  
 $\sim$  500 m from cliff

$\sim$  8.75 km 73 m from  
cliff just up of  
stream coming in.

less wood @ 9.5

48  
Sig used to be here 10.17 km

After trips of ten Mat  
of wood plastered against  
slope e.g. near 11.2 km

I don't see cliff failures  
like I do near Simpson

$\sim$  6 m from edge of water @  
 $\sim$  13.21 km

@ 14.00 km larger larger  
logs. More wood  
42<sup>m to</sup> ~~near water~~ edge  
water

$\sim$  4.5 m to wood on cliff  
lots of wood

Creek coming in @ 15.65 km

Wood craned back in  
Willows @ 16.53 km

Willow in @ 9.1 m HZ

lots of large wood  
again @ 17.4 km

really big jam 18.24  
just below mouth of  
trib.

edge water - 32 @ 20.1 km  
willow @ ~ 74

Really large log for  
scale @ 20.7  
@ upper edge  
~ 59m long ~ 1/2 way

A 22.23 A huge log  
against willows

23.75 travelling ~ 90m  
from shore edge  
and 133m from cliff edge

@ 24.56 big up woodwells.

@ 25.10 233m away from  
cliff.

Sparse wood @ 26.31 km  
large flat bench  
could there be more wood  
pushed to back of bench?

@ 27.31 wood stranded high  
against bank.

@ 28.00 weird clumps of  
wood @ approx

28.92 - large mud flat lots  
of wood  
waters edge ~ 72  
cliff face ~ 175

30.15 moving away from shore -  
not so much wood



32.04km - entry sand  
bar area

35.58 - carry back to  
shore wood plucked &  
chips, & dropped  
jams 35.

35.96 - jams piled on bar  
almost like boulder erratics

- 40k stumps from eroding  
bank is eroding  
Recruitment Zone.  
1st time

41.77  $\Delta$  math east chnl.

Medium trip - River L Bank

Dist to turn -

~ 22. Wood along apron but  
not crazy amounts

Mostly wood pushed into  
Willows.

520.92 - Last sand bar. Long storage site

Mack site 2  $\Delta$   $\Delta$   $\Delta$   
Ribbon of white  $\Delta$   
head of delta  
wood on top of  
sand bar

07.70731 1342874

019.49 Practically no wood.  
Some wood ice pushed into  
Willows.

017.93 shore 21.8m away  
typical banding of wood

016.81 - fire.

016.17 - Wood raft  $\Delta$  outlet of  
trib

015.83 - dead moose

013.08 small landslide  
Return to main

08.49 not much wood

0.15 evidence for some ice push  
into willow s., but not much?

01.06 - lots of wood back in  
willows against bank  
on McPherson ferry side  
wood along L bank smaller

00.22 passing mouth of  
red

— Going upstream past  
start

0.22 shore transect depleted  
wood from humans

little evidence for ice push  
jams.

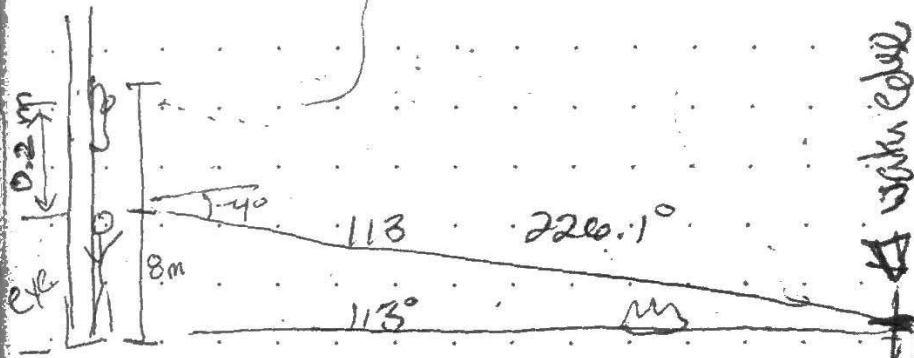
0.95 shore evidence ice push  
wood.

2.08 - almost no wood inside  
shrubland.

turn around

0.97 less wood - Right bank  
0.92 @ ferry

Camera @ Mack I -  
540W view into willows  
Camera



eye height

Camera → water edge

SD	AZ	VD	Inc	HD
113	220.1	-8	-4°	113

eye → grass/mud contact

92	235.9	-8	-4.7	91
----	-------	----	------	----

eye → log pile in grass

84	229.8	-7	-5	84
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eye → back willows

23.1	149°	-4.6	-11.6	22.6
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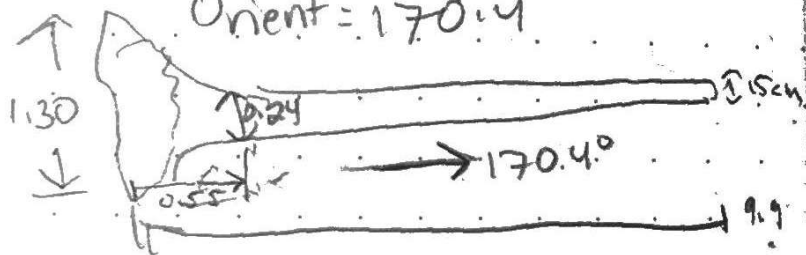
calibration log near shore 166 cm long  
calibration log between willows.

47.47720  
133.77379

67.47720 133.77379

calibration log #2  
diam across but  
root wad = 130  
Log L = 9.9

Sight to camera = 349.6  
diam @ root wad = 24  
diam @ tip =  
Orient = 170.4



I think this log was dep  
2019 in front of  
2019 camera

Proposed

New Cam site -

47. 45589

133. 75366

Pics taken to show  
positioning need to  
center back w/ laser to  
do r-sect.

Andrew's # from Peel River  
377-0007

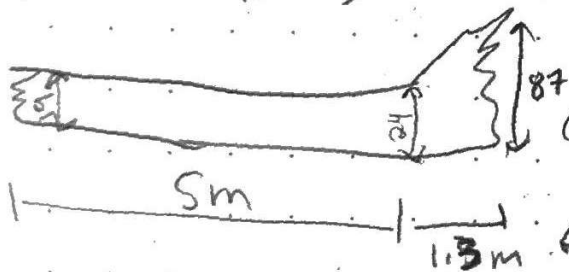
Check in w/ ferry operators

8/29/2019 - Went to Peel  
Andrew took us in a  
boat up river. Lots  
wood coming in from  
bank slumping.  
Lots of researchers going  
up peel to study this  
A camera was  
bulldozed over. Andrew  
can put up a new one.  
I took photos along bank  
IL camera wasn't  
turning on?

We stopped @ one spot  
& measured fluvial  
transported wood

8/30/2019 - took photo  
of cliff where cam  
looks @ Arctic Red  
forgot to ~~do~~ laser  
sighting.

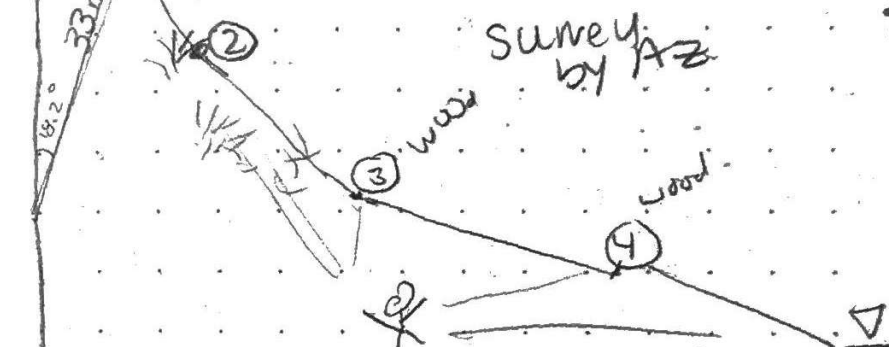
game house



calibration  
log  
for scale  
in bank  
survey

GPS 67.45579  
113.75453

	Az	dist	VD
①	38.3	33.2	10.6
②	25.1	22.4	3.6
③	57.9	14.7	0.2
④	107.7	15.0	2.4
⑤	119.9	22.6	3.3



Survey By Midline

	HD	VD	SD
①-②	10	-6.7	12
②-③	10	-4	11
③-④	15.6	-1.9	15.7
④-⑤	7.4	-1.2	7.5

8/30/2019 - Camera site  
 Mack 4 - transect shoreline  
 water level to w. loc of  
 camera & then further  
 back.

I am walking along transect

① Start eyeheight = 1.6 sitting forward  
 & moving up.  
 So add eye height  
 to VD, each time  
 to get diff.

67.4773 133.77641

<u>HD</u>	<u>VD</u>	<u>SD</u>	<u>Az</u>	<u>inc</u>	
7.8	-1.2		220	8.6	
14.8	-1.1		221.6	4.1	① → ②
13.8	-1.0		276.8	-4.1	② → ③
19.0	<del>1.0</del> -1.0		258.3	-2.1	③ → ④
19.0	0.6		223.4	1.7	④ → ⑤
8.0	-7		223.7	-5	⑤ → ⑥
18	-4		246.5	-13.3	⑥ → ⑦
8.7	-3.4		264.1	-21.2	⑦ → ⑧
2.3	-1.2			-27.6	⑧ → ⑨
3.3	-1.0			-16.6	⑨ → ⑩
4.0	-1.3			-17.7	⑩ → ⑪
2.6	-1.4			-27.9	⑪ → ⑫
3	-0.7			-12.8	⑫ → ⑬
6.5	-1.1			-19.7	⑬ → ⑭
4.3				-10.2	⑭ → ⑮

something weird is going on w/  
 laser Az. got reset to wind mode?

Project 1331, 133, 77041

eroded mud

(2)

mud

grass stands (3)

wood strand line (4)

- near caliber  
side of stream  
strand line

(5)

young willows  
& stranded logs

Willow stands  
& grass  
faller per  
more to  
back

Old strand line  
wood

(6)

Bank walk

(7)

Rate in stream

55 ft  
from 1331.6  
up to 1331.5

Willows w/ scattered logs

⑦ ← standing larger pieces

Grassy w/ solo willows

⑧

late wood plastered logs on site

Calibr. log & this elev.

67:47732  
133.77371

late willows

0m

1m

13m

Transect #1

Starts transect Berni - NW

⑬

crushed willows near stream

67:47733  
133.77347

16m

⑭

Main N my

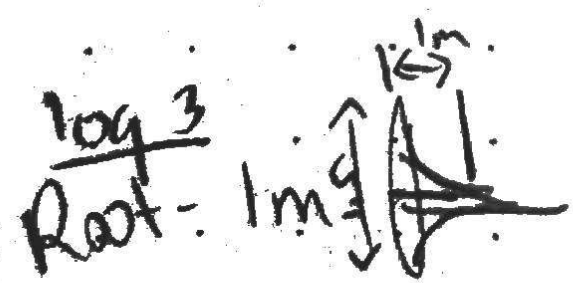
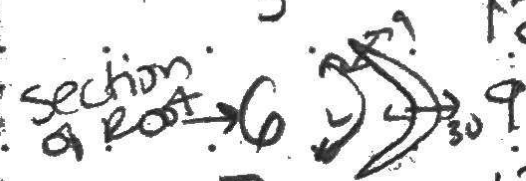
67:47731  
133.77342

9.5

oldest willows

# Porosity / Piece Survey of ice push jam

Transect Log #	Log #	D <sub>15</sub>	D <sub>2</sub>	L (m)	S	DBA	Az
1	1	1.1-s	1.5-s	0.81	Rot	1-2-3	S15E 0
1	2	7-s	10-s	2.82	C	1-8-3	S10E 0
1	3	9-s	13-s	3.9	D	1-4-4	S32E 0
	4	9-s	14-r	1.9	C	1-4-4	S35E 0
	5	12-s	20-s	4.0	C	2-4-3	S 7°N
	6	4-t	12-s	1.5	D	1-2-2	N28W 0
	7	9-s	10-s	2.45	D	1-4-3	SSE 12°W
	8	14-s	15-s	1.1	C	1-4-3	S3W 3°N
	9	17-s	21-s	1.45	D	1-4-4	N4W 4°S
2	1	<del>8</del>	10	0.87	?	3-4-4	N5W 0
	2	15	18	1.90	D	1-4-3	N42E
	3	25-s	39-R	7.0	C	1-3-3	S-0
	④	14-t	11-s	4.4	D	1-3-2	N4E UN
	5	12-s	16-R	2.9	C	2-4-4	S12W 55
section of rot	6	9	20	3.4	C	1-3-4	X
	7	13	15	3.5	D	2-4-4	N35E 0
	8	22	23.5-s	2.17	C	2-4-3	N15E UN



*Notes in the Rain*



T1

Thick  $\varnothing$  diam/w  
1cm 90 1.24

3cm  
3cm 98 1.24

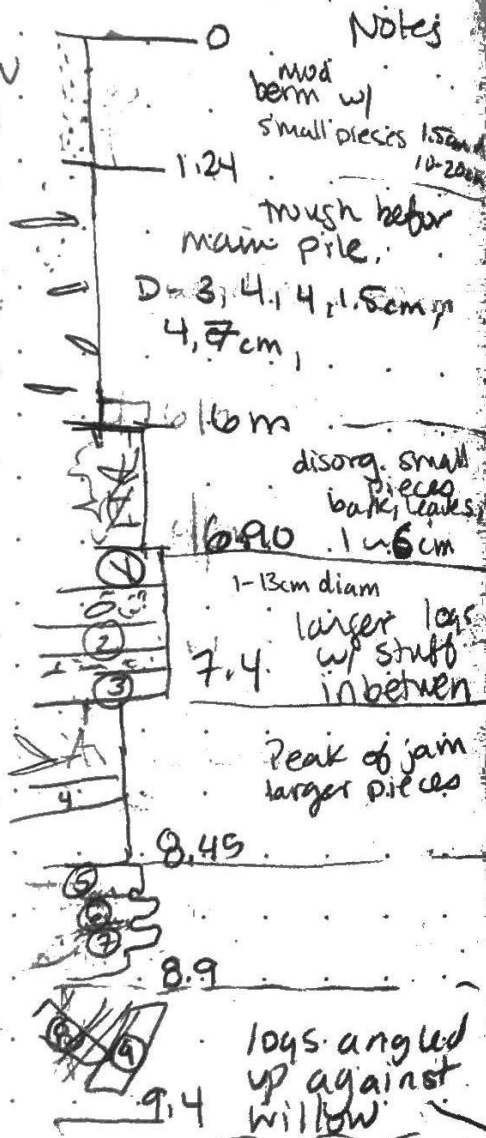
47: top of ball  
25/60 0.9  
Beds through

70 25/70

80 15/50

40 20/30

39/80 0.7

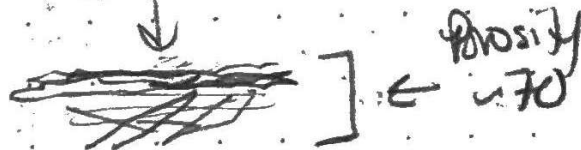


Photo

275

Porosity looks like  
~20%

276



280

Small stuff piled on top. So appears to have low porosity but lots of air underneath

249-252

More compact than section before

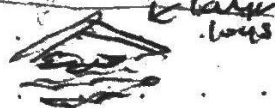
281

larger pieces lying out top of small jammed higher porosity on top but lower more compact

282-

283

2.5cm



Point estimates for jam.

loc	P	w	th	Portion Note/
67.47732 133.77349	50-60	3.4	50cm	T1
67.47727 133.77342	60	1.73	51cm	290
67.47721 133.77345	30	3m	6cm	295-2
67.47720 133.77340	40	4.1m	54cm	291-29

Coast 4

log	φ	w	Th	Ph	Note
69.465957 132.994028	0.5	11.2	0.25	368-370	
69.464037 132.994133		14	0.18	371	T2 berms of wood left eyes in front of old log in bank

T2 start 6747315  
113.77354

Thick	φ	diam/ w	dist	Pct
2	98	2	① 0-2	1 303
8	50	3	② 2-5	304-306
65	90	4	③ 5-9	307-308 309
33	40	2.5	④ 9-11.5	310-313

End G.P.S.

Notes

Loose pieces scattered poorly sorted.

Small pieces layered on mud w/  
some larger pieces scattered.

Large loose logs stacked on willows  
Small bark & pieces on ground.

Imbricated med sm pieces  
poorly sorted w/ bark, mud, leaves,  
larger logs within.

Alicia Sendrowski +1 813 525 7954

~~150~~ Alicia.sendrowski@colostate.edu

Inuvik

Site 1

pg 5-7

new sites ... pg 16

31

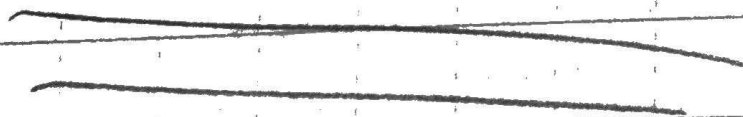
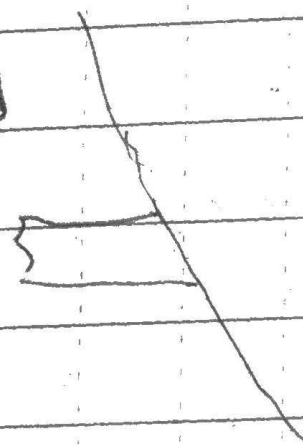
Site Red 1

cut bank wood sticking out of bank of  
Arctic Red River

gps: 67.41107, 133.77032

diameter 29cm LP1

↳ smaller transient wood  
around it



Site Red 2

upstream of Red 1, gps 67.39420,  
133.77386

Rocky sloped shore

wood going up

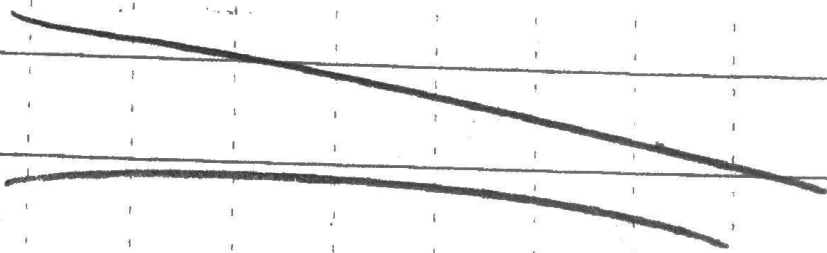
diam 1	diam 2	length	orientation	Type	from
13	16	2.5m	NGW	C	S

---

Dia 1	Dia 2	Len	Or	T	B	class	Note
13	16	2.5m	NGW	C	S	1,4,3	Mid bank
10	11	3.45	N4W	C	S	1,4,3	not round
12	13	1.2	N10W	C	S	1,4,3	split
9	10	1.4	N6E	C		1,4,4	beaver chew both ends
5	10	2.2	N1E	<sup>Birch</sup> D	S	1,3,3	
8	10	2.7	N12W	<sup>Poplar</sup> D	S	1,1,4	top of bank
15	20	1.7	S78W	D	S	1,4,4	"
6	10	1.45	N45E	D	S	1,4,4	"
18	18	1.1	N5W	C	S	1,4,3	upper bank
6	10	4.3	D11E	D	S	1,1,2	root grad.
13	14	2.8	S6W	D		1,4,4	beaver chew both ends
8	15	2.4	D10W	C	S	1,4,4	
24	27	1.7	S42W		S	2,4,4	4/6

Dia	Dia	Len	0	T	B	#	Note
14	20	4.4	NSE	C	S	1,4,4	top of bank

Slope of bank =  $32^\circ$



Site

Mark 1 old driftwood pile back from beach on Muckwitz river upstream of Red + ferry

Edge next to road gps: 67.44673, 133.73833 <sup>(13m)</sup>

Walking in from road - big piles stacked on top

Inward for deposit: 67.4467, 133.73805 <sup>(11.3)</sup>

gps at transect 1

(measurements in Natukie notebook)

3.8m transect

13cm

8cm

Transect 2. gps 67.44676, 133.73790

laying outline tape and measuring  
pieces + spaces

pics for transect 2 25, 26, 27

Transect 3 gps 67.44685, 133.73732

Transect 4. gps 67.44689, 133.73695

gps for end of my walk along  
deposit 67.44697, 133.73654

gps for Mark 1 LP1 67.44682,

50cm dia, 7.9m length 133.73750



08/28/19

Site Mack 1 surveying beach to see character of beach until deposit.

gps 1 (at water edge): 67.44797, 133.73761

gps 2 (start of grass): 67.44775, 133.73746

gps 3 (upslope 1m): 67.44775, 133.73746

gps 4 (toward forest): 67.44746, 133.73727

gps 5 (upslope back in grass) 67.44743, 133.73726

gps 6 (next to road) 67.44726, 133.73717

gps 7 (edge of willow line) 67.44719, 133.73714

gps 8 (willows get more dense) 67.44714, 133.73712

gps 9 (in willows) 67.44707, 133.73708

gps 10 (willows) 67.44703, 133.73709

Site in the rain

gps 11: 67.44699, 133.73703

gps 12 67.44694, 133.73701

gps 13 start of transect 4 67.44693, 133.73700

gps 14 end of tr. 4: 67.44690, 133.73697

---

gps at head of delta, see wood pile  
but too far away 67.73334,  
134.21765

---

Mark 2 67.70731, 134.28726

photo

LP1 22cm, 4.1m

142

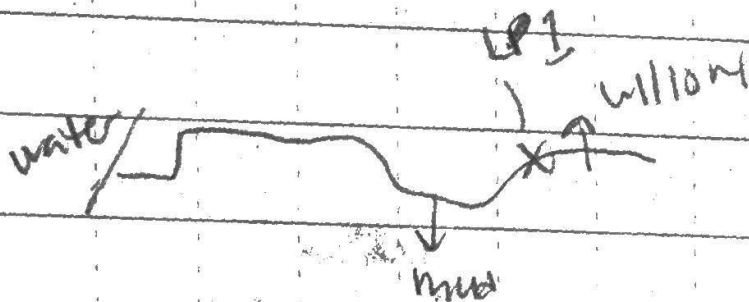
island at head of delta, side  
bar

MARK 3

LP 1 53<sup>dia</sup> cm, 6.6m length  
GPS 47.63055, 134.16841

Island at head of delta  
photo 153

sample taken from willow set back  
from bank



08/29/19

Muck 4 : Deposit where Natalie's camera was  
on Inuvik side of Mack R.

LP1: Taken at beach on river

gps ~~67.47718, 133.77490~~

67.47967, 133.77560

24cm dia, 6m length

photos in phone, after pic of wet feet

LP2 taken in deposit within willows set  
back from river - big log

gps: 67.47704, 133.77368

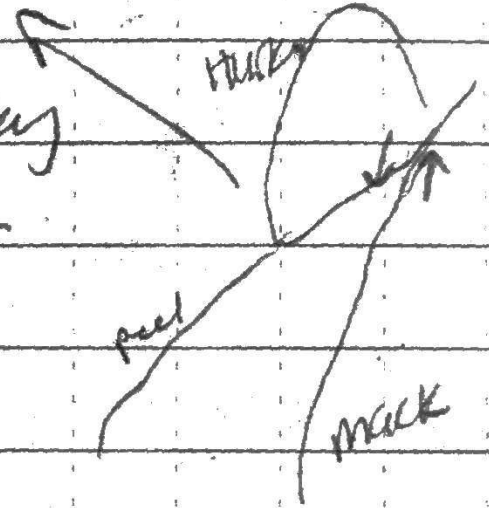
diam 53cm, length 9.6m

Deposit in willows is extensive with variable  
heights and porosity - willows growing  
throughout

08/29/19

Peel R. last week water was high had  
driftwood, wood cleared by high water

sometimes peel higher  
then may go to Husky  
or pushed by Mack



Mackenzie driftwood enters  
Peel, or

Driftwood pile (permanent) at mouth of  
Peel - at least 84 years old

Andrew Koo 377-0007

BIRTHDAY  
Aug 30, 1967

GPS 67.34148, 134.87463

site pool 1 gravel bank

not a lot of wood

67.27967, 134.87744

pieces look smaller, newer than other sites

3 zones - low bank (with rocks)

mid bank (grass + rocks)

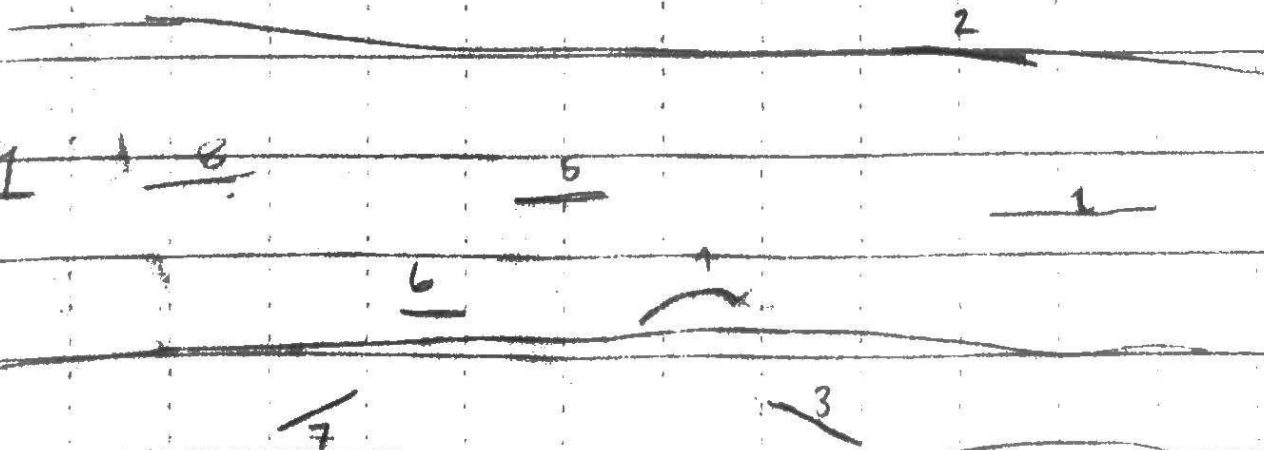
high bank (willow line)

LP1 <sup>dia</sup> 26cm, 6.2m was root wad + bank, looks partially burned

water edge to grass = <sup>HD</sup> 2.1m, <sup>VD</sup> 0.5m

grass edge to slope break = <sup>HD</sup> 9.9m, <sup>VD</sup> 2.5m

slope break to top of bank = <sup>HD</sup> 13.6m, <sup>VD</sup> 8.6m



Wood pieces

Log #	lg	SM. end	Typ	end	br	#'s	AZ	note
1.	26cm	13cm	D	S	1,2,2	6.2m		at mouth Poplar, mid zone 2
2.	10cm	6cm	D	S	1,4,3	4.7		at willow high bank
3.	10	9	C	S	1,4,4	S45E		low bank
4.	9	5	D	S	1,4,4	N20W		root wad
5.	9	7	D	S	1,4,3	N		burned a little
6.	10	3	root wad	S	1,2,1	N30W		piece of root wad
7.	10	5	D	S	1,4,3	S22E		
8.	10	8	C	S	2,4,3	S10W		burned
9.	10	8	D	S	2,3,3	S20W		evidence of burn
10.	8	3	C	S	1,3,3	N20E		end is tip root burned
11.	10	5	C	S	1,3,2	S2E		root wad
12.	10	6	C	S	1,2,2	N15W		rotted & weather root wad
13.	17	16	unkn. C?	S	2,4,3	S20W		burnt

13  

---

12  

---

11

# Small pieces survey

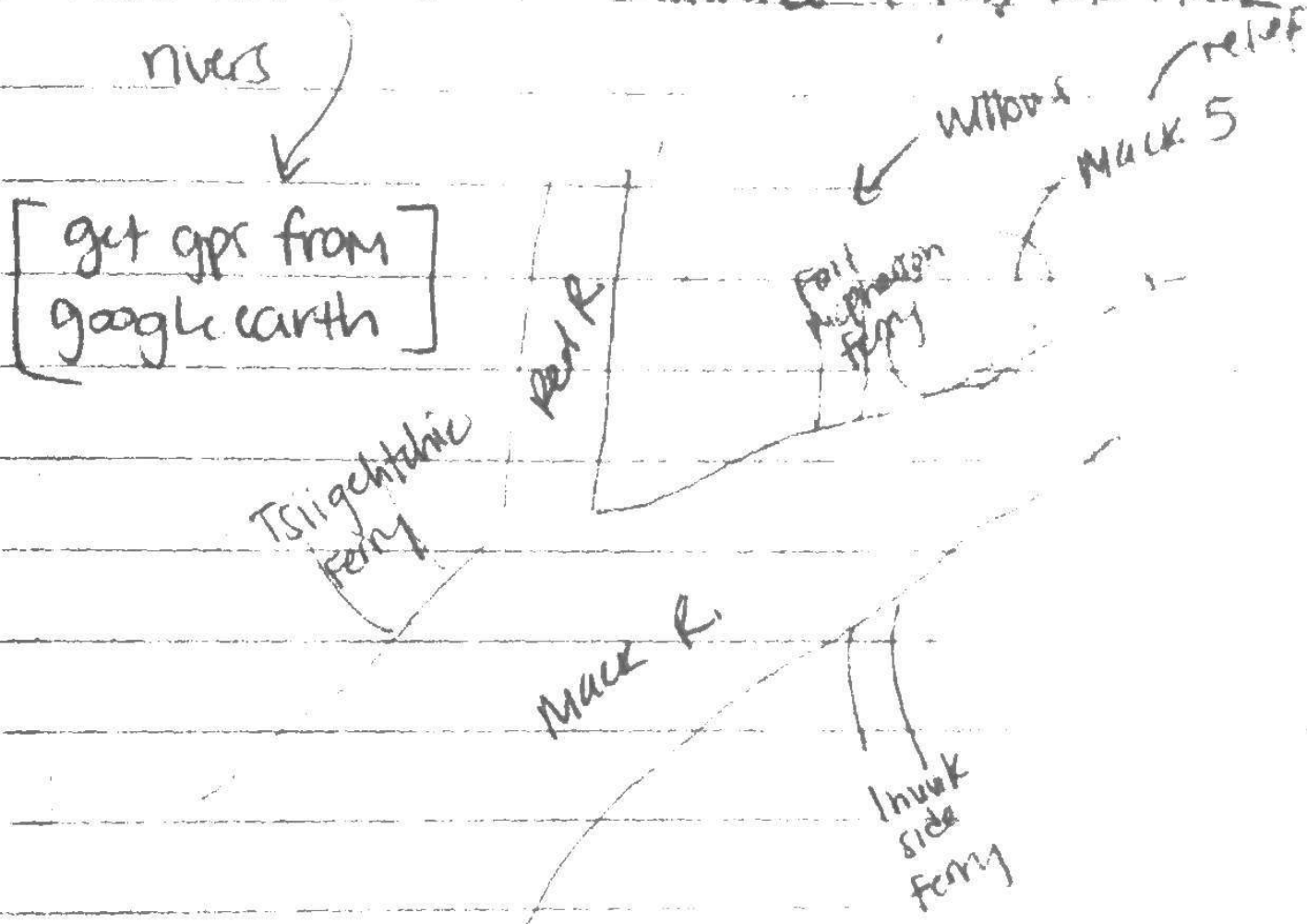
	length	dia		length	di (cm)
1	66cm	1cm	9	13.5	0.5
2	32	0.5	10	15	1
3	40	0.7	11	10	$3 \times 0.3$ bank
4	26	1cm	12	10.5	2
5	19	1.1	13	10.5	0.8
6	16	0.8	14	17	1.8
7	$8 \times 3 \times 0.3$ (bank)		15	$10.8 \times 4.4 \times 2.3$	
8	18	1	16	255	25
17					

LP2 for peel 1 : loose small pieces on ground bank, closer to shore than LP1



23/29/11

Site Mack 5 - next to Ferry crossing on  
McPherson side confluence of leg and Mack  
rivers



Loose pieces as you walk from road toward cliffs  
grass has been blown over by water, feeling of  
several loose pieces under foot.

In willows, ~ 100m perpendicular from road, large  
wood deposit, pieces stacked on top of each  
other

LP1 taken from large pieces end of log  
snapped, may need to get measurements  
from photos

Mark 5 con 4

LP2 <sup>smaller</sup> piece taken from top of pile

measurements 5cm diam x 27cm length

photos 225/226 (<sup>view</sup> from Inuvik Ferry crossing)

Other 2 photos in phone of grass blown  
down + scattered pieces

- Natyue has pics of deposit I believe

Front of deposit or side facing river and  
on other side of road appear to have  
some human influence - logs pushed around  
as they do construction on road

03/30/19

~~Mack 4~~ ~~the return!~~ Mack LP

gps (67.45583, 133.75549) (3m/6m)

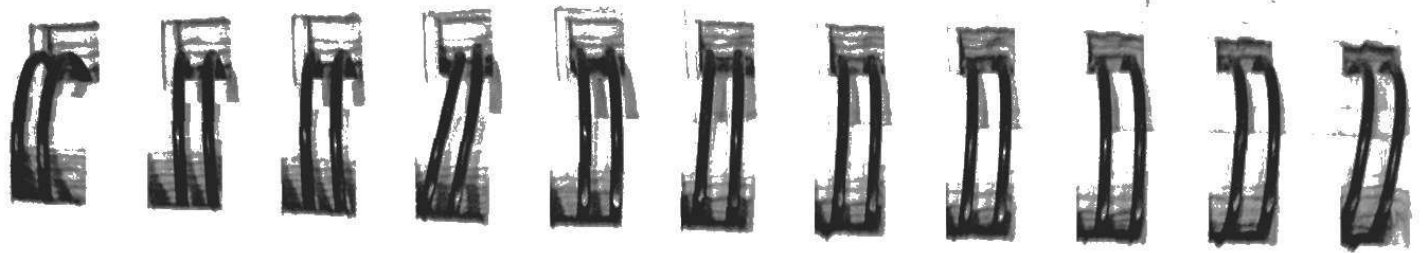
bank wood along Mack R next to Inuvik  
boat launch/ferry crossing

lengths (cm) dia

- |     |                    |     |            |                              |
|-----|--------------------|-----|------------|------------------------------|
| 1.  | 81 cm              | 1.7 |            | survey along                 |
| 2.  | 10.2 x 3.1 x 0.8   |     | bark       | line tape,                   |
| 3.  | 34 cm x 4 cm x 3.7 |     | split wood | any piece                    |
| 4.  | 16.9               | 1.5 |            | that crosses                 |
| 5.  | 8.3                | 1.4 | rootlet    | tape measured                |
| 6.  | 8.6 x 2.8 x 1.6    |     | bark piece | starting from                |
| 7.  | 5.7                | 1.4 |            | back of                      |
| 8.  | 15.6               | 0.5 |            | tape to                      |
| 9.  | 8.9                | 1.5 | not round  | front                        |
| 10. | 5                  | 4   | 0.3        | bark                         |
| 11. | 6.7                | 0.6 |            |                              |
| 12. | 17                 | 1.7 |            |                              |
| 13. | 140                | 4   |            | beaver chewed ends, has bark |
| 14. | 68                 | 4.7 |            | has bark at 1.7m on tape     |
| 15. | 103                | 2   |            |                              |

(cm) dia

(cm) diam



	Length (cm)	dia (cm)	
16	23	2	beaver chew
17	7 x 1.7 x 4.8		bark
18	15 x 4.3 x 1.5		bark
19	10 x 3.6 x 1.8		bark
20	45	1.8	
21	25	0.7	
22	7.3	0.3	
23	93	0.9	<del>bark</del> <del>chew</del>
24	32	0.4	
25	64	0.8	
26	20 x 4.5 x 1		split wood
27	8 x 3.7 x 3.5		split wood
28	7.7 x 2 x 1		bark
29	8 x 5 x 2		bark
30	51	2.2	at 1.2m on tape
31	7.8	0.5	
32	32	1.5	
33	5	0.5	
34	12 x 3.5 x 1.5		bark
35	24 x 3 x 1.8		split wood

	length (cm)	diameter (cm)	
36	79	2.5	
37	74	3	at 1.02 m
38	11	3	rootlet
39	5.3	1	
40	14	0.2	
41	7.8	0.2	
42	8.2	1.8	
43	113	0.9	at 80cm tape
44	105	6	at 70cm
45	7	3 x 0.9	back
46	69	0.4	rootlet
47	17	0.3	
48	67	6	at 60cm tape
49	108	2.7	

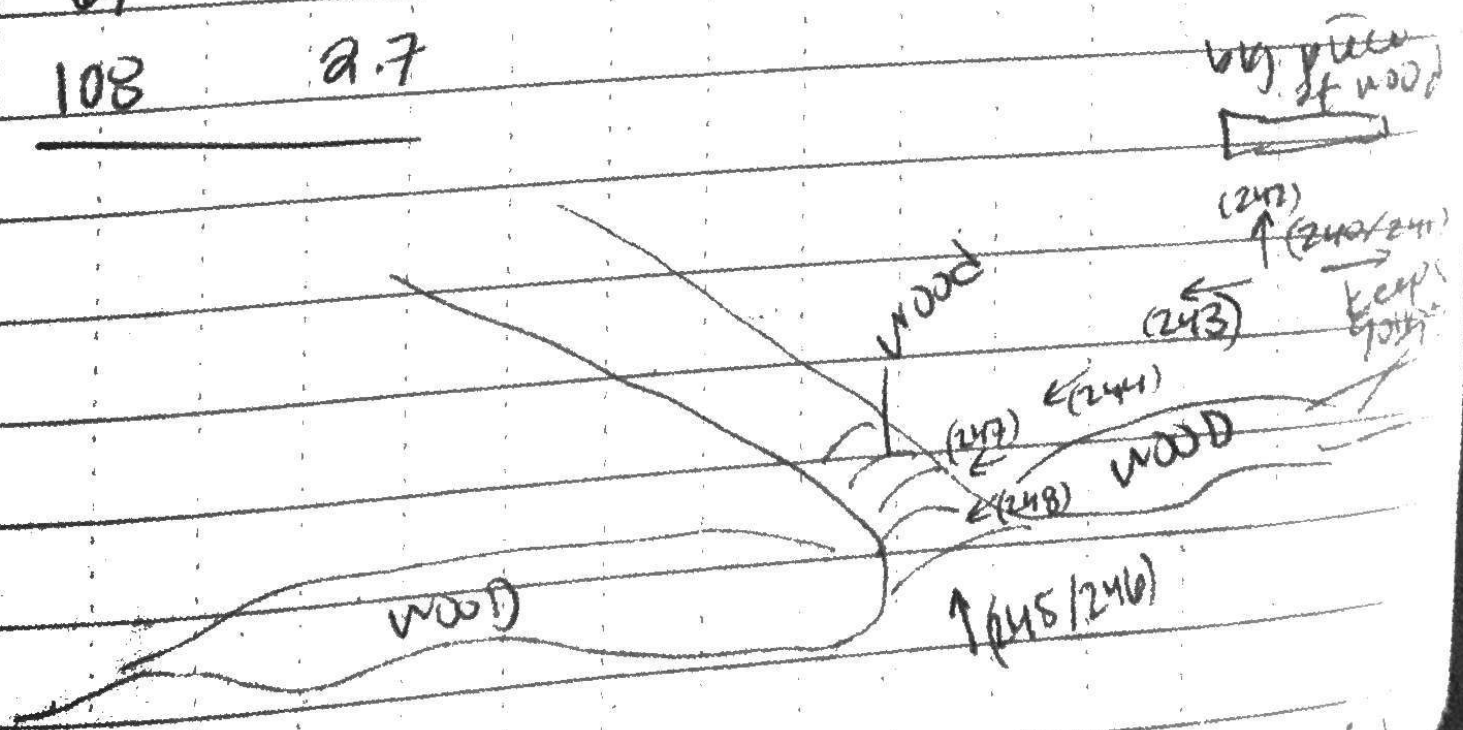


Photo: the Rain

Make 4 the return!

whole jam porosity  $\sim 0.2$

just wood 0.2-0.25

wood + mat + log 0.15-0.2

site of transect 67.47732, 133.77342

photo (249-252) view looking down at one piece  
of transect.

starting transect at 9m so 9-10 = 1m

(because 0-10cm broke off of tape)

① edge of deposit (on right side facing shore)

67.47739, 133.77348

willows have been booted over with large pieces

resting on willows, some willows growing thru

- some logs supported on bent willows so a lot  
of space underneath wood mat

- other places have ~~larger~~ <sup>smaller</sup> logs filling in gaps

From shore

gps strand line 1 67.47726, 133.77554

looking  
→  
(253)

strand line 2 67.47736, 133.77403

254, 55  
56 ↓

grassy gap between 67.47746, 133.77391

willow stands, large pieces of wood (257-260)

\* can't height 49 cm (vertical transect) photo

① 0-7 cm space <sup>from</sup> ground

(261-265)

7-12 cm tree (maybe live willow folder over)

12-19 cm loose pieces of wood stacked (porosity 0.4)

19-25 wood piece

25-27 loose piece (porosity 0.8)

27-49 large log (length 4.57m) → (267) looking  
along

of space around end part (264)

② at end of large log from \*, multiple small pieces

on top gps 67.47737, 133.77348

height 71 cm photo (268-275)

wood along whole height, smaller pieces

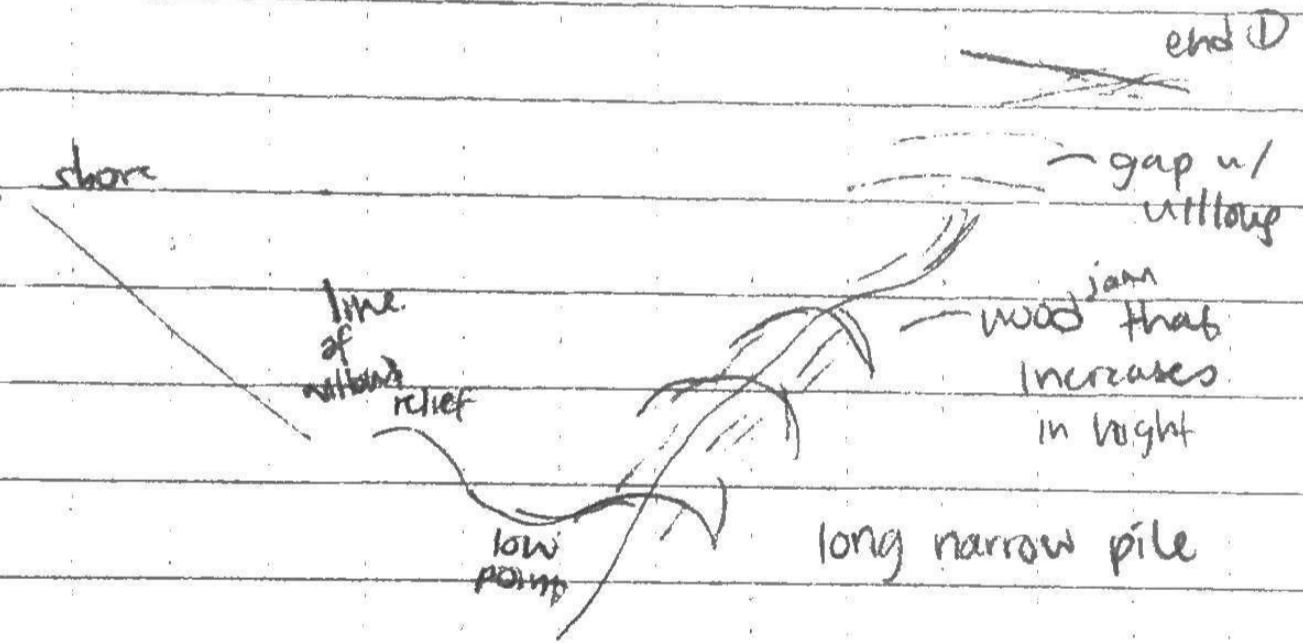
supported by larger pieces

Rite in the Rain

• sheet 133.77342 133.77342

3) transect site with tape

along transect height is single diameter along ground (with spaces) then mound of wood pushed against willows, big logs spaced with much smaller pieces filling in gaps  
this comes up and stays elevated for a few meters



GPS back of jam for transect (07.47731)

horizontal transect

133.77342



point along main jam 67.47726, 133.77315.

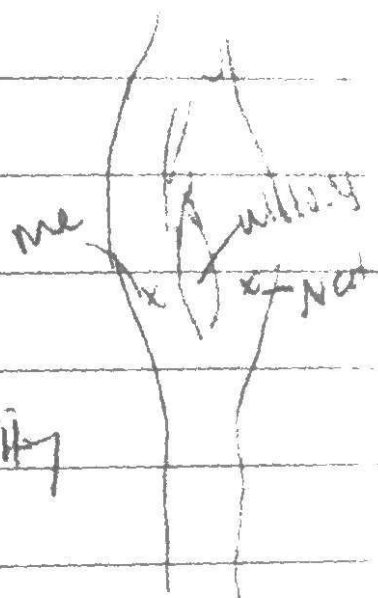
photo (290)

JAM diverges

the point: 67.47722, 133.77339

4.1 m width, 94 cm depth, 40% porosity

photo



transect 2 67.47714, 133.77341

goes across willows

photo (298-302) down transect

Transects start on shore side